Department of Energy

Ohio Field Office
Fernald Closure Project
175 Tri-County Parkway
Springdale, Ohio 45246

NOV 9 2006

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0058-07

Mr. Thomas Schneider, Project Manager
Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF THE RESPONSE TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENT AND THE REVISED ADDENDUM TO THE CERTIFICATION REPORT FOR AREA 4B - PART ONE

References:

1) "Certification Report for Area 4B - Part One," Document 20810-RP-0008, dated January 2006

2) Letter DOE-0170-06, J. Reising to J. Saric/T. Schneider," Addendum to the Certification Design Letter and Certification Project Specific Plan for Area 4B - Part One," dated July 20, 2006

3) Letter, T. Schneider to J. Reising, "Approval - Transmittal of the Addendum to the CDL and Certification PSP for Area 4B - Part One," dated July 26, 2006

4) Letter, J. Saric to J. Reising, "Area 4B-Part 1 CDL and PSP Addendum," dated August 8, 2006

5) Letter, T. Schneider to J. Reising, "Disapproval - Addendum to the Certification Report for Area 4B - Part One," dated September 6, 2006

6) Letter, J. Saric to J. Reising, "Addendum to CR for Area 4B - Part 1," dated September 13, 2006

Excessive rainfall events in the spring caused storm water runoff from non-certified areas to overwhelm and breach the runon control berms and ditches of Certified Area 4B - Part One.

Therefore, a recertification/resampling effort was necessary to demonstrate that soils in Area 4B - Part One had not been impacted by water crossing the certification boundaries from non-certified areas. This revised addendum to the Certification Report for Area 4B - Part One (Reference 1) presents the results of the recertification sampling effort outlined in the Addendum to the Certification Design Letter (CDL) and Certification Project Specific Plan (PSP) for Area 4B - Part One (Reference 2). The CDL addendum was approved by Ohio Environmental Protection Agency (OEPA) on July 26, 2006 and the U.S. Environmental Protection Agency (EPA) on August 8, 2006 (References 3 and 4). Also enclosed is the response to OEPA comment received as noted in Reference 5. This addendum was previously approved by the EPA as noted in Reference 6.

Recertification Approach

Figure 1 shows the extent of the storm water overflow into Area 4B - Part One, the certification unit (CU) design, and the area that real-time scans were performed. Certification units A4B01, A4B02, and A4B03 were designed to cover the area impacted by storm water overflow.

Certification unit A4B01 overlaps portions of previously sampled CUs from the southern end of the original Area 4B - Part One certification effort. This CU was resampled for the Area 4B - Part One area specific constituents of concern (ASCOCs) associated with the original CUs (i.e., radium-226, radium-228, thorium-228, thorium-232, total uranium, technetium-99, aroclor-1254, and beryllium). The certification sample locations that fall within this CU (Figure 2) match the locations of the previous certification effort.

Certification unit A4B02 overlaps portions of previously sampled CUs from the northwestern portion of the original Area 4B - Part One certification effort. This CU was resampled for the Area 4B - Part One ASCOCs associated with the previously sampled CUs (i.e., radium-226, radium-228, thorium-228, thorium-232, total uranium, technetium-99, aroclor-1254, and beryllium). All of the original certification sampling locations (Figure 3) that fell within CU A4B02 were resampled.

Certification unit A4B03 was designed to cover the portion of the previously certified area that is submerged and not covered by CUs A4B01 and A4B02. This CU overlaps portions of previously sampled CUs from the northern and central portion of the original Area 4B - Part One certification effort. The recertification sample locations that fell within A4B03 match 12 locations from the original certification effort. As discussed in the Addendum to the CDL and Certification PSP for Area 4B - Part One (Reference 2), the U.S. Department of Energy believes that total uranium is the best indicator parameter to reveal any potential recontamination of Area 4B - Part One. Therefore, the 12 sampling locations in CU A4B02 (Figure 4) were randomly selected and sampled for total uranium.

Certification unit A4B01 is the only CU that has not been continuously covered with water; therefore, this CU is the only one that was real-time scanned. The results of the real-time scans are shown in Figures 5 through 11.

Recertification Evaluation and Conclusion

The results of this recertification effort were evaluated to determine if the previously certified area had become contaminated. For the locations that were resampled only location A4B-C17-14 had a result that exceeded the final remediation level (FRL) for total uranium. The location is in CU A4B01, within a high leachability zone; therefore, the FRL is 20 milligrams per kilogram (mg/kg). Since the above-FRL result was 60.5 mg/kg, which is three times the FRL, the area surrounding this location was excavated. Following excavation of the hotspot, total uranium was the only ASCOC that was sampled and analyzed. The post-excavation result was 35 mg/kg. A comparison of the original data and resampled data is presented in Table 1. The final recertification data and statistical analysis of the data are presented in Table 2. Certification unit A4B01 passed all of the certification criteria as discussed in Section 2.2.4 of the Certification Report for Area 4B - Part One.

There were no above-FRL results detected in CU A4B02. A comparison of the original data and resampled data is presented in Table 3. The final recertification data are presented in Table 4. Certification unit A4B02 passed all of the certification criteria as discussed in Section 2.2.4 of the Certification Report for Area 4B - Part One.

There were no above-FRL results detected in CU A4B03. A comparison of the original data and resampled data is presented in Table 5. The final recertification data are presented in Table 6. Certification unit A4B03 passed all of the certification criteria as discussed in Section 2.2.4 of the Certification Report for Area 4B - Part One.

If you have any questions or require additional information, please contact me at (513) 648-3139.

Sincerely,

Johnny Reising

Johnny W. Reising
Director

Enclosures

cc w/enclosures:
J. Desormeau, DOE-OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosures)
G. Jablonowski, USEPA-V, SRF-5J
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
S. Helmer, ODH
AR Coordinator, Fluor Fernald, Inc./MS12

cc w/o enclosures:
J. Chiou, Fluor Fernald, Inc./MS88
F. Johnston, Fluor Fernald, Inc./MS12
C. Murphy, Fluor Fernald, Inc./MS1
T. Terry, Fluor Fernald, Inc./MS1

TABLE 1
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B01

CU	Location	Sample ID	Parameter	Recert Result	Recert Qualifier	Original Result	Original Qualifier	Units	FRL	>FRL
A4B01	A4B-C15-4	A4B-C15-4^RMP	Aroclor-1254	5.4	J	1.4	NJ	ug/kg	130	No
	A4B-C17-1	A4B-C17-1^RMP	Aroclor-1254	3.8	U	2.1	U	ug/kg	130	No
	A4B-C17-2	A4B-C17-2^RMP	Aroclor-1254	3.7	U	3.9	UJ	ug/kg	130	No
	A4B-C17-3	A4B-C17-3^RMP	Aroclor-1254	3.7	U	3.8	UJ	ug/kg	130	No
	A4B-C17-5	A4B-C17-5^RMP	Aroclor-1254	3.8	U	3.9	UJ	ug/kg	130	No
	A4B-C17-8	A4B-C17-8^RMP	Aroclor-1254	3.8	U	3.9	UJ	ug/kg	130	No
	A4B-C17-14*									
	A4B-C17-15	A4B-C17-15^RMP	Aroclor-1254	4.1	U	2.4	U	ug/kg	130	No
	A4B-C17-16	A4B-C17-16^RMP	Aroclor-1254	3.7	U	1.3	U	ug/kg	130	No
	A4B-C18-4	A4B-C18-4^RMP	Aroclor-1254	3.9	U	3.2	NJ	ug/kg	130	No
	A4B-C18-7	A4B-C18-7^RMP	Aroclor-1254	3.7	U	2.4	NJ	ug/kg	130	No
	A4B-C18-8	A4B-C18-8^RMP	Aroclor-1254	3.9	U	3.8	UJ	ug/kg	130	No
	A4B-C18-13	A4B-C18-13^RMP	Aroclor-1254	3.9	U	3.8	UJ	ug/kg	130	No
	A4B-C18-15	A4B-C18-15^RMP	Aroclor-1254	3.9	U	4	UJ	ug/kg	130	No
A4B01	A4B-C15-4	A4B-C15-4^RMP	Beryllium	0.49	-	0.58	-	mg/kg	1.5	No
	A4B-C17-1	A4B-C17-1^RMP	Beryllium	0.26	-	0.214	U	mg/kg	1.5	No
	A4B-C17-2	A4B-C17-2^RMP	Beryllium	0.5	-	0.432	U	mg/kg	1.5	No
	A4B-C17-3	A4B-C17-3^RMP	Beryllium	0.37	-	0.272	U	mg/kg	1.5	No
	A4B-C17-5	A4B-C17-5^RMP	Beryllium	0.35	-	0.419	-	mg/kg	1.5	No
	A4B-C17-8	A4B-C17-8^RMP	Beryllium	0.37	-	0.385	-	mg/kg	1.5	No
	A4B-C17-14*									
	A4B-C17-15	A4B-C17-15^RMP	Beryllium	0.38	-	0.248	U	mg/kg	1.5	No
	A4B-C17-16	A4B-C17-16^RMP	Beryllium	0.31	-	0.338	U	mg/kg	1.5	No
	A4B-C18-4	A4B-C18-4^RMP	Beryllium	0.42	-	0.5	-	mg/kg	1.5	No
	A4B-C18-7	A4B-C18-7^RMP	Beryllium	0.27	-	0.42	-	mg/kg	1.5	No
	A4B-C18-8	A4B-C18-8^RMP	Beryllium	0.39	-	0.52	-	mg/kg	1.5	No
	A4B-C18-13	A4B-C18-13^RMP	Beryllium	0.21	-	0.25	-	mg/kg	1.5	No
	A4B-C18-15	A4B-C18-15^RMP	Beryllium	0.29	-	0.91	-	mg/kg	1.5	No
A4B01	A4B-C15-4	A4B-C15-4^RMP	Radium-226	0.896	-	0.862	-	pCi/g	1.7	No
	A4B-C17-1	A4B-C17-1^RMP	Radium-226	0.636	-	0.711	-	pCi/g	1.7	No
	A4B-C17-2	A4B-C17-2^RMP	Radium-226	0.912	-	1.19	-	pCi/g	1.7	No
	A4B-C17-3	A4B-C17-3^RMP	Radium-226	0.769	-	0.873	-	pCi/g	1.7	No
	A4B-C17-5	A4B-C17-5^RMP	Radium-226	0.723	-	0.734	-	pCi/g	1.7	No
	A4B-C17-8	A4B-C17-8^RMP	Radium-226	0.875	-	1.05	-	pCi/g	1.7	No
	A4B-C17-14*									
	A4B-C17-15	A4B-C17-15^RMP	Radium-226	1.04	-	0.938	-	pCi/g	1.7	No
	A4B-C17-16	A4B-C17-16^RMP	Radium-226	0.767	-	0.846	-	pCi/g	1.7	No
	A4B-C18-4	A4B-C18-4^RMP	Radium-226	0.756	-	0.797	-	pCi/g	1.7	No
	A4B-C18-7	A4B-C18-7^RMP	Radium-226	0.78	-	0.817	-	pCi/g	1.7	No
	A4B-C18-8	A4B-C18-8^RMP	Radium-226	0.915	-	0.833	-	pCi/g	1.7	No
	A4B-C18-13	A4B-C18-13^RMP	Radium-226	0.715	-	0.765	-	pCi/g	1.7	No
	A4B-C18-15	A4B-C18-15^RMP	Radium-226	0.733	-	0.933	-	pCi/g	1.7	No
A4B01	A4B-C15-4	A4B-C15-4^RMP	Radium-228	0.773	-	0.703	-	pCi/g	1.8	No
	A4B-C17-1	A4B-C17-1^RMP	Radium-228	0.504	-	0.521	J	pCi/g	1.8	No
	A4B-C17-2	A4B-C17-2^RMP	Radium-228	0.754	-	0.688	J	pCi/g	1.8	No
	A4B-C17-3	A4B-C17-3^RMP	Radium-228	0.58	-	0.792	J	pCi/g	1.8	No
	A4B-C17-5	A4B-C17-5^RMP	Radium-228	0.55	-	0.496	J	pCi/g	1.8	No
	A4B-C17-8	A4B-C17-8^RMP	Radium-228	0.581	-	0.927	J	pCi/g	1.8	No
	A4B-C17-14*									
	A4B-C17-15	A4B-C17-15^RMP	Radium-228	0.841	-	0.682	J	pCi/g	1.8	No
	A4B-C17-16	A4B-C17-16^RMP	Radium-228	0.646	-	0.604	J	pCi/g	1.8	No
	A4B-C18-4	A4B-C18-4^RMP	Radium-228	0.565	-	0.668	-	pCi/g	1.8	No
	A4B-C18-7	A4B-C18-7^RMP	Radium-228	0.489	-	0.56	-	pCi/g	1.8	No
	A4B-C18-8	A4B-C18-8^RMP	Radium-228	0.635	-	0.741	-	pCi/g	1.8	No
	A4B-C18-13	A4B-C18-13^RMP	Radium-228	0.476	-	0.494	-	pCi/g	1.8	No
	A4B-C18-15	A4B-C18-15^RMP	Radium-228	0.677	-	0.787	-	pCi/g	1.8	No

TABLE 1
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B01

CU	Location	Sample ID	Parameter	Recert Result	Recert Qualifier	Original Result	Original Qualifier	Units	FRL	>FRL
A4B01	A4B-C15-4	A4B-C15-4^RMP	Technetium-99	1.17	U	1.11	U	pCi/g	30	No
	A4B-C17-1	A4B-C17-1^RMP	Technetium-99	1.25	U	0.766	U	pCi/g	30	No
	A4B-C17-2	A4B-C17-2^RMP	Technetium-99	1.3	U	0.799	U	pCi/g	30	No
	A4B-C17-3	A4B-C17-3^RMP	Technetium-99	1.13	U	0.741	U	pCi/g	30	No
	A4B-C17-5	A4B-C17-5^RMP	Technetium-99	1.37	U	0.761	U	pCi/g	30	No
	A4B-C17-8	A4B-C17-8^RMP	Technetium-99	1.2	U	0.815	U	pCi/g	30	No
	A4B-C17-14*									
	A4B-C17-15	A4B-C17-15^RMP	Technetium-99	1.25	U	0.78	U	pCi/g	30	No
	A4B-C17-16	A4B-C17-16^RMP	Technetium-99	1.17	U	0.773	U	pCi/g	30	No
	A4B-C18-4	A4B-C18-4^RMP	Technetium-99	1.26	U	1.18	U	pCi/g	30	No
	A4B-C18-7	A4B-C18-7^RMP	Technetium-99	1.26	U	1.22	U	pCi/g	30	No
	A4B-C18-8	A4B-C18-8^RMP	Technetium-99	1.22	U	1.09	U	pCi/g	30	No
	A4B-C18-13	A4B-C18-13^RMP	Technetium-99	1.1	U	1.15	U	pCi/g	30	No
	A4B-C18-15	A4B-C18-15^RMP	Technetium-99	1.33	U	1.17	U	pCi/g	30	No
A4B01	A4B-C15-4	A4B-C15-4^RMP	Thorium-228	0.79	-	0.715	-	pCi/g	1.7	No
	A4B-C17-1	A4B-C17-1^RMP	Thorium-228	0.518	-	0.547	J	pCi/g	1.7	No
	A4B-C17-2	A4B-C17-2^RMP	Thorium-228	0.727	-	0.676	J	pCi/g	1.7	No
	A4B-C17-3	A4B-C17-3^RMP	Thorium-228	0.594	-	0.871	J	pCi/g	1.7	No
	A4B-C17-5	A4B-C17-5^RMP	Thorium-228	0.57	-	0.506	J	pCi/g	1.7	No
	A4B-C17-8	A4B-C17-8^RMP	Thorium-228	0.543	-	0.927	J	pCi/g	1.7	No
	A4B-C17-14*									
	A4B-C17-15	A4B-C17-15^RMP	Thorium-228	0.838	-	0.674	J	pCi/g	1.7	No
	A4B-C17-16	A4B-C17-16^RMP	Thorium-228	0.652	-	0.603	J	pCi/g	1.7	No
	A4B-C18-4	A4B-C18-4^RMP	Thorium-228	0.549	-	0.683	-	pCi/g	1.7	No
	A4B-C18-7	A4B-C18-7^RMP	Thorium-228	0.478	-	0.574	-	pCi/g	1.7	No
	A4B-C18-8	A4B-C18-8^RMP	Thorium-228	0.63	-	0.743	-	pCi/g	1.7	No
	A4B-C18-13	A4B-C18-13^RMP	Thorium-228	0.506	-	0.484	-	pCi/g	1.7	No
	A4B-C18-15	A4B-C18-15^RMP	Thorium-228	0.677	-	0.763	-	pCi/g	1.7	No
A4B01	A4B-C15-4	A4B-C15-4^RMP	Thorium-232	0.773	-	0.703	-	pCi/g	1.5	No
	A4B-C17-1	A4B-C17-1^RMP	Thorium-232	0.504	-	0.521	J	pCi/g	1.5	No
	A4B-C17-2	A4B-C17-2^RMP	Thorium-232	0.754	-	0.688	J	pCi/g	1.5	No
	A4B-C17-3	A4B-C17-3^RMP	Thorium-232	0.58	-	0.792	J	pCi/g	1.5	No
	A4B-C17-5	A4B-C17-5^RMP	Thorium-232	0.55	-	0.496	J	pCi/g	1.5	No
	A4B-C17-8	A4B-C17-8^RMP	Thorium-232	0.581	-	0.927	J	pCi/g	1.5	No
	A4B-C17-14*									
	A4B-C17-15	A4B-C17-15^RMP	Thorium-232	0.841	-	0.682	J	pCi/g	1.5	No
	A4B-C17-16	A4B-C17-16^RMP	Thorium-232	0.646	-	0.604	J	pCi/g	1.5	No
	A4B-C18-4	A4B-C18-4^RMP	Thorium-232	0.565	-	0.668	-	pCi/g	1.5	No
	A4B-C18-7	A4B-C18-7^RMP	Thorium-232	0.489	-	0.56	-	pCi/g	1.5	No
	A4B-C18-8	A4B-C18-8^RMP	Thorium-232	0.635	-	0.741	-	pCi/g	1.5	No
	A4B-C18-13	A4B-C18-13^RMP	Thorium-232	0.476	-	0.494	-	pCi/g	1.5	No
	A4B-C18-15	A4B-C18-15^RMP	Thorium-232	0.677	-	0.787	-	pCi/g	1.5	No
A4B01	A4B-C15-4	A4B-C15-4^RMP	Uranium, Total	6.4	-	3.96	J	mg/kg	20	No
	A4B-C17-1	A4B-C17-1^RMP	Uranium, Total	4.31	-	4.39	-	mg/kg	20	No
	A4B-C17-2	A4B-C17-2^RMP	Uranium, Total	5.84	-	5.27	-	mg/kg	20	No
	A4B-C17-3	A4B-C17-3^RMP	Uranium, Total	5.51	-	3.4	-	mg/kg	20	No
	A4B-C17-5	A4B-C17-5^RMP	Uranium, Total	1.89	U	1.98	J	mg/kg	20	No
	A4B-C17-8	A4B-C17-8^RMP	Uranium, Total	5.21	-	4.19	-	mg/kg	20	No
	A4B-C17-14*		Uranium, Total	35	-			mg/kg	21	Yes
	A4B-C17-15	A4B-C17-15^RMP	Uranium, Total	5.69	-	1.62	U	mg/kg	20	No
	A4B-C17-16	A4B-C17-16^RMP	Uranium, Total	3.92	-	5.25	-	mg/kg	20	No
	A4B-C18-4	A4B-C18-4^RMP	Uranium, Total	3.63	J	3.72	J	mg/kg	20	No
	A4B-C18-7	A4B-C18-7^RMP	Uranium, Total	2.85	J	3.3	-	mg/kg	20	No
	A4B-C18-8	A4B-C18-8^RMP	Uranium, Total	7.24	-	5.39	-	mg/kg	20	No
	A4B-C18-13	A4B-C18-13^RMP	Uranium, Total	1.38	U	2.94	J	mg/kg	20	No
	A4B-C18-15	A4B-C18-15^RMP	Uranium, Total	3.52	J	3.79	J	mg/kg	20	No

* Sample location was excavated after re-sampling revealed that total uranium was greater than two-times the FRL. Therefore, there is not an original sampe result to compare to the recertification result.

TABLE 2
CERTIFICATION UNIT A4B01

	Primary COCs					Secondary COCs		
Sample ID	Radium-226	Radium-228	Thorium-228	Thorium-232	Uranium, Total	Technetium-99	Beryllium	Aroclor-1254
A4B-C15-4W	0.896 -	0.773 -	0.79 -	0.773 -	6.4 -	1.17 U	0.49 -	5.4 J
A4B-C18-4W	0.756 -	0.565 -	0.549 -	0.565 -	3.63 J	1.26 U	0.42 -	3.9 U
A4B-C18-7W	0.78 -	0.489 -	0.478 -	0.489 -	2.85 J	1.26 U	0.27 -	3.7 U
A4B-C18-8W	0.915 -	0.635 -	0.63 -	0.635 -	7.24 -	1.22 U	0.39 -	3.9 U
A4B-C18-8W-D	0.802 -	0.588 -	0.584 -	0.588 -	6.1 -	1.14 U	0.36 -	3.9 U
A4B-C18-13W	0.715 -	0.476 -	0.506 -	0.476 -	1.38 U	1.1 U	0.21 -	3.9 U
A4B-C18-15W	0.733 -	0.677 -	0.677 -	0.677 -	3.52 J	1.33 U	0.29 -	3.9 U
A4B-C17-1W	0.636 -	0.504 -	0.518 -	0.504 -	3.26 -	1.25 U	0.24 -	3.8 U
A4B-C17-1W-D	0.606 -	0.478 -	0.469 -	0.478 -	4.31 -	1.18 U	0.26 -	3.7 U
A4B-C17-2W	0.912 -	0.754 -	0.727 -	0.754 -	5.84 -	1.3 U	0.5 -	3.7 U
A4B-C17-3W	0.769 -	0.58 -	0.594 -	0.58 -	5.51 -	1.13 U	0.37 -	3.7 U
A4B-C17-5W	0.723 -	0.55 -	0.57 -	0.55 -	1.89 U	1.37 U	0.35 -	3.8 U
A4B-C17-8W	0.875 -	0.581 -	0.543 -	0.581 -	5.21 -	1.2 U	0.37 -	3.8 U
A4B-C17-14W	1.03 -	1.02 -	1.02 -	1.02 -		1.26 U	0.32 -	4 J
A4B-C17-14W-B2S					35 -			
A4B-C17-15W	1.04 -	0.841 -	0.838 -	0.841 -	5.69 -	1.25 U	0.38 -	4.1 U
A4B-C17-16W	0.767 -	0.646 -	0.652 -	0.646 -	3.92 -	1.17 U	0.31 -	3.7 U
Limit	1.7	1.8	1.7	1.5	20	30	1.5	130
Units	pCi/g	pCi/g	pCi/g	pCi/g	µg/g	pCi/g	mg/kg	ug/kg
Conf. Level	95%	95%	95%	95%	95%	90%	90%	90%
Max. Result	1.04	1.02	1.02	1.02	35	1.37 U	0.5	5.4
Max. >= Limit	No	No	No	No	Yes	No	No	No
W-statistic Prob. #	- -	- -	- -	- -	6.9% (LN)	- -	- -	- -
Test Procedure	- -	- -	- -	- -	Lognormal	- -	- -	- -
Sample Size	14	14	14	14	14	14	14	14
Nondetects	0	0	0	0	2	14	0	12
% Nondetects	0%	0%	0%	0%	14%	100%	0%	86%
Est. Mean*	- -	- -	- -	- -	6.479	- -	- -	- -
UCL	- -	- -	- -	- -	12.772	- -	- -	- -
Prob. > Limit	- -	- -	- -	- -	- -	- -	- -	- -
Pass / Fail	- -	- -	- -	- -	pass	- -	- -	- -

a posteriori Sample	- -	- -	- -	- -	4	- -	- -	- -
Size calculation	- -	- -	- -	- -	Pass	- -	- -	- -

TABLE 3
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B02

CU	Location	Sample ID	Parameter	Recert Result	Recert Qualifier	Original Result	Original Qualifier	Units	FRL	>FRL
A4B02	A4B-C09-7	A4B-C09-7^RMP	Aroclor-1254	3.9	J	3.6	UJ	ug/kg	130	No
	A4B-C09-8	A4B-C09-8^RMP	Aroclor-1254	3.8	U	0.7	NJ	ug/kg	130	No
	A4B-C09-13	A4B-C09-13^RMP	Aroclor-1254	3.8	U	3.5	UJ	ug/kg	130	No
	A4B-C09-14	A4B-C09-14^RMP	Aroclor-1254	4.1	U	6.8	NJ	ug/kg	130	No
	A4B-C09-16	A4B-C09-16^RMP	Aroclor-1254	4.4	U	1.4	NJ	ug/kg	130	No
	A4B-C11-3	A4B-C11-3^RMP	Aroclor-1254	3.8	U	3.4	UJ	ug/kg	130	No
	A4B-C11-5	A4B-C11-5^RMP	Aroclor-1254	3.9	U	3.5	UJ	ug/kg	130	No
	A4B-C11-6	A4B-C11-6^RMP	Aroclor-1254	3.8	U	3.3	NJ	ug/kg	130	No
	A4B-C11-7	A4B-C11-7^RMP	Aroclor-1254	3.9	U	3.5	UJ	ug/kg	130	No
	A4B-C11-9	A4B-C11-9^RMP	Aroclor-1254	3.9	U	3.6	UJ	ug/kg	130	No
	A4B-C11-11	A4B-C11-11^RMP	Aroclor-1254	4.2	U	3.6	UJ	ug/kg	130	No
	A4B-C11-12	A4B-C11-12^RMP	Aroclor-1254	4.3	U	3.5	UJ	ug/kg	130	No
	A4B-C11-13	A4B-C11-13^RMP	Aroclor-1254	3.7	U	1.2	NJ	ug/kg	130	No
	A4B-C11-14	A4B-C11-14^RMP	Aroclor-1254	3.9	U	3.5	UJ	ug/kg	130	No
	A4B-C11-16	A4B-C11-16^RMP	Aroclor-1254	3.6	U	3.5	UJ	ug/kg	130	No
A4B02	A4B-C09-7	A4B-C09-7^RMP	Beryllium	0.68	-	0.588	J	mg/kg	1.5	No
	A4B-C09-8	A4B-C09-8^RMP	Beryllium	0.47	-	0.463	J	mg/kg	1.5	No
	A4B-C09-13	A4B-C09-13^RMP	Beryllium	0.52	-	0.506	J	mg/kg	1.5	No
	A4B-C09-14	A4B-C09-14^RMP	Beryllium	0.52	-	0.523	J	mg/kg	1.5	No
	A4B-C09-16	A4B-C09-16^RMP	Beryllium	0.68	-	0.458	J	mg/kg	1.5	No
	A4B-C11-3	A4B-C11-3^RMP	Beryllium	0.36	-	0.362	-	mg/kg	1.5	No
	A4B-C11-5	A4B-C11-5^RMP	Beryllium	0.39	-	0.516	-	mg/kg	1.5	No
	A4B-C11-6	A4B-C11-6^RMP	Beryllium	0.22	-	0.412	-	mg/kg	1.5	No
	A4B-C11-7	A4B-C11-7^RMP	Beryllium	0.496	-	0.45	-	mg/kg	1.5	No
	A4B-C11-9	A4B-C11-9^RMP	Beryllium	0.355	-	0.379	-	mg/kg	1.5	No
	A4B-C11-11	A4B-C11-11^RMP	Beryllium	0.335	-	0.44	-	mg/kg	1.5	No
	A4B-C11-12	A4B-C11-12^RMP	Beryllium	0.7	-	0.514	-	mg/kg	1.5	No
	A4B-C11-13	A4B-C11-13^RMP	Beryllium	0.6	-	0.399	-	mg/kg	1.5	No
	A4B-C11-14	A4B-C11-14^RMP	Beryllium	0.29	-	0.393	-	mg/kg	1.5	No
	A4B-C11-16	A4B-C11-16^RMP	Beryllium	0.55	-	0.464	-	mg/kg	1.5	No
A4B02	A4B-C09-7	A4B-C09-7^RMP	Radium-226	1.05	-	1.01	-	pCi/g	1.7	No
	A4B-C09-8	A4B-C09-8^RMP	Radium-226	0.78	-	0.917	-	pCi/g	1.7	No
	A4B-C09-13	A4B-C09-13^RMP	Radium-226	0.837	-	0.971	-	pCi/g	1.7	No
	A4B-C09-14	A4B-C09-14^RMP	Radium-226	0.798	-	0.901	-	pCi/g	1.7	No
	A4B-C09-16	A4B-C09-16^RMP	Radium-226	0.971	-	0.856	-	pCi/g	1.7	No
	A4B-C11-3	A4B-C11-3^RMP	Radium-226	0.878	-	1.09	-	pCi/g	1.7	No
	A4B-C11-5	A4B-C11-5^RMP	Radium-226	0.789	-	1.04	-	pCi/g	1.7	No
	A4B-C11-6	A4B-C11-6^RMP	Radium-226	0.738	-	0.969	-	pCi/g	1.7	No
	A4B-C11-7	A4B-C11-7^RMP	Radium-226	0.887	J	0.91	-	pCi/g	1.7	No
	A4B-C11-9	A4B-C11-9^RMP	Radium-226	0.883	J	0.874	-	pCi/g	1.7	No
	A4B-C11-11	A4B-C11-11^RMP	Radium-226	0.789	J	0.851	-	pCi/g	1.7	No
	A4B-C11-12	A4B-C11-12^RMP	Radium-226	0.868	-	0.863	-	pCi/g	1.7	No
	A4B-C11-13	A4B-C11-13^RMP	Radium-226	0.914	-	0.916	-	pCi/g	1.7	No
	A4B-C11-14	A4B-C11-14^RMP	Radium-226	0.804	-	0.882	-	pCi/g	1.7	No
	A4B-C11-16	A4B-C11-16^RMP	Radium-226	0.768	-	0.97	-	pCi/g	1.7	No

TABLE 3
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B02

CU	Location	Sample ID	Parameter	Recert Result	Recert Qualifier	Original Result	Original Qualifier	Units	FRL	>FRL
A4B02	A4B-C09-7	A4B-C09-7^RMP	Radium-228	1.13	-	0.836	-	pCi/g	1.8	No
	A4B-C09-8	A4B-C09-8^RMP	Radium-228	0.754	-	0.728	-	pCi/g	1.8	No
	A4B-C09-13	A4B-C09-13^RMP	Radium-228	0.728	-	0.779	-	pCi/g	1.8	No
	A4B-C09-14	A4B-C09-14^RMP	Radium-228	0.686	-	0.686	-	pCi/g	1.8	No
	A4B-C09-16	A4B-C09-16^RMP	Radium-228	0.88	-	0.629	-	pCi/g	1.8	No
	A4B-C11-3	A4B-C11-3^RMP	Radium-228	0.617	-	0.681	-	pCi/g	1.8	No
	A4B-C11-5	A4B-C11-5^RMP	Radium-228	0.655	-	0.811	-	pCi/g	1.8	No
	A4B-C11-6	A4B-C11-6^RMP	Radium-228	0.516	-	0.714	-	pCi/g	1.8	No
	A4B-C11-7	A4B-C11-7^RMP	Radium-228	0.598	-	0.725	-	pCi/g	1.8	No
	A4B-C11-9	A4B-C11-9^RMP	Radium-228	0.536	-	0.556	-	pCi/g	1.8	No
	A4B-C11-11	A4B-C11-11^RMP	Radium-228	0.494	-	0.55	-	pCi/g	1.8	No
	A4B-C11-12	A4B-C11-12^RMP	Radium-228	0.771	-	0.8	-	pCi/g	1.8	No
	A4B-C11-13	A4B-C11-13^RMP	Radium-228	0.861	-	0.654	-	pCi/g	1.8	No
	A4B-C11-14	A4B-C11-14^RMP	Radium-228	0.673	-	0.62	-	pCi/g	1.8	No
	A4B-C11-16	A4B-C11-16^RMP	Radium-228	0.672	-	0.753	-	pCi/g	1.8	No
A4B02	A4B-C09-7	A4B-C09-7^RMP	Technetium-99	1.8	U	0.748	U	pCi/g	30	No
	A4B-C09-8	A4B-C09-8^RMP	Technetium-99	1.73	U	0.737	U	pCi/g	30	No
	A4B-C09-13	A4B-C09-13^RMP	Technetium-99	1.72	U	0.748	U	pCi/g	30	No
	A4B-C09-14	A4B-C09-14^RMP	Technetium-99	1.91	U	0.747	U	pCi/g	30	No
	A4B-C09-16	A4B-C09-16^RMP	Technetium-99	2.16	U	0.746	U	pCi/g	30	No
	A4B-C11-3	A4B-C11-3^RMP	Technetium-99	1.6	U	0.725	U	pCi/g	30	No
	A4B-C11-5	A4B-C11-5^RMP	Technetium-99	1.89	U	0.73	U	pCi/g	30	No
	A4B-C11-6	A4B-C11-6^RMP	Technetium-99	1.52	U	0.72	U	pCi/g	30	No
	A4B-C11-7	A4B-C11-7^RMP	Technetium-99	0.781	U	0.742	U	pCi/g	30	No
	A4B-C11-9	A4B-C11-9^RMP	Technetium-99	0.826	U	0.72	U	pCi/g	30	No
	A4B-C11-11	A4B-C11-11^RMP	Technetium-99	0.822	U	0.726	U	pCi/g	30	No
	A4B-C11-12	A4B-C11-12^RMP	Technetium-99	1.74	U	0.736	U	pCi/g	30	No
	A4B-C11-13	A4B-C11-13^RMP	Technetium-99	1.85	U	1.52	-	pCi/g	30	No
	A4B-C11-14	A4B-C11-14^RMP	Technetium-99	1.68	U	0.721	U	pCi/g	30	No
	A4B-C11-16	A4B-C11-16^RMP	Technetium-99	1.79	U	0.726	U	pCi/g	30	No
A4B02	A4B-C09-7	A4B-C09-7^RMP	Thorium-228	1.13	-	0.875	-	pCi/g	1.7	No
	A4B-C09-8	A4B-C09-8^RMP	Thorium-228	0.766	-	0.727	-	pCi/g	1.7	No
	A4B-C09-13	A4B-C09-13^RMP	Thorium-228	0.711	-	0.783	-	pCi/g	1.7	No
	A4B-C09-14	A4B-C09-14^RMP	Thorium-228	0.655	-	0.692	-	pCi/g	1.7	No
	A4B-C09-16	A4B-C09-16^RMP	Thorium-228	0.887	-	0.623	-	pCi/g	1.7	No
	A4B-C11-3	A4B-C11-3^RMP	Thorium-228	0.608	-	0.681	-	pCi/g	1.7	No
	A4B-C11-5	A4B-C11-5^RMP	Thorium-228	0.668	-	0.809	-	pCi/g	1.7	No
	A4B-C11-6	A4B-C11-6^RMP	Thorium-228	0.519	-	0.714	-	pCi/g	1.7	No
	A4B-C11-7	A4B-C11-7^RMP	Thorium-228	0.624	-	0.724	-	pCi/g	1.7	No
	A4B-C11-9	A4B-C11-9^RMP	Thorium-228	0.524	-	0.552	-	pCi/g	1.7	No
	A4B-C11-11	A4B-C11-11^RMP	Thorium-228	0.461	-	0.549	-	pCi/g	1.7	No
	A4B-C11-12	A4B-C11-12^RMP	Thorium-228	0.742	-	0.869	-	pCi/g	1.7	No
	A4B-C11-13	A4B-C11-13^RMP	Thorium-228	0.867	-	0.759	-	pCi/g	1.7	No
	A4B-C11-14	A4B-C11-14^RMP	Thorium-228	0.686	-	0.664	-	pCi/g	1.7	No
	A4B-C11-16	A4B-C11-16^RMP	Thorium-228	0.649	-	0.784	-	pCi/g	1.7	No

TABLE 3
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B02

CU	Location	Sample ID	Parameter	Recert Result	Recert Qualifier	Original Result	Original Qualifier	Units	FRL	>FRL
A4B02	A4B-C09-7	A4B-C09-7^RMP	Thorium-232	1.13	-	0.836	-	pCi/g	1.5	No
	A4B-C09-8	A4B-C09-8^RMP	Thorium-232	0.754	-	0.728	-	pCi/g	1.5	No
	A4B-C09-13	A4B-C09-13^RMP	Thorium-232	0.728	-	0.779	-	pCi/g	1.5	No
	A4B-C09-14	A4B-C09-14^RMP	Thorium-232	0.686	-	0.686	-	pCi/g	1.5	No
	A4B-C09-16	A4B-C09-16^RMP	Thorium-232	0.88	-	0.629	-	pCi/g	1.5	No
	A4B-C11-3	A4B-C11-3^RMP	Thorium-232	0.617	-	0.681	-	pCi/g	1.5	No
	A4B-C11-5	A4B-C11-5^RMP	Thorium-232	0.655	-	0.811	-	pCi/g	1.5	No
	A4B-C11-6	A4B-C11-6^RMP	Thorium-232	0.516	-	0.714	-	pCi/g	1.5	No
	A4B-C11-7	A4B-C11-7^RMP	Thorium-232	0.598	-	0.725	-	pCi/g	1.5	No
	A4B-C11-9	A4B-C11-9^RMP	Thorium-232	0.536	-	0.556	-	pCi/g	1.5	No
	A4B-C11-11	A4B-C11-11^RMP	Thorium-232	0.494	-	0.55	-	pCi/g	1.5	No
	A4B-C11-12	A4B-C11-12^RMP	Thorium-232	0.771	-	0.8	-	pCi/g	1.5	No
	A4B-C11-13	A4B-C11-13^RMP	Thorium-232	0.861	-	0.654	-	pCi/g	1.5	No
	A4B-C11-14	A4B-C11-14^RMP	Thorium-232	0.673	-	0.62	-	pCi/g	1.5	No
	A4B-C11-16	A4B-C11-16^RMP	Thorium-232	0.672	-	0.753	-	pCi/g	1.5	No
A4B02	A4B-C09-7	A4B-C09-7^RMP	Uranium, Total	5.92	-	7.59	-	mg/kg	20	No
	A4B-C09-8	A4B-C09-8^RMP	Uranium, Total	4.41	-	2.37	UJ	mg/kg	20	No
	A4B-C09-13	A4B-C09-13^RMP	Uranium, Total	3.85	-	2.49	UJ	mg/kg	20	No
	A4B-C09-14	A4B-C09-14^RMP	Uranium, Total	4.51	J	5.94	-	mg/kg	20	No
	A4B-C09-16	A4B-C09-16^RMP	Uranium, Total	5.63	-	4.03	-	mg/kg	20	No
	A4B-C11-3	A4B-C11-3^RMP	Uranium, Total	2.04	J	12.5	J	mg/kg	20	No
	A4B-C11-5	A4B-C11-5^RMP	Uranium, Total	2.91	-	16.5	J	mg/kg	20	No
	A4B-C11-6	A4B-C11-6^RMP	Uranium, Total	2.09	J	14.4	J	mg/kg	20	No
	A4B-C11-7	A4B-C11-7^RMP	Uranium, Total	4.5	-	2.39	UJ	mg/kg	20	No
	A4B-C11-9	A4B-C11-9^RMP	Uranium, Total	4.29	-	6.06	J	mg/kg	20	No
	A4B-C11-11	A4B-C11-11^RMP	Uranium, Total	4.71	-	3.65	J	mg/kg	20	No
	A4B-C11-12	A4B-C11-12^RMP	Uranium, Total	5.35	-	2.83	UJ	mg/kg	20	No
	A4B-C11-13	A4B-C11-13^RMP	Uranium, Total	4.92	-	6.57	J	mg/kg	20	No
	A4B-C11-14	A4B-C11-14^RMP	Uranium, Total	4.47	-	4.6	J	mg/kg	20	No
	A4B-C11-16	A4B-C11-16^RMP	Uranium, Total	4.57	-	4.31	J	mg/kg	20	No

TABLE 4
CERTIFICATION UNIT A4B02

	Primary COCs					Secondary COCs		
Sample ID	Radium-226	Radium-228	Thorium-228	Thorium-232	Uranium, Total	Technetium-99	Beryllium	Aroclor-1254
A4B-C09-7W	1.05 -	1.13 -	1.13 -	1.13 -	5.92 -	1.8 U	0.68 -	3.9 J
A4B-C09-8W	0.78 -	0.754 -	0.766 -	0.754 -	4.41 -	1.73 U	0.47 -	3.8 U
A4B-C09-13W	0.837 -	0.728 -	0.711 -	0.728 -	3.85 -	1.72 U	0.52 -	3.8 U
A4B-C09-14W	0.798 -	0.686 -	0.655 -	0.686 -	4.51 J	1.91 U	0.52 -	4.1 U
A4B-C09-16W	0.971 -	0.88 -	0.887 -	0.88 -	5.63 -	2.16 U	0.68 -	4.4 U
A4B-C11-3W	0.878 -	0.617 -	0.608 -	0.617 -	2.04 J	1.6 U	0.36 -	3.8 U
A4B-C11-5W	0.789 -	0.655 -	0.668 -	0.655 -	2.91 -	1.89 U	0.39 -	3.9 U
A4B-C11-6W	0.738 -	0.516 -	0.519 -	0.516 -	2.09 J	1.52 U	0.22 -	3.8 U
A4B-C11-7W	0.887 J	0.598 -	0.624 -	0.598 -	4.5 -	0.781 U	0.496 -	3.9 U
A4B-C11-9W	0.877 J	0.536 -	0.521 -	0.536 -	4.29 -	0.824 U	0.323 -	3.9 U
A4B-C11-9W-D	0.883 J	0.504 -	0.524 -	0.504 -	1.76 U	0.826 U	0.355 -	3.8 U
A4B-C11-11W	0.789 J	0.494 -	0.461 -	0.494 -	4.71 -	0.822 U	0.335 -	4.2 U
A4B-C11-12W	0.868 -	0.771 -	0.742 -	0.771 -	5.35 -	1.74 U	0.7 -	4.3 U
A4B-C11-13W	0.914 -	0.861 -	0.867 -	0.861 -	4.92 -	1.85 U	0.6 -	3.7 U
A4B-C11-14W	0.804 -	0.673 -	0.686 -	0.673 -	4.47 -	1.68 U	0.29 -	3.9 U
A4B-C11-16W	0.768 -	0.672 -	0.649 -	0.672 -	4.57 -	1.79 U	0.55 -	3.6 U
Limit	1.7	1.8	1.7	1.5	20	30	1.5	130
Units	pCi/g	pCi/g	pCi/g	pCi/g	µg/g	pCi/g	mg/kg	ug/kg
Conf. Level	95%	95%	95%	95%	95%	90%	90%	90%
Max. Result	1.05	1.13	1.13	1.13	5.92	2.16 U	0.5	3.9
Max. >= Limit	No	No	No	No	Yes	No	No	No
W-statistic Prob. #	- -	- -	- -	- -	- -	- -	- -	- -
Test Procedure	- -	- -	- -	- -	- -	- -	- -	- -
Sample Size	15	15	15	15	15	15	15	15
Nondetects	0	0	0	0	1	15	0	14
% Nondetects	0%	0%	0%	0%	7%	100%	0%	93%
Est. Mean*	- -	- -	- -	- -	- -	- -	- -	- -
UCL	- -	- -	- -	- -	- -	- -	- -	- -
Prob. > Limit	- -	- -	- -	- -	- -	- -	- -	- -
Pass / Fail	- -	- -	- -	- -	- -	- -	- -	- -
a posteriori Sample	- -	- -	- -	- -	- -	- -	- -	- -
Size calculation	- -	- -	- -	- -	- -	- -	- -	- -

TABLE 5
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B03

CU	Location	Sample ID	Parameter	Recert Result	Recert Qualifier	Original Result	Original Qualifier	Units	FRL	>FRL
A4B03	A4B-C08-12	A4B-C08-12^RMP	Uranium, Total	1.5	J	15	-	mg/kg	20	No
	A4B-C09-10	A4B-C09-10^RMP	Uranium, Total	1.73	J	2.64	UJ	mg/kg	20	No
	A4B-C10-4	A4B-C10-4^RMP	Uranium, Total	7.57	J	8.67	J	mg/kg	20	No
	A4B-C10-8	A4B-C10-8^RMP	Uranium, Total	2.14	J	4.58	J	mg/kg	20	No
	A4B-C13-2	A4B-C13-2^RMP	Uranium, Total	3.46	J	7.78	-	mg/kg	20	No
	A4B-C13-3	A4B-C13-3^RMP	Uranium, Total	18.5	J	5.3	-	mg/kg	20	No
	A4B-C13-6	A4B-C13-6^RMP	Uranium, Total	1.24	J	4.14	-	mg/kg	20	No
	A4B-C13-13	A4B-C13-13^RMP	Uranium, Total	0.917	J	6.66	-	mg/kg	20	No
	A4B-C14-4	A4B-C14-4^RMP	Uranium, Total	0.954	J	2.5	UJ	mg/kg	20	No
	A4B-C14-6	A4B-C14-6^RMP	Uranium, Total	1.95	J	2.63	UJ	mg/kg	20	No
	A4B-C14-12	A4B-C14-12^RMP	Uranium, Total	7.94	J	5.27	J	mg/kg	20	No
	A4B-C15-9	A4B-C15-9^RMP	Uranium, Total	3.65	J	9.46	-	mg/kg	20	No

TABLE 6
CERTIFICATION UNIT A4B03

	Primary COCs
Sample ID	Uranium, Total
A4B-C15-9W	3.65 J
A4B-C14-4W	0.954 J
A4B-C14-6W	1.95 J
A4B-C14-12W	7.94 J
A4B-C13-2W	3.46 J
A4B-C13-3W	18.5 J
A4B-C13-3W-D	13.9 J
A4B-C13-6W	1.24 J
A4B-C13-13W	0.917 J
A4B-C09-10W	1.73 J
A4B-C08-12W	1.5 J
A4B-C10-4W	7.57 J
A4B-C10-8W	2.14 J
Limit	20
Units	µg/g
Conf. Level	95%
Max. Result	18.5
Max. >= Limit	No
W-statistic Prob. #	- -
Test Procedure	- -
Sample Size	12
Nondetects	0
% Nondetects	0%
Est. Mean*	- -
UCL	- -
Prob. > Limit	- -
Pass / Fail	- -

a posteriori Sample	- -
Size calculation	- -

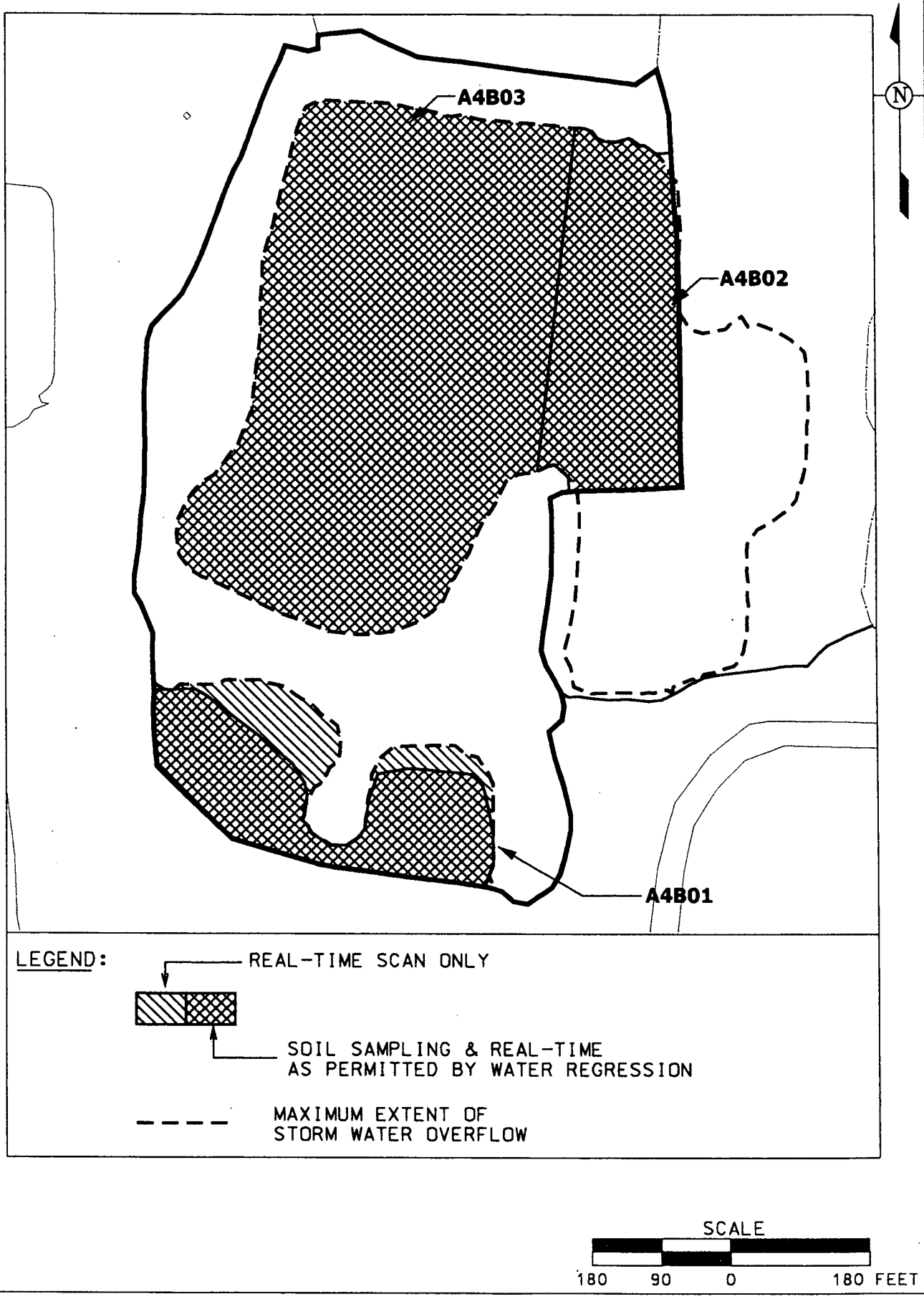
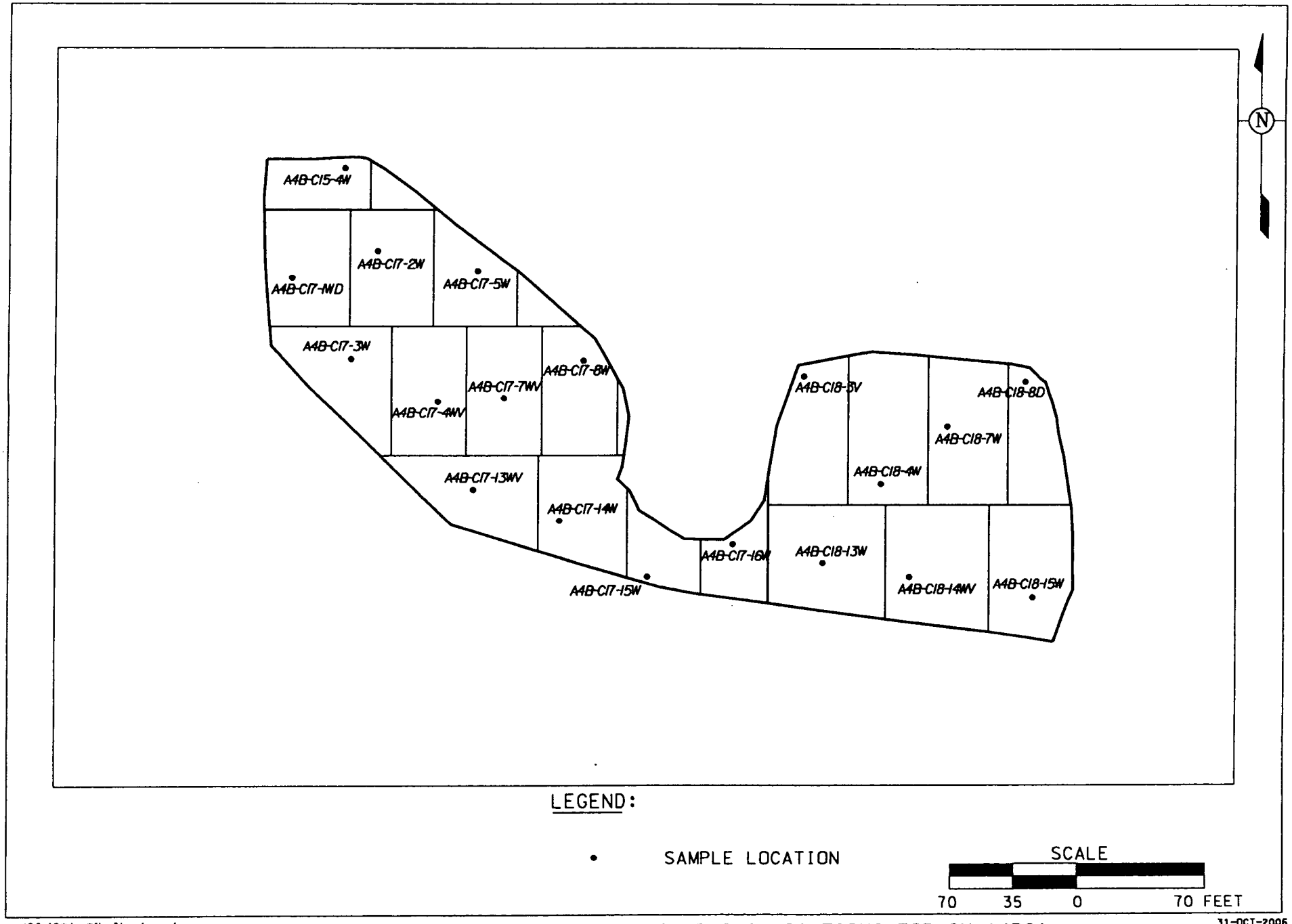


FIGURE 1. STORM WATER OVERFLOW IN 4B CERTIFIED AREA

v:\02-fml2\dgn\4b_water_102.dgn
STATE PLANAR COORDINATE SYSTEM 1983
31-OCT-2006



v:\02fm12\dgn\4b_flood_cu.dgn
STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 2. RE-CERTIFICATION SAMPLING LOCATIONS FOR CU A4B01

31-OCT-2006

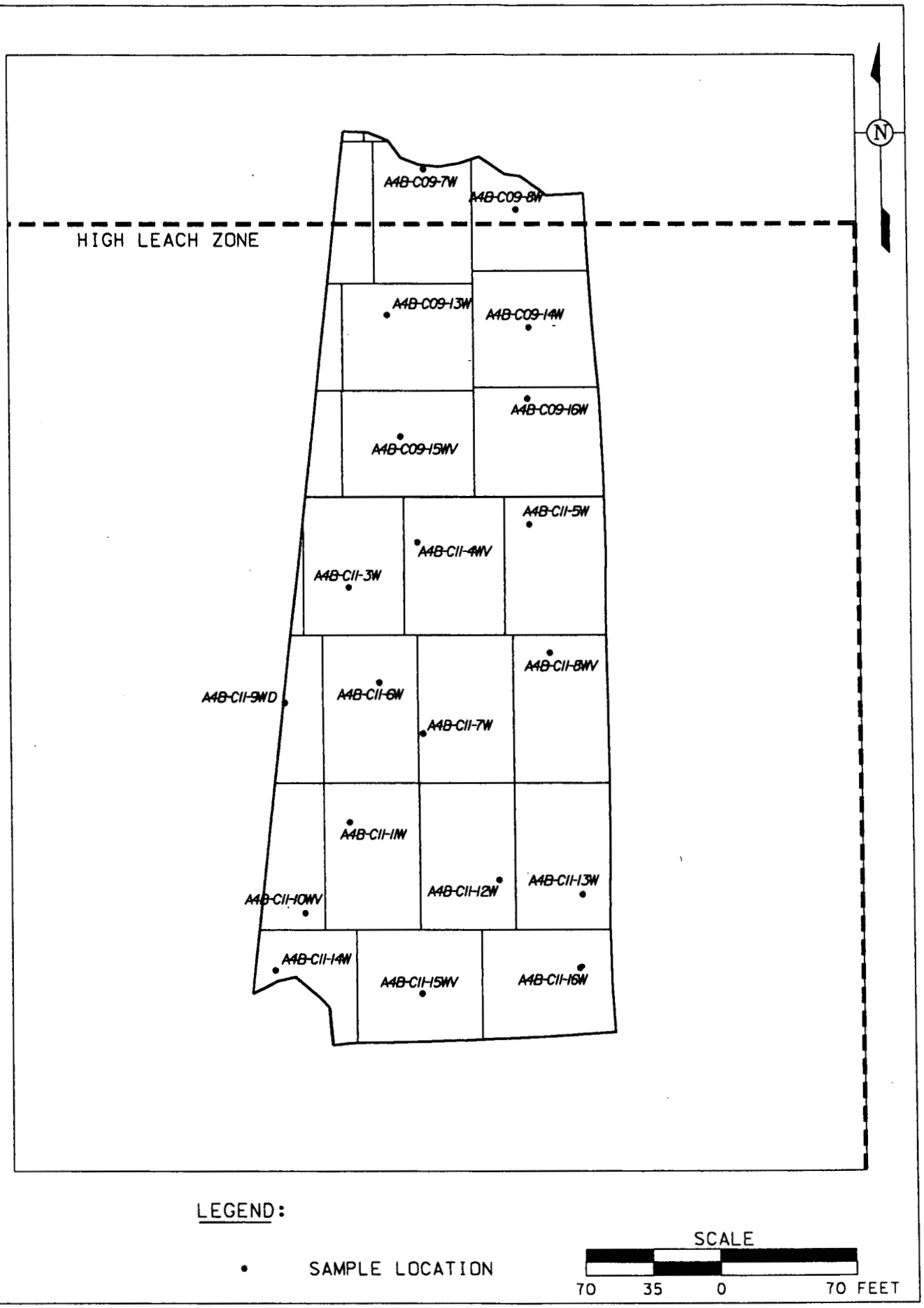


FIGURE 3. RE-CERTIFICATION SAMPLING LOCATIONS FOR CU A4B02

v:\02fmf2\dgn\4b_flood_cu2.dgn
STATE PLANAR COORDINATE SYSTEM 1983
31-OCT-2006

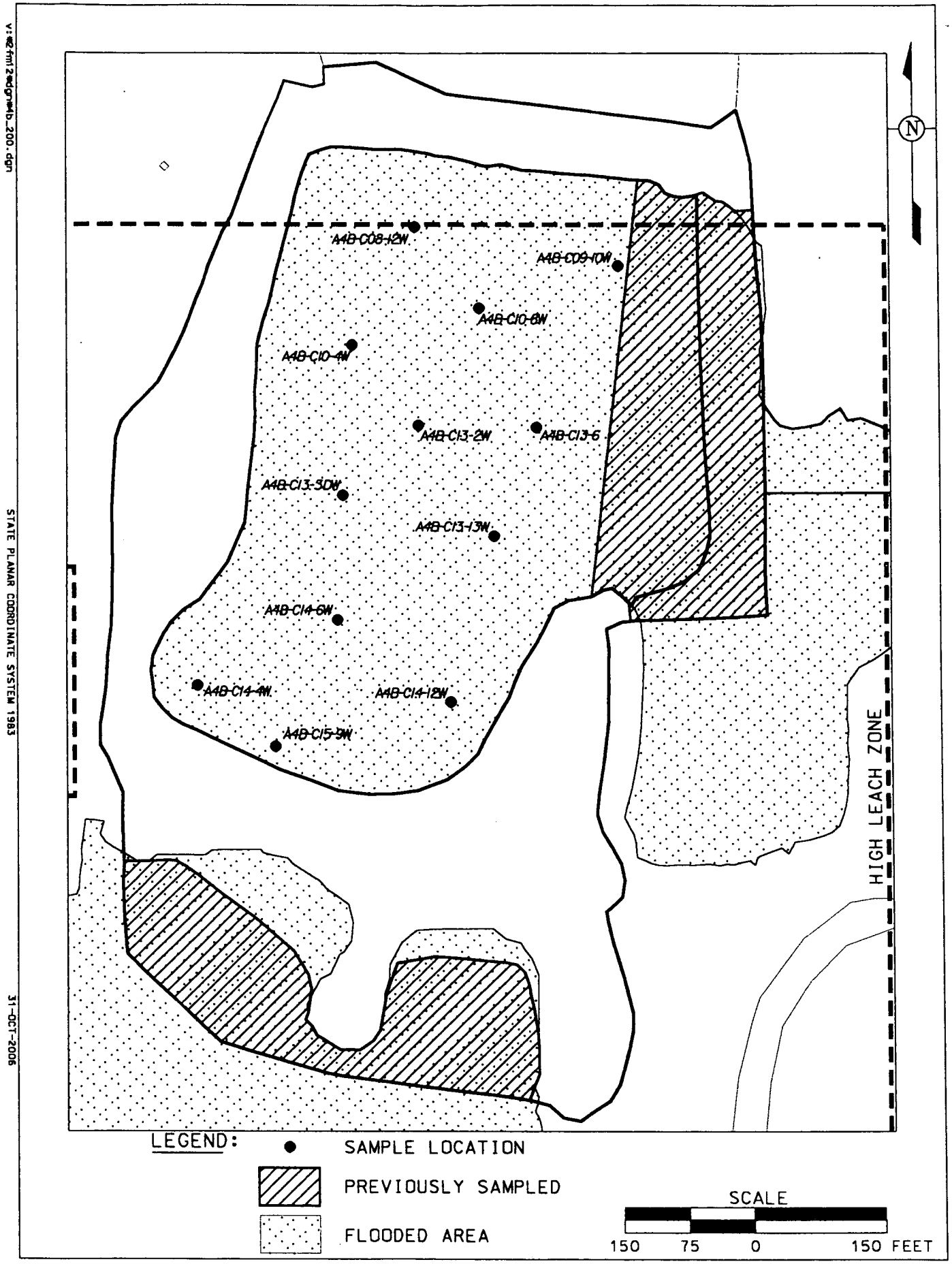


FIGURE 4. CERTIFICATION SAMPLING LOCATIONS FOR CUA4B03

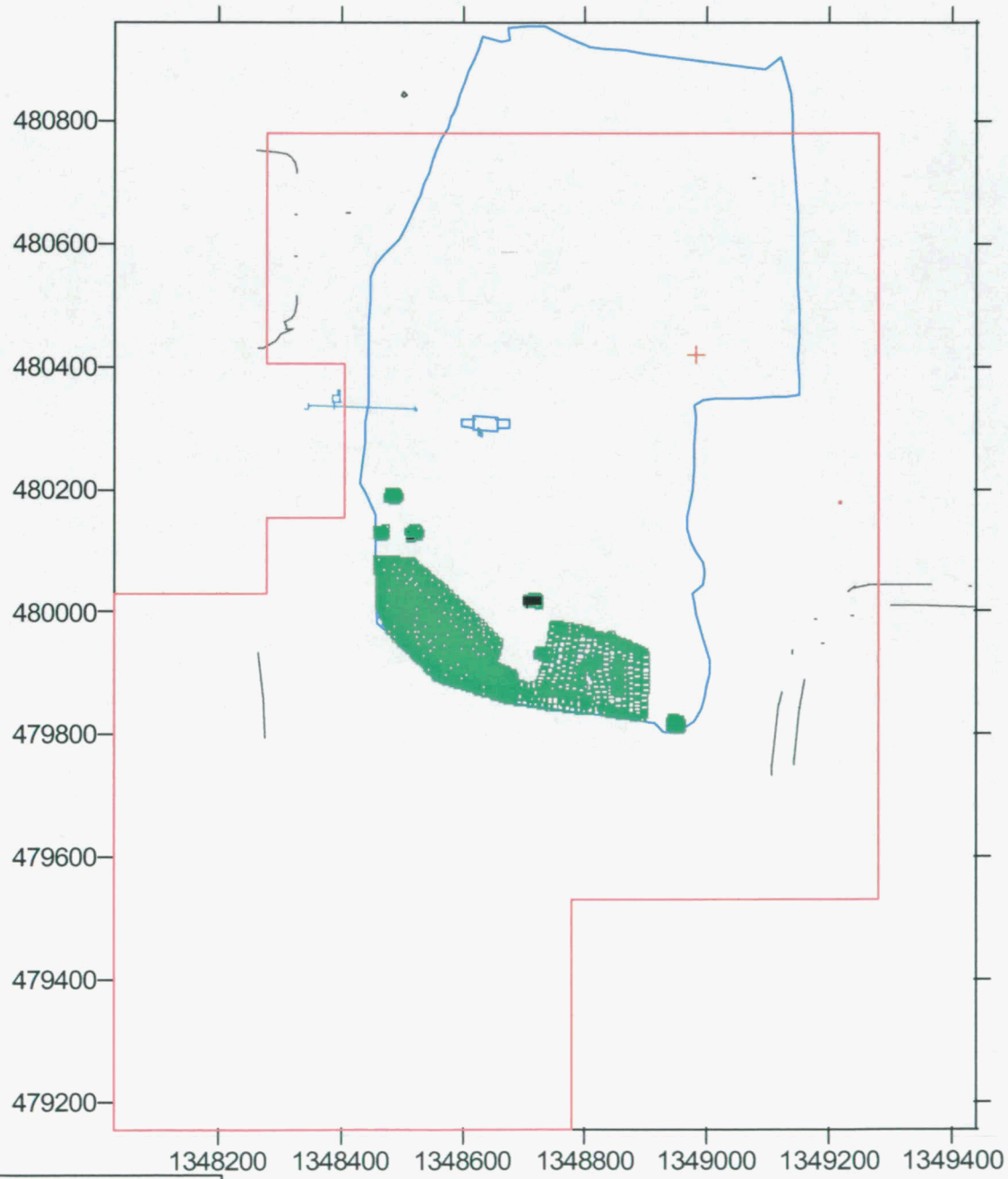
v:\82fm12\dgn\4b_200.dgn
STATE PLANAR COORDINATE SYSTEM 1983
31-OCT-2006

Figure 5 Area 4B - Part One Recertification
Phase 1 Total Gross Counts per Second

Confirmation measurements following removal of contaminated debris and receded water

Data Groups: 30687_02-15-2006,30687_03-24-2006
RSS4_0980_03-26-2006
RSS1_2589_05-23-2006

Measurement Period: 02-15-2006 thru 05-23-2006



Nal Ra-226 pCi/g
- 0 to 3000
- 3000 to 5000
- 5000 to 15000
- 15000 to 18000
- 18000 to 99999

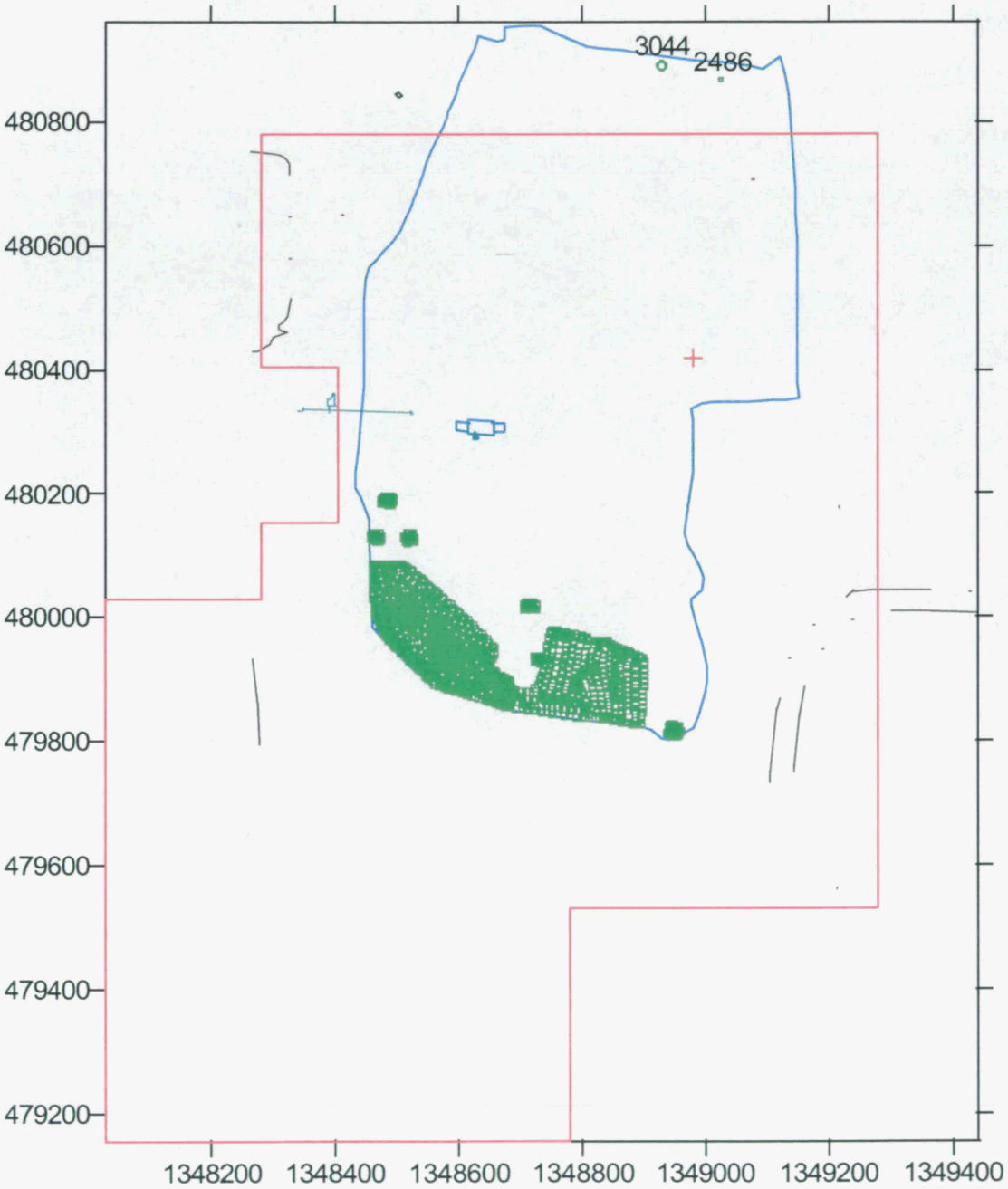
RTIMP DWG ID: A4B_CONF_P1_TC.srf
Project ID: Gen Char for Site Soil Remed/ 20300-PSP-0011
Prepared: D.Seiller 08-22-2006
Support Data: A4B_CONF_P1.xls

Figure 6 Area 4B - Part One Recertification
Phase 1 Moisture Corrected Radium-226

Confirmation measurements following removal of contaminated debris and receded water

Data Groups: 30687_02-15-2006,30687_03-24-2006
RSS4_0980_03-26-2006
RSS1_2589_05-23-2006

Measurement Period: 02-15-2006 thru 05-23-2006



NaI Ra-226 pCi/g	HPGe Ra-226 pCi/g
-9999 to 5.1	-999 to 5.1
5.1 to 9999	5.1 to 999

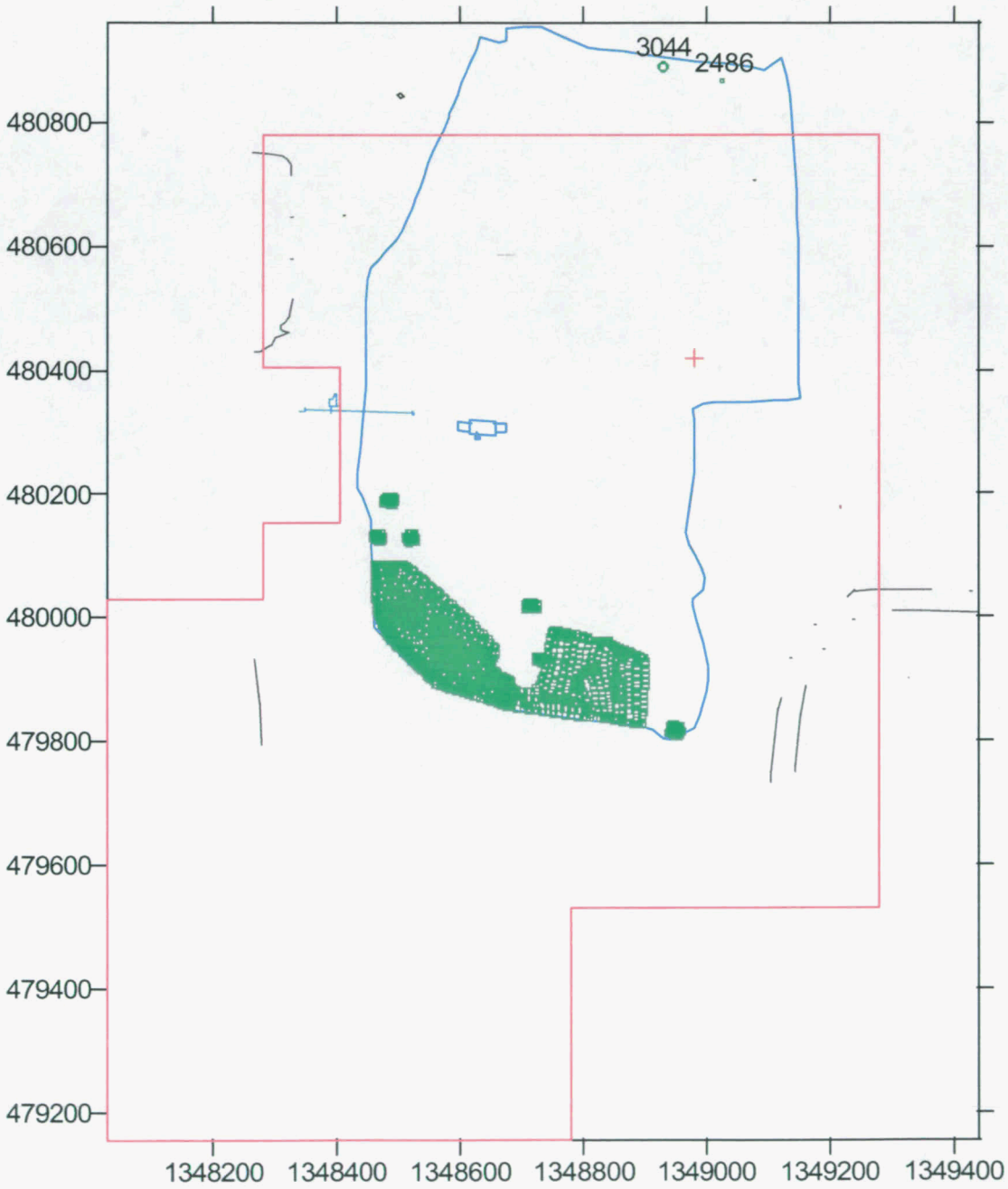
RTIMP DWG ID: A4B_CONF_P1_RA.srf
Project ID: Gen Char for Site Soil Remed/ 20300-PSP-0011
Prepared: D.Seiller 08-22-2006
Support Data: A4B_CONF_P1.xls

Figure 7 Area 4B - Part One Recertification
Phase 1 Moisture Corrected Thorium-232

Confirmation measurements following removal of contaminated debris and receded water

Data Groups: 30687_02-15-2006,30687_03-24-2006
RSS4_0980_03-26-2006
RSS1_2589_05-23-2006

Measurement Period: 02-15-2006 thru 05-23-2006



NaI Th-232 pCi/g	
-9999 to 4.5	
4.5 to 9999	

HPGe Th-232 pCi/g	
-999 to 4.5	
4.5 to 999	

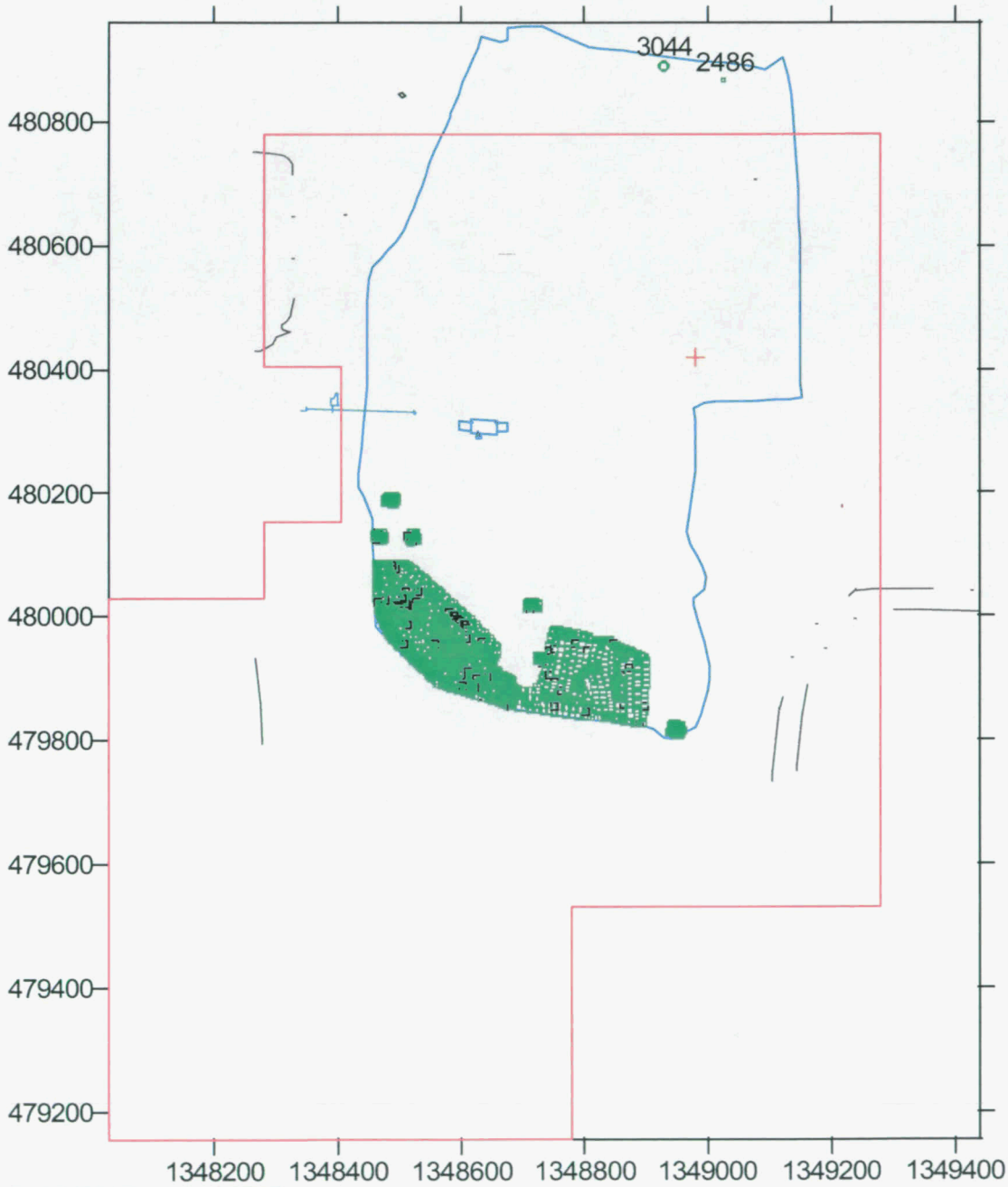
RTIMP DWG ID: A4B_CONF_P1_TH.srf
Project ID: Gen Char for Site Soil Remed/ 20300-PSP-0011
Prepared: D.Seiller 08-22-2006
Support Data: A4B_CONF_P1.xls

Figure 8 Area 4B - Part One Recertification
Phase 1 Moisture Corrected Total Uranium

Confirmation measurements following removal of contaminated debris and receded water

Data Groups: 30687_02-15-2006,30687_03-24-2006
RSS4_0980_03-26-2006
RSS1_2589_05-23-2006

Measurement Period: 02-15-2006 thru 05-23-2006



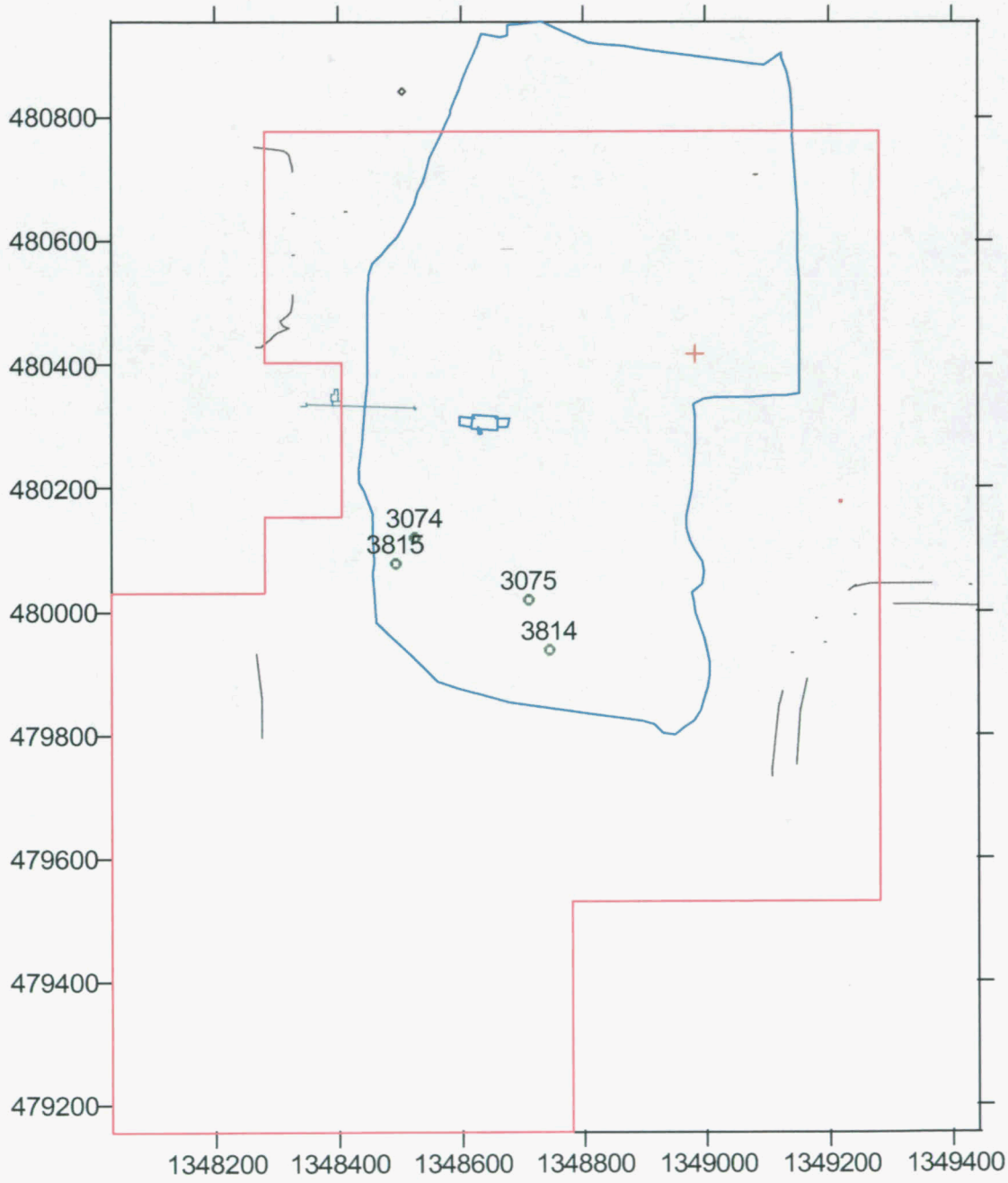
NaI TU in ppm High Leachability areas	HPGe TU in ppm Non-high leachability Areas
-9999 to 60	-999 to 246
60 to 875	246 to 999
875 to 9999	

RTIMP DWG ID: A4B_CONF_P1_TU.srf
Project ID: Gen Char for Site Soil Remed/ 20300-PSP-0011
Prepared: D.Seiller 08-22-2006
Support Data: A4B_CONF_P1.xls

Figure 9 Area 4B - Part One Recertification
Phase 2 Moisture Corrected Radium-226

Area 4B, Phase 2, confirmation measurements following removal of contaminated debris and receded waters

Data Groups: 30687_03-27-2006,30904_05-23-2006
Measurement Period: 03-27-2006 thru 05-23-2006



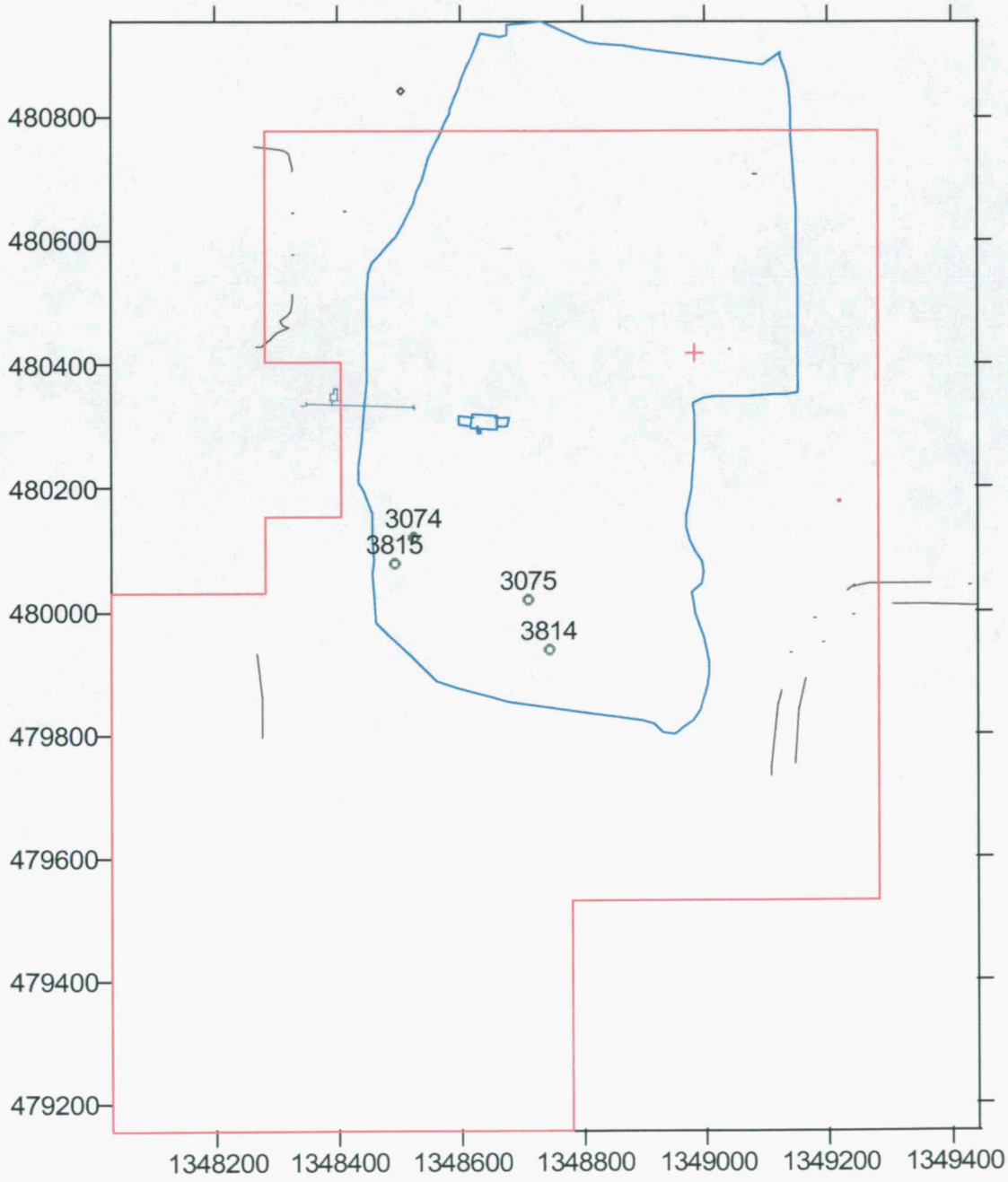
HPGe Ra-226 pCi/g
- 0 to 5.1
- 5.1 to 9999

RTIMP DWG ID: A4B_CONF_P2_RA.srf
Project ID: Gen Char for Site Soil Remed/ 20300-PSP-0011
Prepared: D.Seiller 08-22-2006
Support Data: A4B_CONF_P2_HL.xls

Figure 10 Area 4B - Part One Recertification
Phase 2 Moisture Corrected Thorium-232

Area 4B, Phase 2, confirmation measurements following removal of contaminated debris and receded waters

Data Groups: 30687_03-27-2006,30904_05-23-2006
Measurement Period: 03-27-2006 thru 05-23-2006



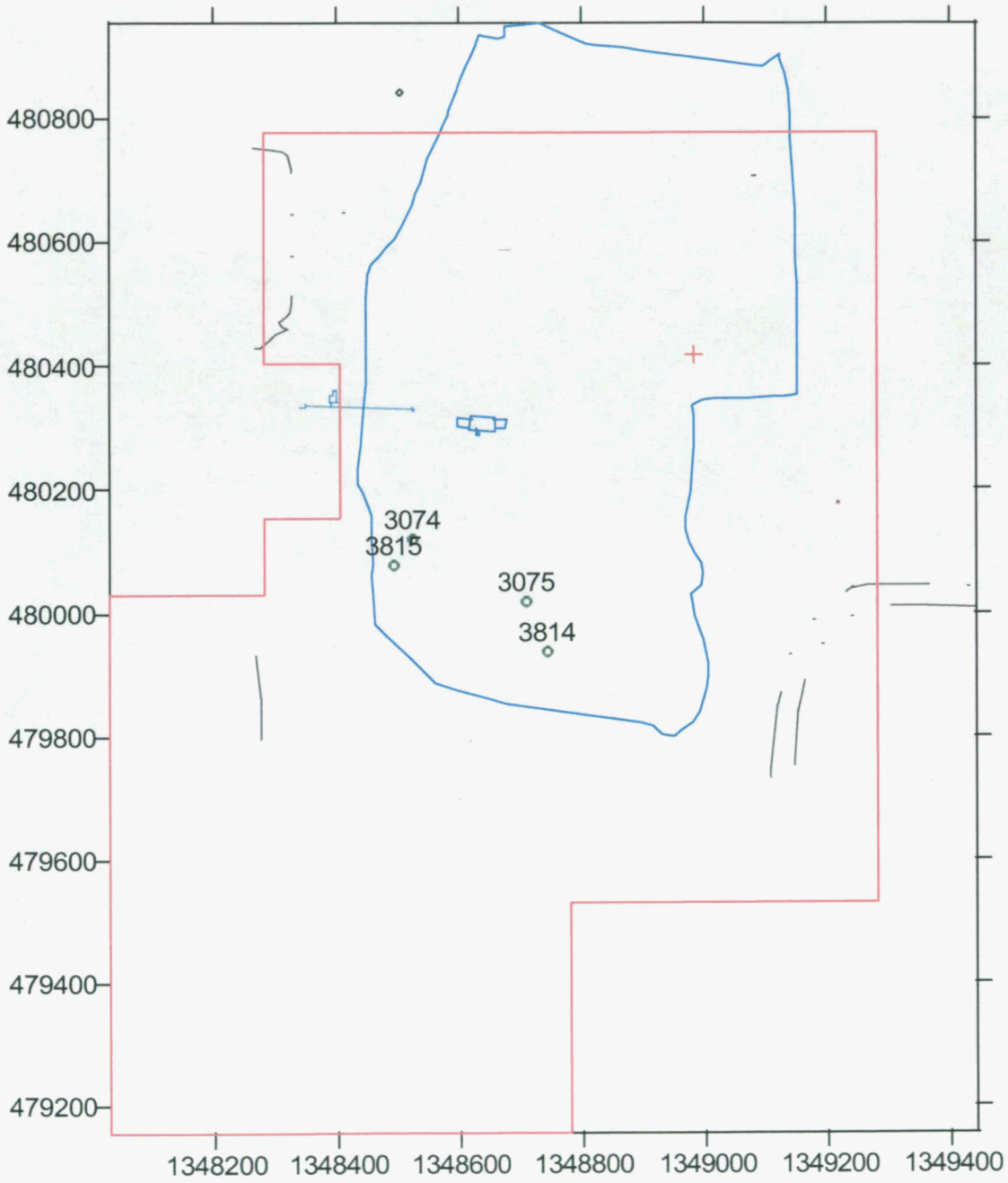
HPGe Th-232 pCi/g
- 0 to 4.5
- 4.5 to 999

RTIMP DWG ID: A4B_CONF_P2_TH.srf
Project ID: Gen Char for Site Soil Remed/ 20300-PSP-0011
Prepared: D.Seiller 08-22-2006
Support Data: A4B_CONF_P2_HL.xls

Figure 11 Area 4B - Part One Recertification
Phase 2 Moisture Corrected Total Uranium

Area 4B, Phase 2, confirmation measurements following removal of contaminated debris and receded waters

Data Groups: 30687_03-27-2006,30904_05-23-2006
Measurement Period: 03-27-2006 thru 05-23-2006



HPGe Total U (ppm)
- 0 to 60
- 60 to 928
- 928 to 9999

RTIMP DWG ID: A4B_CONF_P2_HL_TU.srf
Project ID: Gen Char for Site Soil Remed/ 20300-PSP-0011
Prepared: D.Seiller 08-22-2006
Support Data: A4B_CONF_P2_HL.xls

RESPONSE TO
OHIO ENVIRONMENTAL PROTECTION AGENCY
COMMENT ON THE
ADDENDUM TO THE CERTIFICATION REPORT
FOR AREA 4B - PART ONE

FERNALD CLOSURE PROJECT
FERNALD, OHIO

NOVEMBER 2006

U.S. DEPARTMENT OF ENERGY

RESPONSE TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENT ON THE ADDENDUM TO THE CERTIFICATION REPORT FOR AREA 4B - PART ONE (20810-RP-0008, Addendum 1)

FERNALD CLOSURE PROJECT

1. Commenting Organization: OEPA Commentor: Schneider
Section #: Figures. 2-1 thru 2-12 Page #: NA Line #: NA
Original Editorial Comment #: 1
Comment: In DOE's cover letter, there is a conclusion regarding location A4B-C17-14 that "a comparison of data collected from this location prior to the excavation provided no value". This conclusion is absolutely wrong. In fact, a comparison of the data from certification and that following flooding clearly demonstrate that the flooding resulted in recontamination of a previously certified area and justified the regulators' demands for resampling and recertification of the flooded areas. The document should be revised to include the original data within Table 1 and a discussion of the fact that flooding resulted in recontamination should be included. This is an important lesson that should be clearly documented in this report and others regarding the importance of proper stormwater control and treatment capacity. Though it is not appropriate to consider the pre-excavation data within the certification calculations, it is definitely appropriate for the comparison table. The document should be revised accordingly.

Response: DOE acknowledges that the total uranium result from location A4B-C17-14 increased.

Action: Table 1 will be revised to include the original data from A4B-C17-14. Also, the following statement will be removed from the text:

"However, since location A4B-C17-14 was excavated, a comparison of the data collected from this location prior to the excavation provided no value. Therefore, the analytical results were omitted from Table 1 for all of the ASCOCs with the exception of the post-excavation total uranium result."