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POST-REMEDIAL ACTION REPORT FOR VICINITY PROPERTIES (WP-458)

WELDON SPRING SITE REMEDIAL ACTION PROJECT
WELDON SPRING, MISSOURI

NOVEMBER 2000 **REV. 0**

RECORD

U.S. Department of Energy
Oak Ridge Operations Office
Weldon Spring Site Remedial Action Project

Prepared by MK-Ferguson Company and Jacobs Engineering Group

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Weldon Spring Site Remedial Action Project

Post-Remedial Action Report for Vicinity Properties (WP-458)

Revision 0

November 2000

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for the

U.S. DEPARTMENT OF ENERGY
Oak Ridge Operations Office
Under Contract DE-AC05-86OR21548

EXECUTIVE SUMMARY

Work Package 458 involved remediation of the following vicinity properties: DA-1, DA-2, DA-3, DA-5, MDC-3, MDC-4, MDC-5, and MDC-10. These vicinity properties were addressed in the *Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site* (ROD), therefore the same clean up standards developed for on-site soil were applicable to the vicinity properties.

The objective of this remedial action was to ensure that contaminated areas within the WP-458 work zone were remediated to meet the cleanup criteria standards stated in the ROD. Walkover surveys were conducted and confirmation samples were collected to ensure that remediation of the contaminated areas was completed. Confirmation soil sampling methodology was developed to ensure the adequate remediation of contaminants of concern (COCs).

Components of the remediation and confirmation sampling process included characterization data review, COC identification, confirmation plan development, contaminated soil excavation, radiological walkover surveys, confirmation soil sampling, field oversight, sample analysis, analytical data evaluation, disposition package development, quality assurance/quality control (QA/QC) review, summary of findings and conclusions, and post-remedial action report preparation.

The WP-458 area consisted of Remedial Unit (RU) RU014, which was further subdivided into confirmation units (CU). Each of the CUs represented one vicinity property. This post-remedial action report summarizes the remediation of eight CUs, i.e., CU162 through CU169.

COC lists were developed for each CU using characterization soil sample results. COCs identified for RU014 included Radium-226, Radium-228, Thorium-230, Uranium-238, arsenic, chromium, lead, thallium, PCBs, PAHs, and TNT.

Remedial activities for each CU included the excavation of a predetermined amount of contaminated soil, radiological walkover surveying, removal of additional soil if necessary, and confirmation soil sampling. Additional soil was excavated and confirmation samples were collected until preliminary results indicated that remediation activities were completed and COC concentrations were below the cleanup standards. The CU was then released for backfilling and final grading. Once final analytical results were received, the data were compared to preliminary results to verify that the established cleanup standards were achieved. Independent verification was also conducted by ORISE.

A summary of final analytical results for WP-458 RU014 is presented below. The table was generated using data sets compiled from all samples representing soils left in place.

Summary Totals for RU014 in WP-458

CONTAMINANTS	NO. OF SAMPLES	CONC. RANGE	AVERAGE CONC.	SURFACE ALARA	SURFACE CRITERIA	RESULTS> ALARA
Arsenic (mg/kg)	39	3.5-21.0	10.5	45	75	0
Chromium (mg/kg)	68	6.3-40.4	19.8	90	100	0
Lead (mg/kg)	44	8.0-158	25.1	240	450	0
PAH (mg/kg)	48	0.0-4.53	0.18	0.44	5.6	3
PCB (mg/kg)	102	0.0-1.1	0.02	0.65	8.0	1
Ra-226 (pCi/g)	94	0.73-6.30	1.64	5.0	6.2	1
Ra-228 (pCi/g)	89	0.51-1.66	1.09	5.0	6.2	0
Radium, Total (pCi/g)	89	1.21-7.43	2.73	5.0	6.2	2
Thallium (mg/kg)	39	0.40-5.20	2.25	16	20	0
Th-230 (pCi/g)	44	0.81-4.04	1.21	5.0	6.2	0
TNT (mg/kg)	44	0.01-1.54	0.11	14	140	0
U-238 (pCi/g)	62	1.25-65.2	5.54	30	120	3

As indicated on the table, the RU014 average concentration for each COC is below the as low as reasonably achievable (ALARA) goal. COC averages were calculated for each of the eight CUs located within RU014, and the conclusions are as follows. The average COC concentrations for each of the eight CUs were below ALARA with the exception of the PAH average for CU164. In the CU where hot spots were present, all 100 m^2 averages were less than criteria. In addition, for the total number of samples collected, 50% or more concentrations for each COC were below the ALARA goal.

Remedial activities were completed for RU014. Based on analytical results presented above, all eight CUs were released in accordance with the cleanup standards stated in the *Chemical Plant Area Cleanup Attainment Confirmation Plan.*

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1. INTRODUCTION

1.1 Purpose

This report details the results of soil confirmation activities conducted in association with Work Package 458 (WP-458) at the Weldon Spring Site Remedial Action Project (WSSRAP). Included is information relating to soil confirmation sampling and the analytical results for post-excavation (confirmed) soils within the boundaries of WP-458.

1.2 Scope

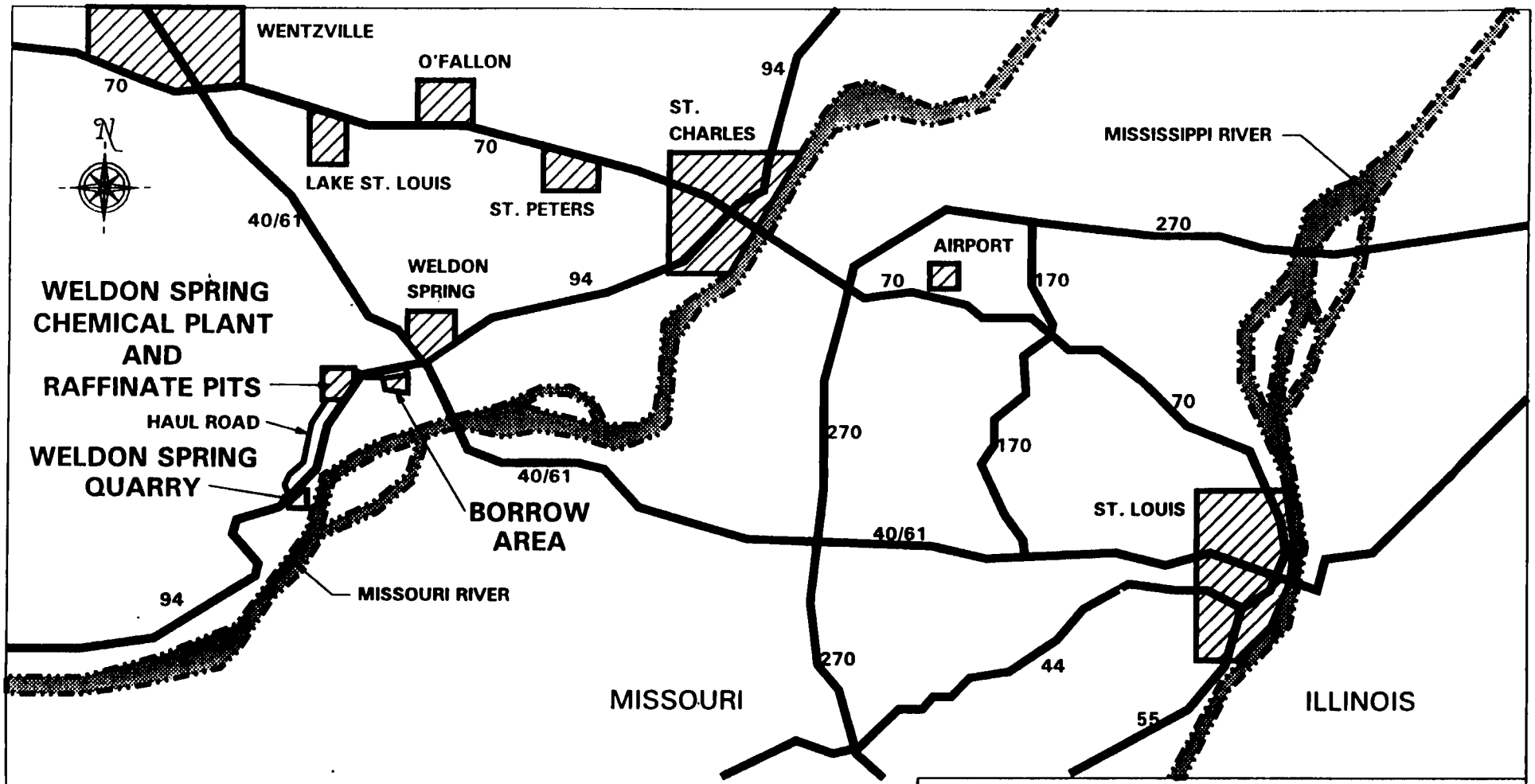
This report describes only the remedial activities and soil confirmation surveys and sampling conducted during WP-458. Soil confirmation walkover surveys and sampling were conducted in accordance with the *Confirmation Sampling Plan Details for Vicinity Properties DA1, DA2, DA3, DA5, MDC3, MDC4, and MDC5 (WP-458)* (Ref. 1) and *Confirmation Sampling Plan Details for Vicinity Properties DA1, DA2, DA3, DA5, MDC3, MDC4, and MDC5 (WP-458): Addendum 1 - MDC10* (Ref. 2). These plans were developed to ensure that goals established by the *Chemical Plant Area Cleanup Attainment Confirmation Plan* (Ref. 3) were accomplished, and to ensure that established remediation requirements of the *Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site* (Ref. 4) were met.

1.3 Site Description and History

The WSSRAP is located in St. Charles County, Missouri, about 30 mi from St. Louis on land formerly used by the U.S. Department of the Army (the Army) as an ordnance works manufacturing trinitrotoluene (TNT) and dinitrotoluene (DNT) (Figure 1-1). The 217 acre chemical plant area is about 2 mi southwest of the junction of Missouri State Route 94 and U.S. Route 40/61. The site is accessible from Missouri State Route 94, and is fenced and closed to the public.

The original ordnance works covered 17,000 acres, but by 1949 all but 2,000 acres had been transferred to the State of Missouri and the University of Missouri. Most of the remaining land became the chemical plant area of the Weldon Spring site and the adjacent U.S. Army Reserve and National Guard training area.

In 1955, the U.S. Atomic Energy Commission (AEC) acquired 203 acres to construct a uranium feed materials plant. The AEC operated this plant from 1957 to 1966. During this time, uranium and thorium ore concentrates were processed, which led to contamination of on-site soils. These activities, including transportation and storage of contaminated materials, also impacted areas outside the chemical plant boundaries. (These areas are now identified as



LOCATION OF THE WELDON SPRING SITE

FIGURE 1-1

REPORT NO DOE/OR/21548-767		EXHIBIT NO A/VP/013/0200	
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vicinity properties.) The radioactive contaminants associated with the site are primarily radionuclides of the natural uranium and Th-232 decay series. Chemical contaminants associated with the site are primarily heavy metals, polychlorinated biphenyls (PCBs), and polycyclic (or polynuclear) aromatic hydrocarbons (PAHs).

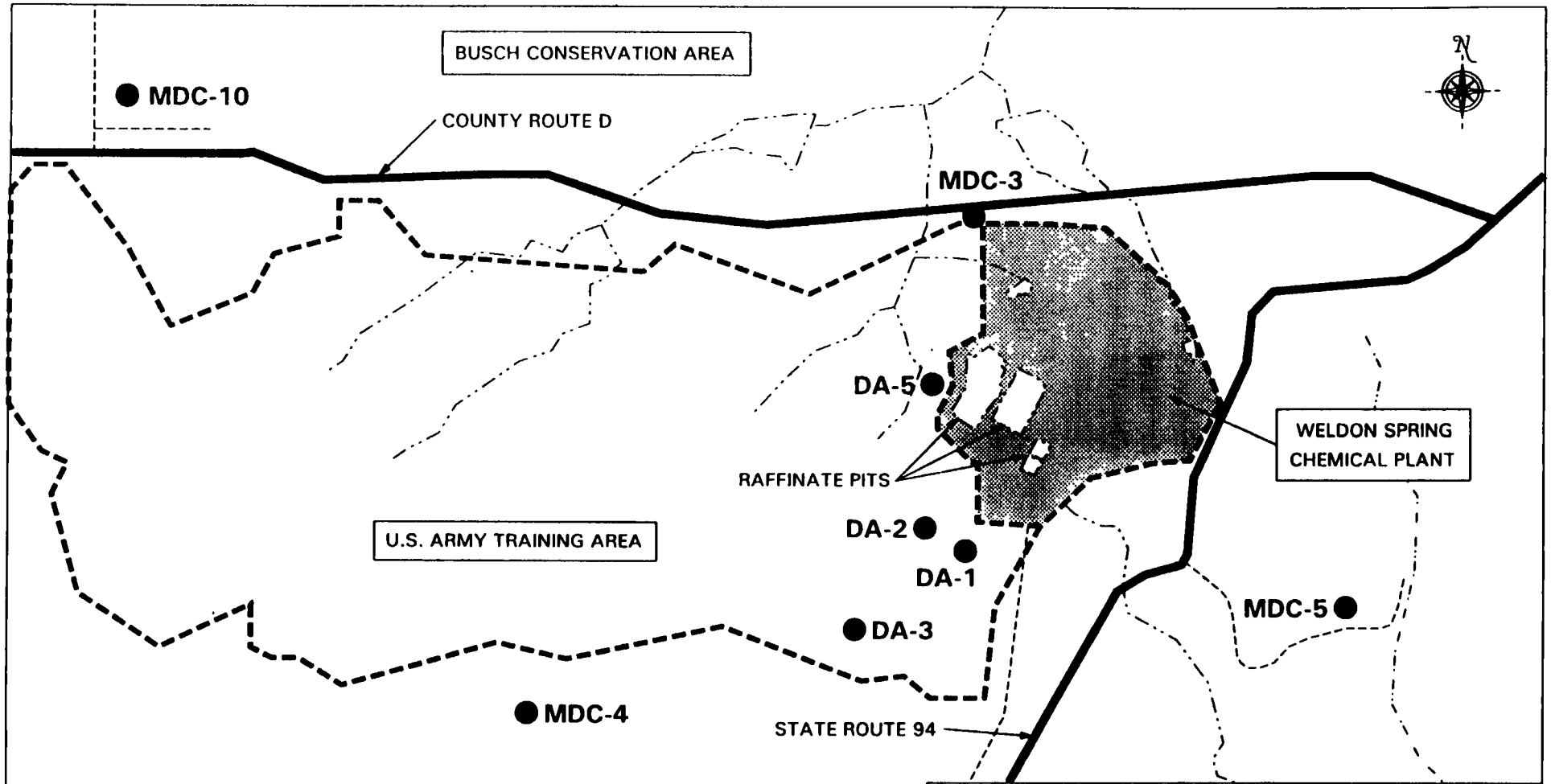
The Army reacquired the chemical plant property in 1967 and began decontamination and dismantlement operations in order to construct a herbicide facility. The project was canceled in 1969 before herbicide production was initiated. By 1985, the Army had turned responsibility for the site over to the U.S. Department of Energy (DOE), successor to the AEC. In 1986, the DOE initiated a series of interim response actions to control and mitigate releases to the environment. The chemical plant area was included on the National Priorities List (NPL) in 1989, and a Record of Decision (Ref. 4) was signed in 1993.

The vicinity properties remediated by WP-458 were on the August A. Busch Memorial Conservation Area, the Weldon Spring Conservation Area, and the U.S. Army Reserve and National Guard Training Area (Figure 1-2). Collectively, they constitute Remedial Unit 14 (RU014). Individually, the eight vicinity properties constitute Confirmation Units (CUs) 162 through 169.

1.4 Remediation and Confirmation Process

Remediation of RU014 consisted of excavating contaminated soil and debris from the eight vicinity properties. These remedial actions were conducted in accordance with the WP-458 vicinity properties subcontract specifications. Following remediation activities, radiological walkover surveys were conducted and soil confirmation samples were collected to ensure that contaminated materials had been removed. The confirmation sampling process was conducted in accordance with the *Chemical Plant Area Cleanup Attainment Confirmation Plan* (Ref. 3) to attain cleanup goals set forth in the *Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site* (Ref. 4). The walkover and sampling details are presented in the *Confirmation Sampling Plan Details for Vicinity Properties DA1, DA2, DA3, DA5, MDC3, MDC4, and MDC5 (WP-458)* (Ref. 1) and *Confirmation Sampling Plan Details for Vicinity Properties DA1, DA2, DA3, DA5, MDC3, MDC4, and MDC5 (WP-458): Addendum 1 - MDC10* (Ref. 2)

The entire remediation and confirmation process included characterization sampling, historical data review, contaminants of concern (COC) identification, confirmation plan development, contaminated soil excavation, radiological walkover surveys, soil sampling, preliminary and final data review, completion of disposition forms, quality assurance/quality control (QA/QC) review, summary of findings and conclusions, and closure report preparation.



NOT TO SCALE

WP-458
VICINITY PROPERTIES

FIGURE 1-2

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2. PRE-REMEDIATION ACTIVITIES

2.1 Review of Characterization Data and Historical Information

Remedial designs and contaminants of concern (COC) for soil confirmation were determined by reviewing historical information and soil characterization data. The vicinity properties were originally identified by Oak Ridge Associated Universities (ORAU) surveys during the 1980s. The results of these surveys can be found in the *Radiological Survey of the August A. Busch and Weldon Spring Wildlife Areas* (Ref. 5) and the *Radiological Survey of the U.S. Army Reserve Property* (Ref. 6). Results from additional soil characterization investigations for the WP-458 properties are contained in the *Chemical Characterization Report IRA #13 Army Reserve Property Vicinity Properties No. 1, 2, 3, and 7* (Ref. 7) and in three vicinity properties characterization summary reports (Refs. 8, 9, and 10).

2.2 Contaminants of Concern

The radiological contaminants of concern for RU014 included uranium, radium, and thorium. Chemical contaminants included arsenic, chromium, lead, thallium, trinitrotoluene (TNT), polychlorinated biphenyl (PCBs), and polycyclic (or polynuclear) aromatic hydrocarbons (PAHs).

2.3 Data Quality Objectives

Data Quality Objectives (DQOs) were identified to specify data for quality control purposes and to ensure that the quality of the data would be sufficient to support the decision making process throughout remedial activities, including the confirmation process. Confirmation DQOs were developed for sampling and analyzing soils during remediation and for the subsequent data evaluation. The DQOs were designed to make statistically defensible decisions regarding attainment of cleanup standards. Sampling and analytical programs for the WP-458 area were designed in accordance with DQOs stated in the *Chemical Plant Area Cleanup Attainment Confirmation Plan* (Ref. 3).

2.4 Remediation Guidelines

Remedial work was conducted in the areas containing contaminated soils. Remediation activities for RU014 were conducted in accordance with the guidelines stated in the vicinity properties subcontract specifications (WP-458). Guidelines were developed for confirmation soil sampling, data evaluation, and Quality Assurance/Quality Control (QA/QC) measures. Remediation guidelines were designed to meet the applicable soils cleanup standards stated in the ROD (Ref. 4) and the *Attainment Plan* (Ref. 3).

2.5 Cleanup Standards

The objective of the U.S. Department of Energy (DOE) process for achieving ALARA (as low as reasonably achievable) is to reduce exposures and risks associated with residual contamination. The *Chemical Plant Area Record of Decision* (ROD) (Ref. 4) established two different sets of cleanup standards: risk-based cleanup criteria and ALARA goals. Remedial activities for WP-458 were designed to remove soil where the COC concentration was present above ALARA goals. Table 2-1 summarizes the cleanup criteria and ALARA goals established in the ROD that are applicable for COCs in the WP-458 area.

Table 2-1 ROD Cleanup Standards for COCs Within WP-458 Remedial Units

	SURFACE[c]		SUBSURFACE[d]	
RADIONUCLIDE (pCi/g)	ALARA	CRITERIA	ALARA	CRITERIA
Ra-226 [a b]	5.0	6.2	5 0	16.2
Ra-228 [a,b]	5.0	6.2	5.0	16.2
Th-230 [a]	5.0	6.2	5.0	16.2
Uranium-238	30.0	120	30	120
CHEMICAL (mg/kg)				
Arsenic	45	75	75	750
Chromium	90	110	110	1,110
Thallium	16	20	20	200
PAH	0.44	5.6	5.6	56
PCB	0.65	8	8	80
Lead	240	450	450	4,500
TNT	14	140	140	1,400

(a) If both Th-230 and Ra-226, or both Th-232 and Ra-228, are present and not in secular equilibrium, the cleanup criterion applies for the radionuclide with the higher concentration.
(b) At locations where both Ra-226 and Ra-228 are present, the cleanup criterion of 6.2 pCi/g (including background) in the top 15 cm (6 in.) of soil, and 16 2 pCi/g (including background) in each 15-cm (6-in.) layer of soil more than 15 cm (6 in) below the surface, applies to the sum of the concentrations of these two radionuclides
(c) Values listed for surface soils apply to contamination within the upper 15 cm (6 in) of the soil column
(d) Values for subsurface apply to contamination in soils below 15 cm (6 in) unless otherwise noted
(e) Benz(a)anthracene, Benz(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Chrysene, and Indeno(1,2 3-cd)pyrene
(f) Aroclor 1248, Aroclor 1254, Aroclor 1260

Source *Record of Decision for Remedial Action at the Chemical Plant Area of the Weldon Spring Site* (Ref 4)

Throughout remedial activities at RU014, COC concentrations were evaluated with the ALARA process. The two sets of cleanup standards (ALARA goals and cleanup criteria) were applied at two different stages of the cleanup confirmation process as discussed in Section 2.6.

2.6 Cleanup Confirmation Process

The cleanup confirmation process is used to determine under the remedial guidelines if remediation activities have achieved the cleanup standards. Figure 2-1 shows the cleanup confirmation process for remedial activities conducted in the WP-458 area. The decision making process was developed to specify how the data would be applied and evaluated within the cleanup confirmation process. To facilitate this data evaluation, the decision making process was implemented at two stages of the confirmation process.

In the first stage, the decision making process was applied to each sample result within a given CU. There are three steps associated with this decision. These steps are detailed below.

Step 1: If a given COC concentration exceeded three times the cleanup criteria, the area was further remediated and resampled. If the COC concentration was above the cleanup criteria, but below three times the cleanup criteria, the COC concentration was evaluated using Step 2 or Step 3, based upon the size of the hot spot. If the COC concentration was below the cleanup criteria, the soil was left in place, and no additional remediation was conducted.

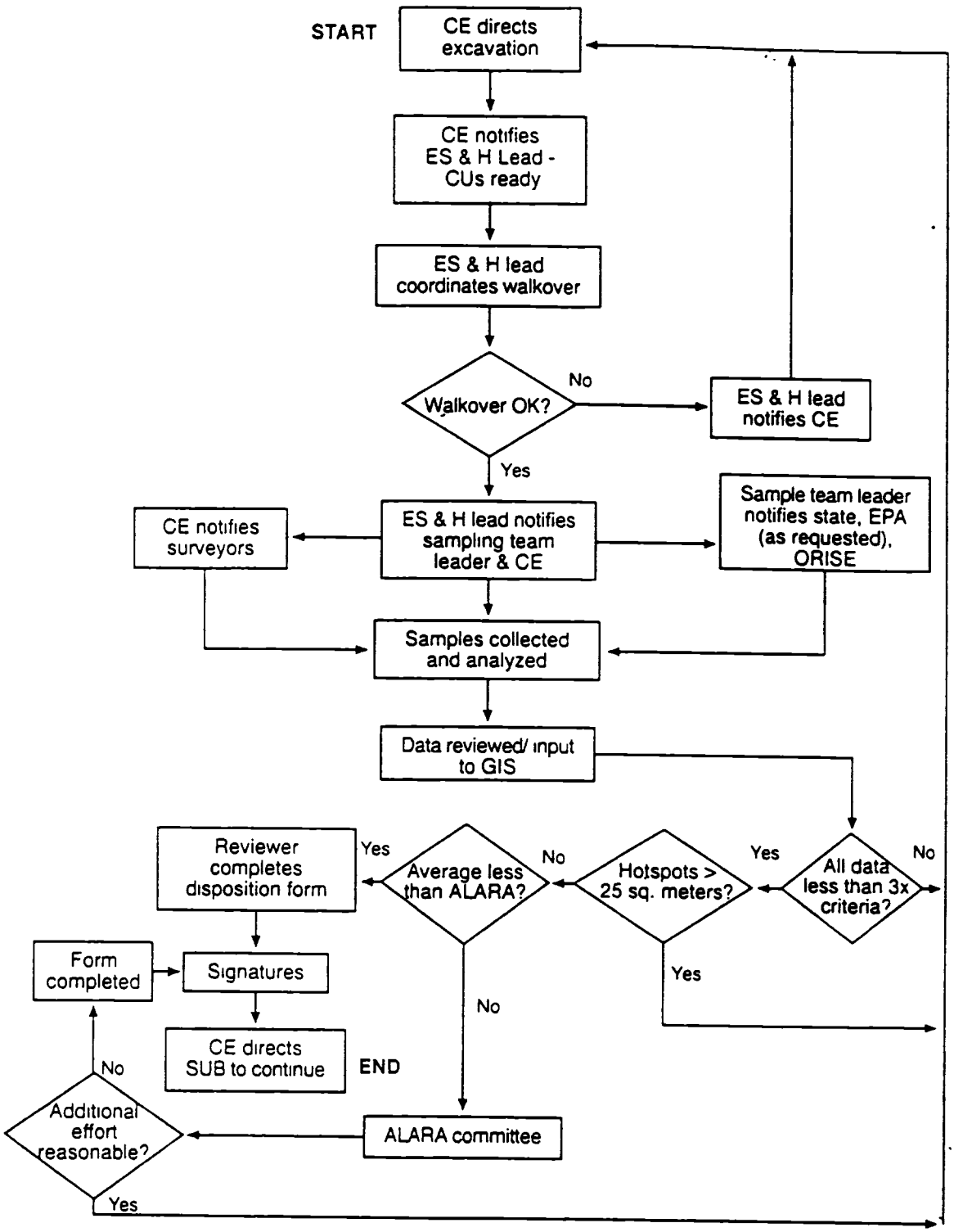
Step 2: If a given COC concentration exceeded the cleanup criteria, and the aerial extent was greater than 25 m^2, the area was further remediated and resampled.

Step 3: If a given COC concentration (in a hot spot area less than 25 m^2) was between the cleanup criteria and three times the cleanup criteria, the following hot spot formula was used to determine the acceptable concentration for the COC.

Maximum Concentration = (cleanup criteria) x $(100/A)^{1/2}$

Where A is the size of the "hot spot" in square meters (m^2).

In the second stage, the decision making process was applied to a specific COC average over an entire CU. If an average concentration of a COC within a CU was greater than ALARA, the issue was presented to the ALARA committee for a decision. Factors in the decision ruling included the percentage of sample results that were less than or greater than ALARA. On the basis of the percentage of sample results above the ALARA goal, the ALARA committee determined whether additional remediation was required. As stated in the ROD (Ref. 4), contaminant levels remaining in soil across the site after remediation are expected to range between the cleanup criteria and the ALARA goals, reaching the goals in most cases.



CLEANUP CONFIRMATION PROCESS

FIGURE 2-1

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3. REMEDIAL ACTIVITIES

3.1 Field Activities

3.1.1 Contaminated Soil Excavation

Contaminated soils and other debris from the eight vicinity properties were first excavated to design depths as detailed in the specifications. All materials excavated during remedial activities prior to confirmation were considered contaminated. These contaminated soils, rootballs, and miscellaneous debris were transported and staged at the Ash Pond storage area, the chipped wood storage area, and the material staging area, respectively. All contaminated soils have since been placed into the disposal facility in accordance with the ROD (Ref. 4). After the initial excavations were completed, radiological walkover surveys were conducted to evaluate the need for additional excavation.

3.1.2 Walkover Surveys

Radiological walkover surveys were conducted after excavation activities were completed. Walkover surveys were conducted using a 2 in. x 2 in. NaI scintillation detector. Background radioactivity readings were collected each day. The background readings were recorded in counts per minute (cpm). Each confirmation unit (CU) was surveyed using the scintillation detector and any areas exhibiting radioactivity levels greater than 1.5 times background levels were further remediated. Remediation (excavation) continued until surveys showed radioactivity levels less than 1.5 times background levels. Walkover figures are located in Appendix B.

3.1.3 Soil Sampling

Once the walkovers were completed, soil sampling was conducted in each CU in accordance with the sampling plans (Refs. 1 and 2). The sampling locations for each CU are shown on the figures in Section 4. Analytes for each CU were developed from historical information and characterization data, as discussed in Section 2. Disposition forms were completed following the receipt of preliminary analytical data for each CU. The completed disposition forms for each CU are presented in Appendix A.

3.2 Laboratory Activities

Radiological analyses (uranium, radium, and thorium) of confirmation soil samples were performed at the on-site radiological laboratory. Non-radiological analyses (arsenic, chromium, lead, thallium, PAHs, PCBs, and TNT) were conducted at off-site laboratories.

Subcontracted off-site laboratories used Contract Laboratory Program (CLP) methodologies. Laboratory activities were conducted in accordance with each laboratory's *Quality Assurance Project Plan.*

3.3 ORISE Verification Activities

The Environmental Survey and Site Assessment Program of the Oak Ridge Institute for Science and Education (ORISE) conducted verification surveys at the WSSRAP from January through June 1998. Verification surveys were conducted in most of the CUs of WP-458 and consist of walkover radiological surveys and analysis of soil samples to verify proper CU disposition. The surveys and sampling were conducted in accordance with ORISE's *Final Verification Survey Plan for the Chemical Plant Area* (Ref. 11).

Independent verification was performed in order to provide independent survey and analytical data for use by the U.S. Department of Energy (DOE) Headquarters Office in determining the adequacy and accuracy of the PMCs conclusions regarding the status of remediated area. A final verification letter will be prepared that addresses the WP-458 properties when ORISE receives the Project Management Contractor's (PMC) post remedial action report for WP-458.

4. CONFIRMATION UNIT RESULTS SUMMARY

This section summarizes the analytical results for the eight confirmation units (CUs) within RU014. These CUs were confirmed during the winter of 1997 and spring of 1998. A total of 102 locations were sampled, as detailed in the sampling plans (Refs. 1 and 2). Figures showing the sampling locations within each CU are in Appendix A. Preliminary concentrations of data on all contaminants of concern (COC) were below cleanup criteria levels with the exception of radium in CU165. Two radium hot spots were allowed to remain in place because their sizes and concentrations were in accordance with the hot spot rule described in Section 2.6. Details regarding these two hot spots can be found in this section and on the disposition form for CU165 in Appendix A.

All COC preliminary concentrations were below the respective as low as reasonably achievable (ALARA) goals except two uranium results, two Ra-226 results, three polycyclic (or polynuclear) aromatic hydrocarbons (PAH) results, and one PCB result. Average COC concentrations remained below the ALARA goals except for PAHs in CU164. The ALARA committee met on April 16, 1998, and decided that because overall (site-wide) PAH levels are well below ALARA levels, and because PAH concentrations in CU164 did not exceed criteria levels, no further soil excavation was warranted in CU164.

After the preliminary data were reviewed, disposition forms were completed and signed by authorized reviewers. Based on these preliminary data, all CUs in RU014 were fully released using surface cleanup standards. All 100 m^2 averages were less than criteria.

Note that the preliminary data were the initial results available immediately from the laboratory and could vary based upon laboratory quality checks or Weldon Spring Site Remedial Action Project (WSSRAP) verification. Final data were the verified results of the analyses performed. For chemical analyses and Th-230, the preliminary data and the final data typically remained the same. Radiological data, specifically Ra-226, usually varied since analytical methods for these parameters required additional time for the regrowth of daughter products after homogenization (i.e., the preliminary results were conservatively estimated).

Upon receipt of the data packages, the final data were reviewed and compared to the preliminary data. The final analytical results agreed with the preliminary results and indicated that the remedial activities had been completed. The final results met the cleanup standards as detailed in the *Chemical Plant Area Cleanup Attainment Confirmation Plan* (Ref. 3) for all CUs in RU014. Tables 4-1 through 4-8 and associated figures provide the confirmation details for each CU. A summary of the final analytical data for RU014 is provided in Appendix C.

Table 4-1 Summary of CU162 (DA 1)

CU 162 **RU** 14

COC

Ra-226	X	As	
Ra-228	X	Cr	
Th-230		Pb	
Th-232		Tl	
U-238	X	PAH	
		PCB	X
		TNT	

Reference Figure: 4-1

DATE RELEASED FOR UNRESTRICTED USE: 6 / 1 / 98

CLEANUP STANDARD [X] SURFACE [ ] SUBSURFACE

EACH 100m² < CRITERIA? [X] YES [ ] NO

LOCATION DESCRIPTION: *Vicinity Property DA1 is located on the U.S. Army Reserve Property near the main entrance and includes a railroad track spur*

WALKOVER SURVEY INFORMATION

BACKGROUND: *10000 - 11100* cpm

FINAL SURVEY (S) BELOW 1.5 X BACKGROUND ? [X] YES [ ] NO

DATE(S) SCANNED: *5/14/98 5/19/98*

CONFIRMATION SAMPLING INFORMATION

TOTAL # OF SAMPLE LOCATIONS: *30*

HOTSPOTS? [ ] YES [X] NO

TOTAL # OF UTILITY SAMPLES: *0*

ADDITIONAL EXCAVATION REQUIRED? [ ] YES [X] NO

GENERAL COMMENTS - *One PCB and three U-238 results were greater than ALARA, average concentrations remain well below ALARA No results exceeded criteria*

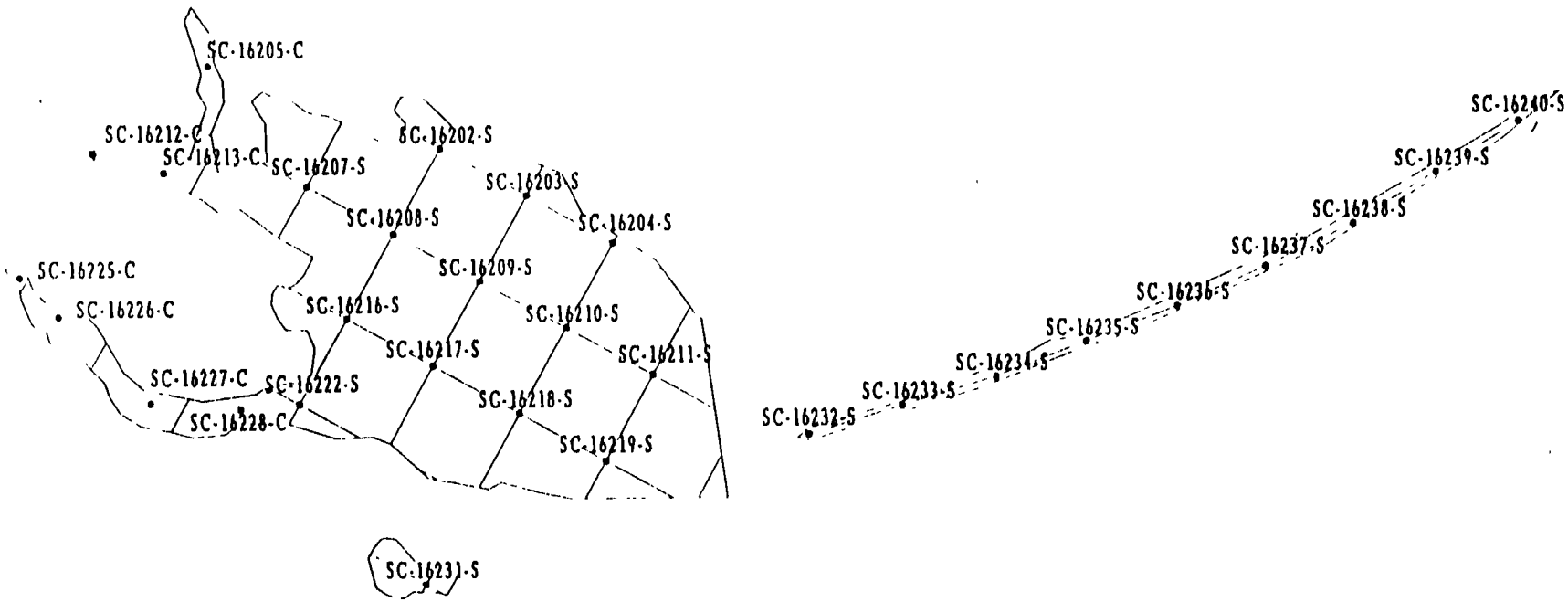
ORISE ACTION - *N/A*

ALARA COMMITTEE ACTION - *N/A*

CU FINAL RESULTS SUMMARY DATA

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ra-226	30	1.06 - 2.05	1.53	5	6.2	0	0
Ra-228	30	0.58 - 1.66	1.2	5	6.2	0	0
Total Radium	30	1.85 - 3.71	2.73	5	6 2	0	0
U-238	30	1.4 - 65.2	8.41	30	120	3	0
PCB	30	0 - 1.1	0.036	0.65	8	1	0

NOTE Radiological contaminants are listed in pCi/g Chemical contaminants are mg/kg



10 5 0 METERS

30 15 0 FEET

N

S

Sample Locations in Remedial Unit RU014

Confirmation Unit CU162 (DA 1)

Figure 4 - 1

EXHIBIT No.: G/VP/004/0797	REPORT No.: DOE/OR/21548-767	
ORIGINATOR: MGL	DRAWN BY: WSSRAP GIS	DATE: 07/24/97

Table 4-2 Summary of CU163 (DA 2)

CU 163 **RU** 14

COC

Ra-226	X	As	
Ra-228	X	Cr	X
Th-230		Pb	
Th-232		Tl	
U-238	X	PAH	
		PCB	X
		TNT	

Reference Figure: 4-2

DATE RELEASED FOR UNRESTRICTED USE: 3 / 12 / 98

CLEANUP STANDARD [X] SURFACE [ ] SUBSURFACE

EACH 100m² < CRITERIA? [X] YES [ ] NO

LOCATION DESCRIPTION: *Vicinity Property DA2 is located on the U. S. Army Reserve Property, approximately 400 ft west of DA1 along the railroad tracks*

WALKOVER SURVEY INFORMATION

BACKGROUND: *7896 - 8307* cpm

FINAL SURVEY (S) BELOW 1.5 X BACKGROUND ? [X] YES [ ] NO

DATE(S) SCANNED: *02/26/1998*

CONFIRMATION SAMPLING INFORMATION

TOTAL # OF SAMPLE LOCATIONS: *24*

HOTSPOTS? [ ] YES [X] NO

TOTAL # OF UTILITY SAMPLES: *0*

ADDITIONAL EXCAVATION REQUIRED? [ ] YES [X] NO

GENERAL COMMENTS - *All results below ALARA*

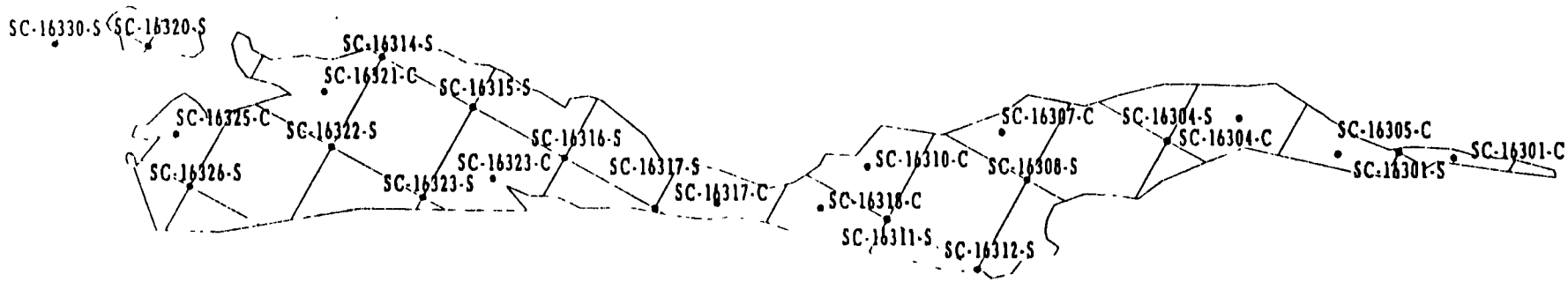
ORISE ACTION - *N/A*

ALARA COMMITTEE ACTION - *N/A*

CU FINAL RESULTS SUMMARY DATA

CONTAMINANT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ra-226	24	1.21 - 1.91	1.46	5	6.2	0	0
Ra-228	24	0.51 - 1.39	1.03	5	6.2	0	0
Total Radium	24	1.85 - 3.28	2.49	5	6.2	0	0
U-238	24	1.26 - 12.4	2.58	30	120	0	0
Cr	24	6.3 - 26.10	18.87	90	110	0	0
PCB	24	0 - 0.39	0.035	0.65	8	0	0

NOTE Radiological contaminants are listed in pCi/g Chemical contaminants are listed in mg/kg



10 5 0 METERS

30 15 0 FEET

N
W
E
S

Sample Locations in Remedial Unit RU014

Confirmation Unit CU163 (DA 2)

Figure 4 – 2

EXHIBIT No.: G/VP/005/0797	REPORT No.: DOE/OR/21548-767	
ORIGINATOR. MGL	DRAWN BY. WSSRAP GIS	DATE: 07/24/97

Table 4-3 Summary of CU164 (DA 3)

CU 164 **RU** 14

COC

Ra-226		As	
Ra-228		Cr	
Th-230		Pb	
Th-232		Tl	
U-238	X	PAH	X
		PCB	X
		TNT	

Reference Figure: 4-3

DATE RELEASED FOR UNRESTRICTED USE: 4 / 16 / 98

CLEANUP STANDARD [X] SURFACE [ ] SUBSURFACE

EACH 100m² < CRITERIA? [X] YES [ ] NO

LOCATION DESCRIPTION: *Vicinity Property DA3 is located on the U.S. Army Reserve Property at the railroad loading dock.*

WALKOVER SURVEY INFORMATION

BACKGROUND: *5000* cpm

FINAL SURVEY (S) BELOW 1.5 X BACKGROUND ? [X] YES [ ] NO

DATE(S) SCANNED: *04/02/1998*

CONFIRMATION SAMPLING INFORMATION

TOTAL # OF SAMPLE LOCATIONS . *4*

HOTSPOTS? [ ] YES [X] NO

TOTAL # OF UTILITY SAMPLES *0*

ADDITIONAL EXCAVATION REQUIRED? [ ] YES [X] NO

GENERAL COMMENTS - *PAH's averaged above ALARA - All individual PAH values were below criteria*

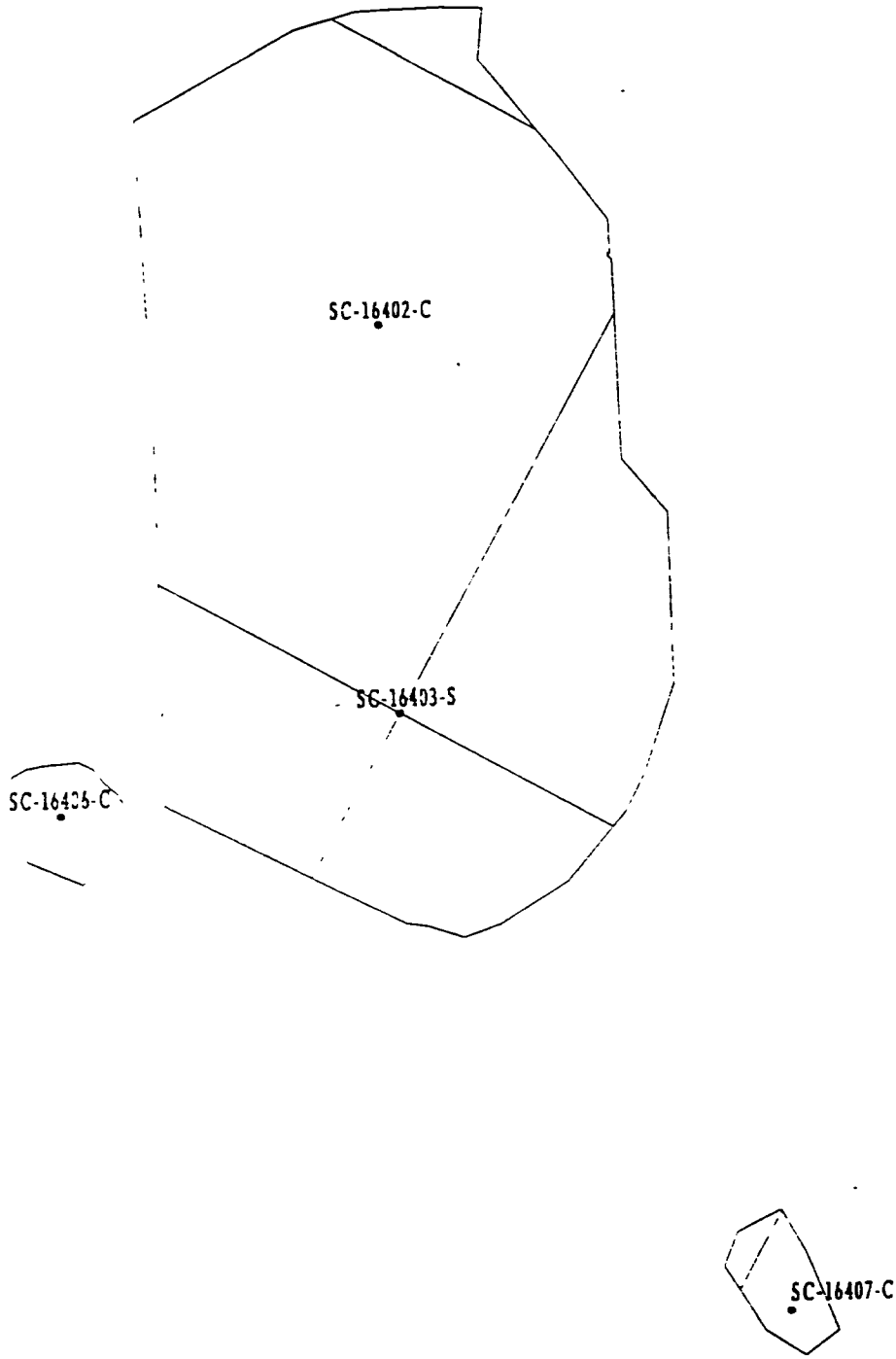
ORISE ACTION - *N/A*

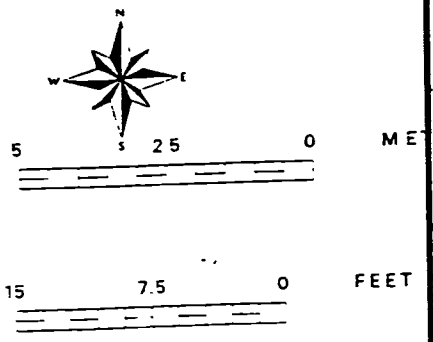
ALARA COMMITTEE ACTION - *ALARA committee decision was to release the area with no further excavation*

CU FINAL RESULTS SUMMARY DATA

CONTAMINANT	NO. OF SAMPLES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NO. > [illegible]
U-238	4	1.49 - 3.50	2.77	30	120	0	0
PAH	4	0 - 4.53	2.02	0.44	5 6	3	0
PCB	4	0 - 0.069	0.028	0.65	8	0	0

NOTE Radiological contaminants are listed in pCi/g Chemical contaminant are listed in mg/kg





Sample Locations in Remedial Unit RU014

Confirmation Unit CU164 (DA 3)

Figure 4 – 3

EXHIBIT No · G/VP/006/0797	REPORT No.· DOE/OR/21548-767	
ORIGINATOR MGL	DRAWN BY WSSRAP GIS	DATE 07 24/97

Table 4-4 Summary of CU165 (DA 5)

CU 165 **RU** 14

COC

Ra-226	X	As	X
Ra-228	X	Cr	X
Th-230	X	Pb	X
Th-232		Tl	X
U-238		PAH	X
		PCB	X
		TNT	X

Reference Figure: 4-4

DATE RELEASED FOR UNRESTRICTED USE: 8 / 4 / 98

CLEANUP STANDARD [X] SURFACE [ ] SUBSURFACE

EACH 100m² < CRITERIA? [X] YES [ ] NO

LOCATION DESCRIPTION: *Vicinity property DA5 is located on the U.S. Army Reserve Property in the drainage immediately west of Raffinate Pit 4.*

WALKOVER SURVEY INFORMATION

BACKGROUND: *4,000 - 10,000* cpm

FINAL SURVEY (S) BELOW 1.5 X BACKGROUND ? [X] YES [ ] NO

DATE(S) SCANNED: *12/18/97 12/19/97 7/1/98 7/7/98 7/8/98 7/9/98 7/15/98*

CONFIRMATION SAMPLING INFORMATION

TOTAL # OF SAMPLE LOCATIONS . 25

HOTSPOTS? [X] YES [ ] NO

TOTAL # OF UTILITY SAMPLES · 0

ADDITIONAL EXCAVATION REQUIRED? [X] YES [ ] NO

GENERAL COMMENTS - *Two hotspots were identified as having elevated concentrations of Ra 226/228 Sampling around the hotspots determined each to be smaller than 25 sq m The hotspot rule was applied and the areas were left in place Hot spot calculations are located in Appendix A with the Disposition Form*

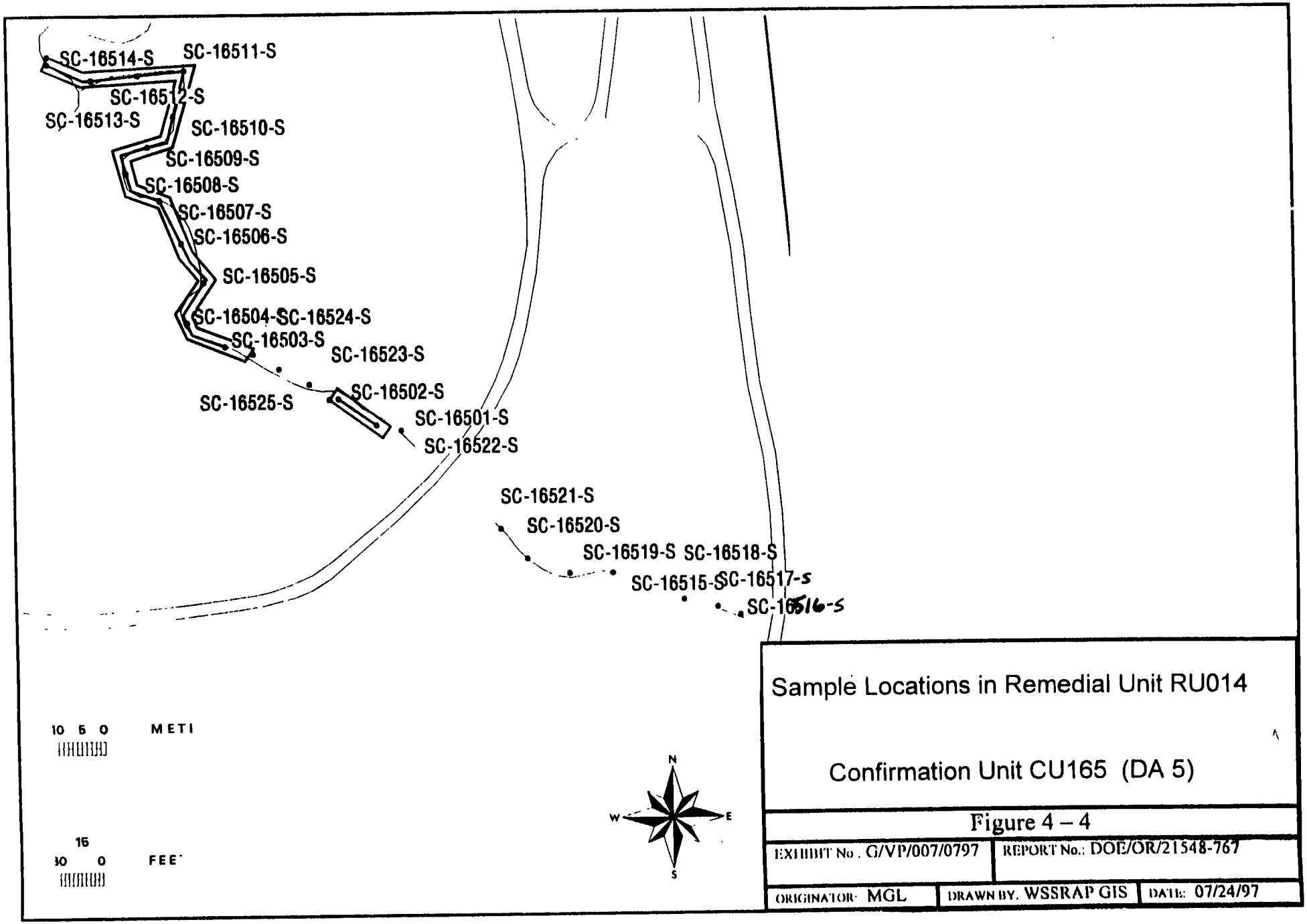
ORISE ACTION - *4/98 - Identified hotspots outside of excavation areas Work was stopped, additional characterization done New design implemented Surveyed Area D on 6/25/98 and Areas A, B, and C on 7/10 and 7/16/98*

ALARA COMMITTEE ACTION - *Met on 5/1/98 - Agreed to implement an ALARA-based design for redefining excavation limits*

CU FINAL RESULTS SUMMARY DATA

CONTAMINANT	NO. OF SAMPLES	[illegible]	[illegible]	[illegible]	[illegible]	NO. > [illegible]	NO. > CRITERIA
Ra-226	25	0.73 - 6.3	1.82	5	6.2	0	1
Ra-228	25	0.59 - 1.31	1.04	5	6.2	0	0
Total Radium	25	1.21 - 7.43	2.86	5	6.2	1	1
Th-230	25	0.81 - 1.19	1	5	6.2	0	0
As	25	4.5 - 21.0	11.31	45	75	0	0
Cr	25	10.4 - 40.4	20.41	90	110	0	0
Pb	25	8.7 - 43.5	20.88	240	450	0	0
Tl	25	0.49 - 5.15	2.39	16	20	0	0
PAH	25	Results < detection limit	N/A	0 44	5.6	0	0
PCB	25	Results < detection limit	N/A	0 65	8	0	0
TNT	25	0.040 - 1.54	0.12	14	140	0	0

NOTE Radiological contaminants are listed in pCi/g. Chemical contaminants are listed in mg/kg



Sample Locations in Remedial Unit RU014

Confirmation Unit CU165 (DA 5)

Figure 4 – 4

EXHIBIT No. G/VP/007/0797	REPORT No.: DOE/OR/21548-767	
ORIGINATOR: MGL	DRAWN BY: WSSRAP GIS	DATE: 07/24/97

Table 4-5 Summary of CU166 (MDC 3)

CU 166 RU 14

COC				
	Ra-226		As	X
	Ra-228		Cr	X
	Th-230	X	Pb	X
	Th-232		Tl	X
	U-238	X	PAH	X
			PCB	X
			TNT	X

Reference Figure: 4-5

DATE RELEASED FOR UNRESTRICTED USE: 7 / 20 / 98

CLEANUP STANDARD [X] SURFACE [ ] SUBSURFACE

EACH 100m² < CRITERIA? [X] YES [ ] NO

LOCATION DESCRIPTION: *Vicinity property MDC 3 is located on the August A. Busch Conservation Area south of highway D.*

WALKOVER SURVEY INFORMATION

BACKGROUND: *8,100* cpm

FINAL SURVEY (S) BELOW 1.5 X BACKGROUND ? [X] YES [ ] NO

DATE(S) SCANNED: 06/17/1998

CONFIRMATION SAMPLING INFORMATION

TOTAL # OF SAMPLE LOCATIONS : *4*

HOTSPOTS? [X] YES [ ] NO

TOTAL # OF UTILITY SAMPLES *0*

ADDITIONAL EXCAVATION REQUIRED? [X] YES [ ] NO

GENERAL COMMENTS - *Original PAH and PCB sample results never rec'd from lab and locations were resampled on 7/7/98 One U-238 sample showed elevated concentration Additional soil was removed and location was resampled on same day (6/22/98) Resample results were below ALARA*

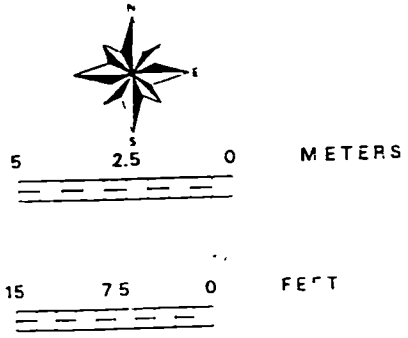
ORISE ACTION - *Surveyed 6/25/98*

ALARA COMMITTEE ACTION - *N/A*

CU SUMMARY DATA

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Th-230	4	0.94 - 1.24	1.04	5	6 2	0	0
U-238	4	1.86 - 12.6	4.63	30	120	0	0
As	4	8.1 - 13.2	10.4	45	75	0	0
Cr	4	15.2 - 34.7	23.78	90	110	0	0
Pb	4	14.1 - 158	60.92	240	450	0	0
Tl	4	0.4 - 1.4	0.91	16	20	0	0
PAH	4	results < detection limit	N/A	0 44	6.5	0	0
PCB	4	results < detection limit	N/A	0.65	8	0	0
TNT	4	results < detection limit	N/A	14	140	0	0

NOTE Radiological contaminants are listed in pCi/g Chemical contaminants are listed in mg/kg



Sample Locations in Remedial Unit RU014

Confirmation Unit CU166 (MDC 3)

Figure 4 – 5

EXHIBIT No G/VP/008 0797	REPORT No DOE/OR/21548-767	
ORIGINATOR MGL	DRAWN BY WSSRAP GIS	DATE 07/24 97

Table 4-6 Summary of CU167 (MDC 4)

CU 167 **RU** 14

COC

Ra-226	X	As	X
Ra-228		Cr	X
Th-230	X	Pb	X
Th-232		Tl	X
U-238		PAH	X
		PCB	X
		TNT	X

Reference Figure 4-6

DATE RELEASED FOR UNRESTRICTED USE: 12 / 30 / 97

CLEANUP STANDARD [X] SURFACE [ ] SUBSURFACE

EACH 100m² < CRITERIA? [X] YES [ ] NO

LOCATION DESCRIPTION: *Vicinity property MDC4 is located on the Weldon Spring Conservation Area, just south of the U.S. Army Reserve property.*

WALKOVER SURVEY INFORMATION

BACKGROUND: *3179 - 9500* cpm

FINAL SURVEY (S) BELOW 1.5 X BACKGROUND ? [X] YES [ ] NO

DATE(S) SCANNED: *11/4/97 11/20/97 11/28/97*

CONFIRMATION SAMPLING INFORMATION

TOTAL # OF SAMPLE LOCATIONS: 5

HOTSPOTS? [ ] YES [X] NO

TOTAL # OF UTILITY SAMPLES: 0

ADDITIONAL EXCAVATION REQUIRED? [ ] YES [X] NO

GENERAL COMMENTS - *All results below ALARA*

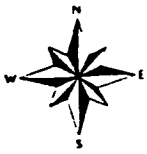
ORISE ACTION - *None*

ALARA COMMITTEE ACTION - *None*

CU FINAL RESULTS SUMMARY DATA

CONTAMINANT	SAMPLES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	NO. > CRITERIA
Ra-226	5	1.37 - 2.38	1.52	5	6.2	0	0
Th-230	5	0.90 - 1.37	1.06	5	6.2	0	0
As	5	3.50 - 10.90	7.33	45	75	0	0
Cr	5	15.90 - 18.40	17.58	90	110	0	0
Pb	5	8.00 - 22.00	15.98	240	450	0	0
Tl	5	results < detection limit	N/A	16	20	0	0
PAH	5	results < detection limit	N/A	0.44	5.6	0	0
PCB	5	results < detection limit	N/A	0.65	8	0	0
TNT	5	results < detection limit	N/A	14	140	0	0

NOTE Radiological contaminants are listed in pCi/g. Chemical contaminants are listed in mg/kg



10 5 0 METEF

30 15 0 FEET

Sample Locations in Remedial Unit RU014

Confirmation Unit CU167 (MDC 4)

Figure 4 – 6

EXHIBIT No G/VP/009/0797	REPORT No.: DOE/OR/21548-767	
ORIGINATOR MGL	DRAWN BY WSSRAP GIS	DATE 07/24/97

Table 4-7 Summary of CU168 (MDC 5)

CU 168 RU 14

COC				
	Ra-226	X	As	
	Ra-228	X	Cr	X
	Th-230	X	Pb	X
	Th-232		Tl	
	U-238		PAH	X
			PCB	X
Reference Figure:	4-7		TNT	X

DATE RELEASED FOR UNRESTRICTED USE: 7 / 20 / 98

CLEANUP STANDARD [X] SURFACE [ ] SUBSURFACE

EACH 100m² < CRITERIA? [X] YES [ ] NO

LOCATION DESCRIPTION: *Vicinity property MDC5 is located on the Weldon Spring Conservation Area just southeast of the Weldon Spring Chemical Plant along a gravel road*

WALKOVER SURVEY INFORMATION

BACKGROUND: *6500* cpm

FINAL SURVEY (S) BELOW 1.5 X BACKGROUND ? [X] YES [ ] NO

DATE(S) SCANNED: *06/16/1998*

CONFIRMATION SAMPLING INFORMATION

TOTAL # OF SAMPLE LOCATIONS . 5

HOTSPOTS? [ ] YES [X] NO

TOTAL # OF UTILITY SAMPLES 0

ADDITIONAL EXCAVATION REQUIRED? [ ] YES [X] NO

GENERAL COMMENTS - *All results below ALARA*

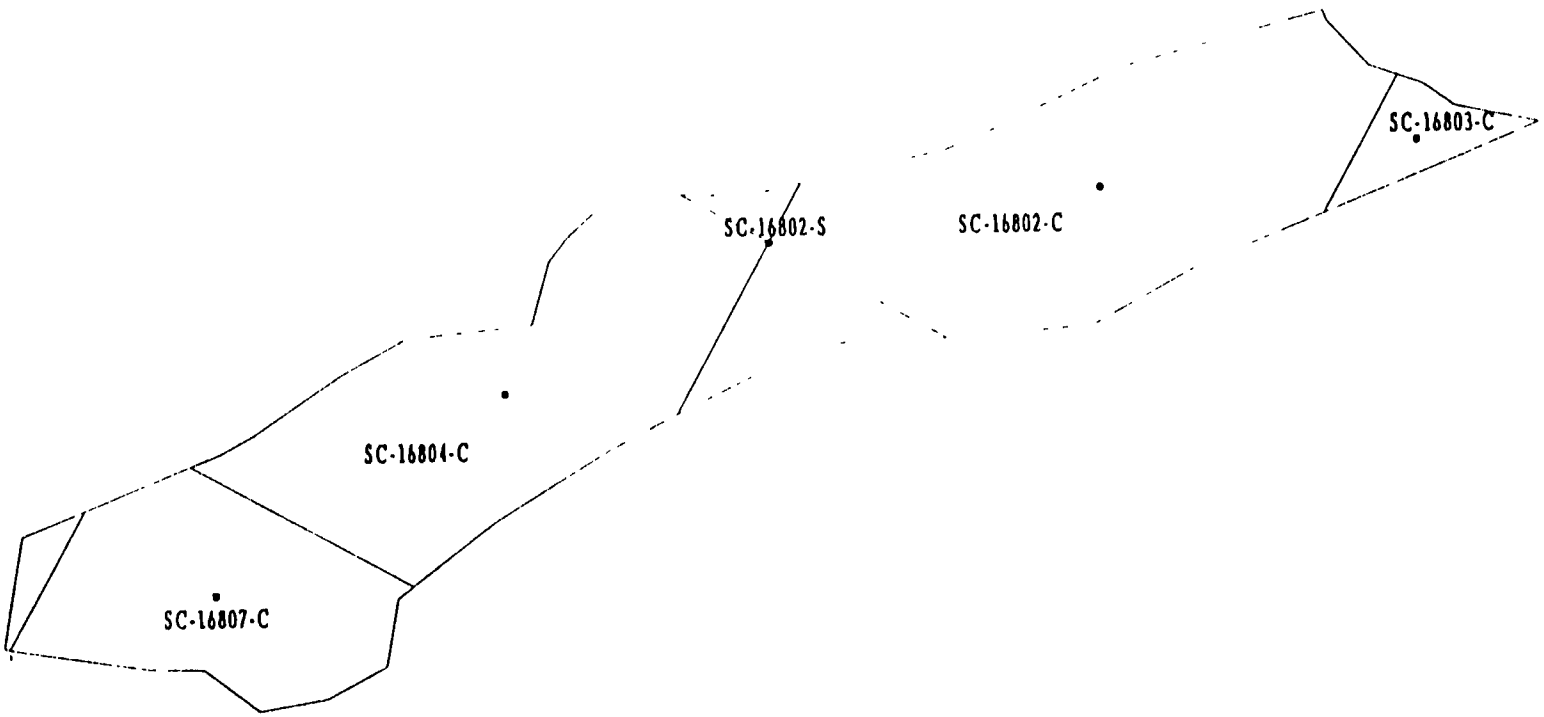
ORISE ACTION - *N/A*

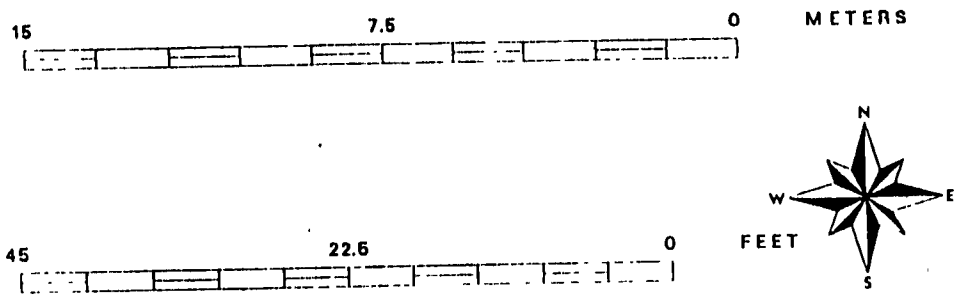
ALARA COMMITTEE ACTION - *N/A*

CU FINAL RESULTS SUMMARY DATA

CONTAMINANT	NO. OF SAMPLES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ra-226	5	1.38 - 3.21	1.96	5	6.2	0	0
Ra-228	5	0.62 - 1 15	0.9	5	6.2	0	0
Total radium	5	2.04 - 4.29	2.86	5	6.2	0	0
Th-230	5	1.03 - 4.04	2.27	5	6.2	0	0
Cr	5	17.9 - 24.9	20.76	90	110	0	0
Pb	5	11.5 - 71.2	36.12	240	450	0	0
PAH	5	results < detection limit	N/A	0.44	5.6	0	0
PCB	5	results < detection limit	N/A	0.65	8	0	0
TNT	5	results < detection limit	N/A	14	140	0	0

NOTE Radiological contaminants are listed in pCi/g Chemical contaminants are listed in mg/kg





Sample Locations in Remedial Unit RU014

Confirmation Unit CU168 (MDC 5)

Figure 4 – 7

EXHIBIT No.: G/VP/261/0797	REPORT No.: DOE/OR/21548-767	
ORIGINATOR: MGL	DRAWN BY: WSSRAP GIS	DATE: 07/29/97

Table 4-8 Summary of CU169 (MDC 10)

CU 169 **RU** 14

COC

Ra-226	X	As	X
Ra-228	X	Cr	X
Th-230	X	Pb	X
Th-232		Tl	X
U-238		PAH	X
		PCB	X
		TNT	X

Reference Figure: 4-8

DATE RELEASED FOR UNRESTRICTED USE: 2 / 20 / 98

CLEANUP STANDARD [X] SURFACE [ ] SUBSURFACE

EACH 100m² < CRITERIA? [X] YES [ ] NO

LOCATION DESCRIPTION: *Vicinity property MDC10 is located on the Busch Conservation Area along Highway D, just west of Lake 21.*

WALKOVER SURVEY INFORMATION

BACKGROUND: *3493 - 7923* cpm

FINAL SURVEY (S) BELOW 1.5 X BACKGROUND ? [X] YES [ ] NO

DATE(S) SCANNED: *1/28/98 2/13/98*

CONFIRMATION SAMPLING INFORMATION

TOTAL # OF SAMPLE LOCATIONS: 5

HOTSPOTS? [ ] YES [X] NO

TOTAL # OF UTILITY SAMPLES: 0

ADDITIONAL EXCAVATION REQUIRED? [ ] YES [X] NO

GENERAL COMMENTS - *All results below ALARA*

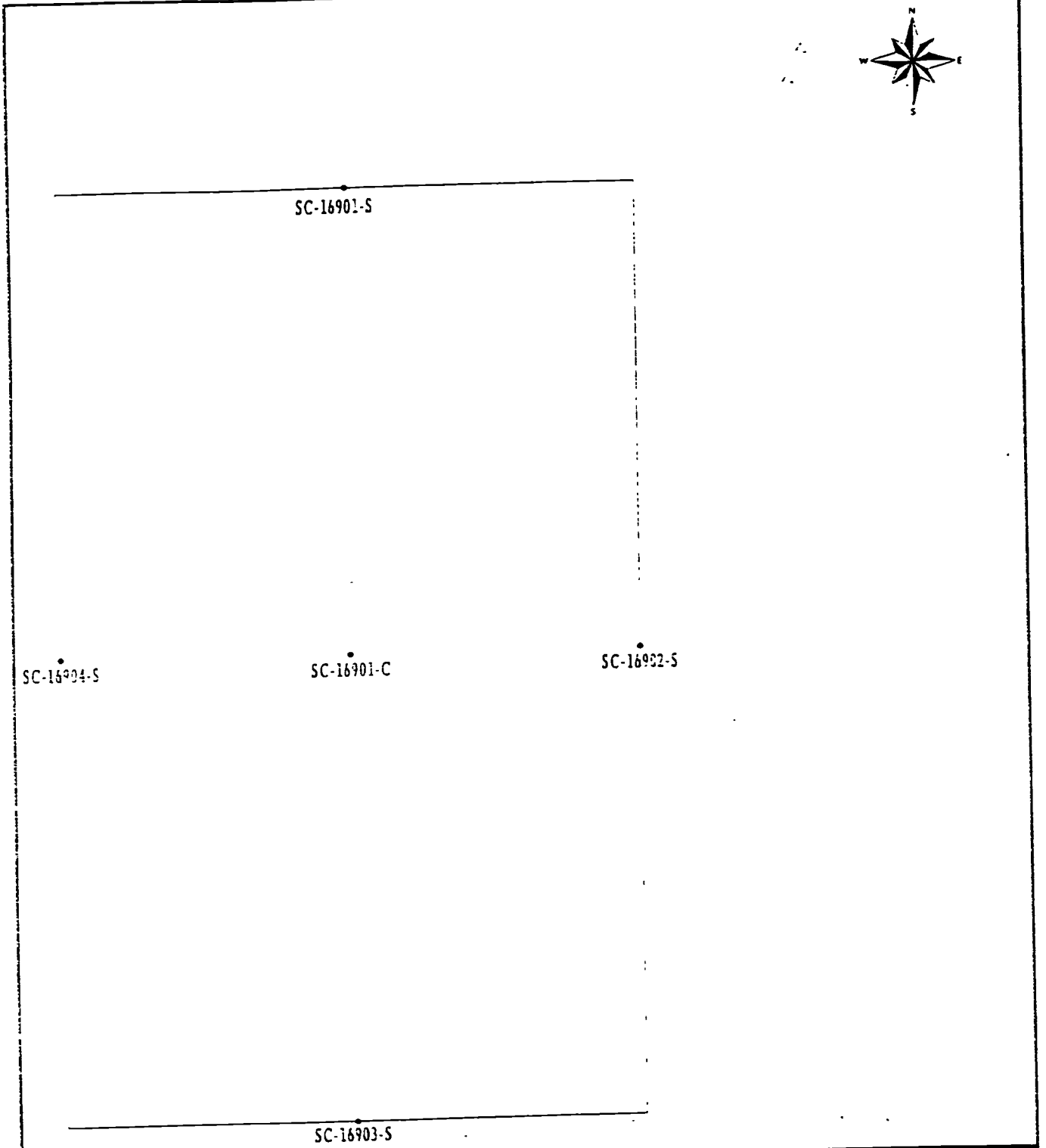
ORISE ACTION - *N/A*

ALARA COMMITTEE ACTION - *N/A*

CU FINAL RESULTS SUMMARY DATA

CONTAMINANT	NO. OF SAMPLES	[illegible]	[illegible]	[illegible]	[illegible]	NO. > [illegible]	NO. > CRITERIA
Ra-226	5	1.55 - 1.75	1.65	5	6.2	0	0
Ra-228	5	1.02 - 1.59	1.27	5	6.2	0	0
Toal Radium	5	2.60 - 3.26	2.92	5	6.2	0	0
Th-230	5	1.26 - 1.74	1.49	5	6.2	0	0
As	5	7.60 - 13.20	9.96	45	75	0	0
Cr	5	9.6 - 24.6	18.82	90	110	0	0
Pb	5	11.20 - 18.40	15.24	240	450	0	0
Tl	5	0.76 - 1.60	1.29	16	20	0	0
PAH	5	results < detection limit	N/A	0.44	5.6	0	0
PCB	5	results < detection limit	N/A	0.65	8	0	0
TNT	5	0.00 - 0 07	0.03	14	140	0	0

NOTE Radiological contaminants are listed in pCi/g Chemical contaminants are listed in mg/kg



Sample Locations in Remedial Unit RU014

Confirmation Unit CU169 (MDC 10)

Figure 4 – 8

EXHIBIT No G/VP/350/0797	REPORT No.. DOE/OR/21548-767	
ORIGINATOR MGL	DRAWN BY WSSRAP GIS	DATE 10/30/97

5. DATA EVALUATION

WP-458 final analytical data were evaluated to determine whether data quality objectives (DQOs) developed for the Weldon Spring Site Remedial Action Project (WSSRAP) were met and to ensure that overall data quality results were generated from these remedial activities. The data were evaluated in accordance with the *Project Management Contractor Quality Assurance Program* (QAP) (Ref. 12) and the *Environmental Quality Assurance Project Plan* (Ref. 13). The data evaluation process was completed by data verification, data review, data validation, and data management activities as stated in the *Chemical Plant Area Cleanup Attainment Confirmation Plan* (Ref. 3).

5.1 Data Verification

Data verification was conducted in accordance with ES&H 4.9.1, *Environmental Monitoring Data Verification*, to ensure that documentation and data were reported in compliance with established reporting requirements and standard operating procedures (SOPs), and to ensure that all analyses were performed. All analytical results received from the laboratory were reviewed to verify that samples were handled according to WSSRAP protocol. The following factors were reviewed and evaluated: sample identification, chain-of-custody, holding times, sample preservation requirements, Sample Analysis Request forms, data reviews, laboratory tracking, data reporting requirements, and the database transfer.

5.2 Data Review

Data packages were reviewed to ensure that final data were properly identified, analyzed, and reported, and that they met data quality requirements (DQRs). The data were also reviewed to check for inconsistencies with the field quality control (QC) samples. Final analytical results were also compared with the preliminary analytical results to identify any changes in data that would change the CUs release status.

During confirmation of WP-458 areas, soil samples were obtained in accordance with the details provided in the sampling plan (Ref. 1). The plan indicated that quality control samples were to be taken at a frequency of 1 per 20 samples or 5%. The quality control samples collected included duplicates, field replicates, secondary duplicates, matrix spikes/matrix spike duplicates, and equipment blanks.

Table 5-1 summarizes QC samples collected during WP-458 confirmation activities. All QC results are provided in Appendix D. With the exception of the organics (2,4,6-TNT, PCBs, and PAHs), all of the QC samples met the 5% frequency requirement.

Table 5-1 Summary of QC Samples

Contaminant	Number of Samples	Number of QC Samples Required	MS	MD	DU	SD	FR	EB
U-238	62	4	N/A	N/A	4	4	4	4
Ra-226	96	5	N/A	N/A	5	6	6	6
Ra-228	91	5	N/A	N/A	5	6	6	6
Th-230	44	3	N/A	N/A	3	3	4	3
Arsenic	39	2	2	N/A	2	2	2	2
Chromium	68	4	4	N/A	4	3	4	4
Lead	44	3	3	N/A	3	3	3	3
Thallium	39	2	2	N/A	2	2	2	2
2,4,6-TNT	44	3	3	3	N/A	1	3	3
PCBs	102	6	4	4	N/A	5	4	6
PAHs	48	3	1	1	N/A	3	1	3

N/A Not Applicable for the analyte.

5.2.1 Duplicate/Secondary and Duplicate/Field Replicates

Duplicate (DU) samples were aliquots taken from the parent samples at the laboratory. Field replicates (FR) and secondary duplicates (SD) were both split in the field from the parent samples. Field replicates were sent to the same laboratory as the parent, while secondary duplicates were sent to different laboratories. The FR, SD, and DU results were compared to the parent samples and the relative percent difference (RPD) was calculated for each. The recommended RPD for radiological and chemical parameters was less than or equal to 50% and 35%, respectively. RPDs were not calculated when one or both of the results were non-detects. If one or both of the results were less than five times the detection limit, the RPD value was considered of limited value due to higher tolerance limits near the analytical detection limit, and therefore, no further analysis was required. In cases where the RPDs were greater than the recommended limit, the data were further evaluated as discussed below.

Average RPDs for the duplicates, field replicates, and secondary duplicates were generally within recommended limits. Table 5-2 provides a summary of duplicate results. Duplicate RPDs ranged between 1% to 56% for radiological and 1% to 68% for metals. Lead was the only metal that had an average RPD just above the recommended RPD of 35%. Field replicate RPDs ranged between 1% and 50% for radiological and 2% and 68% for metals, and were not calculated for organics (TNT, PAHs, and PCBs) since the parent samples and/or the replicate results were non-detects. Even though some of the metal RPDs exceeded the recommended limits, no further analysis was performed since all metal results for this work package were well below their respective as low as reasonably achievable (ALARA) goals.

Table 5-2 Summary of Duplicate/Field Replicate/Secondary Duplicate Samples

Contaminant	Duplicates			Field Replicates			Secondary Duplicates		
	Average RPD	RPD Range	Percentage of samples meeting the accuracy requirements	Average RPD	RPD Range	Percentage of samples meeting the accuracy requirements	Average RPD	RPD Range	Percentage of samples meeting the accuracy requirements
Ra-226	7%	1 – 16%	100%	9%	2 – 15%	100%	86%	12 – 137%	33%
Ra-228	9%	2 – 20%	100%	14%	1 – 25%	100%	14%	4 – 30%	100%
Th-230	8%	7 – 8%	100%	20%	0 – 43%	100%	40%	5 – 59%	33%
U-238	20%	1 – 56%	75%	31%	20 – 50%	100%	48%	29 – 67%	50%
Arsenic	32%	16 – 48%	50%	35%	2 – 68%	50%	39%	11 – 67%	50%
Chromium	21%	0.1 – 49%	75%	15%	3 – 45%	75%	21%	1 – 60%	67%
Lead	39%	16 – 68%	67%	39%	17 – 66%	67%	49%	18 – 90%	33%
Thallium	7%	4 – 9%	100%	42%	42%	100%	N/C	N/C	N/C
2,4,6-TNT	N/A	N/A	N/A	N/C	N/C	N/C	N/C	N/C	N/C
PCBs	N/A	N/A	N/A	N/C	N/C	N/C	N/C	N/C	N/C
PAHs	N/A	N/A	N/A	N/C	N/C	N/C	N/C	N/C	N/C

N/A Not applicable.
N/C All results were ND, therefore not comparable.

Secondary duplicates ranged between 4% and 137% for radiological and 1% and 90% for metals. Again, organic RPDs could not be calculated since the parent samples and/or duplicate results were non-detect. Although the metal RPDs exceeded the recommended limits, no further analyses were performed since all metal results for this work package were well below their respective ALARA goals.

5.2.2 Matrix Spike/Matrix Duplicate/Matrix Spike Duplicate

The matrix spike and matrix spike duplicate samples were sample aliquots treated the same as the parent samples, but spiked with a known amount of specified parameters. The samples were then processed along with the parent samples and percent recoveries (REC) were calculated after analysis. These results determined the precision of the method in a given sample matrix. In addition, the RPDs between matrix spikes and matrix spike duplicates were calculated to determine the accuracy in a given sample matrix. The matrix spikes were done for all chemical analyses, while matrix spike duplicates were required for only organics (i.e., PAHs).

Matrix duplicates were processed like the regular sample and the relative percent difference was calculated after analysis. These samples were used to determine the accuracy of the method in a given sample matrix and are not required for organics (i.e., PAHs).

Percent recoveries for organics and metals were within the acceptable ranges with the exception of the lead matrix spike. The RPDs were also within the acceptable range of 35% or less. **Error! Reference source not found.** provides a summary of the matrix spike and matrix spike duplicate results.

Table 5-3 Summary Table for Matrix Spike/Matrix Spike Duplicates

Contaminant	Percent Recovery		Relative Percent Difference	
	Average	Range	Average	Range
TNT-MS	99%	86 – 107%	12%	11 – 13%
TNT –MD	104%	95 – 122%		
PCBs – MS	89%	84 – 90%	0.8%	0-1.5%
PCBs – MD	89%	85 - 92%		
PAHs – MS	N/C	N/C	N/C	N/C
PAHs – MD	N/C	N/C		
Arsenic - MS	73%	47 - 99%	N/A	N/A
Chromium – MS	109%	97 – 130%	N/A	N/A
Lead – MS	177%	91 – 348%	N/A	N/A
Thallium - MS	97%	87 – 106%	N/A	N/A

N/A Not Acceptable
N/C Results were ND, therefore not comparable.

5.2.3 Equipment Blanks

Equipment blanks (EB) were used to monitor the effectiveness of the process used to clean equipment prior to, or between, sample collections. Equipment blank sample results showed no signs of contamination. **Error! Reference source not found.** presents a summary of the equipment blanks.

Table 5-4 Equipment Blank Summary

Contaminant	Number of Samples	Concentration Ranges	Number of results above the DL
Ra-226	6	0.04 – 0.14	0
Ra-228	6	0.21 – 1.28	2
Th-230	3	0.04 – 0.25	0
Th-232	3	0.12 – 0.22	0
U-238	4	0.34 – 1.88	1
Arsenic	2	All results less than DL	0
Chromium	4	All results less than DL	0
Lead	3	All results less than DL	0
Thallium	2	All results less than DL	0
2,4,6-TNT	3	All results less than DL	0
PCBs	6	All results less than DL	0
PAHs	3	All results less than DL	0

5.3 Data Validation

Data validation is performed on 10% of all analytical data generated from the confirmation sampling activities at the WSSRAP. Data validation was conducted in accordance with ES&H 4.9.2, *Environmental Monitoring Data Validation*. Approximately 20% of the data from this work package were validated. No data associated with RU014 were rejected during validation.

6. SUMMARY OF CLOSURE REPORT FINDINGS

The total work package (WP-458) area consisted of confirmation units (CUs) contained within remedial unit (RU) RU014. Detailed information regarding the remedial activities for each of these CUs, including disposition forms, final data, and walkover forms, is presented in the Appendixes.

6.1 Confirmation Unit Dispositions

Upon completion of remedial activities, preliminary results were used to complete CU disposition forms in accordance with ES&H 1.2.1, *Soil Remediation Disposition Process*. Disposition forms were reviewed and signed by the designated project personnel. Based on the preliminary results, each CU was released for unrestricted use. All eight CUs were released after concentrations of all contaminants of concern (COC) within each were in compliance with the *Record of Decision* (ROD) cleanup standards (Ref. 4).

6.2 Summary of WP-458 Confirmation Results

Table 6-1 provides a summary of the total number of samples collected and analyzed for each contaminant during remedial activities conducted under WP-458. The number of detections that exceeded as low as reasonably achievable (ALARA) and minimum, maximum, and average concentrations are also provided for each contaminant. The table was generated using data sets compiled from all samples that represented soils left in place. Data from all other samples, including remediated hot spot areas, are presented in Appendix D.

Table 6-1 Summary Totals for RU014

CONTAMINANTS	NO. OF SAMPLES	CONC. RANGE	AVERAGE CONC.	SURFACE ALARA	SURFACE CRITERIA	RESULTS> ALARA
Arsenic (mg/kg)	39	3.5-21.0	10.5	45	75	0
Chromium (mg/kg)	68	6.3-40.4	19.8	90	100	0
Lead (mg/kg)	44	8.0-158	25.1	240	450	0
PAH (mg/kg)	48	0.0-4.53	0.18	0.44	5.6	3
PCB (mg/kg)	102	0.0-1.1	0.02	0.65	8.0	1
Ra-226 (pCi/g)	94	0.73-6.30	1.64	5.0	6.2	1
Ra-228 (pCi/g)	89	0.51-1.66	1.09	5.0	6.2	0
Radium, Total (pCi/g)	89	1.21-7.43	2.73	5.0	6.2	2
Thallium (mg/kg)	39	0.40-5.20	2.25	16	20	0
Th-230 (pCi/g)	44	0.81-4.04	1.21	5.0	6.2	0
TNT (mg/kg)	44	0.01-1.54	0.11	14	140	0
U-238 (pCi/g)	62	1.25-65.2	5.54	30	120	3

Analytical results generated from remedial activities at RU014 indicated that the average concentration of each COC over the entire RU014 area was below the ALARA goal. For each of

the eight CUs located within RU014, COC averages were also calculated and the conclusions were as follows. Although some individual sample concentrations were above the ALARA goals, the average COC concentration for each of the eight CUs was below ALARA with only one exception. CU164 had an average PAH concentration which exceeded ALARA, but was below other criteria. All 100 m^2 averages were less than criteria.

6.3 Summary of Chemical Plant Confirmation Results

To meet the requirements of the *Record of Decision* (Ref. 4), more than 50% of the results for each parameter had to be less than the ALARA goal. Table 6-2 summarizes the cumulative results to date.

Table 6-2 Summary Totals for Confirmation

CONTAMINANTS	NO. OF SAMPLES	MINIMUM CONC.	MAXIMUM CONC.	AVERAGE CONC.	RESULTS> ALARA
Arsenic (mg/kg)	865	0.48	34.10	7.43	0
Chromium (mg/kg)	1,276	3.80	41.60	17.12	0
Lead (mg/kg)	995	2.40	817.00	17.06	2
PAH (mg/kg)	582	0.00	4.53	0.19	68
PCB (mg/kg)	1,438	0.00	6.00	0.04	20
Ra-226 (pCi/g)	2,133	0.33	9.43	1.34	3
Ra-228 (pCi/g)	1,942	0.30	6.60	1.27	2
Thallium (mg/kg)	248	0.12	5.20	1.14	0
Th-230 (pCi/g)	1,613	0.09	23.1	1.60	30
TNT (mg/kg)	77	0.00	34.00	0.93	1
U-238 (pCi/g)	3,465	0.39	228.00	3.89	44

NOTE: This table contains summary results from confirmation sampling to date, including WP-399, WP-461, WP-253, WP-420, WP-471, and WP-458

6.4 Comparison of Standard Deviations

This section compares the estimated standard deviations calculated following U.S. Environmental Protection Agency (EPA) guidance and presented in the *Attainment Plan* (Ref. 3) with deviations calculated using confirmation results. Since there were no existing remediation data available to calculate the standard deviation (sigma), the *Attainment Plan* estimated sigma using the range (assuming the average concentration remaining after remediation would not exceed cleanup criteria) divided by six. To determine whether the specified level of precision was obtained, a comparison was made between the estimated sigma and the calculated sigma using the RU014 results.

The comparison indicated that the specified level of precision (a false positive = 0.05 and a false negative = 0.20) was obtained. With the exception of Th-230, all of the calculated sigmas were less than the estimated sigmas, indicating that the minimum specified precision was met. Table 6-3 presents the estimated sigma and calculated sigmas for each COC.

While the RU014 calculated sigma for Th-230 was below estimated sigma, the cumulative sigma exceeded the estimated sigma. This is a factor of hot spots left in place based upon subsurface criteria in previous CUs. The estimated standard deviation, recalculated for Th-230 using subsurface criteria, is 2.7. The cumulative sigma is less than the estimated subsurface sigma.

Table 6-3 Estimated Sigma and Calculated Sigma for Contaminants of Concern

CONTAMINANT	ESTIMATED SIGMA [a]	RU014 SIGMA [b]	CUMULATIVE SIGMA [c]
Arsenic (mg/kg)	12.5	4.29	3.57
Chromium (mg/kg)	18.3	6.08	5.01
Lead (mg/kg)	75	24.24	30.66
PAH (mg/kg)	0.93	0.75	0.50
PCB (mg/kg)	1.33	0.12	0.30
Ra-226 (pCi/g)	1.03	0.71	0.37
Ra-228 (pCi/g)	1.03	0.28	0.36
Thallium (mg/kg)	3.3	1.39	1.18
Th-230 (pCi/g)	1.03	0.57	1.44
Th-232 (pCi/g)	1.03	0.28	0.36
TNT (mg/kg)	23.3	0.22	4.27
U-238 (pCi/g)	20	10.25	9.10

(a) Sigma estimated in the *Attainment Plan* (Ref. 3)
(b) Sigma calculated using only the WP-458 confirmation results.
(c) Sigma calculated using cumulative confirmation results (WP-399, WP-461, WP-420, WP-253, WP-471, and WP-458).

7. REFERENCES

1. MK-Ferguson Company and Jacobs Engineering Group. *Confirmation Sampling Plan Details for Vicinity Properties DA1, DA2, DA3, DA5, MDC3, MDC4, and MDC5 (WP-458).* Rev. 0. DOE/OR/21548-693. Prepared for the U.S. Department of Energy, Oak Ridge Operations Office. St. Charles, MO. September 1997.

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12. MK-Ferguson Company and Jacobs Engineering Group. *Project Management Contractor Quality Assurance Program*. Rev. 6. DOE/OR/21548-333. Prepared for the U.S. Department of Energy, Oak Ridge Operations Office. St. Charles, MO. November 2000.

13. MK-Ferguson Company and Jacobs Engineering Group. *Environmental Quality Assurance Project Plan*. Rev. 5. DOE/OR/21548-352. Prepared for the U.S. Department of Energy, Oak Ridge Operations Office. St. Charles, MO. November 2000.

APPENDIX A
Disposition Forms

NOTE: Disposition Forms are completed using preliminary results. Refer to Appendix C for final results.

ES&H 1.2.1.1, Rev. 2, 11/96

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

SECTION I

1. Work Package Number: 458 2. Date: 6-1-98 3. Review Form #: 98-018

4. Remediation Unit Number: 014 5. Confirmation Unit Number: 162 (map attached)

6. Contaminants of Concern: X U-238 ___ Th-230 ___ Th-232 X Ra-226 X Ra-228
___ TNT X PCB ___ PAH ___ As ___ Cr ___ Pb ___ Tl

7. Results average below ALARA goal(s)?	X Yes ___ No
8. All results below cleanup criteria?	X Yes ___ No
9. Any results greater than 3X criteria?	___ Yes X No
10. Hot spots present (less than 3X criteria)?	___ Yes X No

Parameter	Size	Concentration	Complies with Plan?
			___ Yes ___ No
			___ Yes ___ No
			___ Yes ___ No

11. Comments

12. Reviewer Disposition Recommendation:
X Release for Unrestricted Use (Section II)
___ Additional Excavation Required (Section IV)
___ ALARA Committee Required (Section III)

13. Reviewer: [signature] Date 6-1-98

SECTION II

CU is released for unrestricted use.

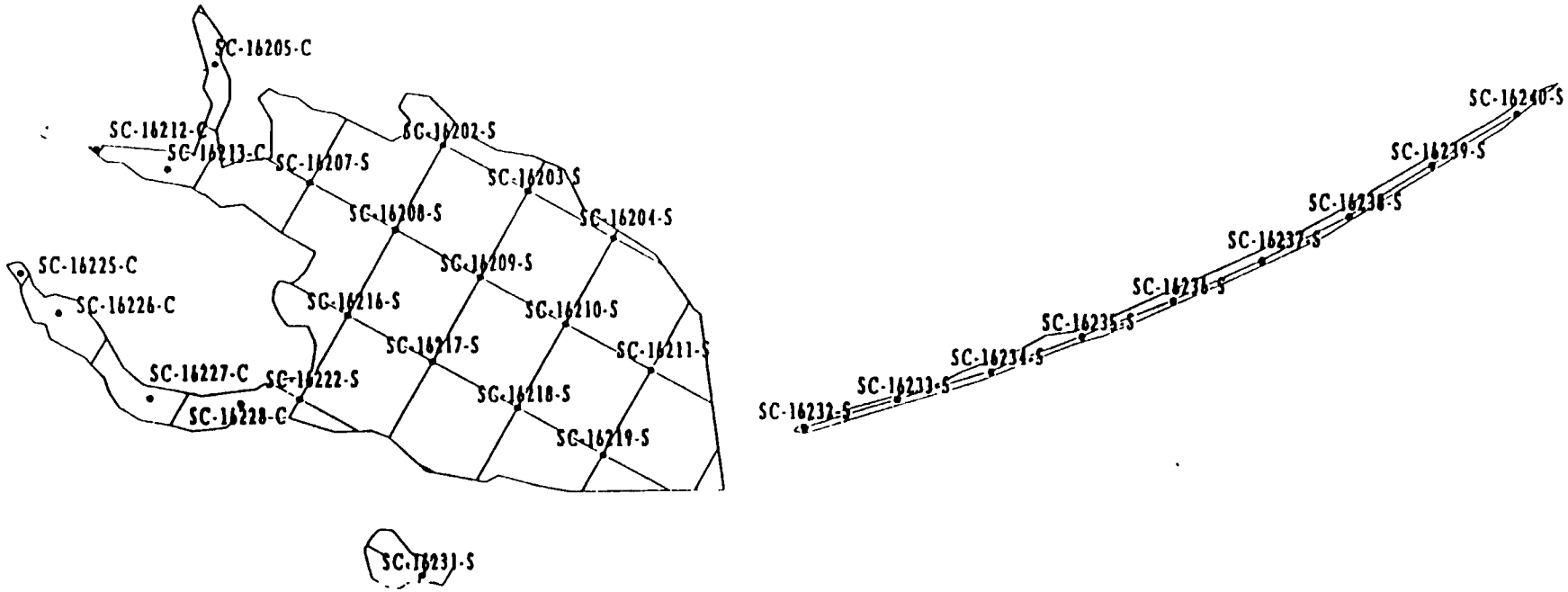
14. ES&H Manager: [signature] Date: 6/1/98

15. DOE Project Manager/Engineer: [signature] Date: 6-2-98

16. Project Manager: [signature] Date: 2 Jun 98

17. Construction Engineer: [signature] Date: 6/2/98

SEE ATTACHED RESULTS AND MAP



Disposition Form # 98-018

10 5 0 METERS

30 15 0 FEET

N

S

Sample Locations in Remedial Unit RU014
Confirmation Unit CU162

Figure 3-2

EXHIBIT NO.: G/VP/004/0797	REPORT NO.: DOE/OR/21548-6v3	
ORIGINATOR: MGL	DRAWN BY: WSSRAP GIS	DATE: 07/24/97

06/01/98

CU162 DATA REPORT

RADIUM-226

PARAMETER	LOCATION	CONC	DL	UNITS
RADIUM-226	SC-16202-S	1.9295	0.33	PCI/G
RADIUM-226	SC-16203-S	1.7479	0.27	PCI/G
RADIUM-226	SC-16204-S	0.87395	0.77	PCI/G
RADIUM-226	SC-16205-C	1.9068	0.28	PCI/G
RADIUM-226	SC-16207-S	2.4062	0.29	PCI/G
RADIUM-226	SC-16208-S	1.9522	0.35	PCI/G
RADIUM-226	SC-16209-S	2.1111	0.27	PCI/G
RADIUM-226	SC-16210-S	2.1338	0.24	PCI/G
RADIUM-226	SC-16211-S	2.3154	0.32	PCI/G
RADIUM-226	SC-16212-C	2.1565	0.39	PCI/G
RADIUM-226	SC-16213-C	2.0657	0.27	PCI/G
RADIUM-226	SC-16216-S	1.9295	0.46	PCI/G
RADIUM-226	SC-16217-S	1.9295	0.29	PCI/G
RADIUM-226	SC-16218-S	2.5424	0.31	PCI/G
RADIUM-226	SC-16219-S	2.3381	0.24	PCI/G
RADIUM-226	SC-16222-S	2.2019	0.3	PCI/G
RADIUM-226	SC-16225-C	2.2246	0.32	PCI/G
RADIUM-226	SC-16226-C	2.6786	0.26	PCI/G
RADIUM-226	SC-16227-C	1.7252	0.51	PCI/G
RADIUM-226	SC-16228-C	2.2473	0.36	PCI/G
RADIUM-226	SC-16231-S	2.2927	0.28	PCI/G
RADIUM-226	SC-16232-S	2.043	0.44	PCI/G
RADIUM-226	SC-16233-S	2.4062	0.31	PCI/G
RADIUM-226	SC-16234-S	2.27	0.34	PCI/G
RADIUM-226	SC-16235-S	2.2246	0.29	PCI/G
RADIUM-226	SC-16236-S	2.1565	0.35	PCI/G
RADIUM-226	SC-16237-S	2.2246	0.26	PCI/G
RADIUM-226	SC-16238-S	1.8841	0.3	PCI/G
RADIUM-226	SC-16239-S	2.1338	0.24	PCI/G
RADIUM-226	SC-16240-S	1.7933	0.39	PCI/G

NUMBER OF RADIUM-226 SAMPLES IN DATABASE FOR THIS CU IS: 30
Average of RADIUM-226 values is 2.09 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 2.68 pCi/g, which is below criteria, 6.20 pCi/g.

RADIUM-228

PARAMETER	LOCATION	CONC	DL	UNITS
RADIUM-228	SC-16202-S	0.58	1.16	PCI/G
RADIUM-228	SC-16203-S	0 585	1.17	PCI/G
RADIUM-228	SC-16204-S	0.575	1.15	PCI/G
RADIUM-228	SC-16205-C	1.36	0.51	PCI/G
RADIUM-228	SC-16207-S	1 32	0.38	PCI/G
RADIUM-228	SC-16208-S	1.38	0.25	PCI/G
RADIUM-228	SC-16209-S	1.38	0.45	PCI/G
RADIUM-228	SC-16210-S	1.2	0.47	PCI/G
RADIUM-228	SC-16211-S	1.34	0.43	PCI/G
RADIUM-228	SC-16212-C	1.14	0.53	PCI/G
RADIUM-228	SC-16213-C	1.11	0.37	PCI/G
RADIUM-228	SC-16216-S	1.35	0.55	PCI/G
RADIUM-228	SC-16217-S	1.47	0.39	PCI/G
RADIUM-228	SC-16218-S	1.02	0.48	PCI/G
RADIUM-228	SC-16219-S	0.63	1.26	PCI/G
RADIUM-228	SC-16222-S	1 55	0.37	PCI/G
RADIUM-228	SC-16225-C	1.25	0.54	PCI/G
RADIUM-228	SC-16226-C	1.28	0.29	PCI/G
RADIUM-228	SC-16227-C	1 03	0 49	PCI/G
RADIUM-228	SC-16228-C	1 42	0.53	PCI/G
RADIUM-228	SC-16231-S	1 16	0.35	PCI/G
RADIUM-228	SC-16232-S	1 26	0.25	PCI/G
RADIUM-228	SC-16233-S	1 08	0.32	PCI/G
RADIUM-228	SC-16234-S	1.36	0.4	PCI/G
RADIUM-228	SC-16235-S	1.08	0.39	PCI/G
RADIUM-228	SC-16236-S	1.18	0.48	PCI/G
RADIUM-228	SC-16237-S	1 08	0.41	PCI/G
RADIUM-228	SC-16238-S	1.22	0.58	PCI/G
RADIUM-228	SC-16239-S	1.14	0.34	PCI/G
RADIUM-228	SC-16240-S	1 31	0 71	PCI/G

NUMBER OF RADIUM-228 SAMPLES IN DATABASE FOR THIS CU IS: 30
Average of RADIUM-228 values is 1.16 pCi/g, which is below ALARA, 5.00 pCi/g
Maximum single value is 1 55 pCi/g, which is below criteria, 6.20 pCi/g.

URANIUM-238

PARAMETER	LOCATION	CONC	DL	UNITS
URANIUM-238	SC-16202-S	1.965	3.93	PCI/G
URANIUM-238	SC-16203-S	1.985	3.97	PCI/G
URANIUM-238	SC-16204-S	2.13	4.26	PCI/G
URANIUM-238	SC-16205-C	2.95	1.92	PCI/G
URANIUM-238	SC-16207-S	1.88	2.1	PCI/G
URANIUM-238	SC-16208-S	1.925	3.85	PCI/G
URANIUM-238	SC-16209-S	3.2	2.17	PCI/G
URANIUM-238	SC-16210-S	8.16	2.63	PCI/G
URANIUM-238	SC-16211-S	18.19	3.03	PCI/G
URANIUM-238	SC-16212-C	1.885	3.77	PCI/G
URANIUM-238	SC-16213-C	1.42	2.84	PCI/G
URANIUM-238	SC-16216-S	2.065	4.13	PCI/G
URANIUM-238	SC-16217-S	69.85	4.24	PCI/G
URANIUM-238	SC-16218-S	9.68	3.72	PCI/G
URANIUM-238	SC-16219-S	2.23	4.46	PCI/G
URANIUM-238	SC-16222-S	10.73	3.22	PCI/G
URANIUM-238	SC-16225-C	1.935	3.87	PCI/G
URANIUM-238	SC-16226-C	1.49	2.98	PCI/G
URANIUM-238	SC-16227-C	18.24	3.77	PCI/G
URANIUM-238	SC-16228-C	1.945	3.89	PCI/G
URANIUM-238	SC-16231-S	1.435	2.87	PCI/G
URANIUM-238	SC-16232-S	27.95	5.38	PCI/G
URANIUM-238	SC-16233-S	48.76	4.36	PCI/G
URANIUM-238	SC-16234-S	17.42	4.6	PCI/G
URANIUM-238	SC-16235-S	5.17	2.24	PCI/G
URANIUM-238	SC-16236-S	1.79	3.58	PCI/G
URANIUM-238	SC-16237-S	1.4	2.8	PCI/G
URANIUM-238	SC-16238-S	2.26	2.49	PCI/G
URANIUM-238	SC-16239-S	1.425	2.85	PCI/G
URANIUM-238	SC-16240-S	1.965	3.93	PCI/G

NUMBER OF URANIUM-238 SAMPLES IN DATABASE FOR THIS CU IS: 30
Average of URANIUM-238 values is 9.11 pCi/g, which is below ALARA, 30.00 pCi/g.
Maximum single value is 69.85 pCi/g, which is below criteria, 120.00 pCi/g.

CU162 DATA REPORT, Continued

PCB

PARAMETER	LOCATION	CONC	DL	UNITS
PCB	SC-16202-S	0	44	UG/KG
PCB	SC-16203-S	0	46	UG/KG
PCB	SC-16204-S	0	41	UG/KG
PCB	SC-16205-C	0	43	UG/KG
PCB	SC-16207-S	0	41	UG/KG
PCB	SC-16208-S	0	43	UG/KG
PCB	SC-16209-S	0	41	UG/KG
PCB	SC-16210-S	0	41	UG/KG
PCB	SC-16211-S	0	38	UG/KG
PCB	SC-16212-C	0	43	UG/KG
PCB	SC-16213-C	0	39	UG/KG
PCB	SC-16216-S	0	44	UG/KG
PCB	SC-16217-S	0	43	UG/KG
PCB	SC-16218-S	1100	380	UG/KG
PCB	SC-16219-S	0	41	UG/KG
PCB	SC-16222-S	0	42	UG/KG
PCB	SC-16225-C	0	45	UG/KG
PCB	SC-16226-C	0	43	UG/KG
PCB	SC-16227-C	0	36	UG/KG
PCB	SC-16228-C	0	42	UG/KG
PCB	SC-16231-S	0	44	UG/KG
PCB	SC-16232-S	0	43	UG/KG
PCB	SC-16233-S	0	42	UG/KG
PCB	SC-16234-S	0	42	UG/KG
PCB	SC-16235-S	0	40	UG/KG
PCB	SC-16236-S	0	40	UG/KG
PCB	SC-16237-S	0	40	UG/KG
PCB	SC-16238-S	0	40	UG/KG
PCB	SC-16239-S	0	41	UG/KG
PCB	SC-16240-S	0	47	UG/KG

NUMBER OF PCB SAMPLES IN DATABASE FOR THIS CU IS. 30
Average of PCB values is 36.67 pCi/g, which is below ALARA, 650 ~~pCi/g~~ µg/kg max
Maximum single value is 1100 pCi/g, which is below criteria, 8000 ~~pCi/g~~ µg/kg max

Weldon Spring Site Remedial Action Project
7295 Highway 94 South, St. Charles, Missouri, 63304

ES&H 1.2.1.1, Rev. 2, 11/96

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

SECTION I

1. Work Package Number: WP-458 2. Date: 3-12-98 3. Review Form #: 98-011

4. Remediation Unit Number: 014 5. Confirmation Unit Number: 163 (map attached)

6. Contaminants of Concern: X U-238 ___ Th-230 ___ Th-232 X Ra-226 X Ra-228
___ TNT X PCB ___ PAH ___ As X Cr ___ Pb ___ Tl

7. Results average below ALARA goal(s)?	X Yes ___ No
8. All results below cleanup criteria?	X Yes ___ No
9. Any results greater than 3X criteria?	___ Yes X No
10. Hot spots present (less than 3X criteria)?	___ Yes X No

Parameter	Size	Concentration	Complies with Plan?
			___ Yes ___ No
			___ Yes ___ No
			___ Yes ___ No

11. Comments

12. Reviewer Disposition Recommendation:
X Release for Unrestricted Use (Section II)
___ Additional Excavation Required (Section IV)
___ ALARA Committee Required (Section III)

13. Reviewer: [signature] Date 3-12-98

SECTION II

CU is released for unrestricted use.

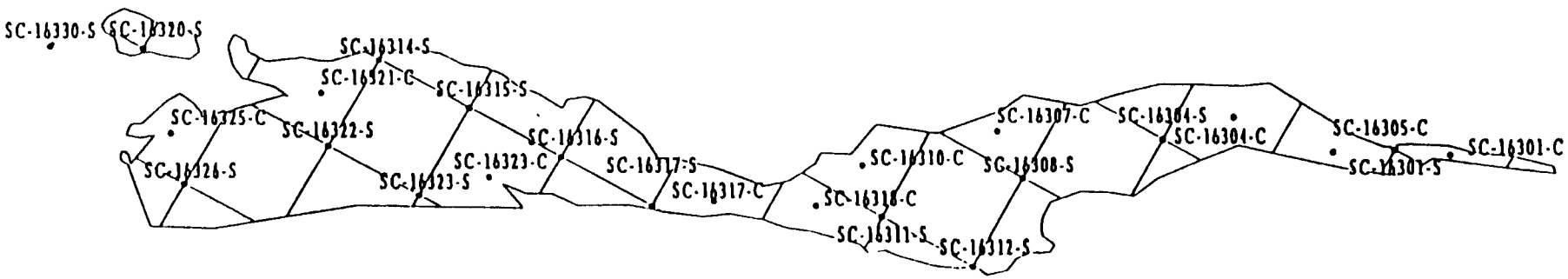
14. ES&H Manager: [signature] Date: 3/12/98

15. DOE Project Manager/Engineer: [signature] Date: 3/12/98

16. Project Manager: [signature] Date: 12 MAR 98

17. Construction Engineer: [signature] Date: 3/12/98

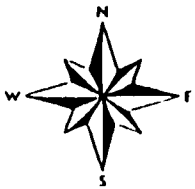
SEE ATTACHED RESULTS AND MAP



RELEASE FORM # 98-011

10 5 0 METERS

30 15 0 FEET



Sample Locations in Remedial Unit RU014
Confirmation Unit CU163

Figure 3-3

EXHIBIT NO.: G/VP/005/0797	REPORT NO.: DOE/OR/21548-693	
ORIGINATOR: MGL	DRAWN BY: WSSRAP GIS	DATE: 07/24/97

03/12/98

CU163 DATA REPORT

URANIUM-238

PARAMETER	LOCATION	CONC	DL	UNITS
URANIUM-238	SC-16330-S	1.85	3.70	PCI/G
URANIUM-238	SC-16320-S	1.61	2.22	PCI/G
URANIUM-238	SC-16314-S	3.64	2.51	PCI/G
URANIUM-238	SC-16315-S	6.69	2.50	PCI/G
URANIUM-238	SC-16304-S	2.42	2.35	PCI/G
URANIUM-238	SC-16322-S	1.40	2.79	PCI/G
URANIUM-238	SC-16301-S	1.45	2.89	PCI/G
URANIUM-238	SC-16316-S	1.97	3.94	PCI/G
URANIUM-238	SC-16308-S	2.27	4.54	PCI/G
URANIUM-238	SC-16326-S	1.31	2.62	PCI/G
URANIUM-238	SC-16323-S	1.30	2.61	PCI/G
URANIUM-238	SC-16317-S	2.06	4.13	PCI/G
URANIUM-238	SC-16311-S	1.44	2.87	PCI/G
URANIUM-238	SC-16312-S	1.41	2.82	PCI/G
URANIUM-238	SC-16321-C	2.96	3.53	PCI/G
URANIUM-238	SC-16304-C	1.78	3.46	PCI/G
URANIUM-238	SC-16325-C	1.89	3.78	PCI/G
URANIUM-238	SC-16307-C	11.34	2.69	PCI/G
URANIUM-238	SC-16305-C	1.87	3.74	PCI/G
URANIUM-238	SC-16323-C	2.00	4.01	PCI/G
URANIUM-238	SC-16310-C	2.31	4.62	PCI/G
URANIUM-238	SC-16301-C	1.78	3.57	PCI/G
URANIUM-238	SC-16317-C	1.20	1.80	PCI/G
URANIUM-238	SC-16318-C	3.49	2.31	PCI/G

NUMBER OF 'URANIUM-238' SAMPLES IN DATABASE FOR THIS CU IS: 24
Average of URANIUM-238 values is 2.56, which is below ALARA, 30.00
Maximum single value is 11.34, which is below criteria, 120.00

RADIUM-226

PARAMETER	LOCATION	CONC	DL	UNITS
RADIUM-226	SC-16330-S	2.25	0.32	PCI/G
RADIUM-226	SC-16320-S	2.50	0.28	PCI/G
RADIUM-226	SC-16314-S	1.95	0.39	PCI/G
RADIUM-226	SC-16315-S	2.27	0.24	PCI/G
RADIUM-226	SC-16304-S	1.75	0.22	PCI/G
RADIUM-226	SC-16322-S	2.11	0.27	PCI/G
RADIUM-226	SC-16301-S	2.18	0.27	PCI/G
RADIUM-226	SC-16316-S	2.38	0.28	PCI/G
RADIUM-226	SC-16308-S	2.25	0.36	PCI/G
RADIUM-226	SC-16326-S	2.29	0.24	PCI/G
RADIUM-226	SC-16323-S	2.20	0.25	PCI/G
RADIUM-226	SC-16317-S	1.95	0.22	PCI/G
RADIUM-226	SC-16311-S	2.02	0.23	PCI/G
RADIUM-226	SC-16312-S	2.34	0.21	PCI/G
RADIUM-226	SC-16321-C	2.66	0.31	PCI/G
RADIUM-226	SC-16304-C	1.84	0.28	PCI/G
RADIUM-226	SC-16325-C	2.29	0.22	PCI/G
RADIUM-226	SC-16307-C	2.07	0.30	PCI/G
RADIUM-226	SC-16305-C	2.00	0.32	PCI/G
RADIUM-226	SC-16323-C	2.11	0.25	PCI/G
RADIUM-226	SC-16310-C	1.68	0.28	PCI/G
RADIUM-226	SC-16301-C	1.79	0.13	PCI/G
RADIUM-226	SC-16317-C	1.93	0.26	PCI/G
RADIUM-226	SC-16318-C	2.00	0.25	PCI/G

NUMBER OF 'RADIUM-226' SAMPLES IN DATABASE FOR THIS CU IS: 24
Average of RADIUM-226 values is 2.12, which is below ALARA, 5.00
Maximum single value is 2.66, which is below criteria, 6.20

RADIUM-228

PARAMETER	LOCATION	CONC	DL	UNITS
RADIUM-228	SC-16330-S	1.13	0.45	PCI/G
RADIUM-228	SC-16320-S	1.10	0.37	PCI/G
RADIUM-228	SC-16314-S	0.54	1.07	PCI/G
RADIUM-228	SC-16315-S	1.01	0.40	PCI/G
RADIUM-228	SC-16304-S	0.99	0.34	PCI/G
RADIUM-228	SC-16322-S	1.10	0.23	PCI/G
RADIUM-228	SC-16301-S	1.39	0.33	PCI/G
RADIUM-228	SC-16316-S	1.32	0.42	PCI/G
RADIUM-228	SC-16308-S	1.37	0.47	PCI/G
RADIUM-228	SC-16326-S	1.02	0.43	PCI/G
RADIUM-228	SC-16323-S	1.26	0.37	PCI/G
RADIUM-228	SC-16317-S	0.53	1.05	PCI/G
RADIUM-228	SC-16311-S	1.36	0.36	PCI/G
RADIUM-228	SC-16312-S	0.96	0.44	PCI/G
RADIUM-228	SC-16321-C	0.55	1.10	PCI/G
RADIUM-228	SC-16304-C	0.60	1.21	PCI/G
RADIUM-228	SC-16325-C	0.56	1.13	PCI/G
RADIUM-228	SC-16307-C	1.33	0.40	PCI/G
RADIUM-228	SC-16305-C	1.17	0.62	PCI/G
RADIUM-228	SC-16323-C	1.14	0.43	PCI/G
RADIUM-228	SC-16310-C	1.49	0.37	PCI/G
RADIUM-228	SC-16301-C	1.31	0.54	PCI/G
RADIUM-228	SC-16317-C	0.59	0.22	PCI/G
RADIUM-228	SC-16318-C	1.05	0.34	PCI/G

NUMBER OF 'RADIUM-228' SAMPLES IN DATABASE FOR THIS CU IS: 24
Average of RADIUM-228 values is 1.04, which is below ALARA, 5.00
Maximum single value is 1.49, which is below criteria, 6.20

CU 163 Data Report, Continued

CHROMIUM

PARAMETER	LOCATION	CONC	DL	UNITS
Chromium	SC-16330-S	19.50	0.15	UG/G
Chromium	SC-16320-S	20.40	0.70	UG/G
Chromium	SC-16314-S	17.60	0.15	UG/G
Chromium	SC-16315-S	18.70	0.15	UG/G
Chromium	SC-16304-S	23.20	0.71	UG/G
Chromium	SC-16322-S	15.40	0.15	UG/G
Chromium	SC-16301-S	20.80	0.72	UG/G
Chromium	SC-16316-S	21.70	0.15	UG/G
Chromium	SC-16308-S	26.10	0.75	UG/G
Chromium	SC-16326-S	19	0.17	UG/G
Chromium	SC-16323-S	16	0.16	UG/G
Chromium	SC-16317-S	22.80	0.16	UG/G
Chromium	SC-16311-S	21.40	0.15	UG/G
Chromium	SC-16312-S	20.70	0.65	UG/G
Chromium	SC-16321-C	15.70	0.15	UG/G
Chromium	SC-16304-C	24.30	0.75	UG/G
Chromium	SC-16325-C	6.30	0.14	UG/G
Chromium	SC-16307-C	22.80	0.70	UG/G
Chromium	SC-16305-C	23.10	0.75	UG/G
Chromium	SC-16323-C	17	0.15	UG/G
Chromium	SC-16310-C	17.70	0.13	UG/G
Chromium	SC-16301-C	21.80	0.71	UG/G
Chromium	SC-16317-C	10.80	0.14	UG/G
Chromium	SC-16318-C	10	0.14	UG/G

NUMBER OF 'Chromium' SAMPLES IN DATABASE FOR THIS CU IS: 24
Average of Chromium values is 18.87, which is below ALARA, 90.00
Maximum single value is 26.10, which is below criteria, 110.00

CU 163 Data Report, Continued

PCB

PARAMETER	LOCATION	CONC	DL	UNITS
PCB	SC-16330-S	49	41	UG/KG
PCB	SC-16320-S	0	44	UG/KG
PCB	SC-16314-S	76	42	UG/KG
PCB	SC-16315-S	0	42	UG/KG
PCB	SC-16304-S	0	44	UG/KG
PCB	SC-16322-S	0	42	UG/KG
PCB	SC-16301-S	170	37	UG/KG
PCB	SC-16316-S	0	42	UG/KG
PCB	SC-16308-S	0	42	UG/KG
PCB	SC-16326-S	0	38	UG/KG
PCB	SC-16323-S	0	43	UG/KG
PCB	SC-16317-S	0	44	UG/KG
PCB	SC-16311-S	0	40	UG/KG
PCB	SC-16312-S	0	38	UG/KG
PCB	SC-16321-C	389	42	UG/KG
PCB	SC-16304-C	160	37	UG/KG
PCB	SC-16325-C	0	38	UG/KG
PCB	SC-16307-C	0	42	UG/KG
PCB	SC-16305-C	0	40	UG/KG
PCB	SC-16323-C	0	40	UG/KG
PCB	SC-16310-C	0	37	UG/KG
PCB	SC-16301-C	0	37	UG/KG
PCB	SC-16317-C	0	38	UG/KG
PCB	SC-16318-C	0	38	UG/KG

NUMBER OF 'PCB' SAMPLES IN DATABASE FOR THIS CU IS: 24
Average of PCB values is 35.17, which is below ALARA, 650
Maximum single value is 389, which is below criteria, 8000

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

SECTION I

1. Work Package Number: 458 2. Date: 4-16-98 3. Review Form #: 98-017

4. Remediation Unit Number: 014 5. Confirmation Unit Number: 164 (map attached)

6. Contaminants of Concern: X U-238 ___ Th-230 ___ Th-232 ___ Ra-226 ___ Ra-228
___ TNT X PCB X PAH ___ As ___ Cr ___ Pb ___ Tl

7. Results average below ALARA goal(s)?	___ Yes X No
8. All results below cleanup criteria?	X Yes ___ No
9 Any results greater than 3X criteria?	___ Yes X No
10. Hot spots present (less than 3X criteria)?	___ Yes X No

Parameter	Size	Concentration	Complies with Plan?
			___ Yes ___ No
			___ Yes ___ No
			___ Yes ___ No

11. Comments PAHs averaged above ALARA goal. See Section III.

12. Reviewer Disposition Recommendation:
___ Release for Unrestricted Use (Section II)
___ Additional Excavation Required (Section IV)
X ALARA Committee Required (Section III)

13. Reviewer: [signature] Date 4-16-98

SECTION II

CU is released for unrestricted use.

14. ES&H Manager: ___ Date: ___

15. DOE Project Manager/Engineer. ___ Date: ___

16. Project Manager: ___ Date: ___

17. Construction Engineer: ___ Date: ___

SEE ATTACHED RESULTS AND MAP

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

ES&H-1.2.1, Rev. 3, 01/98

SECTION III — *ALARA Committee*

Disposition Input: Decision of ALARA committee is to release the area -- no further excavation is warranted.

Disposition Decision: X Backfill/Release for Unrestricted Use.
____ Additional Excavation Required.
____ Additional Samples to be Collected.

YES — 4-16-98
Vote ~~ES&H Manager~~ DEPUTY PROJECT DIRECTOR - OPERATIONS — Date

YES — 4/16/98
Vote ~~DOE Project Manager/Engineer~~ ES&H MANAGER — Date

YES — 4/16/98
Vote ~~Deputy Project Director - Operations~~ DOE PROJECT MANAGER/ENGINEER — Date

Yes — 4/16/98
Vote Environmental Protection Manager — Date

Yes — 4/16/98
Vote Deputy Project Director - Environmental — Date

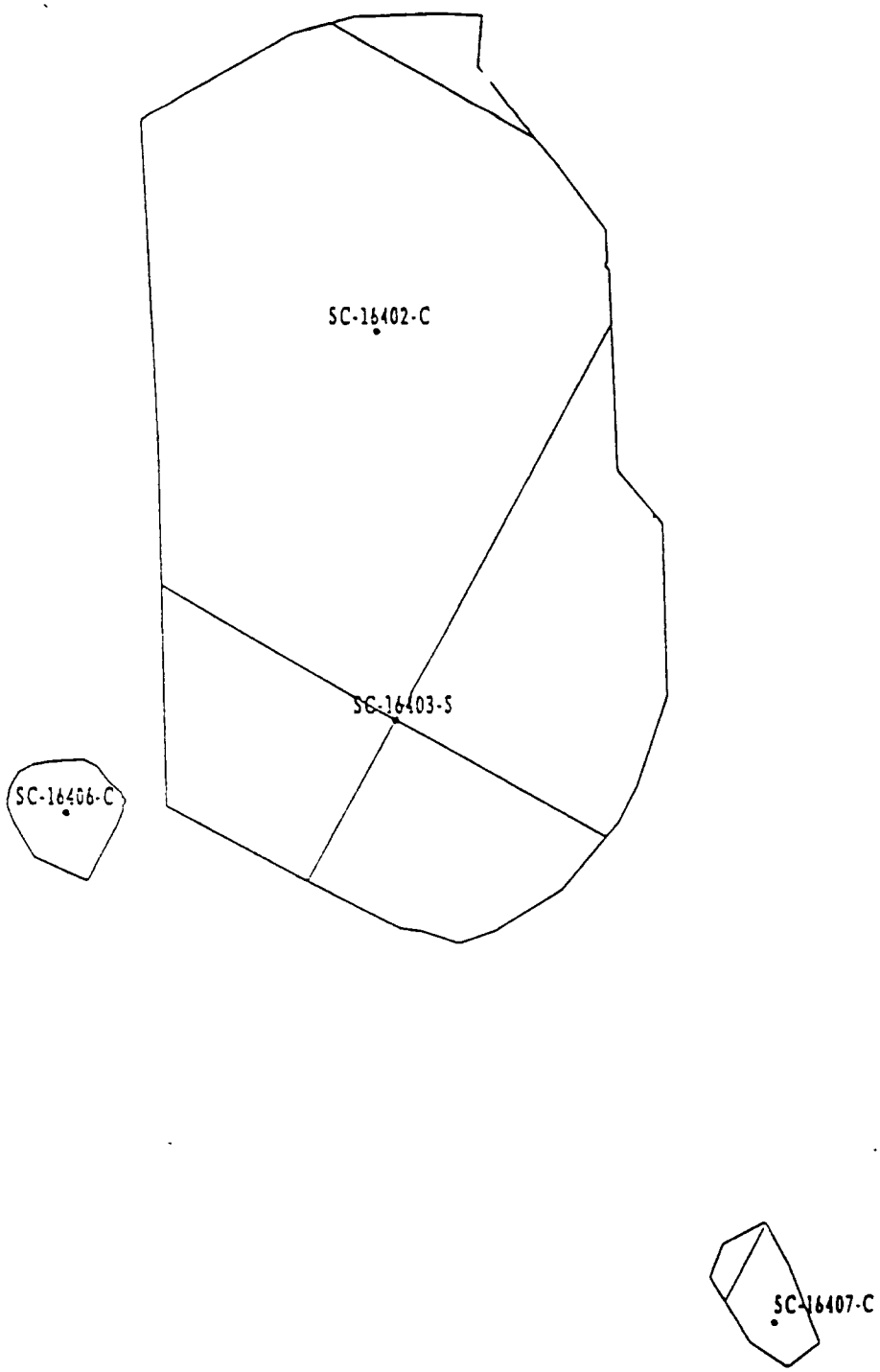
4/16/98
Construction Engineer — Date

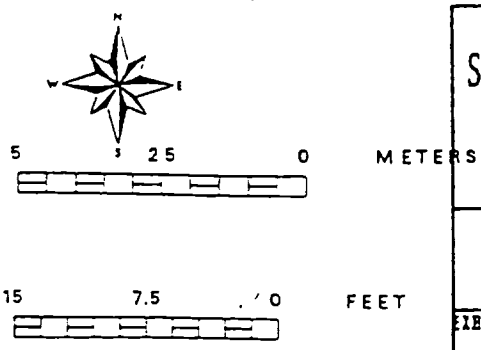
16 APR 98
Project Manager — Date

Section IV *Results greater than 3X criteria or >. hot spot rule, additional excavation automatically required.*

Project Manager: _____ Date: _____

Construction Engineer: _____ Date: _____





Sample Locations in Remedial Unit RU014
Confirmation Unit CU164

Figure 3-4

EXHIBIT NO.: G/VP/006/0797		REPORT NO: DOE/OR/21548-693	
ORIGINATOR MGL	DRAWN BY WSSRAP GIS	DATE: 07/24/97	

Uranium-238

PARAMETER	LOCATION	CONC	DL	UNITS
Uranium	SC-16402-C	3.40	2.63	pCi/g
Uranium	SC-16403-S	2.69	1.98	pCi/g
Uranium	SC-16406-C	3.50	1.10	pCi/g
Uranium	SC-16407-C	1.49	2.31	pCi/g

Number of Uranium-238 samples in database for this CU is: 4
Average of Uranium-238 samples is 2.77, which is below ALARA, 30.00
Maximum single value is 3.40 which is below criteria, 120.

PCB

PARAMETER	LOCATION	CONC	DL	UNITS
PCB	SC-16402-C	0	43	UG/KG
PCB	SC-16403-S	0	48	UG/KG
PCB	SC-16406-C	0	39	UG/KG
PCB	SC-16407-C	69	47	UG/KG

Number of PCB samples in database for this CU is: 4
Average of PCB values is 17.25, which is below ALARA, 650
Maximum single value is 69, which is below criteria, 8000

PAH

PARAMETER	LOCATION	CONC	DL	UNITS
PAH	SC-16402-C	4750	38	UG/KG
PAH	SC-16403-S	1070	38	UG/KG
PAH	SC-16406-C	2410	38	UG/KG
PAH	SC-16407-C	0	38	UG/KG

Number of PAH samples in database for this CU is: 4
Average of PAH values is 2057.5, which is above ALARA, 440
Maximum single value is 4750, which is below criteria, 5600

Weldon Spring Site Remedial Action Project
7295 Highway 94 South, St. Charles, Missouri, 63304

ES&H 1.2.1.1, Rev 2, 11/96

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

SECTION I

1. Work Package Number: 458 2. Date: 8-4-98 3. Review Form #: 98-033

4. Remediation Unit Number: 014 5. Confirmation Unit Number: 165 (map attached)

6 Contaminants of Concern: X U-238 X Th-230 ___ Th-232 X Ra-226 X Ra-228
X TNT X PCB X PAH X As X Cr X Pb X Tl

7. Results average below ALARA goal(s)?	X Yes	___ No
8. All results below cleanup criteria?	___ Yes	X No
9. Any results greater than 3X criteria?	___ Yes	X No
10. Hot spots present (less than 3X criteria)?	X Yes	___ No

Parameter	Size	Concentration	Complies with Plan?	
Ra-226 AND Combined 226/228	<25m²	Ra226: 6.22 pCi/g; Combined Ra: 7.24 pCi/g	X Yes	___ No
Combined Ra 226/228	<25m²	.628 pCi/g	X Yes	___ No
			___ Yes	___ No

11. Comments See attached sheet for hotspot details

12. Reviewer Disposition Recommendation:
X Release for Unrestricted Use (Section II)
___ Additional Excavation Required (Section IV)
___ ALARA Committee Required (Section III)

13. Reviewer: [signature] Date 8-4-98

SECTION II

CU is released for unrestricted use.

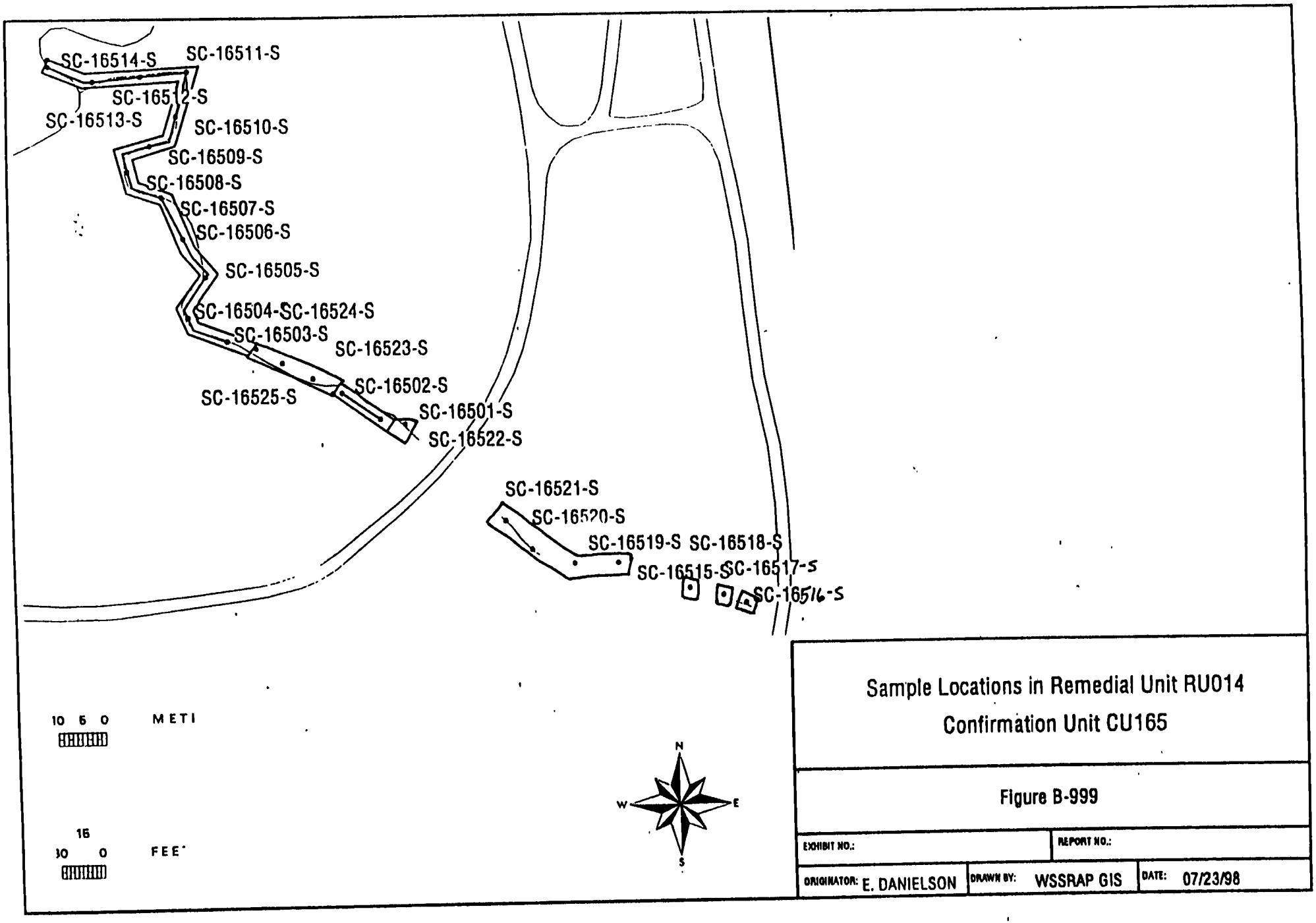
14. ES&H Manager: [signature] Date: 8/4/98

15. DOE Project Manager/Engineer: Thomas C. Darling Date: 8/4/98

16. Project Manager: [signature] Date: 4 August 98

17. Construction Engineer: Rodney L. Jenkins Date: 8/4/98

SEE ATTACHED RESULTS AND MAP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SC-16521-S
SC-16520-S
SC-16519-S
SC-16518-S
SC-16515-S
SC-16517-S
SC-16516-S
10 5 0 METI
15
30 0 FEE
N
W
E
S
Sample Locations in Remedial Unit RU014
Confirmation Unit CU165
Figure B-999
EXHIBIT NO.:
REPORT NO.:
ORIGINATOR: E. DANIELSON
DRAWN BY: WSSRAP GIS
DATE: 07/23/98

CU165 DATA REPORT

RADIUM-226

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
RADIUM-226	SC-16501-S-RS	1.43	0.22	pCi/g
RADIUM-226	SC-16502-S-RS	1.7	0.27	pCi/g
RADIUM-226	SC-16503-S-RS	3.54	0.41	pCi/g
RADIUM-226	SC-16504-S-RS	6.22	0.29	pCi/g
RADIUM-226	SC-16505-S-RS	2.47	0.27	pCi/g
RADIUM-226	SC-16506-S-RS	2.88	0.24	pCi/g
RADIUM-226	SC-16507-S	2.34	0.3	pCi/g
RADIUM-226	SC-16508-S	5.08	0.29	pCi/g
RADIUM-226	SC-16509-S	2.27	0.25	pCi/g
RADIUM-226	SC-16510-S	1.86	0.34	pCi/g
RADIUM-226	SC-16511-S	2.91	0.28	pCi/g
RADIUM-226	SC-16512-S	1.45	0.34	pCi/g
RADIUM-226	SC-16513-S	2	0.28	pCi/g
RADIUM-226	SC-16514-S	2.2	0.37	pCi/g
RADIUM-226	SC-16515-S-RS	2.29	0.41	pCi/g
RADIUM-226	SC-16516-S-RS	2.25	0.37	pCi/g
RADIUM-226	SC-16517-S	2.63	0.31	pCi/g
RADIUM-226	SC-16518-S	2.16	0.39	pCi/g
RADIUM-226	SC-16519-S	1.79	0.2	pCi/g
RADIUM-226	SC-16520-S	2.07	0.4	pCi/g
RADIUM-226	SC-16521-S	1.59	0.25	pCi/g
RADIUM-226	SC-16522-S	2.45	0.21	pCi/g
RADIUM-226	SC-16523-S	1.02	0.29	pCi/g
RADIUM-226	SC-16524-S	1.38	0.32	pCi/g
RADIUM-226	SC-16525-S	1.93	0.22	pCi/g

NUMBER OF RADIUM-226 SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of RADIUM-226 values is 2.40 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 6.22 pCi/g which is above Criteria, 6.20 pCi/g.

RADIUM-228

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
RADIUM-228	SC-16501-S-RS	1.29	0.38	pCi/g
RADIUM-228	SC-16502-S-RS	1.31	0.38	pCi/g
RADIUM-228	SC-16503-S-RS	0.95	0.54	pCi/g
RADIUM-228	SC-16504-S-RS	1.04	0.41	pCi/g
RADIUM-228	SC-16505-S-RS	1.13	0.25	pCi/g
RADIUM-228	SC-16506-S-RS	1.28	0.46	pCi/g
RADIUM-228	SC-16507-S	0.72	0.56	pCi/g
RADIUM-228	SC-16508-S	1.2	0.42	pCi/g
RADIUM-228	SC-16509-S	1.17	0.34	pCi/g
RADIUM-228	SC-16510-S	0.65	1.29	pCi/g
RADIUM-228	SC-16511-S	1.16	0.35	pCi/g
RADIUM-228	SC-16512-S	0.44	0.88	pCi/g
RADIUM-228	SC-16513-S	1.19	0.33	pCi/g
RADIUM-228	SC-16514-S	1.08	0.47	pCi/g
RADIUM-228	SC-16515-S-RS	1.2	0.48	pCi/g
RADIUM-228	SC-16516-S-RS	1	0.59	pCi/g
RADIUM-228	SC-16517-S	1.14	0.38	pCi/g
RADIUM-228	SC-16518-S	0.59	1.18	pCi/g
RADIUM-228	SC-16519-S	1.11	0.29	pCi/g
RADIUM-228	SC-16520-S	1.21	0.64	pCi/g
RADIUM-228	SC-16521-S	1.06	0.3	pCi/g
RADIUM-228	SC-16522-S	1.18	0.28	pCi/g
RADIUM-228	SC-16523-S	0.7	0.7	pCi/g
RADIUM-228	SC-16524-S	1.01	0.25	pCi/g
RADIUM-228	SC-16525-S	1.22	0.33	pCi/g

NUMBER OF RADIUM-228 SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of RADIUM-228 values is 1.04 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 1.31 pCi/g which is below criteria, 6.20 pCi/g.

TOTAL RADIUM

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
Radium	SC-16501-S-RS	2.86	0.38	pCi/g
Radium	SC-16502-S-RS	3.41	0.38	pCi/g
Radium	SC-16503-S-RS	7.08	0.54	pCi/g
Radium	SC-16504-S-RS	12.44	0.41	pCi/g
Radium	SC-16505-S-RS	4.95	0.27	pCi/g
Radium	SC-16506-S-RS	5.77	0.46	pCi/g
Radium	SC-16507-S	3.06	0.56	pCi/g
Radium	SC-16508-S	6.28	0.42	pCi/g
Radium	SC-16509-S	3.44	0.34	pCi/g
Radium	SC-16510-S	2.51	1.29	pCi/g
Radium	SC-16511-S	4.07	0.35	pCi/g
Radium	SC-16512-S	1.89	0.88	pCi/g
Radium	SC-16513-S	3.19	0.33	pCi/g
Radium	SC-16514-S	3.28	0.47	pCi/g
Radium	SC-16515-S-RS	4.59	0.48	pCi/g
Radium	SC-16516-S-RS	4.49	0.59	pCi/g
Radium	SC-16517-S	3.77	0.38	pCi/g
Radium	SC-16518-S	2.75	1.18	pCi/g
Radium	SC-16519-S	2.9	0.29	pCi/g
Radium	SC-16520-S	3.28	0.64	pCi/g
Radium	SC-16521-S	2.65	0.3	pCi/g
Radium	SC-16522-S	3.63	0.28	pCi/g
Radium	SC-16523-S	1.72	0.7	pCi/g
Radium	SC-16524-S	2.39	0.32	pCi/g
Radium	SC-16525-S	3.15	0.33	pCi/g

NUMBER OF 'TOTAL RADIUM' SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of Radium values is 3.98 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 12.44 pCi/g which is above Criteria, 6.20 pCi/g.

THORIUM-230

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
THORIUM-230	SC-16501-S-RS	0.9	0.62	pCi/g
THORIUM-230	SC-16502-S-RS	1.06	0.62	pCi/g
THORIUM-230	SC-16503-S-RS	1.19	0.62	pCi/g
THORIUM-230	SC-16504-S-RS	0.95	0.62	pCi/g
THORIUM-230	SC-16505-S-RS	1.04	0.62	pCi/g
THORIUM-230	SC-16506-S-RS	1.09	0.62	pCi/g
THORIUM-230	SC-16507-S	0.81	0.62	pCi/g
THORIUM-230	SC-16508-S	0.96	0.62	pCi/g
THORIUM-230	SC-16509-S	1.07	0.62	pCi/g
THORIUM-230	SC-16510-S	0.93	0.62	pCi/g
THORIUM-230	SC-16511-S	1.03	0.62	pCi/g
THORIUM-230	SC-16512-S	0.93	0.62	pCi/g
THORIUM-230	SC-16513-S	0.88	0.62	pCi/g
THORIUM-230	SC-16514-S	1.11	0.62	pCi/g
THORIUM-230	SC-16515-S-RS	1.12	0.62	pCi/g
THORIUM-230	SC-16516-S-RS	0.95	0.62	pCi/g
THORIUM-230	SC-16517-S	1.13	0.62	pCi/g
THORIUM-230	SC-16518-S	1.02	0.62	pCi/g
THORIUM-230	SC-16519-S	0.95	0.62	pCi/g
THORIUM-230	SC-16520-S	1	0.62	pCi/g
THORIUM-230	SC-16521-S	1.11	0.62	pCi/g
THORIUM-230	SC-16522-S	1.05	0.62	pCi/g
THORIUM-230	SC-16523-S	0.84	0.62	pCi/g
THORIUM-230	SC-16524-S	1.04	0.62	pCi/g
THORIUM-230	SC-16525-S	0.84	0.62	pCi/g

NUMBER OF THORIUM-230 SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of THORIUM-230 values is 1 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 1.19 pCi/g which is below criteria, 6.20 pCi/g.

2,4,6-TRINITROTOLUENE

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
2,4,6-TRINITROTOLUENE	SC-16501-S-RS	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16502-S-RS	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16503-S-RS	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16504-S-RS	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16505-S-RS	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16506-S-RS	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16507-S	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16508-S	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16509-S	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16510-S	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16511-S	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16512-S	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16513-S	40	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16514-S	1540	80	ug/kg
2,4,6-TRINITROTOLUENE	SC-16515-S-RS	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16516-S-RS-1	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16517-S	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16518-S	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16519-S	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16520-S	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16521-S	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16522-S	65	130	ug/kg
2,4,6-TRINITROTOLUENE	SC-16523-S	120	240	ug/kg
2,4,6-TRINITROTOLUENE	SC-16524-S	120	240	ug/kg
2,4,6-TRINITROTOLUENE	SC-16525-S	120	240	ug/kg

NUMBER OF 2,4,6-TRINITROTOLUENE SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of 2,4,6-TRINITROTOLUENE values is 108.71 mg/kg, which is below ALARA, 14000 mg/kg.
Maximum single value is 1540 mg/kg which is below criteria, 140000 mg/kg.

ARSENIC

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
ARSENIC	SC-16501-S-RS	7	2.6	mg/kg
ARSENIC	SC-16502-S-RS	16	2.5	mg/kg
ARSENIC	SC-16503-S-RS	8.4	2.8	mg/kg
ARSENIC	SC-16504-S-RS	8.6	2.5	mg/kg
ARSENIC	SC-16505-S-RS	14.4	2.8	mg/kg
ARSENIC	SC-16506-S-RS	7	2.4	mg/kg
ARSENIC	SC-16507-S	19.6	2.3	mg/kg
ARSENIC	SC-16508-S	8.2	2.7	mg/kg
ARSENIC	SC-16509-S	5.6	2.6	mg/kg
ARSENIC	SC-16510-S	18.3	2.5	mg/kg
ARSENIC	SC-16511-S	8.6	2.7	mg/kg
ARSENIC	SC-16512-S	19.2	2.4	mg/kg
ARSENIC	SC-16513-S	13.8	2.6	mg/kg
ARSENIC	SC-16514-S	21	2.6	mg/kg
ARSENIC	SC-16515-S-RS	8	2.6	mg/kg
ARSENIC	SC-16516-S-RS	4.5	2.6	mg/kg
ARSENIC	SC-16517-S-RS	14.7	2.8	mg/kg
ARSENIC	SC-16518-S	9.1	2.6	mg/kg
ARSENIC	SC-16519-S	8	2.6	mg/kg
ARSENIC	SC-16520-S	7	2.4	mg/kg
ARSENIC	SC-16521-S	9	2.5	mg/kg
ARSENIC	SC-16522-S	8	2.3	mg/kg
ARSENIC	SC-16523-S	9.7	5.9	mg/kg
ARSENIC	SC-16524-S	13.8	6	mg/kg
ARSENIC	SC-16525-S	13.6	5.8	mg/kg

NUMBER OF ARSENIC SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of ARSENIC values is 11.24 mg/kg, which is below ALARA, 45.00 mg/kg.
Maximum single value is 21 mg/kg which is below criteria, 75 mg/kg.

CHROMIUM

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
CHROMIUM	SC-16501-S-RS	18	2.6	mg/kg
CHROMIUM	SC-16502-S-RS	35	2.5	mg/kg
CHROMIUM	SC-16503-S-RS	18.6	2.8	mg/kg
CHROMIUM	SC-16504-S-RS	13.5	2.5	mg/kg
CHROMIUM	SC-16505-S-RS	23.1	2.8	mg/kg
CHROMIUM	SC-16506-S-RS	14	2.4	mg/kg
CHROMIUM	SC-16507-S	35	2.3	mg/kg
CHROMIUM	SC-16508-S	16	2.7	mg/kg
CHROMIUM	SC-16509-S	11.3	2.6	mg/kg
CHROMIUM	SC-16510-S	10.4	2.5	mg/kg
CHROMIUM	SC-16511-S	19.2	2.7	mg/kg
CHROMIUM	SC-16512-S	28.5	2.4	mg/kg
CHROMIUM	SC-16513-S	16	2.6	mg/kg
CHROMIUM	SC-16514-S	40.4	2.6	mg/kg
CHROMIUM	SC-16515-S-RS	21	2.6	mg/kg
CHROMIUM	SC-16516-S-RS	15.1	2.6	mg/kg
CHROMIUM	SC-16517-S-RS	22.8	2.8	mg/kg
CHROMIUM	SC-16518-S	19.3	2.6	mg/kg
CHROMIUM	SC-16519-S	26	2.6	mg/kg
CHROMIUM	SC-16520-S	14	2.4	mg/kg
CHROMIUM	SC-16521-S	20	2.5	mg/kg
CHROMIUM	SC-16522-S	14	2.3	mg/kg
CHROMIUM	SC-16523-S	12.1	0.94	mg/kg
CHROMIUM	SC-16524-S	20.3	0.94	mg/kg
CHROMIUM	SC-16525-S	25.3	0.91	mg/kg

NUMBER OF CHROMIUM SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of CHROMIUM values is 20.36 mg/kg, which is below ALARA, 90.00 mg/kg.
Maximum single value is 40.40 mg/kg which is below criteria, 110.00 mg/kg.

LEAD

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
LEAD	SC-16501-S-RS	17	0.8	mg/kg
LEAD	SC-16502-S-RS	14	0.8	mg/kg
LEAD	SC-16503-S-RS	19.4	0.84	mg/kg
LEAD	SC-16504-S-RS	20.8	0.76	mg/kg
LEAD	SC-16505-S-RS	28.7	0.85	mg/kg
LEAD	SC-16506-S-RS	16.4	0.72	mg/kg
LEAD	SC-16507-S	22.1	0.7	mg/kg
LEAD	SC-16508-S	17.5	0.81	mg/kg
LEAD	SC-16509-S	17.1	0.79	mg/kg
LEAD	SC-16510-S	24.3	0.74	mg/kg
LEAD	SC-16511-S	16.7	0.8	mg/kg
LEAD	SC-16512-S	35.8	0.72	mg/kg
LEAD	SC-16513-S	43.5	0.77	mg/kg
LEAD	SC-16514-S	34.9	0.8	mg/kg
LEAD	SC-16515-S-RS	19	0.8	mg/kg
LEAD	SC-16516-S-RS	10.5	0.8	mg/kg
LEAD	SC-16517-S-RS	28.8	0.8	mg/kg
LEAD	SC-16518-S	16.3	0.8	mg/kg
LEAD	SC-16519-S	14	0.8	mg/kg
LEAD	SC-16520-S	19	0.7	mg/kg
LEAD	SC-16521-S	16	0.8	mg/kg
LEAD	SC-16522-S	15	0.7	mg/kg
LEAD	SC-16523-S	8.7	6.9	mg/kg
LEAD	SC-16524-S	22.3	6.9	mg/kg
LEAD	SC-16525-S	23.1	11	mg/kg

NUMBER OF LEAD SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of LEAD values is 20.84 mg/kg, which is below ALARA, 240.00 mg/kg.
Maximum single value is 43.50 mg/kg which is below criteria, 450 mg/kg.

PCB

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
PCB	SC-16501-S-RS	0	45	ug/kg
PCB	SC-16502-S-RS	0	44	ug/kg
PCB	SC-16503-S-RS	0	93	ug/kg
PCB	SC-16504-S-RS	0	87	ug/kg
PCB	SC-16505-S-RS	0	93	ug/kg
PCB	SC-16506-S-RS	0	85	ug/kg
PCB	SC-16507-S	0	80	ug/kg
PCB	SC-16508-S	0	93	ug/kg
PCB	SC-16509-S	0	89	ug/kg
PCB	SC-16510-S	0	86	ug/kg
PCB	SC-16511-S	0	89	ug/kg
PCB	SC-16512-S	0	84	ug/kg
PCB	SC-16513-S	0	86	ug/kg
PCB	SC-16514-S	0	86	ug/kg
PCB	SC-16515-S-RS	0	44	ug/kg
PCB	SC-16516-S-RS	0	44	ug/kg
PCB	SC-16517-S-RS	0	46	ug/kg
PCB	SC-16518-S	0	43	ug/kg
PCB	SC-16519-S	0	45	ug/kg
PCB	SC-16520-S	0	39	ug/kg
PCB	SC-16521-S	0	40	ug/kg
PCB	SC-16522-S	0	38	ug/kg
PCB	SC-16523-S	0	42	ug/kg
PCB	SC-16524-S	0	41	ug/kg
PCB	SC-16525-S	0	40	ug/kg

NUMBER OF PCB SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of PCB values is 0 ug/kg, which is below ALARA, 650 ug/kg.
Maximum single value is 0 ug/kg which is below criteria, 8000 ug/kg.

PAH

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
PAH	SC-16501-S-RS	0	220	ug/kg
PAH	SC-16502-S-RS	0	210	ug/kg
PAH	SC-16503-S-RS	0	210	ug/kg
PAH	SC-16504-S-RS	0	210	ug/kg
PAH	SC-16505-S-RS	0	210	ug/kg
PAH	SC-16506-S-RS	0	420	ug/kg
PAH	SC-16507-S	0	400	ug/kg
PAH	SC-16508-S	0	210	ug/kg
PAH	SC-16509-S	0	440	ug/kg
PAH	SC-16510-S	0	420	ug/kg
PAH	SC-16511-S	0	210	ug/kg
PAH	SC-16512-S	0	420	ug/kg
PAH	SC-16513-S	0	420	ug/kg
PAH	SC-16514-S	0	210	ug/kg
PAH	SC-16515-S-RS	0	220	ug/kg
PAH	SC-16516-S-RS	0	430	ug/kg
PAH	SC-16517-S-RS	0	210	ug/kg
PAH	SC-16518-S	0	420	ug/kg
PAH	SC-16519-S	0	220	ug/kg
PAH	SC-16520-S	0	190	ug/kg
PAH	SC-16521-S	0	210	ug/kg
PAH	SC-16522-S	0	190	ug/kg
PAH	SC-16523-S	0	130	ug/kg
PAH	SC-16524-S	0	120	ug/kg
PAH	SC-16525-S	0	120	ug/kg

NUMBER OF PAH SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of PAH values is 0 ug/kg, which is below ALARA, 440 ug/kg.
Maximum single value is 0 ug/kg which is below criteria, 5600 ug/kg.

THALLIUM

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
THALLIUM	SC-16501-S-RS	1.3	2.6	mg/kg
THALLIUM	SC-16502-S-RS	3	2.5	mg/kg
THALLIUM	SC-16503-S-RS	1.4	2.8	mg/kg
THALLIUM	SC-16504-S-RS	1.25	2.5	mg/kg
THALLIUM	SC-16505-S-RS	1.4	2.8	mg/kg
THALLIUM	SC-16506-S-RS	1.2	2.4	mg/kg
THALLIUM	SC-16507-S	3.3	2.3	mg/kg
THALLIUM	SC-16508-S	1.35	2.7	mg/kg
THALLIUM	SC-16509-S	1.3	2.6	mg/kg
THALLIUM	SC-16510-S	1.25	2.5	mg/kg
THALLIUM	SC-16511-S	1.35	2.7	mg/kg
THALLIUM	SC-16512-S	2.6	2.4	mg/kg
THALLIUM	SC-16513-S	1.3	2.6	mg/kg
THALLIUM	SC-16514-S	4	2.6	mg/kg
THALLIUM	SC-16515-S-RS	3	2.6	mg/kg
THALLIUM	SC-16516-S-RS	1.3	2.6	mg/kg
THALLIUM	SC-16517-S-RS	2.9	2.8	mg/kg
THALLIUM	SC-16518-S	1.3	2.6	mg/kg
THALLIUM	SC-16519-S	1.3	2.6	mg/kg
THALLIUM	SC-16520-S	1.2	2.4	mg/kg
THALLIUM	SC-16521-S	1.25	2.5	mg/kg
THALLIUM	SC-16522-S	1.15	2.3	mg/kg
THALLIUM	SC-16523-S	5.15	10.3	mg/kg
THALLIUM	SC-16524-S	5.15	10.3	mg/kg
THALLIUM	SC-16525-S	4.95	9.9	mg/kg

NUMBER OF THALLIUM SAMPLES IN DATABASE FOR THIS CU IS: 25
Average of THALLIUM values is 2.19 mg/kg, which is below ALARA, 16.00 mg/kg.
Maximum single value is 5.15 mg/kg which is below criteria, 20 mg/kg.

CU 165 HOTSPOTS

Sample Point: SC-16504-S

Concentration: Radium 226/228 = 7.26 pCi/g

Hotspot Rule: Max. Allowable Area $=100(\text{criteria/concentration})^2$
$=100\ (6.2 / 7.26)^2$
$=100\ (0.74)$
$=74\ m^2$ However, largest allowable hotspot is $25m^2$.

Samples taken at 2.5 meters (north, south, east, and west) from SC-16504-S had the following combined radium concentrations: 4.29 pCi/g, 2.88 pCi/g, 3.16 pCi/g, and 3.20 pCi/g. Therefore, the hotspot found at SC-16504-S is <u>smaller</u> in size than 25 m^2.

Sample Point: SC-16508-S

Concentration: Radium 226/228 = 6.28 pCi/g

Hotspot Rule: Max. Allowable Area $=100(\text{criteria/concentration})^2$
$=100\ (6.2 / 6.28)^2$
$=100\ (0.975)$
$=97.5\ m^2$ However, largest allowable hotspot is $25m^2$.

Samples taken at 2.5 meters (north, south, east, and west) from SC-16508-S had the following combined radium concentrations: 3.51 pCi/g, 3.99 pCi/g, 3.42 pCi/g, and 4.02 pCi/g. Therefore, the hotspot found at SC-16508-S is <u>smaller</u> in size than 25 m^2.

Weldon Spring Site Remedial Action Project
7295 Highway 94 South, St. Charles, Missouri, 63304

ES&H 1.2.1.1, Rev. 2, 11/9(

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

SECTION I

1. Work Package Number: 458
2. Date: ~~6/18/98~~ 7/20/98
3. Review Form #: 98-031
4. Remediation Unit Number: 014
5. Confirmation Unit Number: 166 (MDC3) (map attached)
6. Contaminants of Concern: X U-238 X Th-230 ___ Th-232 ___ Ra-226 ___ Ra-228 X TNT X PCB X PAH X As X Cr X Pb X Tl

7. Results average below ALARA goal(s)?	X Yes	___ No
8. All results below cleanup criteria?	X Yes	___ No
9. Any results greater than 3X criteria?	___ Yes	X No
10. Hot spots present (less than 3X criteria)?	___ Yes	X No

Parameter	Size	Concentration	Complies with Plan?
			___ Yes ___ No
			___ Yes ___ No
			___ Yes ___ No

11. Comments

12. Reviewer Disposition Recommendation:
- X Release for Unrestricted Use (Section II)
- ___ Additional Excavation Required (Section IV)
- ___ ALARA Committee Required (Section III)

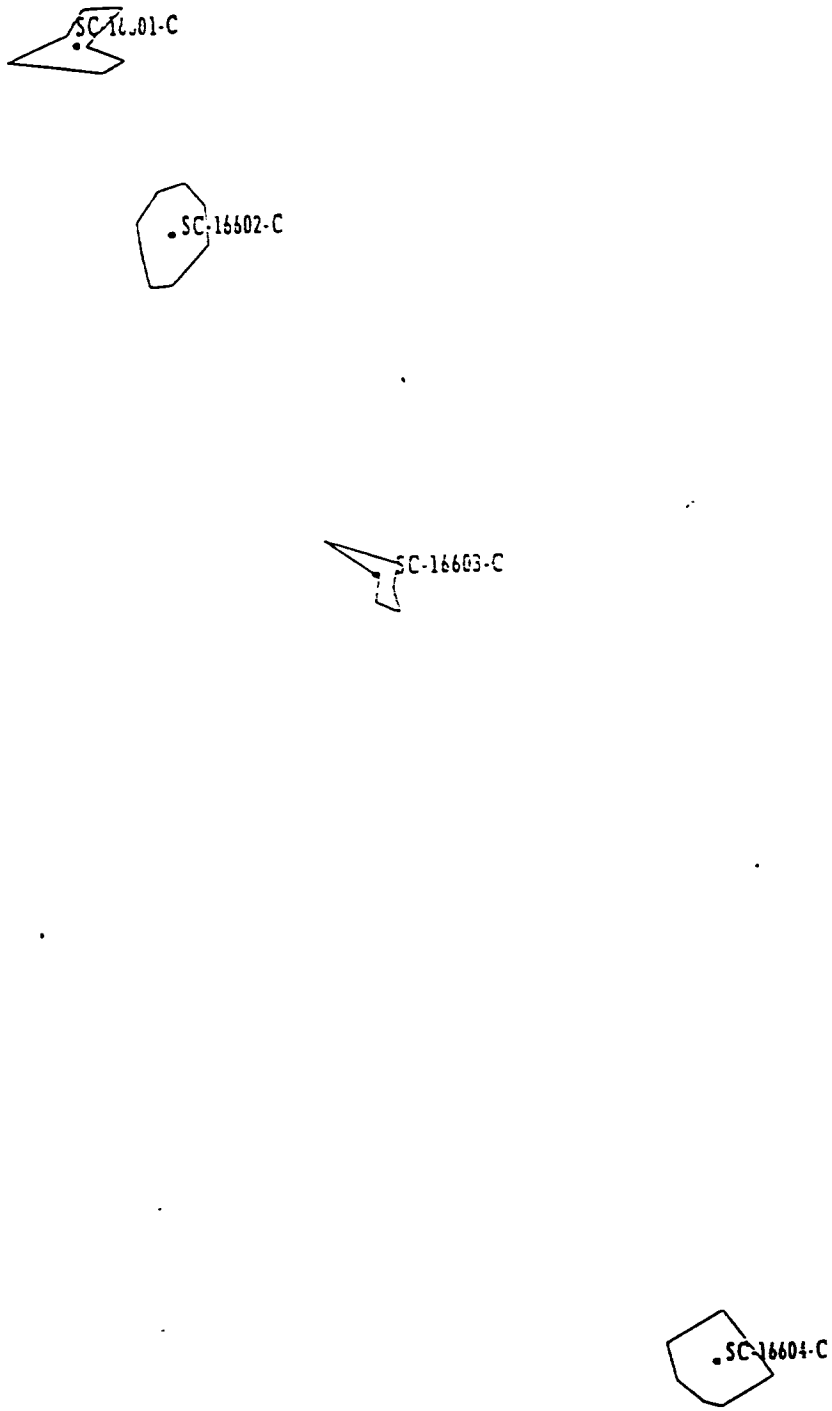
13. Reviewer: [signature] Date 7/20/98

SECTION II

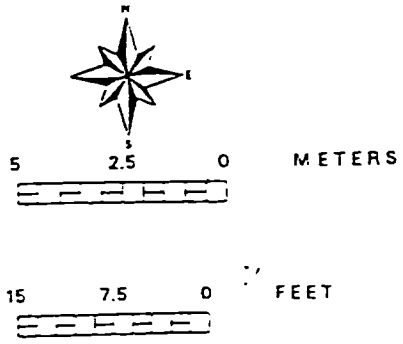
CU is released for unrestricted use.

14. ES&H Manager: [signature] Date: 7/21/98
15. DOE Project Manager/Engineer: [signature] Date: 7/21/98
16. Project Manager: [signature] Date: 21 July 98
17. Construction Engineer: [signature] Date: 7/21/98

SEE ATTACHED RESULTS AND MAP



Review Form # 98-031



Sample Locations in Remedial Unit RU014
Confirmation Unit CU166 (MDC3)

Figure 3-6

EXHIBIT NO. G/VP/008/0797		REPORT NO.: DOE/OR/21548-693	
ORIGINATOR: MGL	DRAWN BY: WSSRAP GIS	DATE: 07/29/97	

07/20/98

CU166 DATA REPORT

THORIUM-230

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
THORIUM-230	SC-16601-C	0.94	0.62	pCi/g
THORIUM-230	SC-16602-C	1.24	0.62	pCi/g
THORIUM-230	SC-16603-C	1.04	0.62	pCi/g
THORIUM-230	SC-16604-C	0.95	0.62	pCi/g

NUMBER OF THORIUM-230 SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of THORIUM-230 values is 1.04 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 1.24 pCi/g which is below criteria, 6.20 pCi/g.

URANIUM-238

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
URANIUM-238	SC-16601-C	1.49	2.46	pCi/g
URANIUM-238	SC-16602-C-RS	1.86	3.72	pCi/g
URANIUM-238	SC-16603-C	2.01	4.01	pCi/g
URANIUM-238	SC-16604-C	12.31	2.95	pCi/g

NUMBER OF URANIUM-238 SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of URANIUM-238 values is 4.42 pCi/g, which is below ALARA, 30.00 pCi/g.
Maximum single value is 12.31 pCi/g which is below criteria, 120.00 pCi/g.

2,4,6-TRINITROTOLUENE

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
2,4,6-TRINITROTOLUENE	SC-16601-C	0.12	0.23	ug/g
2,4,6-TRINITROTOLUENE	SC-16602-C	0.12	0.24	ug/g
2,4,6-TRINITROTOLUENE	SC-16603-C	0.12	0.24	ug/g
2,4,6-TRINITROTOLUENE	SC-16604-C	0.12	0.24	ug/g

NUMBER OF 2,4,6-TRINITROTOLUENE SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of 2,4,6-TRINITROTOLUENE values is 0.12 ug/g, which is below ALARA, 14.00 ug/g.
Maximum single value is 0.12 ug/g which is below criteria, 140 ug/g.

ARSENIC

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
ARSENIC	SC-16601-C	8.1	0.49	ug/g
ARSENIC	SC-16602-C	9.9	0.48	ug/g
ARSENIC	SC-16603-C	10.4	0.48	ug/g
ARSENIC	SC-16604-C	13.2	0.56	ug/g

NUMBER OF ARSENIC SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of ARSENIC values is 10.40 ug/g, which is below ALARA, 45.00 ug/g.
Maximum single value is 13.20 ug/g which is below criteria, 75 ug/g.

CHROMIUM

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
CHROMIUM	SC-16601-C	24.3	0.2	ug/g
CHROMIUM	SC-16602-C	20.9	0.2	ug/g
CHROMIUM	SC-16603-C	15.2	0.2	ug/g
CHROMIUM	SC-16604-C	34.7	0.24	ug/g

NUMBER OF CHROMIUM SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of CHROMIUM values is 23.77 ug/g, which is below ALARA, 90.00 ug/g.
Maximum single value is 34.70 ug/g which is below criteria, 110.00 ug/g.

LEAD

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
LEAD	SC-16601-C	42.8	0.28	ug/g
LEAD	SC-16602-C	14.1	0.28	ug/g
LEAD	SC-16603-C	28.8	0.28	ug/g
LEAD	SC-16604-C	158	0.32	ug/g

NUMBER OF LEAD SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of LEAD values is 60.92 ug/g, which is below ALARA, 240.00 ug/g.
Maximum single value is 158 ug/g which is below criteria, 450 ug/g.

THALLIUM

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
THALLIUM	SC-16601-C	1	0.79	ug/g
THALLIUM	SC-16602-C	0.83	0.79	ug/g
THALLIUM	SC-16603-C	0.4	0.79	ug/g
THALLIUM	SC-16604-C	1.4	0.91	ug/g

NUMBER OF THALLIUM SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of THALLIUM values is 0.91 ug/g, which is below ALARA, 16.00 ug/g.
Maximum single value is 1.40 ug/g which is below criteria, 20 ug/g.

PAH

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
PAH	SC-16601-C-RE	0	220	ug/kg
PAH	SC-16602-C-RE	0	210	ug/kg
PAH	SC-16603-C-RE	0	220	ug/kg
PAH	SC-16604-C-RE	0	240	ug/kg

NUMBER OF PAH SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of PAH values is 0 ug/kg, which is below ALARA, 440 ug/kg.
Maximum single value is 0 ug/kg which is below criteria, 5600 ug/kg.

PCB

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
PCB	SC-16601-C-RE	0	44	ug/kg
PCB	SC-16602-C-RE	0	42	ug/kg
PCB	SC-16603-C-RE	0	44	ug/kg
PCB	SC-16604-C-RE	0	48	ug/kg

NUMBER OF PCB SAMPLES IN DATABASE FOR THIS CU IS: 4
Average of PCB values is 0 ug/kg, which is below ALARA, 650 ug/kg.
Maximum single value is 0 ug/kg which is below criteria, 8000 ug/kg.

Weldon Spring Site Remedial Action Project
7295 Highway 94 South, St. Charles, Missouri, 63304

ES&H 1.2.1.1, Rev. 2, 11/96

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

SECTION I

1. Work Package Number: WP458 2. Date: 12-30-97 3. Review Form #: 97-042

4. Remediation Unit Number: RU14 5. Confirmation Unit Number: CU167 (map attached)

6. Contaminants of Concern: ___ U-238 X Th-230 ___ Th-232 X Ra-226 ___ Ra-228
X TNT X PCB X PAH X As X Cr X Pb X Tl

7. Results average below ALARA goal(s)?	X Yes	___ No
8. All results below cleanup criteria?	X Yes	___ No
9. Any results greater than 3X criteria?	___ Yes	X No
10. Hot spots present (less than 3X criteria)?	___ Yes	X No

Parameter	Size	Concentration	Complies with Plan?
			___ Yes ___ No
			___ Yes ___ No
			___ Yes ___ No

11. Comments

12. Reviewer Disposition Recommendation:
X Release for Unrestricted Use (Section II)
___ Additional Excavation Required (Section IV)
___ ALARA Committee Required (Section III)

13. Reviewer: [signature] Date 12-30-97

SECTION II *CU is released for unrestricted use.*

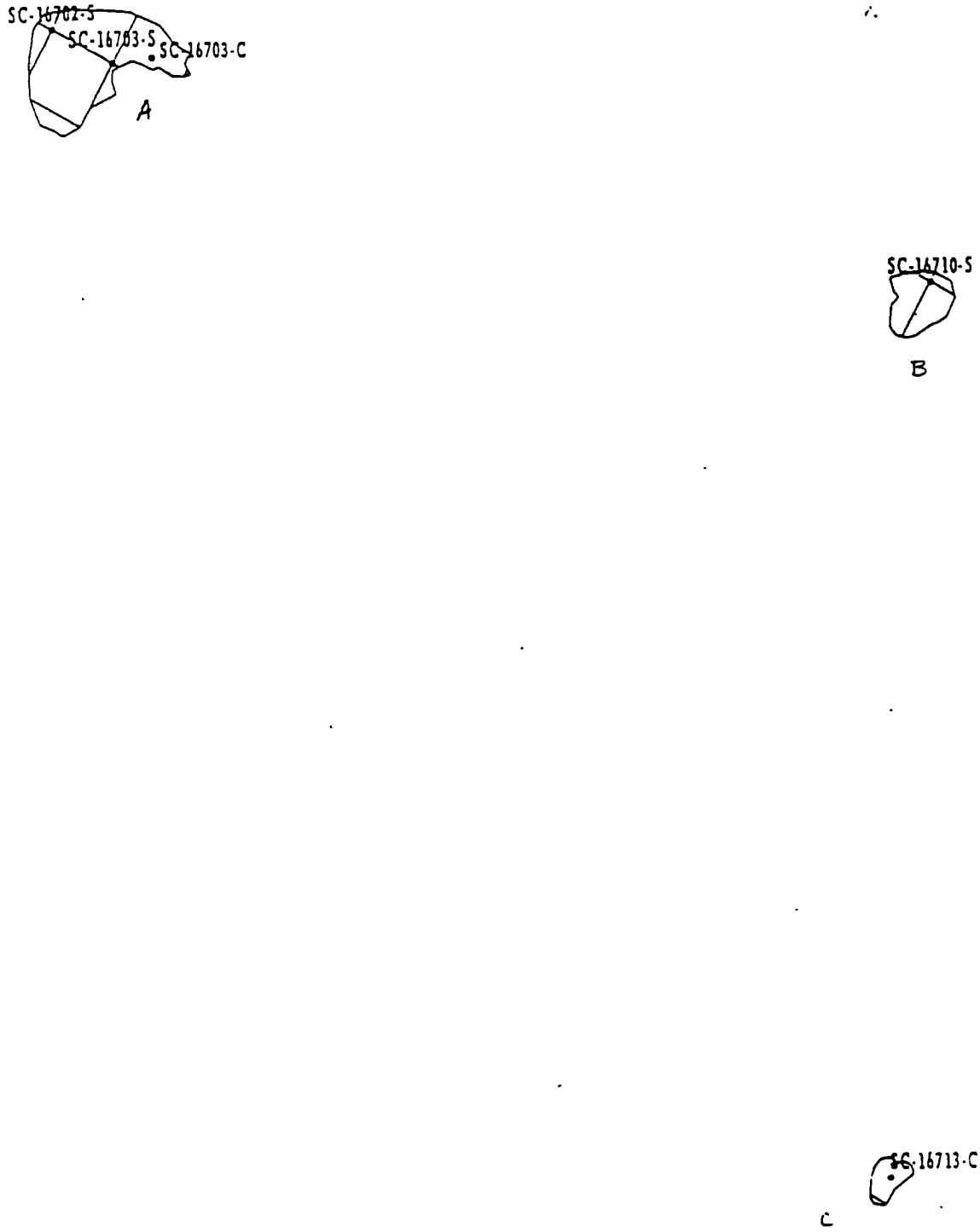
14. ES&H Manager: [signature] Date: 12/31/97

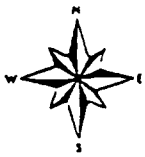
15. DOE Project Manager/Engineer: [signature] Date: 12/31/97

16. Project Manager: [signature] for G Valett Date: 12/31/97

17. Construction Engineer: [signature] Date: 12/31/97

SEE ATTACHED RESULTS AND MAP





10 5 0 METEF

30 15 0 FEET

Sample Locations in Remedial Unit RU014
Confirmation Unit CU167

Figure 3-7

EXHIBIT NO.: G/VP/009/0797		REPORT NO.: DOE/OR/21548-693	
ORIGINATOR MGL	DRAWN BY: WSSRAP GIS	DATE: 07/24/97	

12/29/97

CU167 DATA REPORT

THORIUM-230

PARAMETER	LOCATION	CONC	DL	UNITS
Thorium-230	SC-16702-S	0.99	0.62	PCI/G
Thorium-230	SC-16703-S	0.98	0.62	PCI/G
Thorium-230	SC-16710-S	0.94	0.62	PCI/G
Thorium-230	SC-16703-C	1.10	0.62	PCI/G
Thorium-230	SC-16713-C	1.37	0.62	PCI/G

NUMBER OF 'Thorium-230' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Thorium-230 values is 1.08, which is below ALARA, 5.00
Maximum single value is 1.37, which is below criteria, 6.20

RADIUM-226

PARAMETER	LOCATION	CONC	DL	UNITS
RADIUM-226	SC-16702-S	2.32	0.34	PCI/G
RADIUM-226	SC-16703-S	2.32	0.23	PCI/G
RADIUM-226	SC-16710-S	2.18	0.24	PCI/G
RADIUM-226	SC-16703-C	2.38	0.28	PCI/G
RADIUM-226	SC-16713-C	1.97	0.27	PCI/G

NUMBER OF 'RADIUM-226' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of RADIUM-226 values is 2.23, which is below ALARA, 5.00
Maximum single value is 2.38, which is below criteria, 6.20

ARSENIC

PARAMETER	LOCATION	CONC	DL	UNITS
Arsenic	SC-16702-S	3.75	7.50	UG/G
Arsenic	SC-16703-S	8.30	7.40	UG/G
Arsenic	SC-16710-S	10.20	0.90	UG/G
Arsenic	SC-16703-C	10.90	7.40	UG/G
Arsenic	SC-16713-C	3.50	7	UG/G

NUMBER OF 'Arsenic' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Arsenic values is 7.33, which is below ALARA, 45.00
Maximum single value is 10.90, which is below criteria, 75

CU167 DATA REPORT, CONTINUED

CHROMIUM

PARAMETER	LOCATION	CONC	DL	UNITS
Chromium	SC-16702-S	18	0.76	UG/G
Chromium	SC-16703-S	18.30	0.75	UG/G
Chromium	SC-16710-S	15.90	0.50	UG/G
Chromium	SC-16703-C	18.40	0.78	UG/G
Chromium	SC-16713-C	17.30	0.71	UG/G

NUMBER OF 'Chromium' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Chromium values is 17.58, which is below ALARA, 90.00
Maximum single value is 18.40, which is below criteria, 110.00

LEAD

PARAMETER	LOCATION	CONC	DL	UNITS
Lead	SC-16702-S	8	5.60	UG/G
Lead	SC-16703-S	19.10	5.50	UG/G
Lead	SC-16710-S	17.50	0.50	UG/G
Lead	SC-16703-C	13.30	5.70	UG/G
Lead	SC-16713-C	22	5.20	UG/G

NUMBER OF 'Lead' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Lead values is 15.98, which is below ALARA, 240.00
Maximum single value is 22, which is below criteria, 450

THALLIUM

PARAMETER	LOCATION	CONC	DL	UNITS
Thallium	SC-16702-S	4.2	8.40	UG/G
Thallium	SC-16703-S	4.2	8.40	UG/G
Thallium	SC-16710-S	0.8	1.60	UG/G
Thallium	SC-16703-C	4.3	8.60	UG/G
Thallium	SC-16713-C	3.95	7.90	UG/G

NUMBER OF 'Thallium' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Thallium values is 3.49, which is below ALARA, 16.00
Maximum single value is 4.3, which is below criteria, 20

CU167 DATA REPORT, CONTINUED

PAH

PARAMETER	LOCATION	CONC	DL	UNITS
PAH	SC-16702-S	0	100	UG/KG
PAH	SC-16703-S	0	100	UG/KG
PAH	SC-16710-S	0	29	UG/KG
PAH	SC-16703-C	0	100	UG/KG
PAH	SC-16713-C	0	110	UG/KG

NUMBER OF 'PAH' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of PAH values is 0, which is below ALARA, 440
Maximum single value is 0, which is below criteria, 5600

PCB

PARAMETER	LOCATION	CONC	DL	UNITS
PCB	SC-16702-S	0	33	UG/KG
PCB	SC-16703-S	0	33	UG/KG
PCB	SC-16710-S	0	38	UG/KG
PCB	SC-16703-C	0	33	UG/KG
PCB	SC-16713-C	0	38	UG/KG

NUMBER OF 'PCB' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of PCB values is 0, which is below ALARA, 650
Maximum single value is 0, which is below criteria, 8000

TNT

PARAMETER	LOCATION	CONC	DL	UNITS
TNT	SC-16702-S	0.12	0.24	UG/G
TNT	SC-16703-S	0.12	0.24	UG/G
TNT	SC-16710-S	0.05	0.1	UG/G
TNT	SC-16703-C	0.12	0.24	UG/G
TNT	SC-16713-C	0.125	0.25	UG/G

NUMBER OF 'TNT' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of TNT values is 0.166, which is below ALARA, 14
Maximum single value is 0, which is below criteria, 140

Weldon Spring Site Remedial Action Project
7295 Highway 94 South, St. Charles, Missouri, 63304

ES&H 1.2.1.1, Rev. 2, 11/9

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

SECTION I

1. Work Package Number: 458
2. Date: ~~6/18/98~~ 7/20/98
3. Review Form #: 98-030
4. Remediation Unit Number: 014
5. Confirmation Unit Number: 168 (MDC5) (map attached)
6. Contaminants of Concern: ___ U-238 X Th-230 ___ Th-232 X Ra-226 X Ra-228 X TNT X PCB X PAH ___ As X Cr X Pb ___ Tl

7. Results average below ALARA goal(s)?	X Yes	___ No
8. All results below cleanup criteria?	X Yes	___ No
9. Any results greater than 3X criteria?	___ Yes	X No
10. Hot spots present (less than 3X criteria)?	___ Yes	X No

Parameter	Size	Concentration	Complies with Plan?
			___ Yes ___ No
			___ Yes ___ No
			___ Yes ___ No

11. Comments

12. Reviewer Disposition Recommendation:
X Release for Unrestricted Use (Section II)
___ Additional Excavation Required (Section IV)
___ ALARA Committee Required (Section III)

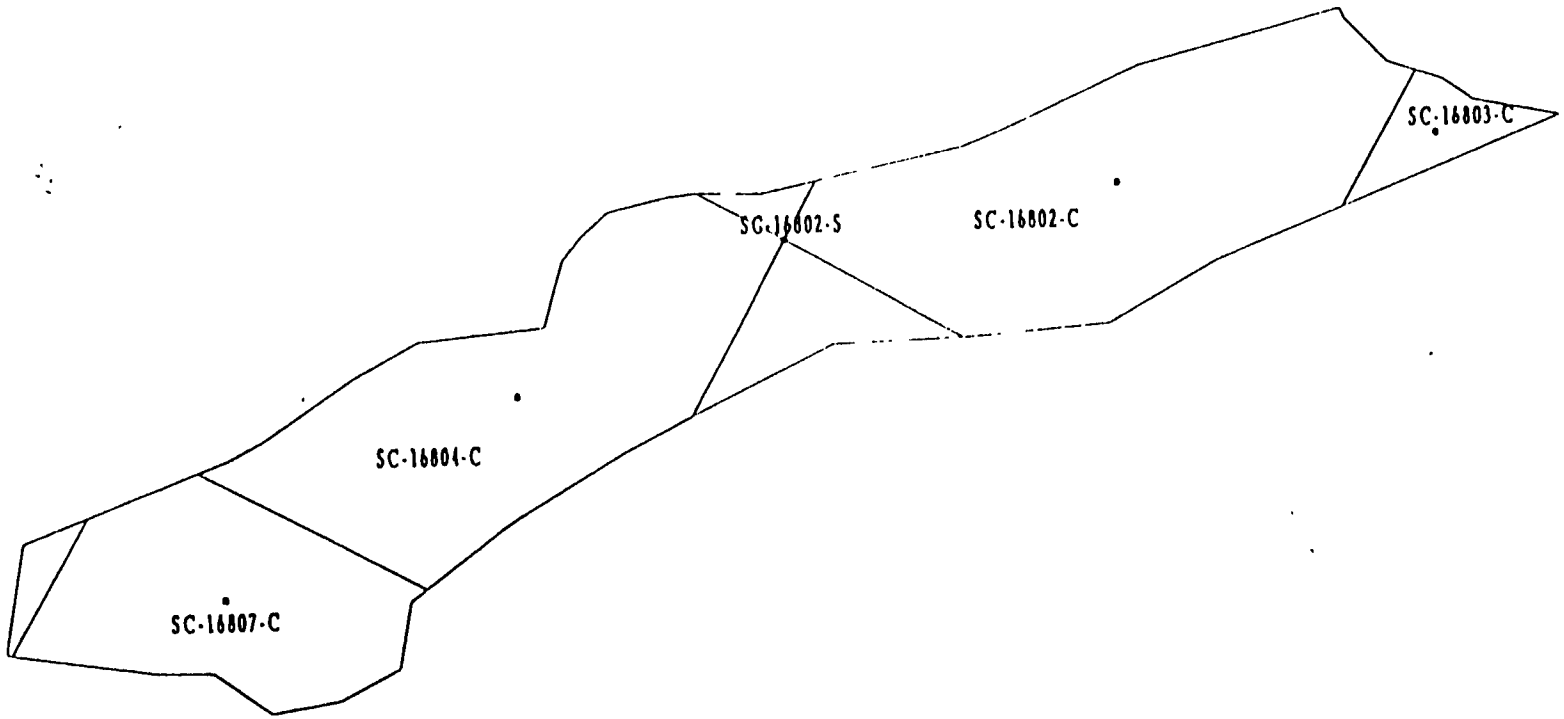
13. Reviewer: [signature] Date 7/20/98

SECTION II

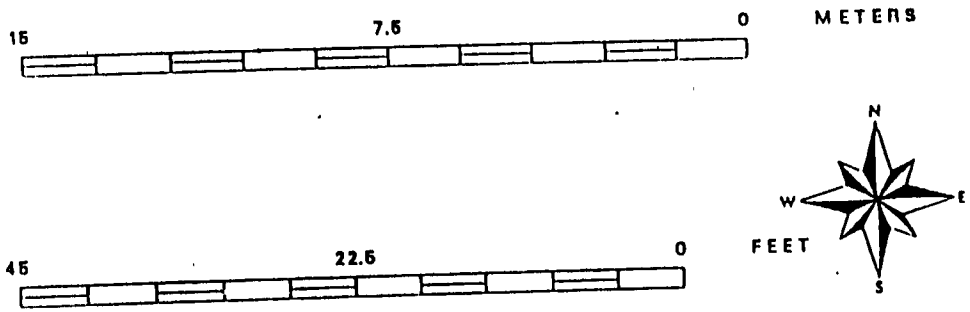
CU is released for unrestricted use.

14. ES&H Manager: [signature] Date: 7/21/98
15. DOE Project Manager/Engineer: Thomas C. Dowling Date: 7/21/98
16. Project Manager: [signature] Date: 21 July 98
17. Construction Engineer: Rodney L. Jenkins Date: 7/21/98

SEE ATTACHED RESULTS AND MAP



Release Form # 98-030



Sample Locations in Remedial Unit RU014
Confirmation Unit CU168 (MDC5)

Figure 3-8

EXHIBIT NO.: G/YP/261/0797	REPORT NO.: DOE/OR/2158-693	
ORIGINATOR: MGL	DRAWN BY: WSSRAP GIS	DATE: 07/29/97

07/20/98

CU168 LATA REPORT

RADIUM-226

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
RADIUM-226	SC-16802-C	2.16	0.37	pCi/g
RADIUM-226	SC-16802-S	2.27	0.19	pCi/g
RADIUM-226	SC-16803-C	2.79	0.32	pCi/g
RADIUM-226	SC-16804-C	2.91	0.3	pCi/g
RADIUM-226	SC-16807-C	2.77	0.13	pCi/g

NUMBER OF RADIUM-226 SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of RADIUM-226 values is 2.58 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 2.91 pCi/g which is below criteria, 6.20 pCi/g.

RADIUM-228

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
RADIUM-228	SC-16802-C	1.04	0.69	pCi/g
RADIUM-228	SC-16802-S	1.05	0.31	pCi/g
RADIUM-228	SC-16803-C	1.31	0.36	pCi/g
RADIUM-228	SC-16804-C	1.04	0.37	pCi/g
RADIUM-228	SC-16807-C	1.39	0.4	pCi/g

NUMBER OF RADIUM-228 SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of RADIUM-228 values is 1.17 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 1.39 pCi/g which is below criteria, 6.20 pCi/g.

TOTAL RADIUM

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
Radium	SC-16802-C	3.2	0.69	pCi/g
Radium	SC-16802-S	3.32	0.31	pCi/g
Radium	SC-16803-C	4.1	0.36	pCi/g
Radium	SC-16804-C	3.95	0.37	pCi/g
Radium	SC-16807-C	4.16	0.4	pCi/g

NUMBER OF 'TOTAL RADIUM' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Radium values is 3.74 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 4.16 pCi/g which is below criteria, 6.20 pCi/g.

THORIUM-230

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
THORIUM-230	SC-16802-C	4.04	0.62	pCi/g
THORIUM-230	SC-16802-S	2.06	0.62	pCi/g
THORIUM-230	SC-16803-C	1.03	0.62	pCi/g
THORIUM-230	SC-16804-C	2.83	0.62	pCi/g
THORIUM-230	SC-16807-C	1.41	0.62	pCi/g

NUMBER OF THORIUM-230 SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of THORIUM-230 values is 2.27 pCi/g, which is below ALARA, 5.00 pCi/g.
Maximum single value is 4.04 pCi/g which is below criteria, 6.20 pCi/g.

2,4,6-TRINITROTOLUENE

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
2,4,6-TRINITROTOLUENE	SC-16802-C	0.12	0.23	ug/g
2,4,6-TRINITROTOLUENE	SC-16802-S	0.12	0.23	ug/g
2,4,6-TRINITROTOLUENE	SC-16803-C	0.12	0.24	ug/g
2,4,6-TRINITROTOLUENE	SC-16804-C	0.12	0.24	ug/g
2,4,6-TRINITROTOLUENE	SC-16807-C	0.12	0.24	ug/g

NUMBER OF 2,4,6-TRINITROTOLUENE SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of 2,4,6-TRINITROTOLUENE values is 0.12 ug/g, which is below ALARA, 14.00 ug/g.
Maximum single value is 0.12 ug/g which is below criteria, 140 ug/g.

CHROMIUM

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
CHROMIUM	SC-16802-C	24.9	0.21	ug/g
CHROMIUM	SC-16802-S	21.1	0.2	ug/g
CHROMIUM	SC-16803-C	18.3	0.2	ug/g
CHROMIUM	SC-16804-C	17.9	0.21	ug/g
CHROMIUM	SC-16807-C	21.6	0.2	ug/g

NUMBER OF CHROMIUM SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of CHROMIUM values is 20.76 ug/g, which is below ALARA, 90.00 ug/g.
Maximum single value is 24.90 ug/g which is below criteria, 110.00 ug/g.

LEAD

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
LEAD	SC-16802-C	64.7	0.3	ug/g
LEAD	SC-16802-S	71.2	0.28	ug/g
LEAD	SC-16803-C	11.5	0.27	ug/g
LEAD	SC-16804-C	19.8	0.29	ug/g
LEAD	SC-16807-C	13.4	0.27	ug/g

NUMBER OF LEAD SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of LEAD values is 36.12 ug/g, which is below ALARA, 240.00 ug/g.
Maximum single value is 71.20 ug/g which is below criteria, 450 ug/g.

PAH

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
PAH	SC-16802-C	0	244	ug/kg
PAH	SC-16802-S	0	244	ug/kg
PAH	SC-16803-C	0	244	ug/kg
PAH	SC-16804-C	0	244	ug/kg
PAH	SC-16807-C	0	244	ug/kg

NUMBER OF PAH SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of PAH values is 0 ug/kg, which is below ALARA, 440 ug/kg.
Maximum single value is 0 ug/kg which is below criteria, 5600 ug/kg.

PCB

PARAMETER	LOCATION	CONCENTRATION	DETECTION_LIMIT	UNITS
PCB	SC-16802-C	0	41	ug/kg
PCB	SC-16802-S	0	52	ug/kg
PCB	SC-16803-C	0	40	ug/kg
PCB	SC-16804-C	0	46	ug/kg
PCB.	SC-16807-C	0	41	ug/kg

NUMBER OF PCB SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of PCB values is 0 ug/kg, which is below ALARA, 650 ug/kg.
Maximum single value is 0 ug/kg which is below criteria, 8000 ug/kg.

Weldon Spring Site Remedial Action Project
7295 Highway 94 South, St. Charles, Missouri, 63304

ES&H 1.2.1.1, Rev. 2, 11/96

SOIL CONFIRMATION REMEDIATION DISPOSITION FORM

SECTION I

1. Work Package Number: 458 2. Date: 2-20-98 3. Review Form #: 98-0008

4. Remediation Unit Number: 014 5. Confirmation Unit Number: 169 (map attached)

6. Contaminants of Concern: ___ U-238 X Th-230 ___ Th-232 X Ra-226 X Ra-228
X TNT X PCB X PAH X As X Cr X Pb X Tl

7. Results average below ALARA goal(s)?	X Yes	___ No
8. All results below cleanup criteria?	X Yes	___ No
9. Any results greater than 3X criteria?	___ Yes	X No
10. Hot spots present (less than 3X criteria)?	___ Yes	X No

Parameter	Size	Concentration	Complies with Plan?
			___ Yes ___ No
			___ Yes ___ No
			___ Yes ___ No

11. Comments

12. Reviewer Disposition Recommendation:
X Release for Unrestricted Use (Section II)
___ Additional Excavation Required (Section IV)
___ ALARA Committee Required (Section III)

13. Reviewer: [signature] Date 2-20-98

SECTION II *CU is released for unrestricted use.*

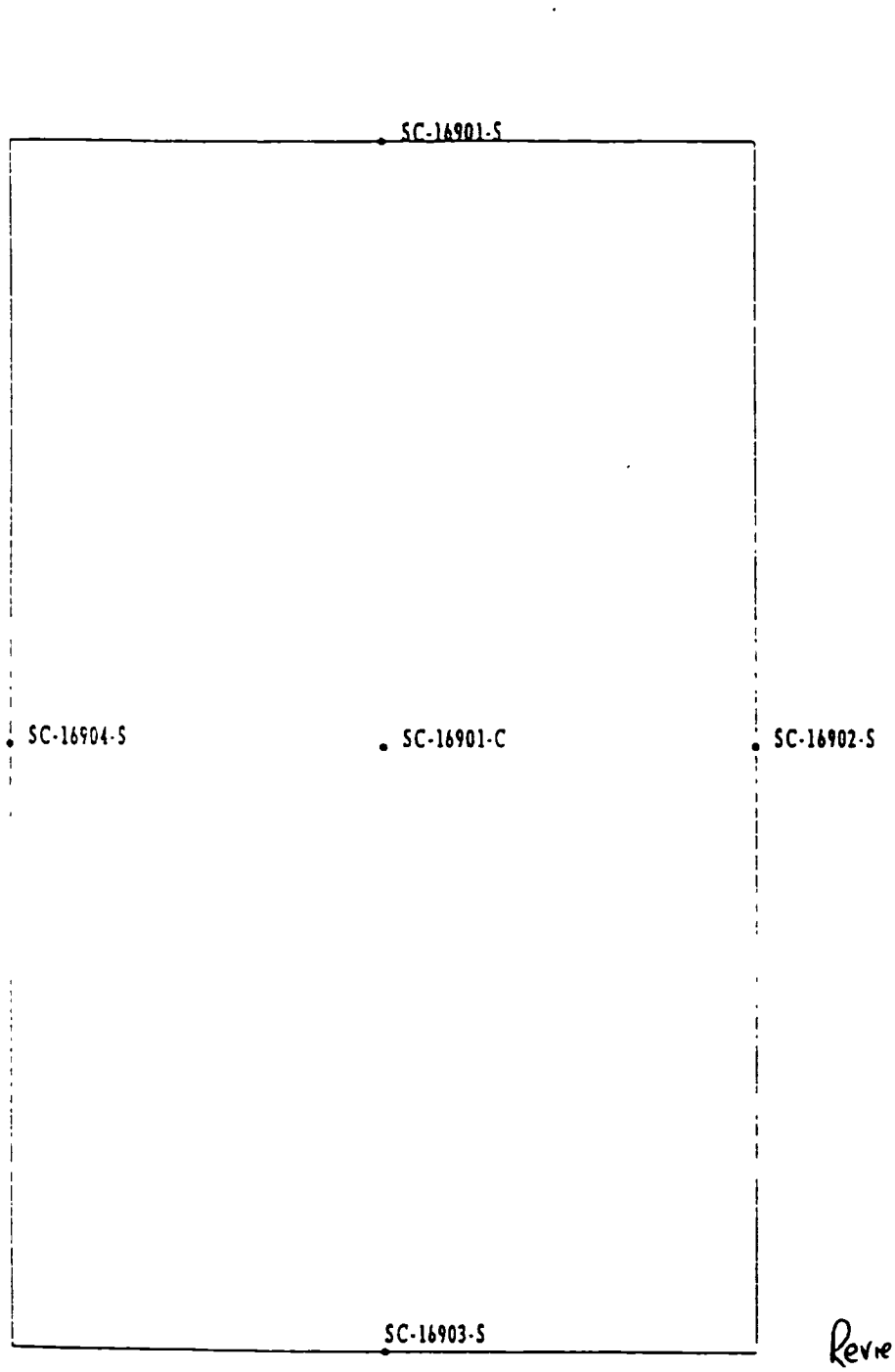
14. ES&H Manager: [signature] for DEH Date: 2/20/98

15. DOE Project Manager/Engineer: [signature] Date: 2/20/98

16. Project Manager: [signature] Date: 20 Feb 98

17. Construction Engineer: [signature] Date: 2/20/98

SEE ATTACHED RESULTS AND MAP



Review Form # 98-0008

3 1.5 0 METERS

10 5 0 FEET

Sample Locations in Remedial Unit RU014
Confirmation Unit CU169

Figure 3-1

EXHIBIT NO G/CP/350/1097		REPORT NO: DOE/OR/21548-693	
ORIGINATOR MGL	DRAWN BY LGB	DATE 12/04/97	

02/23/98

CU169 DATA REPORT

THORIUM-230

PARAMETER	LOCATION	CONC	DL	UNITS
Thorium-230	SC-16904-S	1.40	0.62	PCI/G
Thorium-230	SC-16901-S	1.70	0.62	PCI/G
Thorium-230	SC-16902-S	1.74	0.62	PCI/G
Thorium-230	SC-16903-S	1.26	0.62	PCI/G
Thorium-230	SC-16901-C	1.35	0.62	PCI/G

NUMBER OF 'Thorium-230' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Thorium-230 values is 1.49, which is below ALARA, 5.00
Maximum single value is 1.74, which is below criteria, 6.20

RADIUM-226

PARAMETER	LOCATION	CONC	DL	UNITS
RADIUM-226	SC-16904-S	2.29	0.35	PCI/G
RADIUM-226	SC-16901-S	2.41	0.25	PCI/G
RADIUM-226	SC-16902-S	2.61	0.39	PCI/G
RADIUM-226	SC-16903-S	2.16	0.26	PCI/G
RADIUM-226	SC-16901-C	2.59	0.34	PCI/G

NUMBER OF 'RADIUM-226' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of RADIUM-226 values is 2.41, which is below ALARA, 5.00
Maximum single value is 2.61, which is below criteria, 6.20

RADIUM-228

PARAMETER	LOCATION	CONC	DL	UNITS
RADIUM-228	SC-16904-S	1.30	0.29	PCI/G
RADIUM-228	SC-16901-S	1.06	0.41	PCI/G
RADIUM-228	SC-16902-S	0.54	1.11	PCI/G
RADIUM-228	SC-16903-S	1.23	0.33	PCI/G
RADIUM-228	SC-16901-C	1.20	0.51	PCI/G

NUMBER OF 'RADIUM-228' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of RADIUM-228 values is 1.06, which is below ALARA, 5.00
Maximum single value is 1.30, which is below criteria, 6.20

CU 169 DATA REPORT, CONTINUED

ARSENIC

PARAMETER	LOCATION	CONC	DL	UNITS
Arsenic	SC-16904-S	7.60	0.33	UG/G
Arsenic	SC-16901-S	13.20	0.35	UG/G
Arsenic	SC-16902-S	10.60	0.33	UG/G
Arsenic	SC-16903-S	9.40	0.32	UG/G
Arsenic	SC-16901-C	9	0.34	UG/G

NUMBER OF 'Arsenic' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Arsenic values is 9.96, which is below ALARA, 45.00
Maximum single value is 13.20, which is below criteria, 75

CHROMIUM

PARAMETER	LOCATION	CONC	DL	UNITS
Chromium	SC-16904-S	9.60	0.15	UG/G
Chromium	SC-16901-S	24.60	0.16	UG/G
Chromium	SC-16902-S	18.40	0.15	UG/G
Chromium	SC-16903-S	21.90	0.15	UG/G
Chromium	SC-16901-C	19.60	0.16	UG/G

NUMBER OF 'Chromium' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Chromium values is 18.82, which is below ALARA, 90.00
Maximum single value is 24.60, which is below criteria, 110.00

LEAD

PARAMETER	LOCATION	CONC	DL	UNITS
Lead	SC-16904-S	11.20	0.23	UG/G
Lead	SC-16901-S	18	0.24	UG/G
Lead	SC-16902-S	18.40	0.23	UG/G
Lead	SC-16903-S	14	0.22	UG/G
Lead	SC-16901-C	14.60	0.24	UG/G

NUMBER OF 'Lead' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Lead values is 15.24, which is below ALARA, 240.00
Maximum single value is 18.40, which is below criteria, 450

CU 169 DATA REPORT, CONTINUED

THALLIUM

PARAMETER	LOCATION	CONC	DL	UNITS
Thallium	SC-16904-S	0.76	0.45	UG/G
Thallium	SC-16901-S	1.60	0.48	UG/G
Thallium	SC-16902-S	1.50	0.46	UG/G
Thallium	SC-16903-S	1.40	0.45	UG/G
Thallium	SC-16901-C	1.20	0.47	UG/G

NUMBER OF 'Thallium' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of Thallium values is 1.29, which is below ALARA, 16.00
Maximum single value is 1.60, which is below criteria, 20

PAH

PARAMETER	LOCATION	CONC	DL	UNITS
PAH	SC-16904-S	0	44	UG/KG
PAH	SC-16901-S	0	48	UG/KG
PAH	SC-16902-S	0	45	UG/KG
PAH	SC-16903-S	0	43	UG/KG
PAH	SC-16901-C	0	46	UG/KG

NUMBER OF 'PAH' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of PAH values is 0, which is below ALARA, 440
Maximum single value is 0, which is below criteria, 5600

PCB

PARAMETER	LOCATION	CONC	DL	UNITS
PCB	SC-16904-S	0	42	UG/KG
PCB	SC-16901-S	0	45	UG/KG
PCB	SC-16902-S	0	43	UG/KG
PCB	SC-16903-S	0	41	UG/KG
PCB	SC-16901-C	0	44	UG/KG

NUMBER OF 'PCB' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of PCB values is 0, which is below ALARA, 650
Maximum single value is 0, which is below criteria, 8000

CU 169 DATA REPORT, CONTINUED

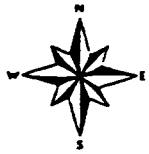
2,4,6-TRINITROTOLUENE

PARAMETER	LOCATION	CONC	DL	UNITS
2,4,6-TRINITROTOLUENE	SC-16904-S	0.01	0.01	UG/G
2,4,6-TRINITROTOLUENE	SC-16901-S	0.07	0.01	UG/G
2,4,6-TRINITROTOLUENE	SC-16902-S	0.01	0.01	UG/G
2,4,6-TRINITROTOLUENE	SC-16903-S	0.00	0.01	UG/G
2,4,6-TRINITROTOLUENE	SC-16901-C	0.04	0.01	UG/G

NUMBER OF '2,4,6-TRINITROTOLUENE' SAMPLES IN DATABASE FOR THIS CU IS: 5
Average of 2,4,6-TRINITROTOLUENE values is 0.03, which is below ALARA, 14.00
Maximum single value is 0.07, which is below criteria, 140

APPENDIX B
Walkover Forms

WALKOVER SURVEY FORM FOR WP458: R0014C0169



SC-16901-S

SC-16904-S

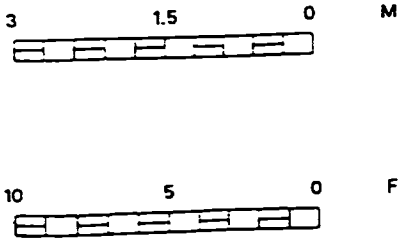
SC-16901-C

SC-16902-S

WALK OVER PERFORMED
ON 1-29-98

SC-16903-S

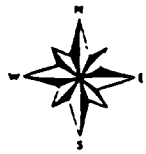
WSSRAP GIS

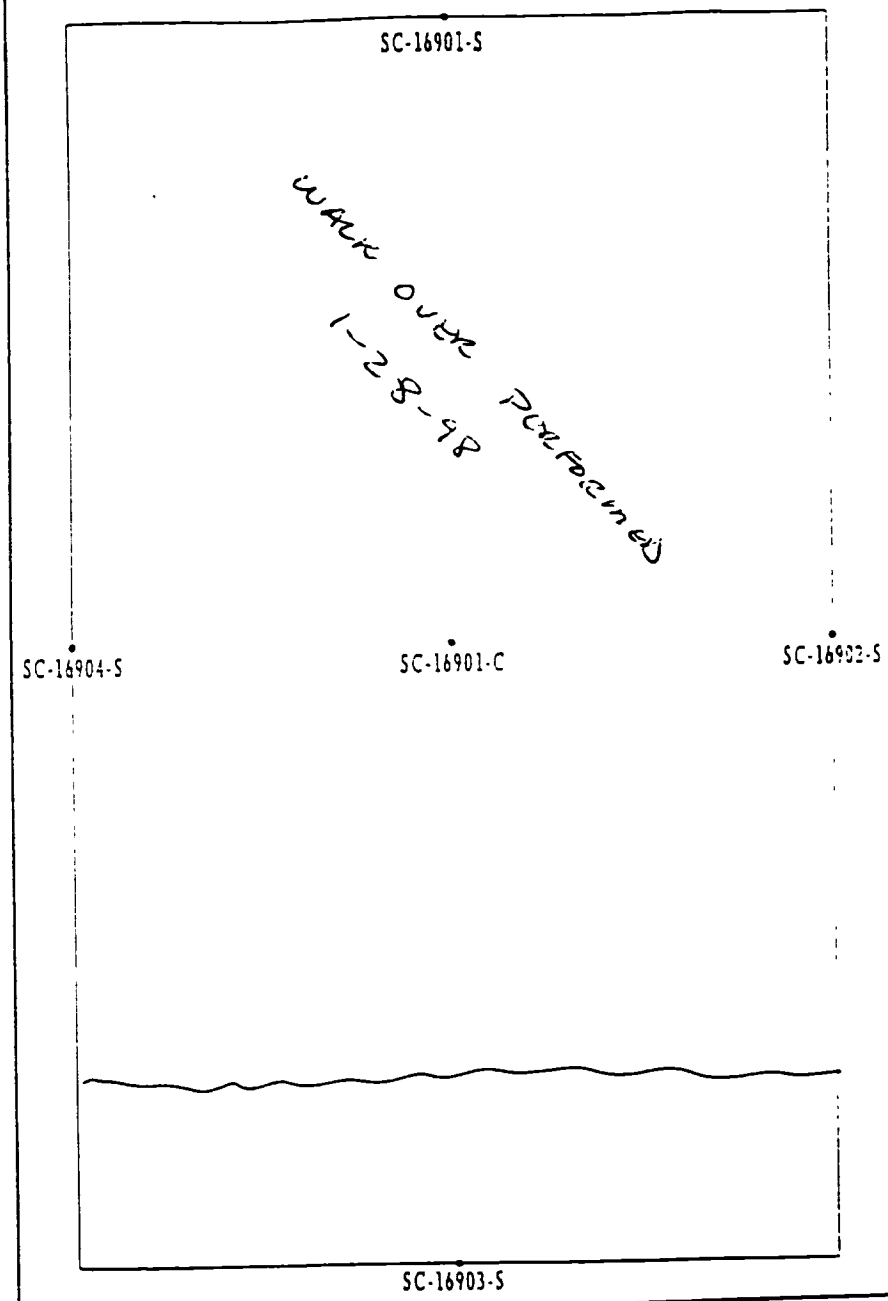


Meter Model#: 2221
DOE # 3576
Meter Serial#: 106701
Calibration Due: 10-24-98
Survey Date/Time: 1-29-98/0750
Surveyor(s): ANTONIO W. MARTINEZ
Comments: ALL AREAS LESS THAN 1 1/2 TIMES BACK GROUND

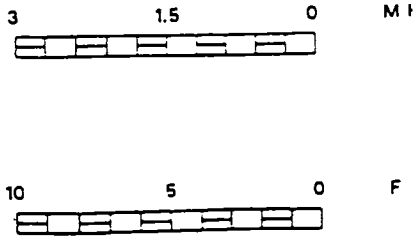
Detector Model#: 44-10
DOE # 1029D
Detector Serial#: 035449
Calibration Due: 7-24-98
Field Bkg.: SHIELDED 3738 CPM

WALKOVER SURVEY FORM FOR WP458: R0014C0169





WSSRAP 615



Meter Model#: 2221
DOE # 3570
Meter Serial#: 106701

Detector Model#: 44-10
DOE # 10290
Detector Serial#: 035449

Calibration Due: 10-24-98

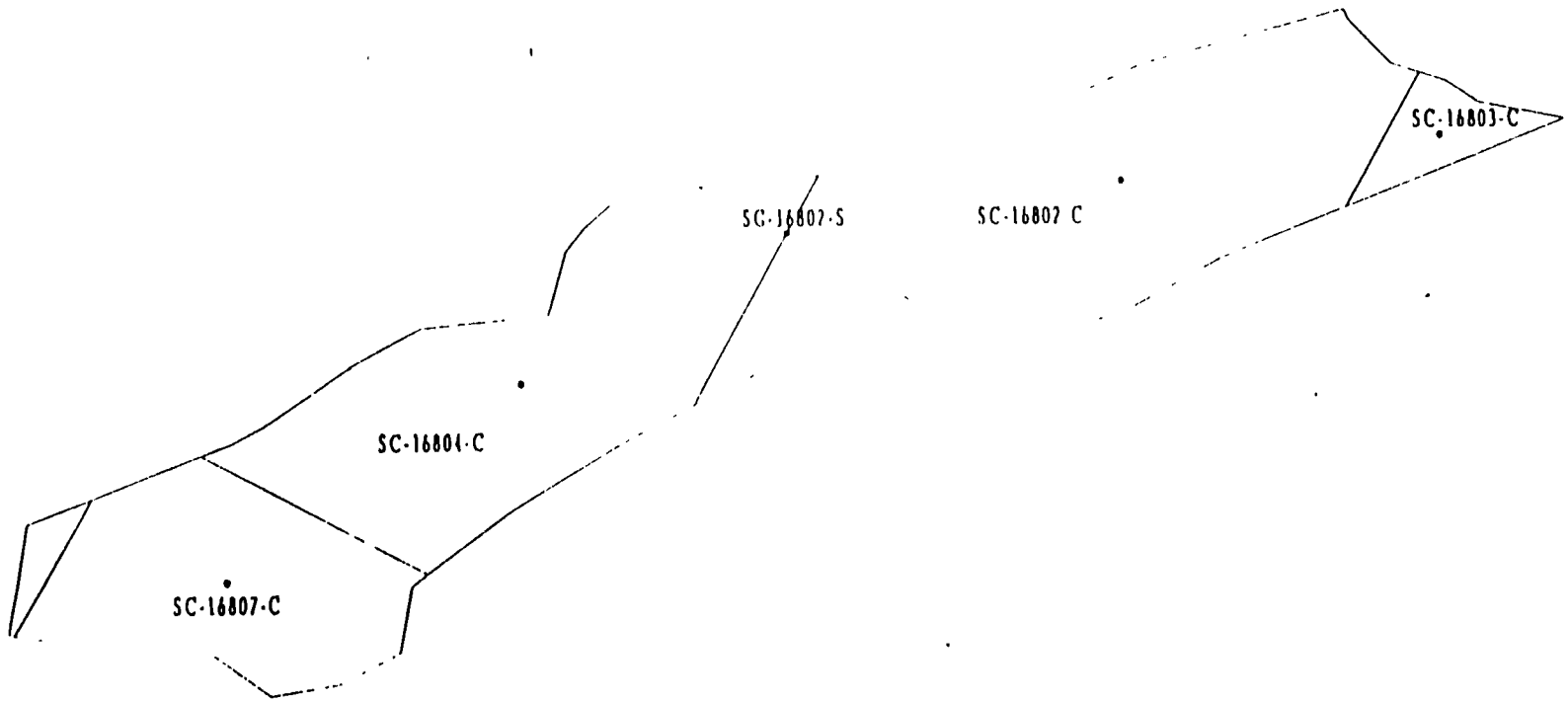
Calibration Due: 7-24-98

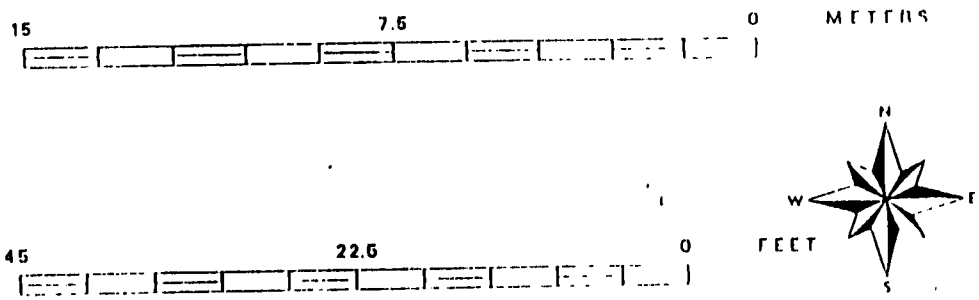
Survey Date/Time: 1-28-98/1712

Field Bkg.: SHIELDED 3493 CPM

Surveyor(s): ANTONIO W. MARTINEZ /

Comments: ALL AREAS LESS THAN 1 1/2 TIMES BACKGROUND





Meter Model#: 2221

Meter Serial#: 3576

Calibration Due: 24-Oct-98

Survey Date/Time: 6-16-98; 14:00

Surveyor(s): F. Alquiter

Comments: Surveyd Area was less than (1+½)*BKG. / BJ

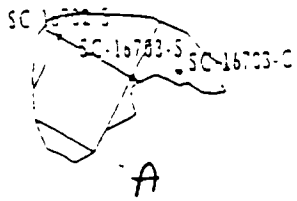
Detector Model#: NaI2X2D

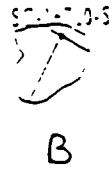
Detector Serial#: 1029

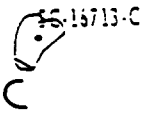
Calibration Due: 7-24-98

Field Bkg.: 6500 CPM

WALKOVER SURVEY FORM: RU014 CU167



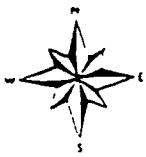




section "C"

Meter Model:	2221	Detector Model:	NaI 2x2 N
Meter Serial:	127247	Detector Serial:	Pr 130774
Calibration Due:	8-8-98	Calibration Due:	8-11-98
Survey Date/Time	11-4-97	Field Bkg.:	9500 cpm
Surveyor(s):	E. Algutifan		

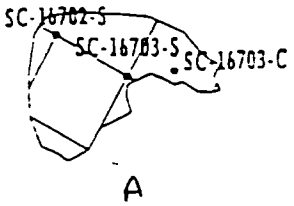
Comments: Area "C" of MDC4 is less than $(1+\frac{1}{2})$BKG

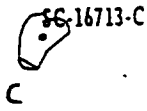


10 5 0 METER

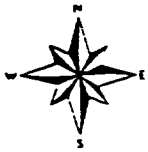
30 15 0 FEET

WALKOVER SURVEY FORM: RU014 CU167





section "B"



10 5 0 METER

30 15 0 FEET

Meter Model#: [illegible]

Meter Serial#: 127247

Calibration Due: 8-5-98

Survey Date/Time: 11-20-97

Surveyor(s): F. Algutifan, H. Hutker

Detector Model#: NaI 2x2 N

Detector Serial#: Pr130774

Calibration Due: 8-11-98

Field Bkg.: 7400 CPM

Comments: Area "B" of MDC 4 is less than (1 + 1/2) BKG.

* #1-5 SOIL SAMPLE POINTS

2x2 "D" BKG 3179

1½ x BKG = 4768

2 x BKG = 6358

2½ x BKG = 7948

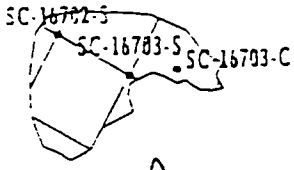
MDCL

Section A

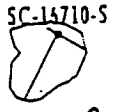
Soil samples Taken on 11-28-97 To check for RAD contamination

- Perimeter walkaround
- Inside hole @ 3' depth ~ 2 x BKG.

WALKOVER SURVEY FORM: RU014 CU167

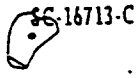


A



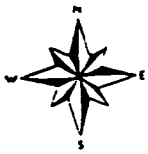
B

* BKG = 3179 cpm
- AVG WALKOVER = ~5700 cpm (1.8 x BKG)
- INFORMATIONAL SAMPLES TAKEN DUE TO SLIGHTLY ELEVATED READINGS ALONG EXCAVATION WALLS.
- SEE FYI SAMPLES - [illegible]



C

Section "A"

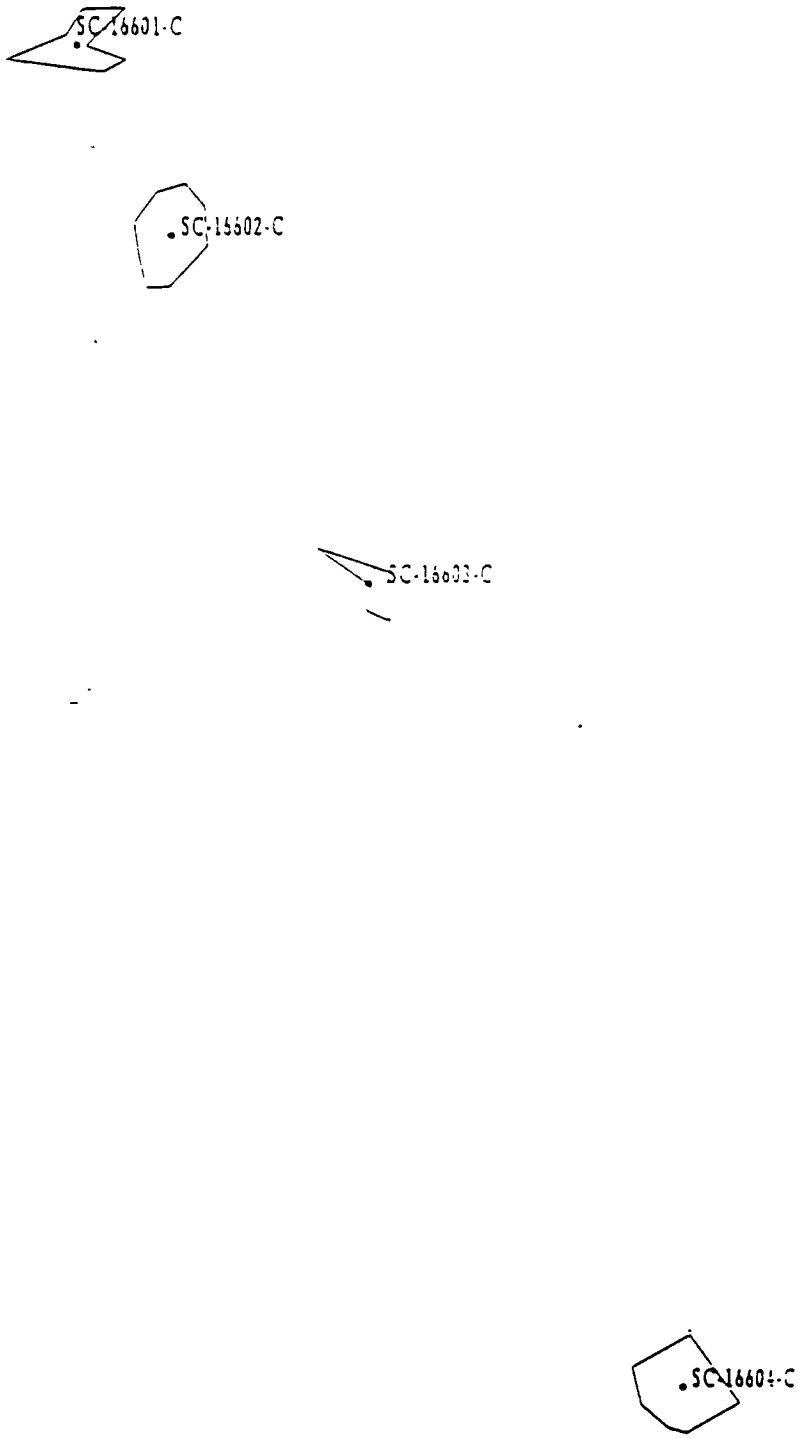


10 5 0 METER

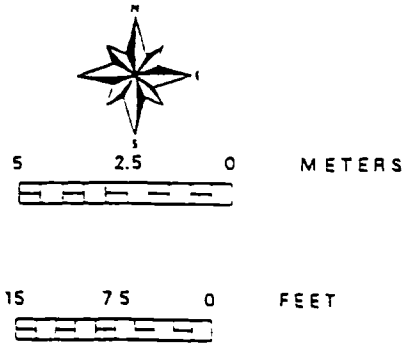
30 15 0 FEET

Meter Model#:	2221	Detector Model#:	NaI 2x2 D
Meter Serial#:	106701	Detector Serial#:	035447
Calibration Due:	24-Oct-98	Calibration Due:	7-24-98
Survey Date/Time:	11-28-97	Field Bkg.:	3179 cpm
Surveyor(s):	F. Algutifan, Antonio Martinez		
Comments:	* SEE comments.		

WALKOVER SURVEY FORM: RU014 CU166

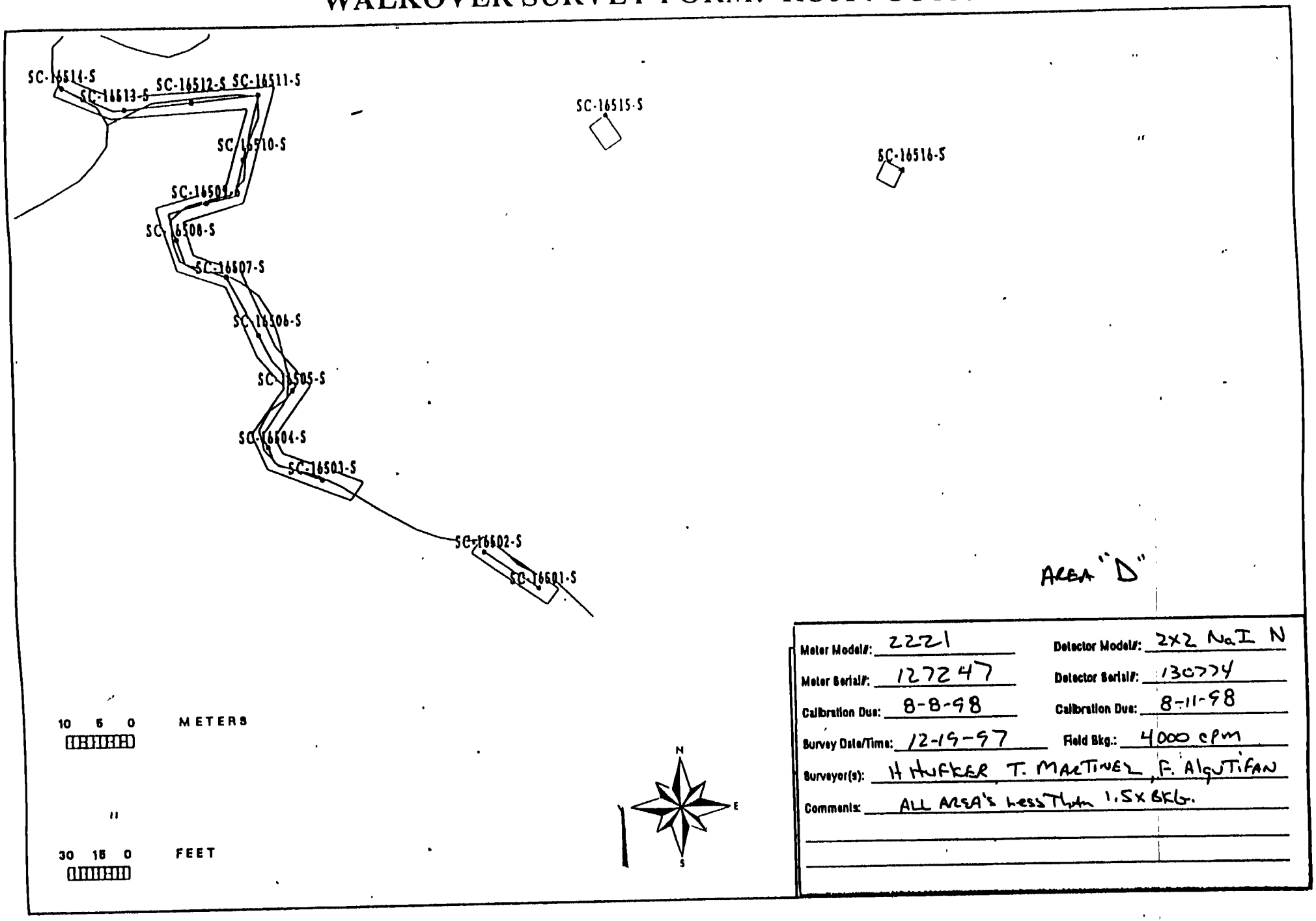


moc-3



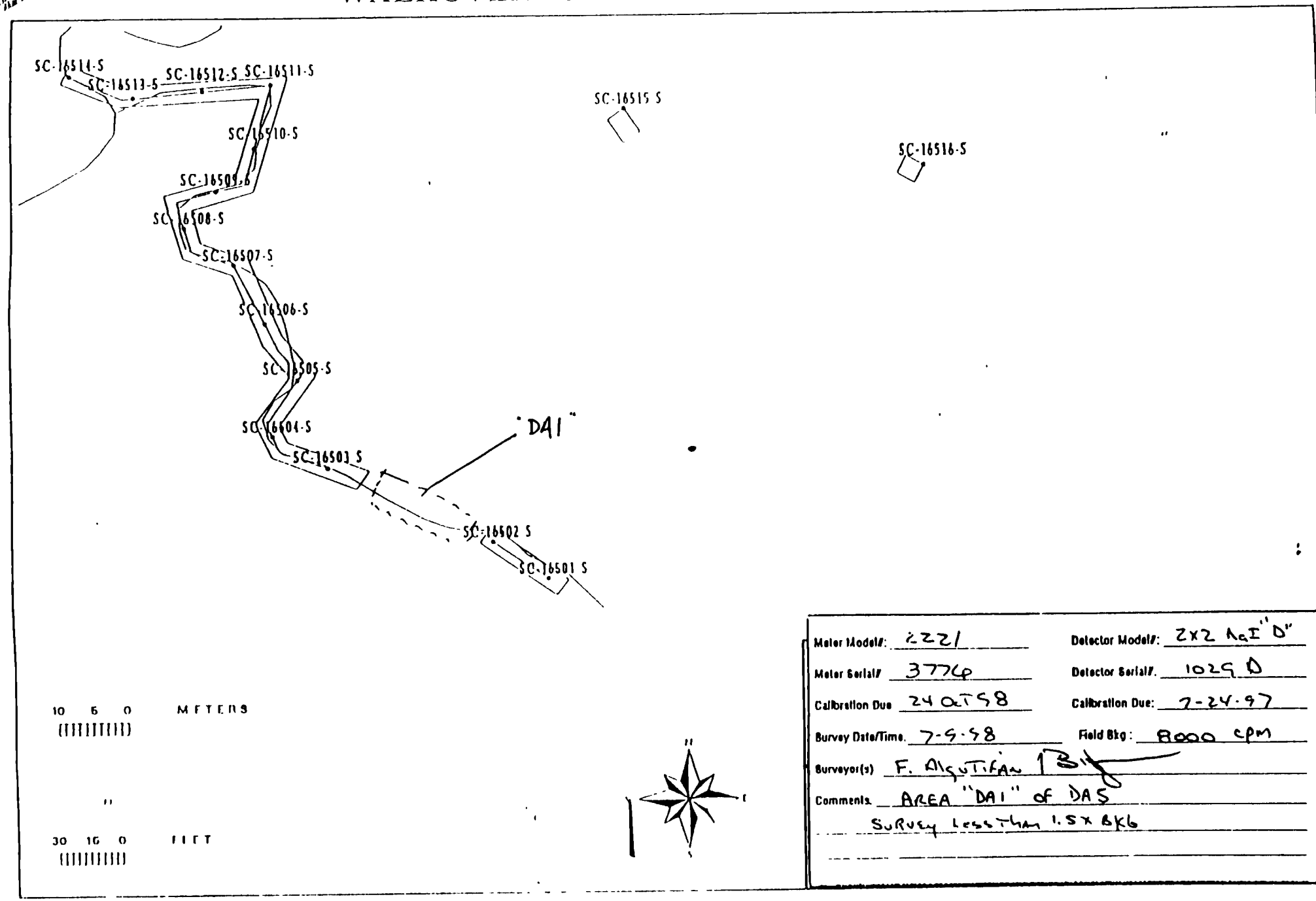
Meter Model#:	2221	Detector Model#:	2x2
Meter Serial#:	106701	Detector Serial#	035449
Calibration Due:	24 Oct 98	Calibration Due.	7-24-98
Survey Date/Time:	6-17-98	Field Bkg.:	8100
Surveyor(s):	BHWFKEL		
Comments:	ALL AREAS LESS THAN 1.5 x BKG		

WALKOVER SURVEY FORM: RU014 CU165



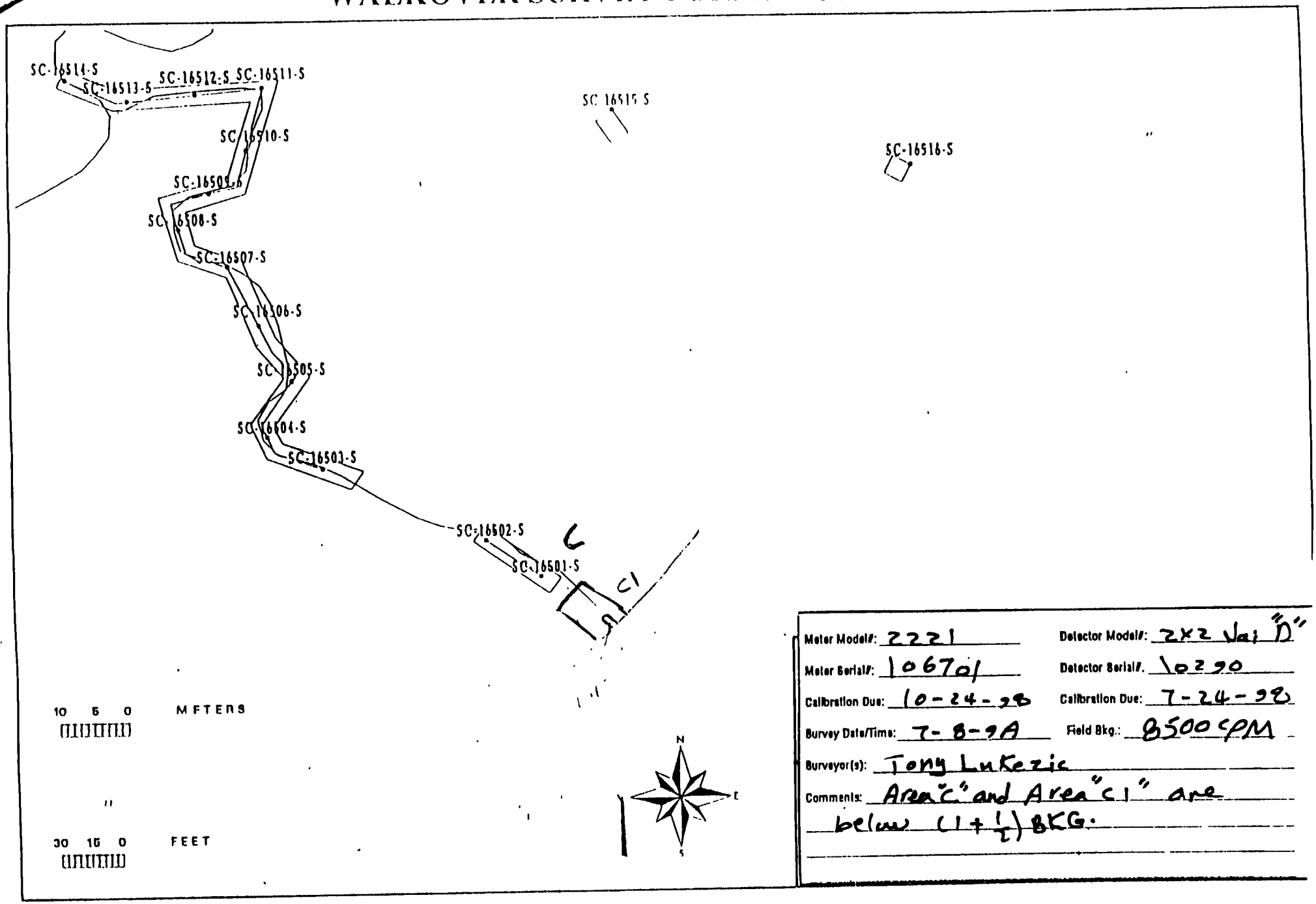
Meter Model#:	2221	Detector Model#:	2x2 NaI N
Meter Serial#:	127247	Detector Serial#:	130724
Calibration Due:	8-8-98	Calibration Due:	8-11-98
Survey Date/Time:	12-19-97	Field Bkg.:	4000 cpm
Surveyor(s):	H HUFKER T. MARTINEZ, F. ALGUTIFAN		
Comments:	ALL AREA's Less Than 1.5x BKG.		

WALKOVER SURVEY FORM: RU014 CU165



Meter Model#:	2221	Detector Model#:	2x2 NaI "D"
Meter Serial#	3776	Detector Serial#.	1029 D
Calibration Due	24 Oct 98	Calibration Due:	7-24-97
Survey Date/Time.	7-9-98	Field Bkg:	8000 cpm
Surveyor(s)	F. Algutifan		
Comments.	AREA "DA1" of DA5		
	Survey Less than 1.5x Bkg		

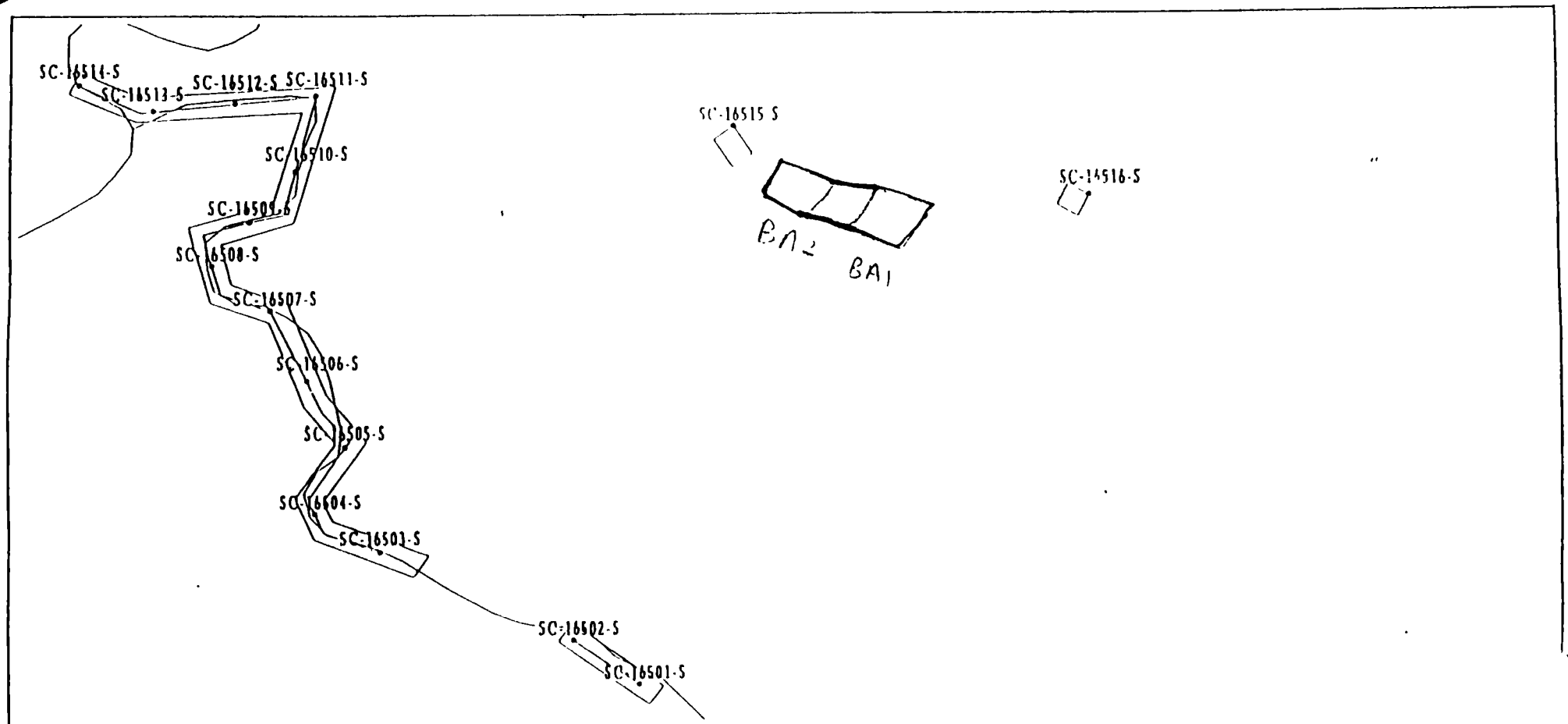
WALKOVER SURVEY FORM: RU014 CU165



Meter Model#:	2221	Detector Model#:	2x2 Nal "D"
Meter Serial#:	106701	Detector Serial#:	10290
Calibration Due:	10-24-98	Calibration Due:	7-24-98
Survey Date/Time:	7-8-98	Field Bkg.:	8500 cpm
Surveyor(s):	Tony Lukezic		

Comments: Area "C" and Area "C1" are below (1 + 1/2) BKG.

WALKOVER SURVEY FORM: RU014 CU165



10 5 0 METERS

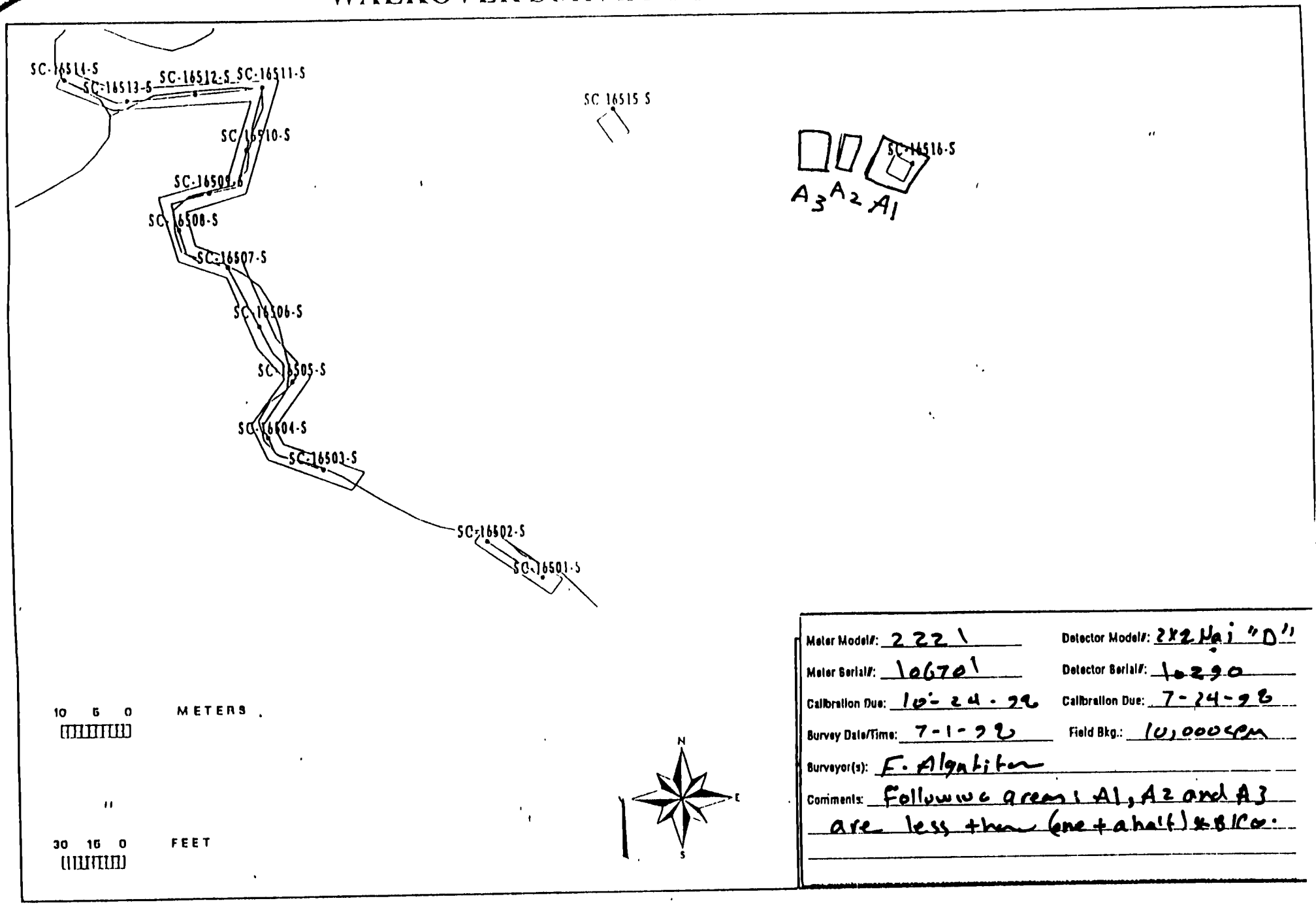
30 15 0 FEET

N
E
S

Meter Model#:	2221	Detector Model#:	2x2 NaI "D"
Meter Serial#	106701	Detector Serial#	10290
Calibration Due	10-24-98	Calibration Due	7-24-98
Survey Date/Time	7-7-98	Field Bkg	9000 cpm
Surveyor(s):	F. Almtiter		

Comments: Areas "BA1" and "BA2" of DA-5 are less than one and a half Back Ground.

WALKOVER SURVEY FORM: RU014 CU165



Meter Model#: 2221

Meter Serial#: 106701

Calibration Due: 10-24-98

Survey Date/Time: 7-1-98

Surveyor(s): F. Algabiton

Detector Model#: 2x2 Naj "D"

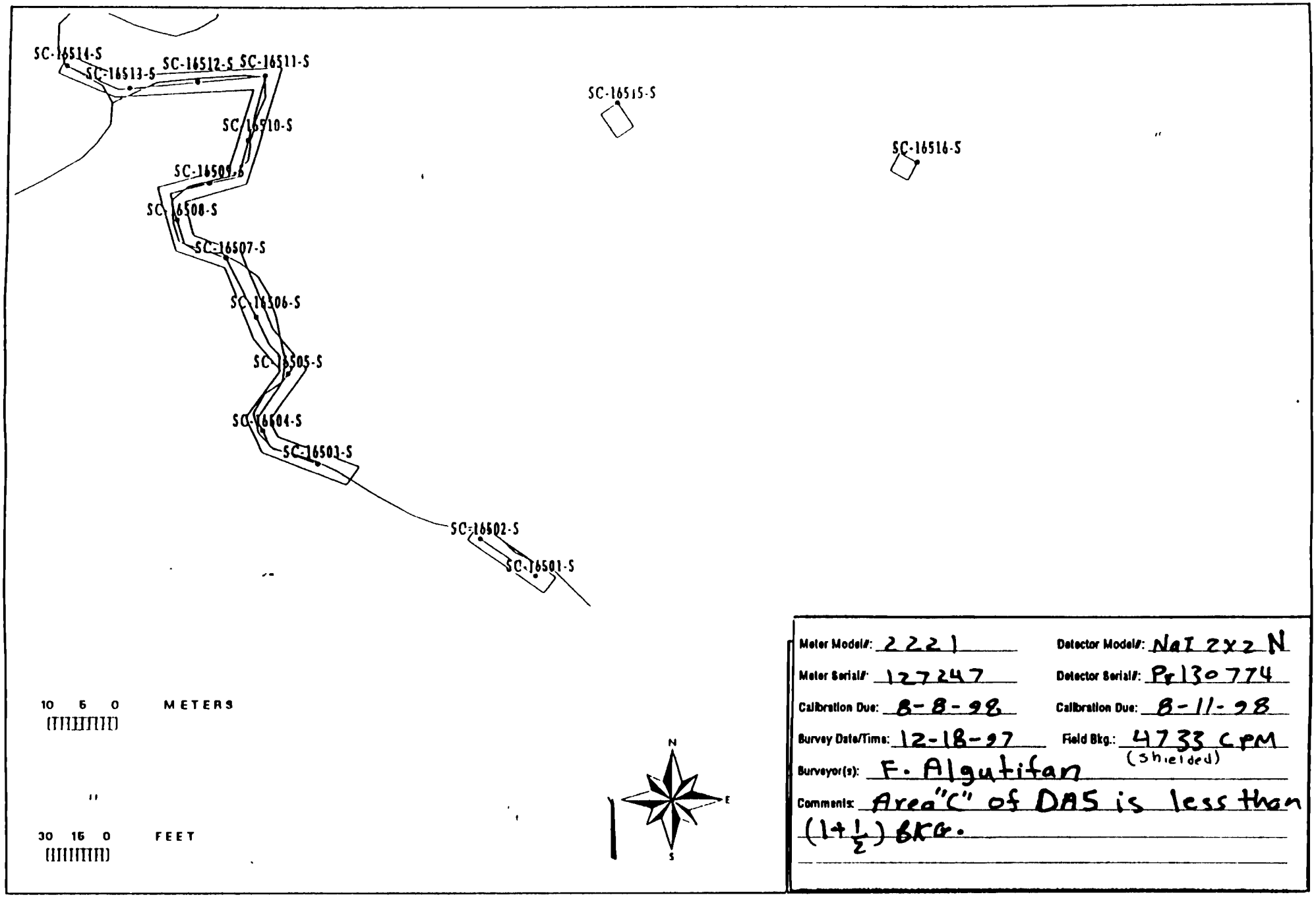
Detector Serial#: 10290

Calibration Due: 7-24-98

Field Bkg.: 10,000cpm

Comments: Following areas: A1, A2 and A3 are less than (one + a half) x BKG.

WALKOVER SURVEY FORM: RU014 CU165



Meter Model#: 2221

Meter Serial#: 127247

Calibration Due: 8-8-98

Survey Date/Time: 12-18-97

Surveyor(s): F. Algutifan

Detector Model#: NaI 2x2 N

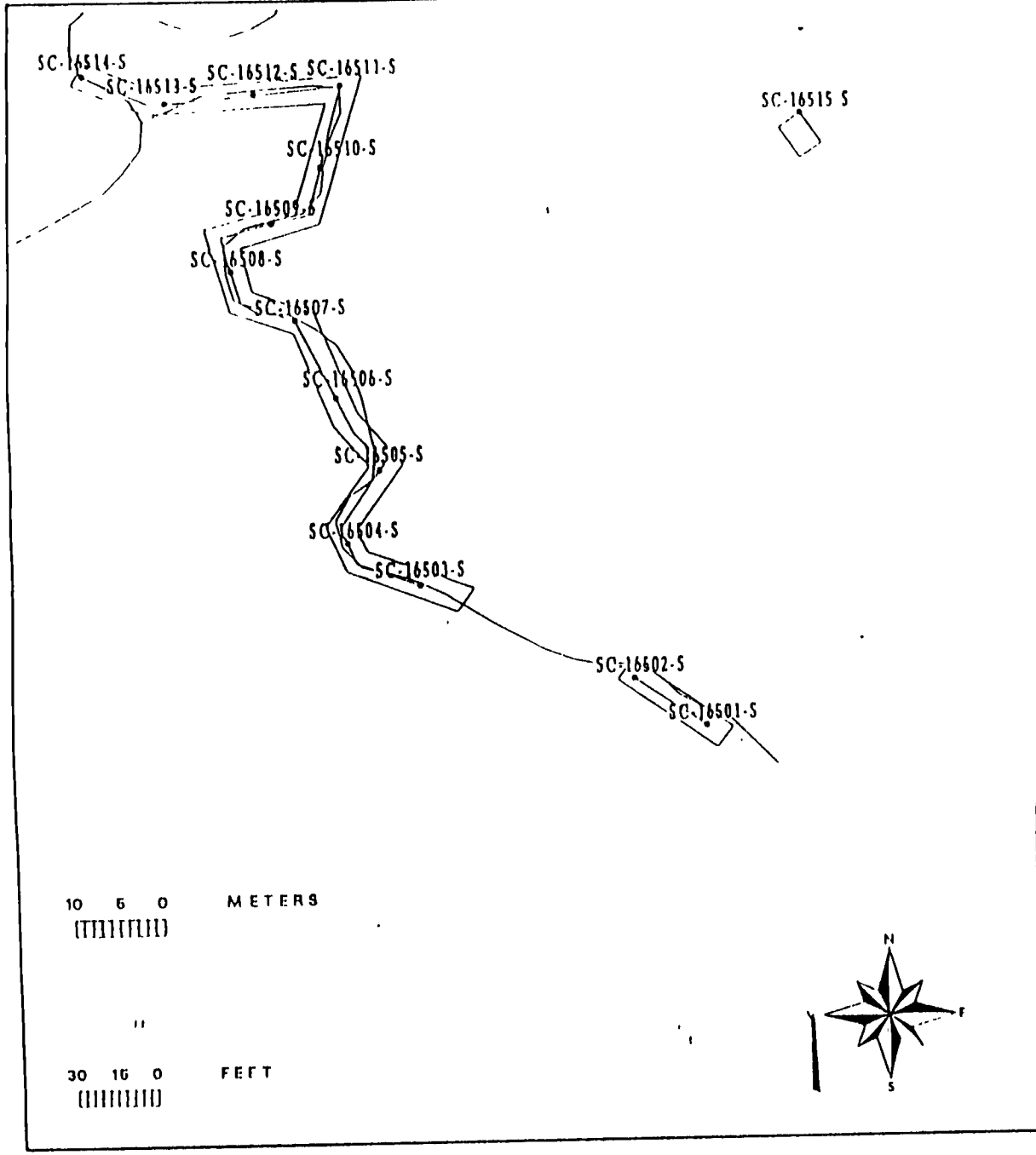
Detector Serial#: PR130774

Calibration Due: 8-11-98

Field Bkg.: 4733 CPM (shielded)

Comments: Area "C" of DAS is less than $(1+\frac{1}{2})$ BKG.

WALKOVER SURVEY FORM: RU014 CU165



Meter Model#: 2221

Meter Serial#: 127247

Calibration Due: 8-8-98

Survey Date/Time: 12-19-97, 1010

Surveyor(s): F. Alguntifan

Detector Model#: NaI 2X2 N

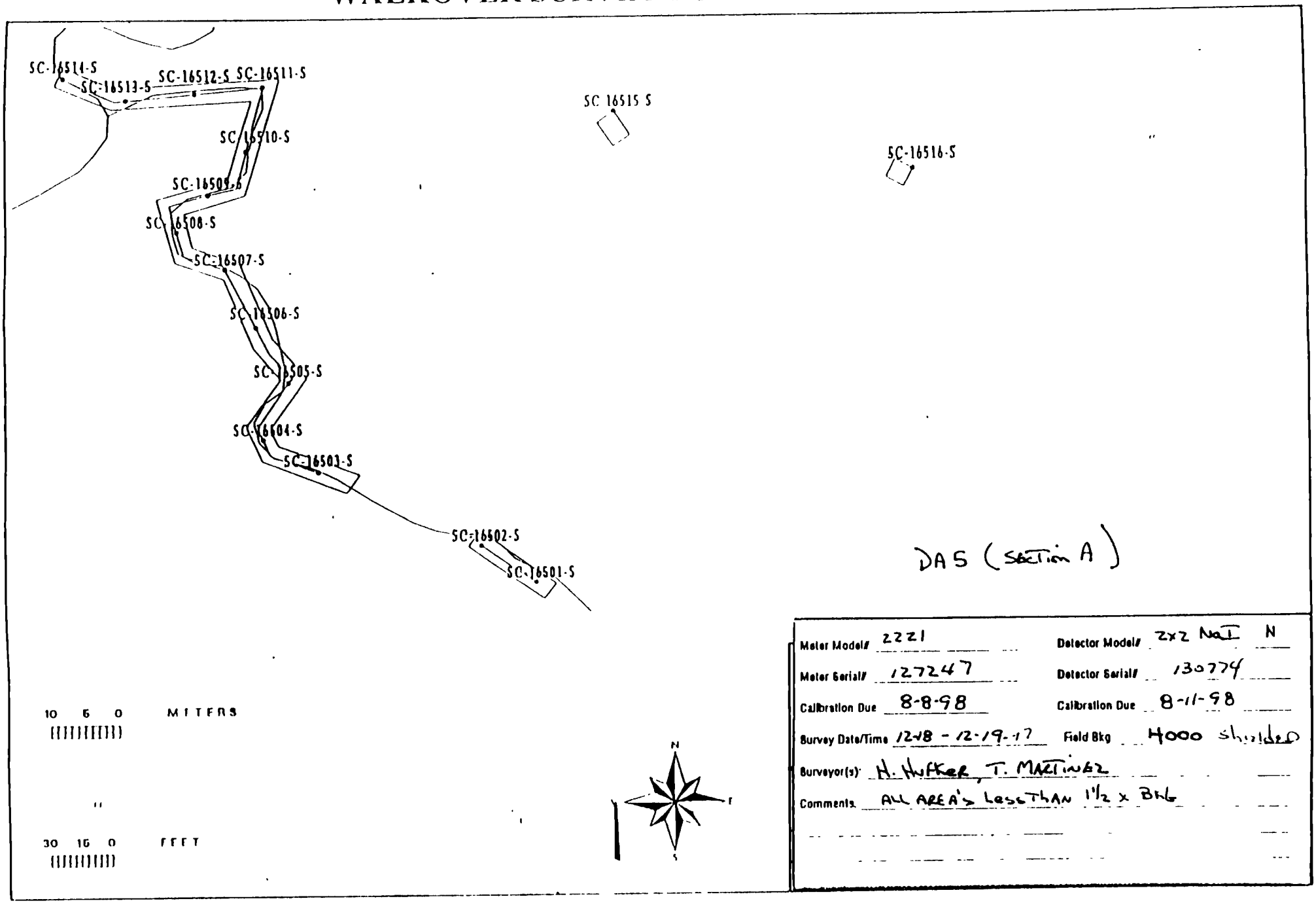
Detector Serial#: PR130774

Calibration Due: 8-11-98

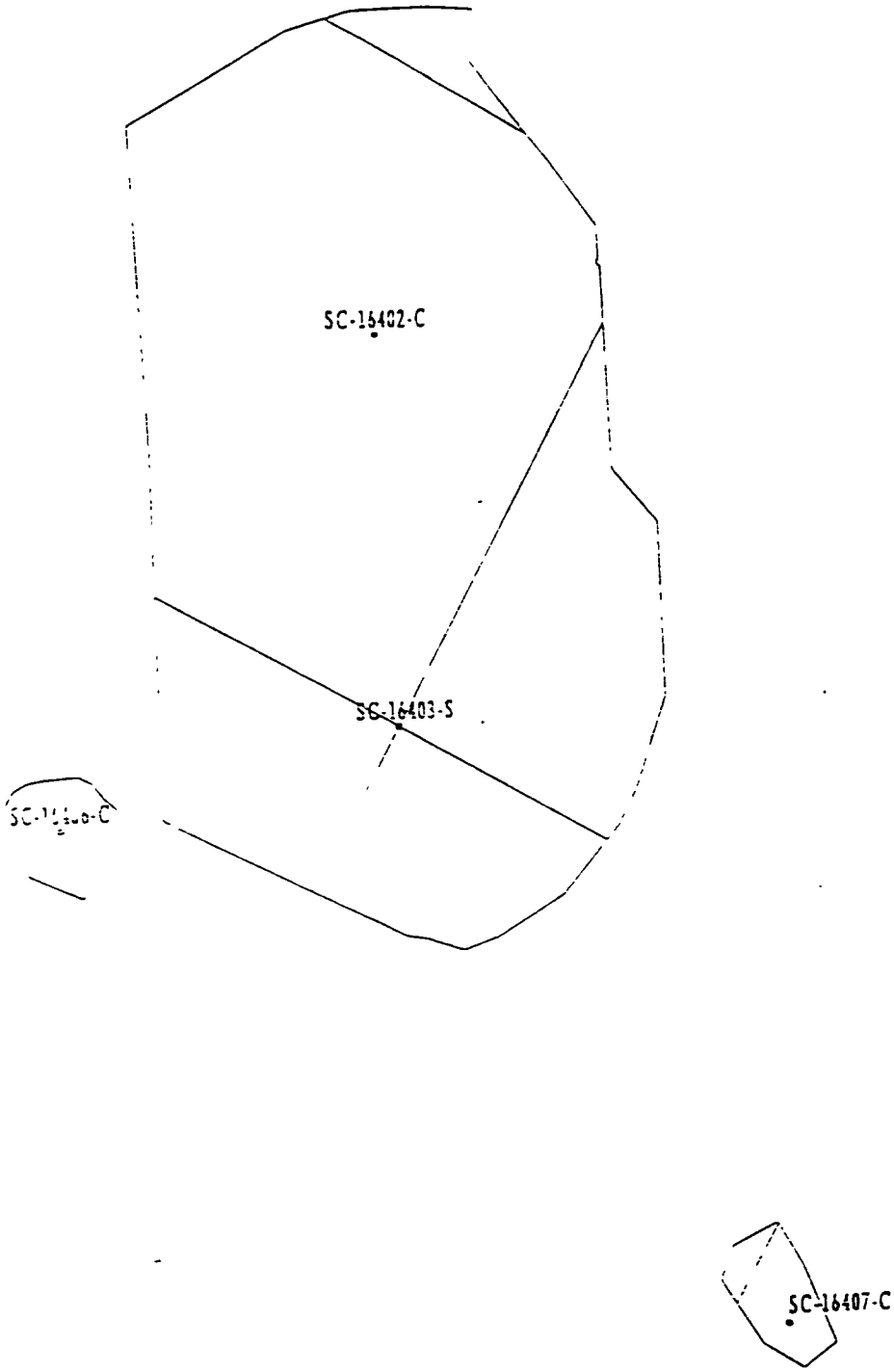
Field Bkg.: 4000 cpm

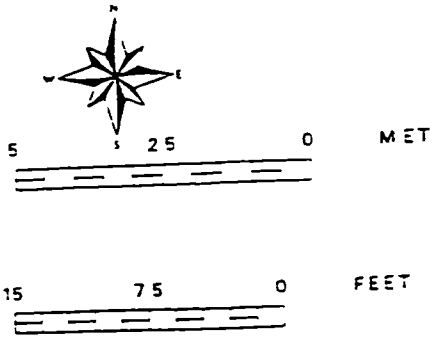
Comments: Area "B" of DA5 is less than one & a half BKG.

WALKOVER SURVEY FORM: RU014 CU165



Meter Model#	2221	Detector Model#	2x2 NaI N
Meter Serial#	127247	Detector Serial#	130774
Calibration Due	8-8-98	Calibration Due	8-11-98
Survey Date/Time	12-18 - 12-19-17	Field Bkg	4000 shielded
Surveyor(s):	H. Hufker, T. Martinez		
Comments:	ALL AREA's LESS THAN 1½ x BKG		





Meter Model#: 2221

Meter Serial#: 127247

Calibration Due: 8-8-98

Survey Date/Time: 4-2-98, 1630

Detector Model#: 2x2, NaI "L"

Detector Serial#: DOE# 4532

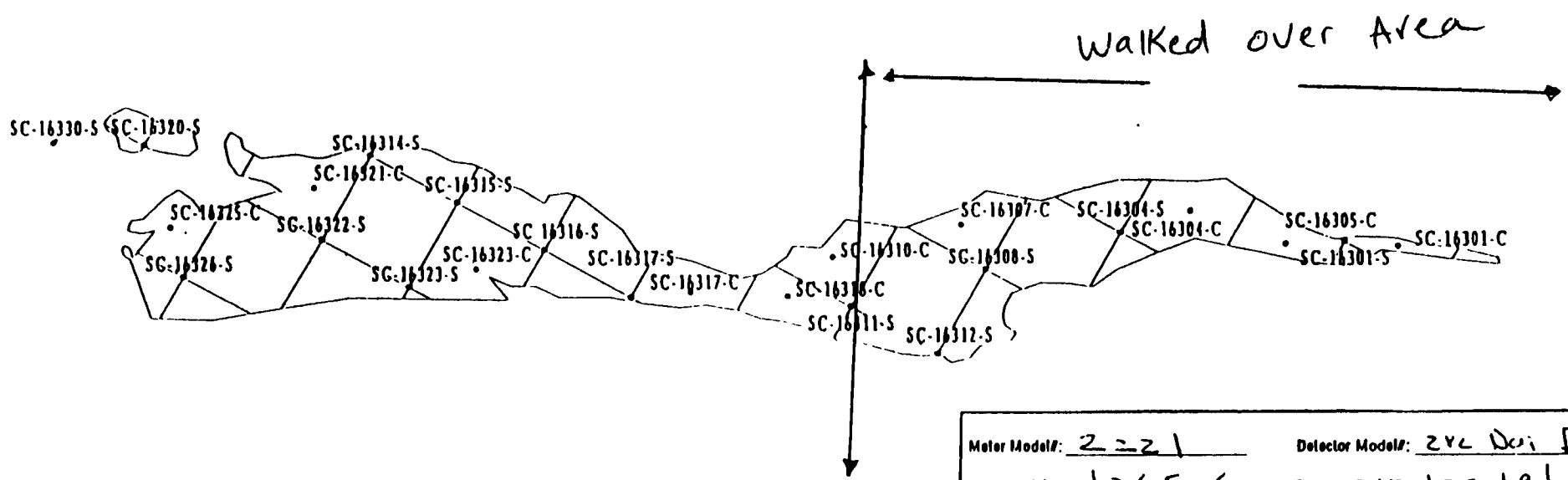
Calibration Due: 6-19-98

Field Bkg.: 5000 cpm

Surveyor(s): F. Algatifan

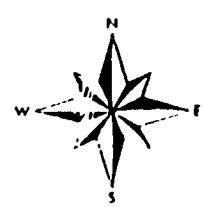
Comments: Surveyed area is below (1 + 1/2) BKG.

WALKOVER SURVEY FORM: RU014 CU163



10 5 0 METERS

30 15 0 FEET



Meter Model#: 2221

Detector Model#: 2rc Dai I

Meter Serial#: 126506

Detector Serial#: 122191

Calibration Due: 6-25-98

Calibration Due: 7-24-98

Survey Date/Time 2-26-98

Field Bkg 8307 CPM

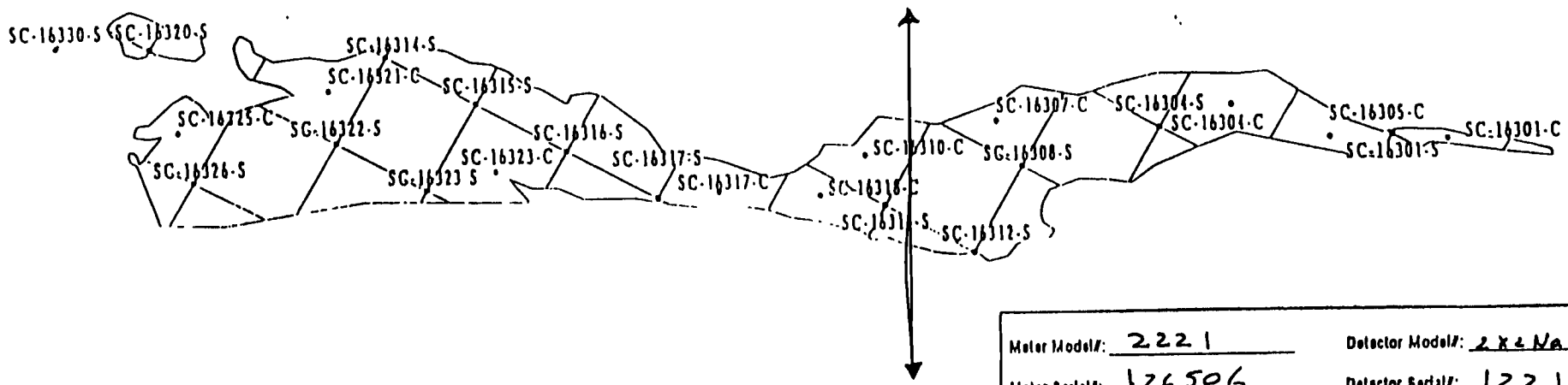
Surveyor(s): F. Alquitran / [illegible]

Comments Surveyed areas show values less than (one & a half) BKG

WALKOVER SURVEY FORM: RU014 CU163

DA-2

Walked over Areas



10 5 0 METERS

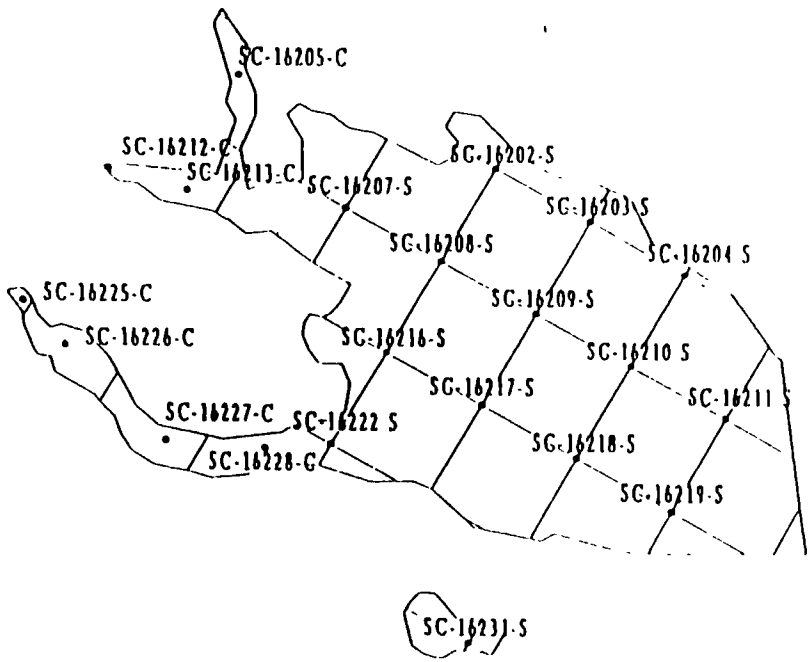
30 15 0 FEET

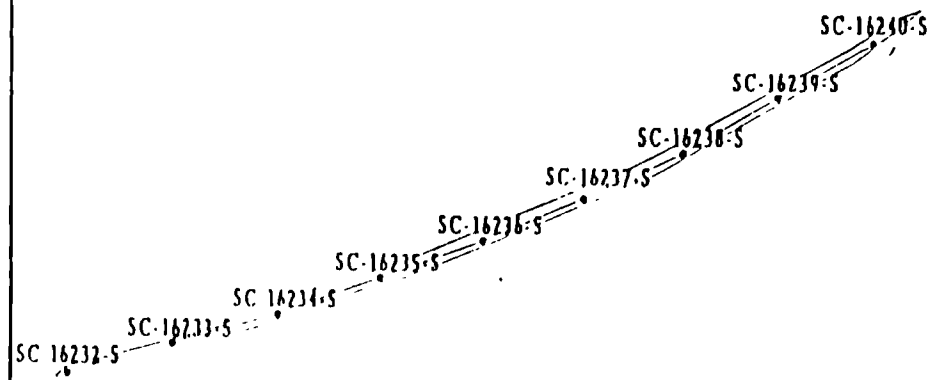
N W E S

Meter Model#:	2221	Detector Model#:	2x2 NaI F
Meter Serial#:	126506	Detector Serial#:	122191
Calibration Due:	6-25-98	Calibration Due:	7-24-98
Survey Date/Time:	2-26-98	Field Bkg.:	7896 CPM
Surveyor(s):	F. Algatifan / [illegible]		

Comments: Surveyed areas show values less than (one+a half) Background

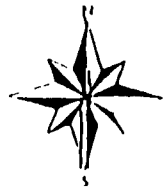
WALKOVER SURVEY FORM: RU014 CU162





10 5 0 METERS

30 15 0 FEET

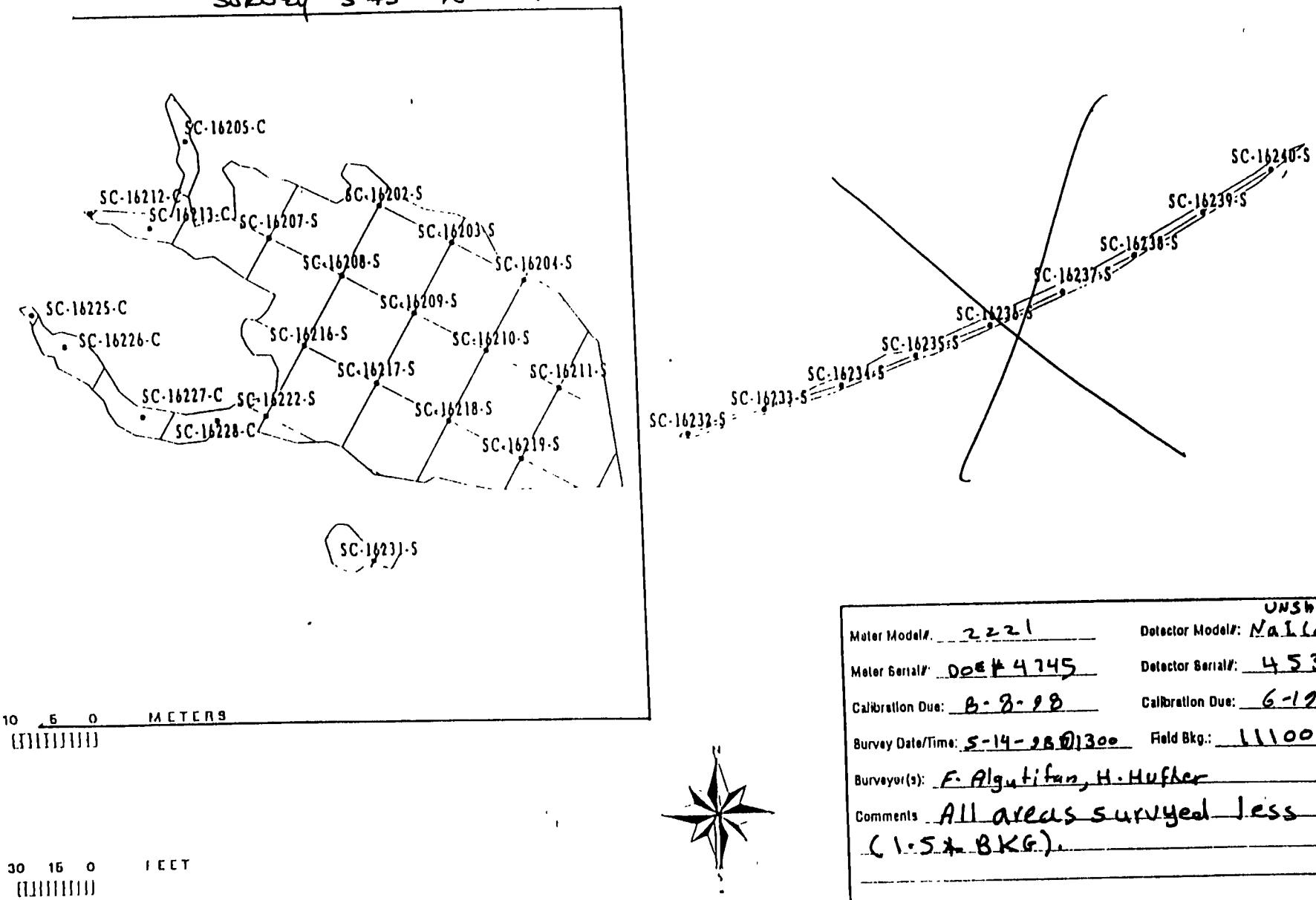


Meter Model#	2221	Detector Model#	2x2 NaI "L"
Meter Serial#	4745	Detector Serial#	L1532
Calibration Due	8-8-98	Calibration Due	6-19-98
Survey Date/Time	5-19-98, 1400	Field Bkg	10,000 cpm
Surveyor(s)	F. Algutifan /		

Comments: Surveyed Areas were less than 1.5 Background.

WALKOVER SURVEY FORM: RU014 CU162

SURVEY 5-14-98 PARTIAL



Meter Model#: 2221	Detector Model#: NaI (2x2) L UNshielded.
Meter Serial#: DOE# 4745	Detector Serial#: 4532=DOE#
Calibration Due: 8-8-98	Calibration Due: 6-19-98
Survey Date/Time: 5-14-98 @ 1300	Field Bkg.: 11100 CPM
Surveyor(s): F. Algutifan, H. Hufker	
Comments: All areas survyed less than (1.5 x BKG).	

5-15-98

APPENDIX C
Final Data

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16202-S	05/15/1998	ND	AROCLOR-1248	44	UG/KG	06/22/1998
SC-16202-S	05/15/1998	ND	AROCLOR-1254	44	UG/KG	06/22/1998
SC-16202-S	05/15/1998	ND	AROCLOR-1260	44	UG/KG	06/22/1998
SC-16202-S	05/15/1998	75 8	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16202-S	05/15/1998	1.61	RADIUM-226	0.39	PCI/G	09/10/1998
SC-16202-S	05/15/1998	ND	RADIUM-228	1.34	PCI/G	09/10/1998
SC-16202-S	05/15/1998	ND	URANIUM-238	4.15	PCI/G	09/10/1998
SC-16203-S	05/15/1998	ND	AROCLOR-1248	46	UG/KG	06/22/1998
SC-16203-S	05/15/1998	ND	AROCLOR-1254	46	UG/KG	06/22/1998
SC-16203-S	05/15/1998	ND	AROCLOR-1260	46	UG/KG	06/22/1998
SC-16203-S	05/15/1998	73 2	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16203-S	05/15/1998	1.73	RADIUM-226	0.34	PCI/G	09/10/1998
SC-16203-S	05/15/1998	1.25	RADIUM-228	0.44	PCI/G	09/10/1998
SC-16203-S	05/15/1998	ND	URANIUM-238	2.98	PCI/G	09/10/1998
SC-16204-S	05/15/1998	ND	AROCLOR-1248	41	UG/KG	06/22/1998
SC-16204-S	05/15/1998	ND	AROCLOR-1254	41	UG/KG	06/22/1998
SC-16204-S	05/15/1998	ND	AROCLOR-1260	41	UG/KG	06/22/1998
SC-16204-S	05/15/1998	80 9	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16204-S	05/15/1998	1 43	RADIUM-226	0.38	PCI/G	09/10/1998
SC-16204-S	05/15/1998	1.15	RADIUM-228	0.45	PCI/G	09/10/1998
SC-16204-S	05/15/1998	ND	URANIUM-238	4.27	PCI/G	09/10/1998
SC-16205-C	05/15/1998	ND	AROCLOR-1248	43	UG/KG	06/22/1998
SC-16205-C	05/15/1998	ND	AROCLOR-1254	43	UG/KG	06/22/1998
SC-16205-C	05/15/1998	ND	AROCLOR-1260	43	UG/KG	06/22/1998
SC-16205-C	05/15/1998	76.9	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16205-C	05/15/1998	1 60	RADIUM-226	0 32	PCI/G	09/10/1998
SC-16205-C	05/15/1998	1 41	RADIUM-228	0.51	PCI/G	09/10/1998
SC-16205-C	05/15/1998	ND	URANIUM-238	3.03	PCI/G	09/10/1998
SC-16207-S	05/15/1998	ND	AROCLOR-1248	41	UG/KG	06/22/1998
SC-16207-S	05/15/1998	ND	AROCLOR-1254	41	UG/KG	06/22/1998
SC-16207-S	05/15/1998	ND	AROCLOR-1260	41	UG/KG	06/22/1998
SC-16207-S	05/15/1998	80 4	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16207-S	05/15/1998	1 63	RADIUM-226	0.35	PCI/G	09/10/1998
SC-16207-S	05/15/1998	ND	RADIUM-228	1.28	PCI/G	09/10/1998
SC-16207-S	05/15/1998	ND	URANIUM-238	4.20	PCI/G	09/10/1998
SC-16208-S	05/15/1998	ND	AROCLOR-1248	43	UG/KG	06/22/1998
SC-16208-S	05/15/1998	ND	AROCLOR-1254	43	UG/KG	06/22/1998
SC-16208-S	05/15/1998	ND	AROCLOR-1260	43	UG/KG	06/22/1998
SC-16208-S	05/15/1998	77 1	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16208-S	05/15/1998	1.86	RADIUM-226	0.26	PCI/G	09/10/1998
SC-16208-S	05/15/1998	1 54	RADIUM-228	0.37	PCI/G	09/10/1998
SC-16208-S	05/15/1998	ND	URANIUM-238	3.01	PCI/G	09/10/1998
SC-16209-S	05/15/1998	ND	AROCLOR-1248	41	UG/KG	06/22/1998
SC-16209-S	05/15/1998	ND	AROCLOR-1254	41	UG/KG	06/22/1998
SC-16209-S	05/15/1998	ND	AROCLOR-1260	41	UG/KG	06/22/1998
SC-16209-S	05/15/1998	81 1	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16209-S	05/15/1998	1.70	RADIUM-226	0.29	PCI/G	09/10/1998
SC-16209-S	05/15/1998	1.23	RADIUM-228	0.43	PCI/G	09/10/1998
SC-16209-S	05/15/1998	2.83	URANIUM-238	1.85	PCI/G	09/10/1998
SC-16210-S	05/15/1998	ND	AROCLOR-1248	41	UG/KG	06/22/1998
SC-16210-S	05/15/1998	ND	AROCLOR-1254	41	UG/KG	06/22/1998
SC-16210-S	05/15/1998	ND	AROCLOR-1260	41	UG/KG	06/22/1998
SC-16210-S	05/15/1998	80 6	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16210-S	05/15/1998	1 41	RADIUM-226	0 42	PCI/G	09/10/1998
SC-16210-S	05/15/1998	1 31	RADIUM-228	0.56	PCI/G	09/10/1998
SC-16210-S	05/15/1998	7 12	URANIUM-238	4.12	PCI/G	09/10/1998

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16211-S	05/15/1998	ND	AROCLOR-1248	38	UG/KG	06/22/1998
SC-16211-S	05/15/1998	ND	AROCLOR-1254	38	UG/KG	06/22/1998
SC-16211-S	05/15/1998	ND	AROCLOR-1260	38	UG/KG	06/22/1998
SC-16211-S	05/15/1998	87 0	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16211-S	05/15/1998	1 50	RADIUM-226	0 43	PCI/G	09/10/1998
SC-16211-S	05/15/1998	1 45	RADIUM-228	0 60	PCI/G	09/10/1998
SC-16211-S	05/15/1998	12 4	URANIUM-238	4 61	PCI/G	09/10/1998
SC-16212-C	05/15/1998	ND	AROCLOR-1248	43	UG/KG	06/22/1998
SC-16212-C	05/15/1998	ND	AROCLOR-1254	43	UG/KG	06/22/1998
SC-16212-C	05/15/1998	ND	AROCLOR-1260	43	UG/KG	06/22/1998
SC-16212-C	05/15/1998	77 6	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16212-C	05/15/1998	1 37	RADIUM-226	0 29	PCI/G	09/10/1998
SC-16212-C	05/15/1998	1 08	RADIUM-228	0 34	PCI/G	09/10/1998
SC-16212-C	05/15/1998	ND	URANIUM-238	2 85	PCI/G	09/10/1998
SC-16213-C	05/15/1998	ND	AROCLOR-1248	39	UG/KG	06/22/1998
SC-16213-C	05/15/1998	ND	AROCLOR-1254	39	UG/KG	06/22/1998
SC-16213-C	05/15/1998	ND	AROCLOR-1260	39	UG/KG	06/22/1998
SC-16213-C	05/15/1998	85 4	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16213-C	05/15/1998	1 61	RADIUM-226	0 22	PCI/G	09/10/1998
SC-16213-C	05/15/1998	1 54	RADIUM-228	0 47	PCI/G	09/10/1998
SC-16213-C	05/15/1998	ND	URANIUM-238	4 04	PCI/G	09/10/1998
SC-16216-S	05/15/1998	ND	AROCLOR-1248	44	UG/KG	06/22/1998
SC-16216-S	05/15/1998	ND	AROCLOR-1254	44	UG/KG	06/22/1998
SC-16216-S	05/15/1998	ND	AROCLOR-1260	44	UG/KG	06/22/1998
SC-16216-S	05/15/1998	75 8	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16216-S	05/15/1998	2 05	RADIUM-226	0 30	PCI/G	09/10/1998
SC-16216-S	05/15/1998	1 66	RADIUM-228	0 45	PCI/G	09/10/1998
SC-16216-S	05/15/1998	2 39	URANIUM-238	2 02	PCI/G	09/10/1998
SC-16217-S	05/15/1998	ND	AROCLOR-1248	43	UG/KG	06/22/1998
SC-16217-S	05/15/1998	ND	AROCLOR-1254	43	UG/KG	06/22/1998
SC-16217-S	05/15/1998	ND	AROCLOR-1260	43	UG/KG	06/22/1998
SC-16217-S	05/15/1998	77 4	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16217-S	05/15/1998	1 56	RADIUM-226	0 43	PCI/G	09/10/1998
SC-16217-S	05/15/1998	1 19	RADIUM-228	0 64	PCI/G	09/10/1998
SC-16217-S	05/15/1998	65 2	URANIUM-238	6 98	PCI/G	09/10/1998
SC-16218-S	05/15/1998	ND	AROCLOR-1248	380	UG/KG	06/22/1998
SC-16218-S	05/15/1998	1100	AROCLOR-1254	380	UG/KG	06/22/1998
SC-16218-S	05/15/1998	ND	AROCLOR-1260	380	UG/KG	06/22/1998
SC-16218-S	05/15/1998	87 4	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16218-S	05/15/1998	1 59	RADIUM-226	0 24	PCI/G	09/10/1998
SC-16218-S	05/15/1998	1 23	RADIUM-228	0 47	PCI/G	09/10/1998
SC-16218-S	05/15/1998	8 61	URANIUM-238	3 21	PCI/G	09/10/1998
SC-16219-S	05/15/1998	ND	AROCLOR-1248	41	UG/KG	06/22/1998
SC-16219-S	05/15/1998	ND	AROCLOR-1254	41	UG/KG	06/22/1998
SC-16219-S	05/15/1998	ND	AROCLOR-1260	41	UG/KG	06/22/1998
SC-16219-S	05/15/1998	80 7	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16219-S	05/15/1998	1 50	RADIUM-226	0 40	PCI/G	09/10/1998
SC-16219-S	05/15/1998	1 45	RADIUM-228	0 54	PCI/G	09/10/1998
SC-16219-S	05/15/1998	(3 23)	URANIUM-238	3 84	PCI/G	09/10/1998
SC-16222-S	05/15/1998	ND	AROCLOR-1248	42	UG/KG	06/22/1998
SC-16222-S	05/15/1998	ND	AROCLOR-1254	42	UG/KG	06/22/1998
SC-16222-S	05/15/1998	ND	AROCLOR-1260	42	UG/KG	06/22/1998
SC-16222-S	05/15/1998	78 6	PERCENT SOLID	0 01	PRCNT	06/22/1998
SC-16222-S	05/15/1998	1 81	RADIUM-226	0 36	PCI/G	09/10/1998
SC-16222-S	05/15/1998	1 48	RADIUM-228	0 40	PCI/G	09/10/1998
SC-16222-S	05/15/1998	12 6	URANIUM-238	2 86	PCI/G	09/10/1998

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16225-C	05/18/1998	ND	AROCLOR-1016	45	UG/KG	06/12/1998
SC-16225-C	05/18/1998	ND	AROCLOR-1221	45	UG/KG	06/12/1998
SC-16225-C	05/18/1998	ND	AROCLOR-1232	92	UG/KG	06/12/1998
SC-16225-C	05/18/1998	ND	AROCLOR-1242	45	UG/KG	06/12/1998
SC-16225-C	05/18/1998	ND	AROCLOR-1248	45	UG/KG	06/12/1998
SC-16225-C	05/18/1998	ND	AROCLOR-1254	45	UG/KG	06/12/1998
SC-16225-C	05/18/1998	ND	AROCLOR-1260	45	UG/KG	06/12/1998
SC-16225-C	05/18/1998	1.61	RADIUM-226	0.30	PCI/G	07/06/1998
SC-16225-C	05/18/1998	1 17	RADIUM-228	0.72	PCI/G	07/06/1998
SC-16225-C	05/18/1998	ND	URANIUM-238	3.90	PCI/G	07/06/1998
SC-16226-C	05/18/1998	ND	AROCLOR-1016	43	UG/KG	06/12/1998
SC-16226-C	05/18/1998	ND	AROCLOR-1221	43	UG/KG	06/12/1998
SC-16226-C	05/18/1998	ND	AROCLOR-1232	86	UG/KG	06/12/1998
SC-16226-C	05/18/1998	ND	AROCLOR-1242	43	UG/KG	06/12/1998
SC-16226-C	05/18/1998	ND	AROCLOR-1248	43	UG/KG	06/12/1998
SC-16226-C	05/18/1998	ND	AROCLOR-1254	43	UG/KG	06/12/1998
SC-16226-C	05/18/1998	ND	AROCLOR-1260	43	UG/KG	06/12/1998
SC-16226-C	05/18/1998	1.39	RADIUM-226	0.33	PCI/G	07/06/1998
SC-16226-C	05/18/1998	1 28	RADIUM-228	0.47	PCI/G	07/06/1998
SC-16226-C	05/18/1998	ND	URANIUM-238	2.98	PCI/G	07/06/1998
SC-16227-C	05/18/1998	ND	AROCLOR-1016	36	UG/KG	06/12/1998
SC-16227-C	05/18/1998	ND	AROCLOR-1221	36	UG/KG	06/12/1998
SC-16227-C	05/18/1998	ND	AROCLOR-1232	73	UG/KG	06/12/1998
SC-16227-C	05/18/1998	ND	AROCLOR-1242	36	UG/KG	06/12/1998
SC-16227-C	05/18/1998	ND	AROCLOR-1248	36	UG/KG	06/12/1998
SC-16227-C	05/18/1998	ND	AROCLOR-1254	36	UG/KG	06/12/1998
SC-16227-C	05/18/1998	ND	AROCLOR-1260	36	UG/KG	06/12/1998
SC-16227-C	05/18/1998	1 56	RADIUM-226	0 45	PCI/G	07/06/1998
SC-16227-C	05/18/1998	1.24	RADIUM-228	0.68	PCI/G	07/06/1998
SC-16227-C	05/18/1998	16 0	URANIUM-238	4.46	PCI/G	07/06/1998
SC-16228-C	05/15/1998	ND	AROCLOR-1248	42	UG/KG	06/22/1998
SC-16228-C	05/15/1998	ND	AROCLOR-1254	42	UG/KG	06/22/1998
SC-16228-C	05/15/1998	ND	AROCLOR-1260	42	UG/KG	06/22/1998
SC-16228-C	05/15/1998	79 9	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16228-C	05/15/1998	1 96	RADIUM-226	0.23	PCI/G	09/10/1998
SC-16228-C	05/15/1998	1 10	RADIUM-228	0 78	PCI/G	09/10/1998
SC-16228-C	05/15/1998	ND	URANIUM-238	4 32	PCI/G	09/10/1998
SC-16231-S	05/15/1998	ND	AROCLOR-1248	44	UG/KG	06/22/1998
SC-16231-S	05/15/1998	ND	AROCLOR-1254	44	UG/KG	06/22/1998
SC-16231-S	05/15/1998	ND	AROCLOR-1260	44	UG/KG	06/22/1998
SC-16231-S	05/15/1998	75 8	PERCENT SOLID	0.01	PRCNT	06/22/1998
SC-16231-S	05/15/1998	1 76	RADIUM-226	0.32	PCI/G	09/10/1998
SC-16231-S	05/15/1998	1 16	RADIUM-228	0.49	PCI/G	09/10/1998
SC-16231-S	05/15/1998	(1.96)	URANIUM-238	2.21	PCI/G	09/10/1998
SC-16232-S	05/20/1998	ND	AROCLOR-1248	43	UG/KG	07/14/1998
SC-16232-S	05/20/1998	ND	AROCLOR-1254	43	UG/KG	07/14/1998
SC-16232-S	05/20/1998	ND	AROCLOR-1260	43	UG/KG	07/14/1998
SC-16232-S	05/20/1998	23 7	PERCENT MOISTURE	0.10	PRCNT	07/14/1998
SC-16232-S	05/20/1998	1.36	RADIUM-226	0.34	PCI/G	07/14/1998
SC-16232-S	05/20/1998	1 20	RADIUM-228	0.37	PCI/G	07/14/1998
SC-16232-S	05/20/1998	31 4	URANIUM-238	3 85	PCI/G	07/14/1998
SC-16233-S	05/20/1998	ND	AROCLOR-1248	42	UG/KG	07/14/1998
SC-16233-S	05/20/1998	ND	AROCLOR-1254	42	UG/KG	07/14/1998
SC-16233-S	05/20/1998	ND	AROCLOR-1260	42	UG/KG	07/14/1998
SC-16233-S	05/20/1998	20 9	PERCENT MOISTURE	0 10	PRCNT	07/14/1998
SC-16233-S	05/20/1998	1 24	RADIUM-226	0.40	PCI/G	07/14/1998

Row Filter WSSRAP_ID between 'SC-162' and 'SC-169' (Marked Rows Only)
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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16233-S	05/20/1998	1 04	RADIUM-228	0 60	PCI/G	07/14/1998
SC-16233-S	05/20/1998	39 2	URANIUM-238	6 50	PCI/G	07/14/1998
SC-16234-S	05/20/1998	ND	AROCLOR-1248	42	UG/KG	07/14/1998
SC-16234-S	05/20/1998	ND	AROCLOR-1254	42	UG/KG	07/14/1998
SC-16234-S	05/20/1998	ND	AROCLOR-1260	42	UG/KG	07/14/1998
SC-16234-S	05/20/1998	21 5	PERCENT MOISTURE	0 10	PRCNT	07/14/1998
SC-16234-S	05/20/1998	1.06	RADIUM-226	0 34	PCI/G	07/14/1998
SC-16234-S	05/20/1998	1 20	RADIUM-228	0 43	PCI/G	07/14/1998
SC-16234-S	05/20/1998	16 1	URANIUM-238	2 96	PCI/G	07/14/1998
SC-16235-S	05/20/1998	ND	AROCLOR-1248	40	UG/KG	07/14/1998
SC-16235-S	05/20/1998	ND	AROCLOR-1254	40	UG/KG	07/14/1998
SC-16235-S	05/20/1998	ND	AROCLOR-1260	40	UG/KG	07/14/1998
SC-16235-S	05/20/1998	18 0	PERCENT MOISTURE	0 10	PRCNT	07/14/1998
SC-16235-S	05/20/1998	1 35	RADIUM-226	0 28	PCI/G	07/14/1998
SC-16235-S	05/20/1998	1 25	RADIUM-228	0 48	PCI/G	07/14/1998
SC-16235-S	05/20/1998	4 75	URANIUM-238	2 51	PCI/G	07/14/1998
SC-16236-S	05/20/1998	ND	AROCLOR-1248	40	UG/KG	07/14/1998
SC-16236-S	05/20/1998	ND	AROCLOR-1254	40	UG/KG	07/14/1998
SC-16236-S	05/20/1998	ND	AROCLOR-1260	40	UG/KG	07/14/1998
SC-16236-S	05/20/1998	18 0	PERCENT MOISTURE	0 10	PRCNT	07/14/1998
SC-16236-S	05/20/1998	1 27	RADIUM-226	0 29	PCI/G	07/14/1998
SC-16236-S	05/20/1998	ND	RADIUM-228	1 15	PCI/G	07/14/1998
SC-16236-S	05/20/1998	ND	URANIUM-238	3 86	PCI/G	07/14/1998
SC-16237-S	05/20/1998	ND	AROCLOR-1248	40	UG/KG	07/14/1998
SC-16237-S	05/20/1998	ND	AROCLOR-1254	40	UG/KG	07/14/1998
SC-16237-S	05/20/1998	ND	AROCLOR-1260	40	UG/KG	07/14/1998
SC-16237-S	05/20/1998	17 3	PERCENT MOISTURE	0 10	PRCNT	07/14/1998
SC-16237-S	05/20/1998	1 26	RADIUM-226	0 34	PCI/G	07/14/1998
SC-16237-S	05/20/1998	1 07	RADIUM-228	0 64	PCI/G	07/14/1998
SC-16237-S	05/20/1998	(1 53)	URANIUM-238	2 77	PCI/G	07/14/1998
SC-16238-S	05/20/1998	ND	AROCLOR-1248	40	UG/KG	07/14/1998
SC-16238-S	05/20/1998	ND	AROCLOR-1254	40	UG/KG	07/14/1998
SC-16238-S	05/20/1998	ND	AROCLOR-1260	40	UG/KG	07/14/1998
SC-16238-S	05/20/1998	17 0	PERCENT MOISTURE	0 10	PRCNT	07/14/1998
SC-16238-S	05/20/1998	1 42	RADIUM-226	0 24	PCI/G	07/14/1998
SC-16238-S	05/20/1998	0 99	RADIUM-228	0 48	PCI/G	07/14/1998
SC-16238-S	05/20/1998	ND	URANIUM-238	2 80	PCI/G	07/14/1998
SC-16239-S	05/20/1998	ND	AROCLOR-1248	41	UG/KG	07/14/1998
SC-16239-S	05/20/1998	ND	AROCLOR-1254	41	UG/KG	07/14/1998
SC-16239-S	05/20/1998	ND	AROCLOR-1260	41	UG/KG	07/14/1998
SC-16239-S	05/20/1998	19 0	PERCENT MOISTURE	0 10	PRCNT	07/14/1998
SC-16239-S	05/20/1998	1 37	RADIUM-226	0 31	PCI/G	07/14/1998
SC-16239-S	05/20/1998	1 26	RADIUM-228	0 68	PCI/G	07/14/1998
SC-16239-S	05/20/1998	ND	URANIUM-238	4 39	PCI/G	07/14/1998
SC-16240-S	05/20/1998	ND	AROCLOR-1248	47	UG/KG	07/14/1998
SC-16240-S	05/20/1998	ND	AROCLOR-1254	47	UG/KG	07/14/1998
SC-16240-S	05/20/1998	ND	AROCLOR-1260	47	UG/KG	07/14/1998
SC-16240-S	05/20/1998	29 9	PERCENT MOISTURE	0 10	PRCNT	07/14/1998
SC-16240-S	05/20/1998	1 35	RADIUM-226	0 32	PCI/G	07/14/1998
SC-16240-S	05/20/1998	1 33	RADIUM-228	0.33	PCI/G	07/14/1998
SC-16240-S	05/20/1998	ND	URANIUM-238	2 89	PCI/G	07/14/1998
SC-16301-C	03/06/1998	ND	AROCLOR-1248	37	UG/KG	04/03/1998
SC-16301-C	03/06/1998	ND	AROCLOR-1254	37	UG/KG	04/03/1998
SC-16301-C	03/06/1998	ND	AROCLOR-1260	37	UG/KG	04/03/1998
SC-16301-C	03/06/1998	21 8	CHROMIUM	0 71	UG/G	04/03/1998
SC-16301-C	03/06/1998	24 2	PERCENT MOISTURE	0 10	PRCNT	04/03/1998

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16301-C	03/06/1998	1 41	RADIUM-226	0 33	PCI/G	04/27/1998
SC-16301-C	03/06/1998	1 07	RADIUM-228	0 43	PCI/G	04/27/1998
SC-16301-C	03/06/1998	ND	URANIUM-238	4.02	PCI/G	04/27/1998
SC-16301-S	03/06/1998	ND	AROCLOR-1248	37	UG/KG	04/03/1998
SC-16301-S	03/06/1998	ND	AROCLOR-1254	37	UG/KG	04/03/1998
SC-16301-S	03/06/1998	170	AROCLOR-1260	37	UG/KG	04/03/1998
SC-16301-S	03/06/1998	20.8	CHROMIUM	0.72	UG/G	04/03/1998
SC-16301-S	03/06/1998	25.3	PERCENT MOISTURE	0.10	PRCNT	04/03/1998
SC-16301-S	03/06/1998	1 47	RADIUM-226	0.39	PCI/G	04/27/1998
SC-16301-S	03/06/1998	1 11	RADIUM-228	0.35	PCI/G	04/27/1998
SC-16301-S	03/06/1998	(2 18)	URANIUM-238	2.20	PCI/G	04/27/1998
SC-16304-C	03/06/1998	ND	AROCLOR-1248	37	UG/KG	04/03/1998
SC-16304-C	03/06/1998	ND	AROCLOR-1254	37	UG/KG	04/03/1998
SC-16304-C	03/06/1998	160	AROCLOR-1260	37	UG/KG	04/03/1998
SC-16304-C	03/06/1998	24 3	CHROMIUM	0.75	UG/G	04/03/1998
SC-16304-C	03/06/1998	28 2	PERCENT MOISTURE	0.10	PRCNT	04/03/1998
SC-16304-C	03/06/1998	1 67	RADIUM-226	0.29	PCI/G	04/27/1998
SC-16304-C	03/06/1998	ND	RADIUM-228	1 14	PCI/G	04/27/1998
SC-16304-C	03/06/1998	ND	URANIUM-238	4 11	PCI/G	04/27/1998
SC-16304-S	03/06/1998	ND	AROCLOR-1248	44	UG/KG	04/03/1998
SC-16304-S	03/06/1998	ND	AROCLOR-1254	44	UG/KG	04/03/1998
SC-16304-S	03/06/1998	ND	AROCLOR-1260	44	UG/KG	04/03/1998
SC-16304-S	03/06/1998	23 2	CHROMIUM	0 71	UG/G	04/03/1998
SC-16304 S	03/06/1998	23.4	PERCENT MOISTURE	0 10	PRCNT	04/03/1998
SC-16304-S	03/06/1998	1 42	RADIUM-226	0.29	PCI/G	04/27/1998
SC-16304-S	03/06/1998	1.02	RADIUM-228	0.43	PCI/G	04/27/1998
SC-16304-S	03/06/1998	(2 16)	URANIUM-238	2.53	PCI/G	04/27/1998
SC-16305-C	03/06/1998	ND	AROCLOR-1248	40	UG/KG	04/03/1998
SC-16305-C	03/06/1998	ND	AROCLOR-1254	40	UG/KG	04/03/1998
SC-16305-C	03/06/1998	ND	AROCLOR-1260	40	UG/KG	04/03/1998
SC-16305-C	03/06/1998	23 1	CHROMIUM	0.75	UG/G	04/03/1998
SC-16305-C	03/06/1998	27 7	PERCENT MOISTURE	0 10	PRCNT	04/03/1998
SC-16305-C	03/06/1998	1 44	RADIUM-226	0.43	PCI/G	04/27/1998
SC-16305-C	03/06/1998	1 11	RADIUM-228	0.62	PCI/G	04/27/1998
SC-16305-C	03/06/1998	ND	URANIUM-238	4.34	PCI/G	04/27/1998
SC-16307-C	03/06/1998	ND	AROCLOR-1248	42	UG/KG	04/03/1998
SC-16307-C	03/06/1998	ND	AROCLOR-1254	42	UG/KG	04/03/1998
SC-16307-C	03/06/1998	ND	AROCLOR-1260	42	UG/KG	04/03/1998
SC-16307-C	03/06/1998	22 8	CHROMIUM	0.70	UG/G	04/03/1998
SC-16307-C	03/06/1998	22 5	PERCENT MOISTURE	0 10	PRCNT	04/03/1998
SC-16307-C	03/06/1998	1 69	RADIUM-226	0.24	PCI/G	04/27/1998
SC-16307-C	03/06/1998	1 29	RADIUM-228	0.45	PCI/G	04/27/1998
SC-16307-C	03/06/1998	12 4	URANIUM-238	2.97	PCI/G	04/27/1998
SC-16308-S	03/06/1998	ND	AROCLOR-1248	42	UG/KG	04/03/1998
SC-16308-S	03/06/1998	ND	AROCLOR-1254	42	UG/KG	04/03/1998
SC-16308-S	03/06/1998	ND	AROCLOR-1260	42	UG/KG	04/03/1998
SC-16308-S	03/06/1998	26 1	CHROMIUM	0 75	UG/G	04/03/1998
SC-16308-S	03/06/1998	27.5	PERCENT MOISTURE	0.10	PRCNT	04/03/1998
SC-16308-S	03/06/1998	1 49	RADIUM-226	0 26	PCI/G	04/27/1998
SC-16308-S	03/06/1998	1 15	RADIUM-228	0 56	PCI/G	04/27/1998
SC-16308-S	03/06/1998	ND	URANIUM-238	4.41	PCI/G	04/27/1998
SC-16310-C	03/04/1998	ND	AROCLOR-1248	36	UG/KG	04/23/1998
SC-16310-C	03/04/1998	ND	AROCLOR-1254	36	UG/KG	04/23/1998
SC-16310-C	03/04/1998	ND	AROCLOR-1260	36	UG/KG	04/23/1998
SC-16310-C	03/04/1998	17 7	CHROMIUM	0 13	UG/G	04/23/1998
SC-16310-C	03/04/1998	10 4	PERCENT MOISTURE	0 10	PRCNT	04/23/1998

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16310-C	03/04/1998	1 91	RADIUM-226	0.35	PCI/G	04/14/1998
SC-16310-C	03/04/1998	1 37	RADIUM-228	0 46	PCI/G	04/14/1998
SC-16310-C	03/04/1998	ND	URANIUM-238	4 94	PCI/G	04/14/1998
SC-16311-S	03/04/1998	ND	AROCLOR-1248	40	UG/KG	04/23/1998
SC-16311-S	03/04/1998	ND	AROCLOR-1254	40	UG/KG	04/23/1998
SC-16311-S	03/04/1998	ND	AROCLOR-1260	40	UG/KG	04/23/1998
SC-16311-S	03/04/1998	21 4	CHROMIUM	0 15	UG/G	04/23/1998
SC-16311-S	03/04/1998	17 4	PERCENT MOISTURE	0 10	PRCNT	04/23/1998
SC-16311-S	03/04/1998	1 53	RADIUM-226	0 31	PCI/G	04/14/1998
SC-16311-S	03/04/1998	1 39	RADIUM-228	0 41	PCI/G	04/14/1998
SC-16311-S	03/04/1998	(1 70)	URANIUM-238	2 18	PCI/G	04/14/1998
SC-16312-S	03/06/1998	ND	AROCLOR-1248	38	UG/KG	04/03/1998
SC-16312-S	03/06/1998	ND	AROCLOR-1254	38	UG/KG	04/03/1998
SC-16312-S	03/06/1998	ND	AROCLOR-1260	38	UG/KG	04/03/1998
SC-16312-S	03/06/1998	20 7	CHROMIUM	0 65	UG/G	04/03/1998
SC-16312-S	03/06/1998	17 2	PERCENT MOISTURE	0 10	PRCNT	04/03/1998
SC-16312-S	03/06/1998	1 62	RADIUM-226	0 27	PCI/G	04/27/1998
SC-16312-S	03/06/1998	1 34	RADIUM-228	0 41	PCI/G	04/27/1998
SC-16312-S	03/06/1998	ND	URANIUM-238	2 97	PCI/G	04/27/1998
SC-16314-S	03/04/1998	ND	AROCLOR-1248	42	UG/KG	04/23/1998
SC-16314-S	03/04/1998	76	AROCLOR-1254	42	UG/KG	04/23/1998
SC-16314-S	03/04/1998	ND	AROCLOR-1260	42	UG/KG	04/23/1998
SC-16314-S	03/04/1998	17 6	CHROMIUM	0 15	UG/G	04/23/1998
SC-16314-S	03/04/1998	21 8	PERCENT MOISTURE	0 10	PRCNT	04/23/1998
SC-16314-S	03/04/1998	1 58	RADIUM-226	0 29	PCI/G	04/14/1998
SC-16314-S	03/04/1998	0 92	RADIUM-228	0 62	PCI/G	04/14/1998
SC-16314-S	03/04/1998	(3 03)	URANIUM-238	3 40	PCI/G	04/14/1998
SC-16315-S	03/04/1998	ND	AROCLOR-1248	42	UG/KG	04/23/1998
SC-16315-S	03/04/1998	ND	AROCLOR-1254	42	UG/KG	04/23/1998
SC-16315-S	03/04/1998	ND	AROCLOR-1260	42	UG/KG	04/23/1998
SC-16315-S	03/04/1998	18 7	CHROMIUM	0 15	UG/G	04/23/1998
SC-16315-S	03/04/1998	21 9	PERCENT MOISTURE	0 10	PRCNT	04/23/1998
SC-16315-S	03/04/1998	1 45	RADIUM-226	0 28	PCI/G	04/14/1998
SC-16315-S	03/04/1998	1 12	RADIUM-228	0 36	PCI/G	04/14/1998
SC-16315-S	03/04/1998	5 97	URANIUM-238	2 95	PCI/G	04/14/1998
SC-16316-S	03/04/1998	ND	AROCLOR-1248	42	UG/KG	04/23/1998
SC-16316-S	03/04/1998	ND	AROCLOR-1254	42	UG/KG	04/23/1998
SC-16316-S	03/04/1998	ND	AROCLOR-1260	42	UG/KG	04/23/1998
SC-16316-S	03/04/1998	21 7	CHROMIUM	0 15	UG/G	04/23/1998
SC-16316-S	03/04/1998	21 0	PERCENT MOISTURE	0 10	PRCNT	04/23/1998
SC-16316-S	03/04/1998	1 30	RADIUM-226	0 22	PCI/G	04/14/1998
SC-16316-S	03/04/1998	ND	RADIUM-228	1 13	PCI/G	04/14/1998
SC-16316-S	03/04/1998	(2 06)	URANIUM-238	2 43	PCI/G	04/14/1998
SC-16317-C	03/04/1998	ND	AROCLOR-1248	38	UG/KG	04/23/1998
SC-16317-C	03/04/1998	ND	AROCLOR-1254	38	UG/KG	04/23/1998
SC-16317-C	03/04/1998	ND	AROCLOR-1260	38	UG/KG	04/23/1998
SC-16317-C	03/04/1998	10 8	CHROMIUM	0 14	UG/G	04/23/1998
SC-16317-C	03/04/1998	12 7	PERCENT MOISTURE	0 10	PRCNT	04/23/1998
SC-16317-C	03/04/1998	1 34	RADIUM-226	0 24	PCI/G	04/14/1998
SC-16317-C	03/04/1998	0 51	RADIUM-228	0 34	PCI/G	04/14/1998
SC-16317-C	03/04/1998	ND	URANIUM-238	2 51	PCI/G	04/14/1998
SC-16317-S	03/04/1998	ND	AROCLOR-1248	44	UG/KG	04/23/1998
SC-16317-S	03/04/1998	ND	AROCLOR-1254	44	UG/KG	04/23/1998
SC-16317-S	03/04/1998	ND	AROCLOR-1260	44	UG/KG	04/23/1998
SC-16317-S	03/04/1998	22 8	CHROMIUM	0 16	UG/G	04/23/1998
SC-16317-S	03/04/1998	24 7	PERCENT MOISTURE	0 10	PRCNT	04/23/1998

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SC-16317-S	03/04/1998	1.38	RADIUM-226	0.32	PCI/G	04/14/1998
SC-16317-S	03/04/1998	ND	RADIUM-228	1.23	PCI/G	04/14/1998
SC-16317-S	03/04/1998	ND	URANIUM-238	4.06	PCI/G	04/14/1998
SC-16318-C	03/04/1998	ND	AROCLOR-1248	38	UG/KG	04/23/1998
SC-16318-C	03/04/1998	ND	AROCLOR-1254	38	UG/KG	04/23/1998
SC-16318-C	03/04/1998	ND	AROCLOR-1260	38	UG/KG	04/23/1998
SC-16318-C	03/04/1998	10.0	CHROMIUM	0.14	UG/G	04/23/1998
SC-16318-C	03/04/1998	13 2	PERCENT MOISTURE	0.10	PRCNT	04/23/1998
SC-16318-C	03/04/1998	1.21	RADIUM-226	0.30	PCI/G	04/14/1998
SC-16318-C	03/04/1998	0.92	RADIUM-228	0 36	PCI/G	04/14/1998
SC-16318-C	03/04/1998	2.92	URANIUM-238	2.14	PCI/G	04/14/1998
SC-16320-S	03/06/1998	ND	AROCLOR-1248	44	UG/KG	04/03/1998
SC-16320-S	03/06/1998	ND	AROCLOR-1254	44	UG/KG	04/03/1998
SC-16320-S	03/06/1998	ND	AROCLOR-1260	44	UG/KG	04/03/1998
SC-16320-S	03/06/1998	20 4	CHROMIUM	0.70	UG/G	04/03/1998
SC-16320-S	03/06/1998	23 0	PERCENT MOISTURE	0.10	PRCNT	04/03/1998
SC-16320-S	03/06/1998	1 56	RADIUM-226	0.27	PCI/G	04/27/1998
SC-16320-S	03/06/1998	1.09	RADIUM-228	0.43	PCI/G	04/27/1998
SC-16320-S	03/06/1998	ND	URANIUM-238	2.95	PCI/G	04/27/1998
SC-16321-C	03/04/1998	ND	AROCLOR-1248	42	UG/KG	04/23/1998
SC-16321-C	03/04/1998	330	AROCLOR-1254	42	UG/KG	04/23/1998
SC-16321-C	03/04/1998	59	AROCLOR-1260	42	UG/KG	04/23/1998
SC-16321-C	03/04/1998	15 7	CHROMIUM	0 15	UG/G	04/23/1998
SC-16321-C	03/04/1998	21.8	PERCENT MOISTURE	0.10	PRCNT	04/23/1998
SC-16321-C	03/04/1998	1 36	RADIUM-226	0.34	PCI/G	04/14/1998
SC-16321-C	03/04/1998	1 08	RADIUM-228	0.47	PCI/G	04/14/1998
SC-16321-C	03/04/1998	ND	URANIUM-238	4.43	PCI/G	04/14/1998
SC-16322-S	03/04/1998	ND	AROCLOR-1248	42	UG/KG	04/23/1998
SC-16322-S	03/04/1998	ND	AROCLOR-1254	42	UG/KG	04/23/1998
SC-16322-S	03/04/1998	ND	AROCLOR-1260	42	UG/KG	04/23/1998
SC-16322-S	03/04/1998	15 4	CHROMIUM	0.15	UG/G	04/23/1998
SC-16322-S	03/04/1998	20 4	PERCENT MOISTURE	0 10	PRCNT	04/23/1998
SC-16322-S	03/04/1998	1 48	RADIUM-226	0.24	PCI/G	04/14/1998
SC-16322-S	03/04/1998	1.24	RADIUM-228	0.35	PCI/G	04/14/1998
SC-16322-S	03/04/1998	ND	URANIUM-238	2 74	PCI/G	04/14/1998
SC-16323-C	03/04/1998	ND	AROCLOR-1248	40	UG/KG	04/23/1998
SC-16323-C	03/04/1998	ND	AROCLOR-1254	40	UG/KG	04/23/1998
SC-16323-C	03/04/1998	ND	AROCLOR-1260	40	UG/KG	04/23/1998
SC-16323-C	03/04/1998	17 0	CHROMIUM	0 15	UG/G	04/23/1998
SC-16323-C	03/04/1998	18 0	PERCENT MOISTURE	0.10	PRCNT	04/23/1998
SC-16323-C	03/04/1998	1.25	RADIUM-226	0.35	PCI/G	04/14/1998
SC-16323-C	03/04/1998	ND	RADIUM-228	1.22	PCI/G	04/14/1998
SC-16323-C	03/04/1998	(2.05)	URANIUM-238	2.71	PCI/G	04/14/1998
SC-16323-S	03/04/1998	ND	AROCLOR-1248	43	UG/KG	04/23/1998
SC-16323-S	03/04/1998	ND	AROCLOR-1254	43	UG/KG	04/23/1998
SC-16323-S	03/04/1998	ND	AROCLOR-1260	43	UG/KG	04/23/1998
SC-16323-S	03/04/1998	16 0	CHROMIUM	0.16	UG/G	04/23/1998
SC-16323-S	03/04/1998	22 8	PERCENT MOISTURE	0.10	PRCNT	04/23/1998
SC-16323-S	03/04/1998	1 35	RADIUM-226	0.26	PCI/G	04/14/1998
SC-16323-S	03/04/1998	1 14	RADIUM-228	0.41	PCI/G	04/14/1998
SC-16323-S	03/04/1998	ND	URANIUM-238	2.84	PCI/G	04/14/1998
SC-16325-C	03/04/1998	ND	AROCLOR-1248	38	UG/KG	04/23/1998
SC-16325-C	03/04/1998	ND	AROCLOR-1254	38	UG/KG	04/23/1998
SC-16325-C	03/04/1998	ND	AROCLOR-1260	38	UG/KG	04/23/1998
SC-16325-C	03/04/1998	6 3	CHROMIUM	0 14	UG/G	04/23/1998
SC-16325-C	03/04/1998	12 7	PERCENT MOISTURE	0 10	PRCNT	04/23/1998

Row Filter WSSRAP_ID between 'SC-162' and 'SC-169' (Marked Rows Only)

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16325-C	03/04/1998	1 29	RADIUM-226	0 35	PCI/G	04/14/1998
SC-16325-C	03/04/1998	1 17	RADIUM-228	0 70	PCI/G	04/14/1998
SC-16325-C	03/04/1998	ND	URANIUM-238	3 72	PCI/G	04/14/1998
SC-16326-S	03/04/1998	ND	AROCLOR-1248	46	UG/KG	04/23/1998
SC-16326-S	03/04/1998	ND	AROCLOR-1254	46	UG/KG	04/23/1998
SC-16326-S	03/04/1998	ND	AROCLOR-1260	46	UG/KG	04/23/1998
SC-16326-S	03/04/1998	19 0	CHROMIUM	0 17	UG/G	04/23/1998
SC-16326-S	03/04/1998	28 0	PERCENT MOISTURE	0 10	PRCNT	04/23/1998
SC-16326-S	03/04/1998	1 37	RADIUM-226	0 33	PCI/G	04/14/1998
SC-16326-S	03/04/1998	1 24	RADIUM-228	0 42	PCI/G	04/14/1998
SC-16326-S	03/04/1998	(1 55)	URANIUM-238	1 97	PCI/G	04/14/1998
SC-16330-S	03/04/1998	ND	AROCLOR-1248	40	UG/KG	04/23/1998
SC-16330-S	03/04/1998	49	AROCLOR-1254	40	UG/KG	04/23/1998
SC-16330-S	03/04/1998	ND	AROCLOR-1260	40	UG/KG	04/23/1998
SC-16330-S	03/04/1998	19 5	CHROMIUM	0 15	UG/G	04/23/1998
SC-16330-S	03/04/1998	19 3	PERCENT MOISTURE	0 10	PRCNT	04/23/1998
SC-16330-S	03/04/1998	1 39	RADIUM-226	0 32	PCI/G	04/14/1998
SC-16330-S	03/04/1998	1 18	RADIUM-228	0 47	PCI/G	04/14/1998
SC-16330-S	03/04/1998	ND	URANIUM-238	3 79	PCI/G	04/14/1998
SC-16402-C	04/06/1998	ND	AROCLOR-1248	43	UG/KG	04/30/1998
SC-16402-C	04/06/1998	ND	AROCLOR-1254	43	UG/KG	04/30/1998
SC-16402-C	04/06/1998	ND	AROCLOR-1260	43	UG/KG	04/30/1998
SC-16402-C	04/06/1998	520	BENZO(A)ANTHRACENE	240	UG/KG	04/30/1998
SC-16402-C	04/06/1998	630	BENZO(A)PYRENE	20	UG/KG	04/30/1998
SC-16402-C	04/06/1998	1200	BENZO(B)FLUORANTHENE	320	UG/KG	04/30/1998
SC-16402-C	04/06/1998	600	BENZO(K)FLUORANTHENE	280	UG/KG	04/30/1998
SC-16402-C	04/06/1998	710	CHRYSENE	130	UG/KG	04/30/1998
SC-16402-C	04/06/1998	870	INDENO(1,2,3-CD)PYRENE	38	UG/KG	04/30/1998
SC-16402-C	04/06/1998	76 8	PERCENT SOLID	0 01	PRCNT	04/30/1998
SC-16402-C	04/06/1998	3 40	URANIUM-238	2 63	PCI/G	04/30/1998
SC-16403-S	04/06/1998	ND	AROCLOR-1248	48	UG/KG	04/30/1998
SC-16403-S	04/06/1998	ND	AROCLOR-1254	48	UG/KG	04/30/1998
SC-16403-S	04/06/1998	ND	AROCLOR-1260	48	UG/KG	04/30/1998
SC-16403-S	04/06/1998	220	BENZO(A)ANTHRACENE	13	UG/KG	04/30/1998
SC-16403-S	04/06/1998	230	BENZO(A)PYRENE	22	UG/KG	04/30/1998
SC-16403-S	04/06/1998	290	BENZO(B)FLUORANTHENE	17	UG/KG	04/30/1998
SC-16403-S	04/06/1998	150	BENZO(K)FLUORANTHENE	16	UG/KG	04/30/1998
SC-16403-S	04/06/1998	ND	CHRYSENE	140	UG/KG	04/30/1998
SC-16403-S	04/06/1998	180	INDENO(1,2,3-CD)PYRENE	42	UG/KG	04/30/1998
SC-16403-S	04/06/1998	69 7	PERCENT SOLID	0 01	PRCNT	04/30/1998
SC-16403-S	04/06/1998	2 69	URANIUM-238	1 98	PCI/G	04/30/1998
SC-16406-C	04/06/1998	ND	AROCLOR-1248	39	UG/KG	04/30/1998
SC-16406-C	04/06/1998	43	AROCLOR-1254	39	UG/KG	04/30/1998
SC-16406-C	04/06/1998	ND	AROCLOR-1260	39	UG/KG	04/30/1998
SC-16406-C	04/06/1998	360	BENZO(A)ANTHRACENE	110	UG/KG	04/30/1998
SC-16406-C	04/06/1998	440	BENZO(A)PYRENE	18	UG/KG	04/30/1998
SC-16406-C	04/06/1998	770	BENZO(B)FLUORANTHENE	140	UG/KG	04/30/1998
SC-16406-C	04/06/1998	370	BENZO(K)FLUORANTHENE	13	UG/KG	04/30/1998
SC-16406-C	04/06/1998	ND	CHRYSENE	120	UG/KG	04/30/1998
SC-16406-C	04/06/1998	520	INDENO(1,2,3-CD)PYRENE	34	UG/KG	04/30/1998
SC-16406-C	04/06/1998	85 3	PERCENT SOLID	0 01	PRCNT	04/30/1998
SC-16406-C	04/06/1998	3 50	URANIUM-238	1 10	PCI/G	04/30/1998
SC-16407-C	04/06/1998	ND	AROCLOR-1248	47	UG/KG	04/30/1998
SC-16407-C	04/06/1998	69	AROCLOR-1254	47	UG/KG	04/30/1998
SC-16407-C	04/06/1998	ND	AROCLOR-1260	47	UG/KG	04/30/1998
SC-16407-C	04/06/1998	ND	BENZO(A)ANTHRACENE	13	UG/KG	04/30/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16407-C	04/06/1998	ND	BENZO(A)PYRENE	21	UG/KG	04/30/1998
SC-16407-C	04/06/1998	ND	BENZO(B)FLUORANTHENE	17	UG/KG	04/30/1998
SC-16407-C	04/06/1998	ND	BENZO(K)FLUORANTHENE	16	UG/KG	04/30/1998
SC-16407-C	04/06/1998	ND	CHRYSENE	140	UG/KG	04/30/1998
SC-16407-C	04/06/1998	ND	INDENO(1,2,3-CD)PYRENE	41	UG/KG	04/30/1998
SC-16407-C	04/06/1998	70 6	PERCENT SOLID	0 01	PRCNT	04/30/1998
SC-16407-C	04/06/1998	(1 49)	URANIUM-238	2.31	PCI/G	04/30/1998
SC-16501-S	12/19/1997	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	02/05/1998
SC-16501-S	12/19/1997	ND	AROCLOR-1248	37	UG/KG	02/05/1998
SC-16501-S	12/19/1997	ND	AROCLOR-1254	37	UG/KG	02/05/1998
SC-16501-S	12/19/1997	ND	AROCLOR-1260	37	UG/KG	02/05/1998
SC-16501-S	12/19/1997	14 8	ARSENIC	0.54	UG/G	02/05/1998
SC-16501-S	12/19/1997	ND	BENZO(A)ANTHRACENE	10	UG/KG	02/05/1998
SC-16501-S	12/19/1997	ND	BENZO(A)PYRENE	17	UG/KG	02/05/1998
SC-16501-S	12/19/1997	ND	BENZO(B)FLUORANTHENE	13	UG/KG	02/05/1998
SC-16501-S	12/19/1997	ND	BENZO(K)FLUORANTHENE	12	UG/KG	02/05/1998
SC-16501-S	12/19/1997	32 8	CHROMIUM	0.13	UG/G	02/05/1998
SC-16501-S	12/19/1997	ND	CHRYSENE	110	UG/KG	02/05/1998
SC-16501-S	12/19/1997	ND	INDENO(1,2,3-CD)PYRENE	33	UG/KG	02/05/1998
SC-16501-S	12/19/1997	24.4	LEAD	0.65	UG/G	02/05/1998
SC-16501-S	12/19/1997	89 0	PERCENT SOLID	0.01	PRCNT	02/05/1998
SC-16501-S	12/19/1997	1 09	RADIUM-226	0.33	PCI/G	03/13/1998
SC-16501-S	12/19/1997	1 1	THALLIUM	1.10	UG/G	02/05/1998
SC-16501-S	12/19/1997	0 85	THORIUM-230	0.62	PCI/G	03/13/1998
SC-16501-S-HS01	01/27/1998	27.3	RADIUM-226	1 07	PCI/G	03/16/1998
SC-16501-S-HS01	01/27/1998	1 41	RADIUM-228	1 01	PCI/G	03/16/1998
SC-16501-S-HS01	01/27/1998	2.25	THORIUM-230	0.62	PCI/G	03/16/1998
SC-16501-S-RS	07/08/1998	ND	2,4,6-TRINITROTOLUENE	0 130	UG/G	09/01/1998
SC-16501-S-RS	07/08/1998	ND	AROCLOR-1248	45	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	ND	AROCLOR-1254	45	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	ND	AROCLOR-1260	45	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	7 00	ARSENIC	0.80	UG/G	09/01/1998
SC-16501-S-RS	07/08/1998	ND	BENZO(A)ANTHRACENE	440	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	ND	BENZO(A)PYRENE	440	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	ND	BENZO(B)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	ND	BENZO(K)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	18 1	CHROMIUM	0 26	UG/G	09/01/1998
SC-16501-S-RS	07/08/1998	ND	CHRYSENE	440	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	ND	INDENO(1,2,3-CD)PYRENE	440	UG/KG	09/01/1998
SC-16501-S-RS	07/08/1998	17.3	LEAD	0.26	UG/G	09/01/1998
SC-16501-S-RS	07/08/1998	27.0	PERCENT MOISTURE	0.1	PRCNT	09/01/1998
SC-16501-S-RS	07/08/1998	1 18	RADIUM-226	0.28	PCI/G	09/16/1998
SC-16501-S-RS	07/08/1998	0 94	RADIUM-228	0.53	PCI/G	09/16/1998
SC-16501-S-RS	07/08/1998	1.10	THALLIUM	1.10	UG/G	09/01/1998
SC-16501-S-RS	07/08/1998	0 90	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16502-S	12/19/1997	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	02/05/1998
SC-16502-S	12/19/1997	ND	AROCLOR-1248	42	UG/KG	02/05/1998
SC-16502-S	12/19/1997	ND	AROCLOR-1254	42	UG/KG	02/05/1998
SC-16502-S	12/19/1997	ND	AROCLOR-1260	42	UG/KG	02/05/1998
SC-16502-S	12/19/1997	13 9	ARSENIC	0.58	UG/G	02/05/1998
SC-16502-S	12/19/1997	ND	BENZO(A)ANTHRACENE	11	UG/KG	02/05/1998
SC-16502-S	12/19/1997	ND	BENZO(A)PYRENE	19	UG/KG	02/05/1998
SC-16502-S	12/19/1997	ND	BENZO(B)FLUORANTHENE	15	UG/KG	02/05/1998
SC-16502-S	12/19/1997	ND	BENZO(K)FLUORANTHENE	14	UG/KG	02/05/1998
SC-16502-S	12/19/1997	23 6	CHROMIUM	0 14	UG/G	02/05/1998
SC-16502-S	12/19/1997	ND	CHRYSENE	130	UG/KG	02/05/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16502-S	12/19/1997	ND	INDENO(1,2,3-CD)PYRENE	36	UG/KG	02/05/1998
SC-16502-S	12/19/1997	31 0	LEAD	0 70	UG/G	02/05/1998
SC-16502-S	12/19/1997	79 6	PERCENT SOLID	0 01	PRCNT	02/05/1998
SC-16502-S	12/19/1997	1 29	RADIUM-226	0 24	PCI/G	03/13/1998
SC-16502-S	12/19/1997	1 2	THALLIUM	1 20	UG/G	02/05/1998
SC-16502-S	12/19/1997	0 83	THORIUM-230	0 62	PCI/G	03/13/1998
SC-16502-S-RS	07/08/1998	ND	2,4,6-TRINITROTOLUENE	0 130	UG/G	09/01/1998
SC-16502-S-RS	07/08/1998	ND	AROCLOR-1248	44	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	ND	AROCLOR-1254	44	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	ND	AROCLOR-1260	44	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	16 3	ARSENIC	0 76	UG/G	09/01/1998
SC-16502-S-RS	07/08/1998	ND	BENZO(A)ANTHRACENE	410	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	ND	BENZO(A)PYRENE	410	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	ND	BENZO(B)FLUORANTHENE	410	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	ND	BENZO(K)FLUORANTHENE	410	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	35 0	CHROMIUM	0 25	UG/G	09/01/1998
SC-16502-S-RS	07/08/1998	ND	CHRYSENE	410	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	ND	INDENO(1,2,3-CD)PYRENE	410	UG/KG	09/01/1998
SC-16502-S-RS	07/08/1998	14 0	LEAD	0 25	UG/G	09/01/1998
SC-16502-S-RS	07/08/1998	25 2	PERCENT MOISTURE	0 1	PRCNT	09/01/1998
SC-16502-S-RS	07/08/1998	0 99	RADIUM-226	0 26	PCI/G	09/16/1998
SC-16502-S-RS	07/08/1998	1 08	RADIUM-228	0 38	PCI/G	09/16/1998
SC-16502-S-RS	07/08/1998	3 30	THALLIUM	1 00	UG/G	09/01/1998
SC-16502-S-RS	07/08/1998	1 06	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16503-S	01/27/1998	ND	2,4,6-TRINITROTOLUENE	0 0079	UG/G	03/13/1998
SC-16503-S	01/27/1998	ND	AROCLOR-1248	44	UG/KG	03/13/1998
SC-16503-S	01/27/1998	ND	AROCLOR-1254	44	UG/KG	03/13/1998
SC-16503-S	01/27/1998	ND	AROCLOR-1260	44	UG/KG	03/13/1998
SC-16503-S	01/27/1998	8 7	ARSENIC	0 35	UG/G	03/13/1998
SC-16503-S	01/27/1998	ND	BENZO(A)ANTHRACENE	46	UG/KG	03/13/1998
SC-16503-S	01/27/1998	ND	BENZO(A)PYRENE	46	UG/KG	03/13/1998
SC-16503-S	01/27/1998	ND	BENZO(B)FLUORANTHENE	46	UG/KG	03/13/1998
SC-16503-S	01/27/1998	ND	BENZO(K)FLUORANTHENE	46	UG/KG	03/13/1998
SC-16503-S	01/27/1998	19 6	CHROMIUM	0 16	UG/G	03/13/1998
SC-16503-S	01/27/1998	ND	CHRYSENE	46	UG/KG	03/13/1998
SC-16503-S	01/27/1998	ND	INDENO(1,2,3-CD)PYRENE	46	UG/KG	03/13/1998
SC-16503-S	01/27/1998	24 2	LEAD	0 24	UG/G	03/13/1998
SC-16503-S	01/27/1998	24 9	PERCENT MOISTURE	0 10	PRCNT	03/13/1998
SC-16503-S	01/27/1998	3 13	RADIUM-226	0 38	PCI/G	03/16/1998
SC-16503-S	01/27/1998	1 20	RADIUM-228	0 43	PCI/G	03/16/1998
SC-16503-S	01/27/1998	3 1	THALLIUM	0 48	UG/G	03/13/1998
SC-16503-S	01/27/1998	0 99	THORIUM-230	0 62	PCI/G	03/16/1998
SC-16503-S-RS	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0 080	UG/G	08/25/1998
SC-16503-S-RS	06/25/1998	ND	AROCLOR-1248	46	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	ND	AROCLOR-1254	93	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	ND	AROCLOR-1260	93	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	8 50	ARSENIC	1 10	UG/G	09/01/1998
SC-16503-S-RS	06/25/1998	ND	BENZO(A)ANTHRACENE	460	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	ND	BENZO(A)PYRENE	460	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	ND	BENZO(B)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	ND	BENZO(K)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	18 6	CHROMIUM	0 28	UG/G	09/01/1998
SC-16503-S-RS	06/25/1998	ND	CHRYSENE	460	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	460	UG/KG	09/01/1998
SC-16503-S-RS	06/25/1998	19 4	LEAD	0 56	UG/G	09/01/1998
SC-16503-S-RS	06/25/1998	28 8	PERCENT MOISTURE	0 00	PRCNT	09/01/1998

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16503-S-RS	06/25/1998	3 70	RADIUM-226	0.40	PCI/G	09/16/1998
SC-16503-S-RS	06/25/1998	ND	RADIUM-228	1.14	PCI/G	09/16/1998
SC-16503-S-RS	06/25/1998	2 50	THALLIUM	1.10	UG/G	09/01/1998
SC-16503-S-RS	06/25/1998	1 19	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16504-S	01/27/1998	ND	2,4,6-TRINITROTOLUENE	0.0084	UG/G	03/13/1998
SC-16504-S	01/27/1998	ND	AROCLOR-1248	47	UG/KG	03/13/1998
SC-16504-S	01/27/1998	ND	AROCLOR-1254	47	UG/KG	03/13/1998
SC-16504-S	01/27/1998	ND	AROCLOR-1260	47	UG/KG	03/13/1998
SC-16504-S	01/27/1998	13 2	ARSENIC	0.37	UG/G	03/13/1998
SC-16504-S	01/27/1998	ND	BENZO(A)ANTHRACENE	49	UG/KG	03/13/1998
SC-16504-S	01/27/1998	ND	BENZO(A)PYRENE	49	UG/KG	03/13/1998
SC-16504-S	01/27/1998	ND	BENZO(B)FLUORANTHENE	49	UG/KG	03/13/1998
SC-16504-S	01/27/1998	ND	BENZO(K)FLUORANTHENE	49	UG/KG	03/13/1998
SC-16504-S	01/27/1998	21 6	CHROMIUM	0 17	UG/G	03/13/1998
SC-16504-S	01/27/1998	ND	CHRYSENE	49	UG/KG	03/13/1998
SC-16504-S	01/27/1998	ND	INDENO(1,2,3-CD)PYRENE	49	UG/KG	03/13/1998
SC-16504-S	01/27/1998	21 0	LEAD	0.26	UG/G	03/13/1998
SC-16504-S	01/27/1998	29 5	PERCENT MOISTURE	0.10	PRCNT	03/13/1998
SC-16504-S	01/27/1998	3 06	RADIUM-226	0.38	PCI/G	03/16/1998
SC-16504-S	01/27/1998	1 15	RADIUM-228	0.43	PCI/G	03/16/1998
SC-16504-S	01/27/1998	3 4	THALLIUM	0.51	UG/G	03/13/1998
SC-16504-S	01/27/1998	1.21	THORIUM-230	0.62	PCI/G	03/16/1998
SC-16504-S-HS01	07/01/1998	5 64	RADIUM-226	0.55	PCI/G	09/23/1998
SC-16504 S-HS01	07/01/1998	1 01	RADIUM-228	0.58	PCI/G	09/23/1998
SC-16504-S-HS02	07/01/1998	1 28	RADIUM-226	0.27	PCI/G	09/23/1998
SC-16504-S-HS02	07/01/1998	0 93	RADIUM-228	0 38	PCI/G	09/23/1998
SC-16504-S-HS03	07/01/1998	1 58	RADIUM-226	0 34	PCI/G	09/23/1998
SC-16504-S-HS03	07/01/1998	1 13	RADIUM-228	0.52	PCI/G	09/23/1998
SC-16504-S-HS04	07/01/1998	1.35	RADIUM-226	0.22	PCI/G	09/23/1998
SC-16504-S-HS04	07/01/1998	0 89	RADIUM-228	0 56	PCI/G	09/23/1998
SC-16504-S-RS	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0.080	UG/G	08/25/1998
SC-16504-S-RS	06/25/1998	ND	AROCLOR-1248	43	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	ND	AROCLOR-1254	87	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	ND	AROCLOR-1260	87	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	8 60	ARSENIC	1.00	UG/G	09/01/1998
SC-16504-S-RS	06/25/1998	ND	BENZO(A)ANTHRACENE	430	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	ND	BENZO(A)PYRENE	430	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	ND	BENZO(B)FLUORANTHENE	430	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	ND	BENZO(K)FLUORANTHENE	430	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	13 5	CHROMIUM	0.25	UG/G	09/01/1998
SC-16504-S-RS	06/25/1998	ND	CHRYSENE	430	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	430	UG/KG	09/01/1998
SC-16504-S-RS	06/25/1998	20 8	LEAD	0.51	UG/G	09/01/1998
SC-16504-S-RS	06/25/1998	23 5	PERCENT MOISTURE	0.00	PRCNT	09/01/1998
SC-16504-S-RS	06/25/1998	6.30	RADIUM-226	0.39	PCI/G	09/16/1998
SC-16504-S-RS	06/25/1998	1 13	RADIUM-228	0 45	PCI/G	09/16/1998
SC-16504-S-RS	06/25/1998	1 80	THALLIUM	1.00	UG/G	09/01/1998
SC-16504-S-RS	06/25/1998	0.95	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16505-S	01/27/1998	ND	2,4,6-TRINITROTOLUENE	0.0081	UG/G	03/13/1998
SC-16505-S	01/27/1998	ND	AROCLOR-1248	45	UG/KG	03/13/1998
SC-16505-S	01/27/1998	ND	AROCLOR-1254	45	UG/KG	03/13/1998
SC-16505-S	01/27/1998	ND	AROCLOR-1260	45	UG/KG	03/13/1998
SC-16505-S	01/27/1998	9 8	ARSENIC	0.36	UG/G	03/13/1998
SC-16505-S	01/27/1998	ND	BENZO(A)ANTHRACENE	48	UG/KG	03/13/1998
SC-16505-S	01/27/1998	ND	BENZO(A)PYRENE	48	UG/KG	03/13/1998
SC-16505-S	01/27/1998	ND	BENZO(B)FLUORANTHENE	48	UG/KG	03/13/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16505-S	01/27/1998	ND	BENZO(K)FLUORANTHENE	48	UG/KG	03/13/1998
SC-16505-S	01/27/1998	19 6	CHROMIUM	0 16	UG/G	03/13/1998
SC-16505-S	01/27/1998	ND	CHRYSENE	48	UG/KG	03/13/1998
SC-16505-S	01/27/1998	ND	INDENO(1,2,3-CD)PYRENE	48	UG/KG	03/13/1998
SC-16505-S	01/27/1998	24 3	LEAD	0 25	UG/G	03/13/1998
SC-16505-S	01/27/1998	27 1	PERCENT MOISTURE	0.10	PRCNT	03/13/1998
SC-16505-S	01/27/1998	2 41	RADIUM-226	0 30	PCI/G	03/16/1998
SC-16505-S	01/27/1998	1 12	RADIUM-228	0 38	PCI/G	03/16/1998
SC-16505-S	01/27/1998	2 9	THALLIUM	0 49	UG/G	03/13/1998
SC-16505-S	01/27/1998	1 57	THORIUM-230	0 62	PCI/G	03/16/1998
SC-16505-S-RS	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0 080	UG/G	08/25/1998
SC-16505-S-RS	06/25/1998	ND	AROCLOR-1248	46	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	ND	AROCLOR-1254	93	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	ND	AROCLOR-1260	93	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	14 4	ARSENIC	1 10	UG/G	09/01/1998
SC-16505-S-RS	06/25/1998	ND	BENZO(A)ANTHRACENE	460	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	ND	BENZO(A)PYRENE	460	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	ND	BENZO(B)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	ND	BENZO(K)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	23 1	CHROMIUM	0 28	UG/G	09/01/1998
SC-16505-S-RS	06/25/1998	ND	CHRYSENE	460	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	460	UG/KG	09/01/1998
SC-16505-S-RS	06/25/1998	28 7	LEAD	0 57	UG/G	09/01/1998
SC-16505-S-RS	06/25/1998	29 4	PERCENT MOISTURE	0 00	PRCNT	09/01/1998
SC-16505-S-RS	06/25/1998	2 04	RADIUM-226	0 39	PCI/G	09/16/1998
SC-16505-S-RS	06/25/1998	1 00	RADIUM-228	0 50	PCI/G	09/16/1998
SC-16505-S-RS	06/25/1998	2 50	THALLIUM	1 10	UG/G	09/01/1998
SC-16505-S-RS	06/25/1998	1 04	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16506-S	01/27/1998	ND	2,4,6-TRINITROTOLUENE	0 0078	UG/G	03/13/1998
SC-16506-S	01/27/1998	ND	AROCLOR-1248	44	UG/KG	03/13/1998
SC-16506-S	01/27/1998	ND	AROCLOR-1254	44	UG/KG	03/13/1998
SC-16506-S	01/27/1998	ND	AROCLOR-1260	44	UG/KG	03/13/1998
SC-16506-S	01/27/1998	10 4	ARSENIC	0 35	UG/G	03/13/1998
SC-16506-S	01/27/1998	ND	BENZO(A)ANTHRACENE	47	UG/KG	03/13/1998
SC-16506-S	01/27/1998	ND	BENZO(A)PYRENE	47	UG/KG	03/13/1998
SC-16506-S	01/27/1998	ND	BENZO(B)FLUORANTHENE	47	UG/KG	03/13/1998
SC-16506-S	01/27/1998	ND	BENZO(K)FLUORANTHENE	47	UG/KG	03/13/1998
SC-16506-S	01/27/1998	15 2	CHROMIUM	0 16	UG/G	03/13/1998
SC-16506-S	01/27/1998	ND	CHRYSENE	47	UG/KG	03/13/1998
SC-16506-S	01/27/1998	ND	INDENO(1,2,3-CD)PYRENE	47	UG/KG	03/13/1998
SC-16506-S	01/27/1998	18 6	LEAD	0 24	UG/G	03/13/1998
SC-16506-S	01/27/1998	25 4	PERCENT MOISTURE	0 10	PRCNT	03/13/1998
SC-16506-S	01/27/1998	1 63	RADIUM-226	0 36	PCI/G	03/16/1998
SC-16506-S	01/27/1998	1 28	RADIUM-228	0 27	PCI/G	03/16/1998
SC-16506-S	01/27/1998	2 8	THALLIUM	0 48	UG/G	03/13/1998
SC-16506-S	01/27/1998	1 13	THORIUM-230	0 62	PCI/G	03/16/1998
SC-16506-S-RS	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0.080	UG/G	08/25/1998
SC-16506-S-RS	06/25/1998	ND	AROCLOR-1248	42	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	ND	AROCLOR-1254	84	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	ND	AROCLOR-1260	84	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	7 00	ARSENIC	0 96	UG/G	09/01/1998
SC-16506-S-RS	06/25/1998	ND	BENZO(A)ANTHRACENE	420	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	ND	BENZO(A)PYRENE	420	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	ND	BENZO(B)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	ND	BENZO(K)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	14 1	CHROMIUM	0 24	UG/G	09/01/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16506-S-RS	06/25/1998	ND	CHRYSENE	420	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	420	UG/KG	09/01/1998
SC-16506-S-RS	06/25/1998	16 4	LEAD	0.48	UG/G	09/01/1998
SC-16506-S-RS	06/25/1998	21 0	PERCENT MOISTURE	0.00	PRCNT	09/01/1998
SC-16506-S-RS	06/25/1998	1.84	RADIUM-226	0.30	PCI/G	09/16/1998
SC-16506-S-RS	06/25/1998	1.14	RADIUM-228	0.37	PCI/G	09/16/1998
SC-16506-S-RS	06/25/1998	2.00	THALLIUM	0.96	UG/G	09/01/1998
SC-16506-S-RS	06/25/1998	1.09	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16507-S	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0.080	UG/G	08/25/1998
SC-16507-S	06/25/1998	ND	AROCLOR-1248	39	UG/KG	09/01/1998
SC-16507-S	06/25/1998	ND	AROCLOR-1254	80	UG/KG	09/01/1998
SC-16507-S	06/25/1998	ND	AROCLOR-1260	80	UG/KG	09/01/1998
SC-16507-S	06/25/1998	19.6	ARSENIC	0.93	UG/G	09/01/1998
SC-16507-S	06/25/1998	ND	BENZO(A)ANTHRACENE	400	UG/KG	09/01/1998
SC-16507-S	06/25/1998	ND	BENZO(A)PYRENE	400	UG/KG	09/01/1998
SC-16507-S	06/25/1998	ND	BENZO(B)FLUORANTHENE	400	UG/KG	09/01/1998
SC-16507-S	06/25/1998	ND	BENZO(K)FLUORANTHENE	400	UG/KG	09/01/1998
SC-16507-S	06/25/1998	35.0	CHROMIUM	0.23	UG/G	09/01/1998
SC-16507-S	06/25/1998	ND	CHRYSENE	400	UG/KG	09/01/1998
SC-16507-S	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	400	UG/KG	09/01/1998
SC-16507-S	06/25/1998	22 1	LEAD	0.46	UG/G	09/01/1998
SC-16507-S	06/25/1998	17 3	PERCENT MOISTURE	0.00	PRCNT	09/01/1998
SC-16507-S	06/25/1998	1 47	RADIUM-226	0.35	PCI/G	09/16/1998
SC-16507-S	06/25/1998	ND	RADIUM-228	1.14	PCI/G	09/16/1998
SC-16507-S	06/25/1998	3 30	THALLIUM	0.93	UG/G	09/01/1998
SC-16507-S	06/25/1998	0 81	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16508-S	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0.080	UG/G	08/25/1998
SC-16508-S	06/25/1998	ND	AROCLOR-1248	46	UG/KG	09/01/1998
SC-16508-S	06/25/1998	ND	AROCLOR-1254	93	UG/KG	09/01/1998
SC-16508-S	06/25/1998	ND	AROCLOR-1260	93	UG/KG	09/01/1998
SC-16508-S	06/25/1998	8 20	ARSENIC	1 10	UG/G	09/01/1998
SC-16508-S	06/25/1998	ND	BENZO(A)ANTHRACENE	460	UG/KG	09/01/1998
SC-16508-S	06/25/1998	ND	BENZO(A)PYRENE	460	UG/KG	09/01/1998
SC-16508-S	06/25/1998	ND	BENZO(B)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16508-S	06/25/1998	ND	BENZO(K)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16508-S	06/25/1998	16 0	CHROMIUM	0.27	UG/G	09/01/1998
SC-16508-S	06/25/1998	ND	CHRYSENE	460	UG/KG	09/01/1998
SC-16508-S	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	460	UG/KG	09/01/1998
SC-16508-S	06/25/1998	17 5	LEAD	0.54	UG/G	09/01/1998
SC-16508-S	06/25/1998	29 1	PERCENT MOISTURE	0 00	PRCNT	09/01/1998
SC-16508-S	06/25/1998	4.21	RADIUM-226	0.34	PCI/G	09/16/1998
SC-16508-S	06/25/1998	1 09	RADIUM-228	0.55	PCI/G	09/16/1998
SC-16508-S	06/25/1998	1.90	THALLIUM	1.10	UG/G	09/01/1998
SC-16508-S	06/25/1998	0 96	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16508-S-HS01	06/25/1998	13 7	RADIUM-226	0.81	PCI/G	09/16/1998
SC-16508-S-HS01	06/25/1998	1.24	RADIUM-228	1.02	PCI/G	09/16/1998
SC-16508-S-HS01	06/25/1998	1.28	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16508-S-HS01-RS	07/10/1998	1.14	RADIUM-226	0.36	PCI/G	09/16/1998
SC-16508-S-HS01-RS	07/10/1998	ND	RADIUM-228	1.00	PCI/G	09/16/1998
SC-16508-S-HS02	07/01/1998	3.25	RADIUM-226	0.40	PCI/G	09/23/1998
SC-16508-S-HS02	07/01/1998	1 28	RADIUM-228	0.49	PCI/G	09/23/1998
SC-16508-S-HS03	07/01/1998	2 15	RADIUM-226	0.28	PCI/G	09/23/1998
SC-16508-S-HS03	07/01/1998	0 96	RADIUM-228	0 38	PCI/G	09/23/1998
SC-16508-S-HS04	07/01/1998	9 02	RADIUM-226	0.74	PCI/G	09/23/1998
SC-16508-S-HS04	07/01/1998	1 18	RADIUM-228	1.02	PCI/G	09/23/1998
SC-16508-S-HS04-RS	07/10/1998	6 02	RADIUM-226	0 40	PCI/G	09/16/1998

Row Filter WSSRAP_ID between 'SC-162' and 'SC-169' (Marked Rows Only)

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16508-S-HS04-RS	07/10/1998	0 94	RADIUM-228	0 45	PCI/G	09/16/1998
SC-16508-S-HS04-RS2	07/16/1998	3 93	RADIUM-226	0 34	PCI/G	09/16/1998
SC-16508-S-HS04-RS2	07/16/1998	1 15	RADIUM-228	0 39	PCI/G	09/16/1998
SC-16508-S-HS05	07/01/1998	1 87	RADIUM-226	0 29	PCI/G	09/23/1998
SC-16508-S-HS05	07/01/1998	1 24	RADIUM-228	0 37	PCI/G	09/23/1998
SC-16508-S-HS1	07/01/1998	3 05	RADIUM-226	0 39	PCI/G	09/23/1998
SC-16508-S-HS1	07/01/1998	1 22	RADIUM-228	0 47	PCI/G	09/23/1998
SC-16508-S-HS2	07/01/1998	2 14	RADIUM-226	0 30	PCI/G	09/23/1998
SC-16508-S-HS2.	07/01/1998	1 10	RADIUM-228	0 43	PCI/G	09/23/1998
SC-16508-S-HS3	07/01/1998	2 12	RADIUM-226	0.37	PCI/G	09/23/1998
SC-16508-S-HS3	07/01/1998	1 34	RADIUM-228	0 50	PCI/G	09/23/1998
SC-16508-S-HS4	07/01/1998	1 75	RADIUM-226	0 22	PCI/G	09/23/1998
SC-16508-S-HS4	07/01/1998	1 25	RADIUM-228	0 43	PCI/G	09/23/1998
SC-16509-S	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0 080	UG/G	08/25/1998
SC-16509-S	06/25/1998	ND	AROCLOR-1248	44	UG/KG	09/01/1998
SC-16509-S	06/25/1998	(7 5)	AROCLOR-1254	89	UG/KG	09/01/1998
SC-16509-S	06/25/1998	ND	AROCLOR-1260	89	UG/KG	09/01/1998
SC-16509-S	06/25/1998	5 60	ARSENIC	1 00	UG/G	09/01/1998
SC-16509-S	06/25/1998	ND	BENZO(A)ANTHRACENE	440	UG/KG	09/01/1998
SC-16509-S	06/25/1998	ND	BENZO(A)PYRENE	440	UG/KG	09/01/1998
SC-16509-S	06/25/1998	ND	BENZO(B)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16509-S	06/25/1998	ND	BENZO(K)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16509-S	06/25/1998	11 3	CHROMIUM	0 26	UG/G	09/01/1998
SC-16509-S	06/25/1998	ND	CHRYSENE	440	UG/KG	09/01/1998
SC-16509-S	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	440	UG/KG	09/01/1998
SC-16509-S	06/25/1998	17 1	LEAD	0 52	UG/G	09/01/1998
SC-16509-S	06/25/1998	24 6	PERCENT MOISTURE	0 00	PRCNT	09/01/1998
SC-16509-S	06/25/1998	2 09	RADIUM-226	0 31	PCI/G	09/16/1998
SC-16509-S	06/25/1998	1 02	RADIUM-228	0 35	PCI/G	09/16/1998
SC-16509-S	06/25/1998	1 20	THALLIUM	1 00	UG/G	09/01/1998
SC-16509-S	06/25/1998	1 07	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16510-S	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0 080	UG/G	08/25/1998
SC-16510-S	06/25/1998	ND	AROCLOR-1248	42	UG/KG	09/01/1998
SC-16510-S	06/25/1998	ND	AROCLOR-1254	86	UG/KG	09/01/1998
SC-16510-S	06/25/1998	ND	AROCLOR-1260	86	UG/KG	09/01/1998
SC-16510-S	06/25/1998	18 3	ARSENIC	0 99	UG/G	09/01/1998
SC-16510-S	06/25/1998	ND	BENZO(A)ANTHRACENE	420	UG/KG	09/01/1998
SC-16510-S	06/25/1998	ND	BENZO(A)PYRENE	420	UG/KG	09/01/1998
SC-16510-S	06/25/1998	ND	BENZO(B)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16510-S	06/25/1998	ND	BENZO(K)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16510-S	06/25/1998	10 4	CHROMIUM	0 25	UG/G	09/01/1998
SC-16510-S	06/25/1998	ND	CHRYSENE	420	UG/KG	09/01/1998
SC-16510-S	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	420	UG/KG	09/01/1998
SC-16510-S	06/25/1998	24 3	LEAD	0 50	UG/G	09/01/1998
SC-16510-S	06/25/1998	21 9	PERCENT MOISTURE	0 00	PRCNT	09/01/1998
SC-16510-S	06/25/1998	1 35	RADIUM-226	0 38	PCI/G	09/16/1998
SC-16510-S	06/25/1998	1 41	RADIUM-228	0 55	PCI/G	09/16/1998
SC-16510-S	06/25/1998	2 00	THALLIUM	0.99	UG/G	09/01/1998
SC-16510-S	06/25/1998	0 93	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16511-S	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0 080	UG/G	08/25/1998
SC-16511-S	06/25/1998	ND	AROCLOR-1248	44	UG/KG	09/01/1998
SC-16511-S	06/25/1998	(20)	AROCLOR-1254	89	UG/KG	09/01/1998
SC-16511-S	06/25/1998	ND	AROCLOR-1260	89	UG/KG	09/01/1998
SC-16511-S	06/25/1998	8 60	ARSENIC	1 10	UG/G	09/01/1998
SC-16511-S	06/25/1998	ND	BENZO(A)ANTHRACENE	440	UG/KG	09/01/1998
SC-16511-S	06/25/1998	ND	BENZO(A)PYRENE	440	UG/KG	09/01/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16511-S	06/25/1998	ND	BENZO(B)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16511-S	06/25/1998	ND	BENZO(K)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16511-S	06/25/1998	19 2	CHROMIUM	0.27	UG/G	09/01/1998
SC-16511-S	06/25/1998	ND	CHRYSENE	440	UG/KG	09/01/1998
SC-16511-S	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	440	UG/KG	09/01/1998
SC-16511-S	06/25/1998	16 7	LEAD	0 54	UG/G	09/01/1998
SC-16511-S	06/25/1998	25 4	PERCENT MOISTURE	0.00	PRCNT	09/01/1998
SC-16511-S	06/25/1998	1 87	RADIUM-226	0.27	PCI/G	09/16/1998
SC-16511-S	06/25/1998	1 10	RADIUM-228	0.38	PCI/G	09/16/1998
SC-16511-S	06/25/1998	2.20	THALLIUM	1 10	UG/G	09/01/1998
SC-16511-S	06/25/1998	1.03	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16512-S	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0.080	UG/G	08/25/1998
SC-16512-S	06/25/1998	ND	AROCLOR-1248	41	UG/KG	09/01/1998
SC-16512-S	06/25/1998	ND	AROCLOR-1254	84	UG/KG	09/01/1998
SC-16512-S	06/25/1998	ND	AROCLOR-1260	84	UG/KG	09/01/1998
SC-16512-S	06/25/1998	19 2	ARSENIC	0 96	UG/G	09/01/1998
SC-16512-S	06/25/1998	ND	BENZO(A)ANTHRACENE	420	UG/KG	09/01/1998
SC-16512-S	06/25/1998	ND	BENZO(A)PYRENE	420	UG/KG	09/01/1998
SC-16512-S	06/25/1998	ND	BENZO(B)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16512-S	06/25/1998	ND	BENZO(K)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16512-S	06/25/1998	28 5	CHROMIUM	0.24	UG/G	09/01/1998
SC-16512-S	06/25/1998	ND	CHRYSENE	420	UG/KG	09/01/1998
SC-16512-S	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	420	UG/KG	09/01/1998
SC-16512-S	06/25/1998	35.8	LEAD	0.48	UG/G	09/01/1998
SC-16512-S	06/25/1998	20 7	PERCENT MOISTURE	0.00	PRCNT	09/01/1998
SC-16512-S	06/25/1998	1 34	RADIUM-226	0.43	PCI/G	09/16/1998
SC-16512-S	06/25/1998	ND	RADIUM-228	1.05	PCI/G	09/16/1998
SC-16512-S	06/25/1998	2.60	THALLIUM	0 96	UG/G	09/01/1998
SC-16512-S	06/25/1998	0 93	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16513-S	06/25/1998	ND	2,4,6-TRINITROTOLUENE	0 080	UG/G	08/25/1998
SC-16513-S	06/25/1998	ND	AROCLOR-1248	42	UG/KG	09/01/1998
SC-16513-S	06/25/1998	ND	AROCLOR-1254	86	UG/KG	09/01/1998
SC-16513-S	06/25/1998	ND	AROCLOR-1260	86	UG/KG	09/01/1998
SC-16513-S	06/25/1998	13 9	ARSENIC	1.00	UG/G	09/01/1998
SC-16513-S	06/25/1998	ND	BENZO(A)ANTHRACENE	420	UG/KG	09/01/1998
SC-16513-S	06/25/1998	ND	BENZO(A)PYRENE	420	UG/KG	09/01/1998
SC-16513-S	06/25/1998	ND	BENZO(B)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16513-S	06/25/1998	ND	BENZO(K)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16513-S	06/25/1998	16 0	CHROMIUM	0.26	UG/G	09/01/1998
SC-16513-S	06/25/1998	ND	CHRYSENE	420	UG/KG	09/01/1998
SC-16513-S	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	420	UG/KG	09/01/1998
SC-16513-S	06/25/1998	43 5	LEAD	0.51	UG/G	09/01/1998
SC-16513-S	06/25/1998	22 1	PERCENT MOISTURE	0.00	PRCNT	09/01/1998
SC-16513-S	06/25/1998	1.40	RADIUM-226	0.22	PCI/G	09/16/1998
SC-16513-S	06/25/1998	0 99	RADIUM-228	0.34	PCI/G	09/16/1998
SC-16513-S	06/25/1998	2 20	THALLIUM	1.00	UG/G	09/01/1998
SC-16513-S	06/25/1998	0 88	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16514-S	06/25/1998	1 54	2,4,6-TRINITROTOLUENE	0.080	UG/G	08/25/1998
SC-16514-S	06/25/1998	ND	AROCLOR-1248	45	UG/KG	09/01/1998
SC-16514-S	06/25/1998	ND	AROCLOR-1254	92	UG/KG	09/01/1998
SC-16514-S	06/25/1998	(5 0)	AROCLOR-1260	92	UG/KG	09/01/1998
SC-16514-S	06/25/1998	21 0	ARSENIC	1 10	UG/G	09/01/1998
SC-16514-S	06/25/1998	ND	BENZO(A)ANTHRACENE	450	UG/KG	09/01/1998
SC-16514-S	06/25/1998	ND	BENZO(A)PYRENE	450	UG/KG	09/01/1998
SC-16514-S	06/25/1998	ND	BENZO(B)FLUORANTHENE	450	UG/KG	09/01/1998
SC-16514-S	06/25/1998	ND	BENZO(K)FLUORANTHENE	450	UG/KG	09/01/1998

Row Filter WSSRAP_ID between 'SC-162' and 'SC-169' (Marked Rows Only)

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16514-S	06/25/1998	40 4	CHROMIUM	0 26	UG/G	09/01/1998
SC-16514-S	06/25/1998	ND	CHRYSENE	450	UG/KG	09/01/1998
SC-16514-S	06/25/1998	ND	INDENO(1,2,3-CD)PYRENE	450	UG/KG	09/01/1998
SC-16514-S	06/25/1998	34 9	LEAD	0 53	UG/G	09/01/1998
SC-16514-S	06/25/1998	26 8	PERCENT MOISTURE	0.00	PRCNT	09/01/1998
SC-16514-S	06/25/1998	1 85	RADIUM-226	0 40	PCI/G	09/16/1998
SC-16514-S	06/25/1998	1 28	RADIUM-228	0 56	PCI/G	09/16/1998
SC-16514-S	06/25/1998	4 00	THALLIUM	1 10	UG/G	09/01/1998
SC-16514-S	06/25/1998	1 11	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16515-S	12/19/1997	ND	2,4,6-TRINITROTOLUENE	0 23	UG/G	02/05/1998
SC-16515-S	12/19/1997	ND	AROCLOR-1248	42	UG/KG	02/05/1998
SC-16515-S	12/19/1997	ND	AROCLOR-1254	42	UG/KG	02/05/1998
SC-16515-S	12/19/1997	ND	AROCLOR-1260	42	UG/KG	02/05/1998
SC-16515-S	12/19/1997	6 1	ARSENIC	0 57	UG/G	02/05/1998
SC-16515-S	12/19/1997	ND	BENZO(A)ANTHRACENE	11	UG/KG	02/05/1998
SC-16515-S	12/19/1997	ND	BENZO(A)PYRENE	19	UG/KG	02/05/1998
SC-16515-S	12/19/1997	ND	BENZO(B)FLUORANTHENE	15	UG/KG	02/05/1998
SC-16515-S	12/19/1997	ND	BENZO(K)FLUORANTHENE	14	UG/KG	02/05/1998
SC-16515-S	12/19/1997	13 1	CHROMIUM	0 14	UG/G	02/05/1998
SC-16515-S	12/19/1997	ND	CHRYSENE	130	UG/KG	02/05/1998
SC-16515-S	12/19/1997	ND	INDENO(1,2,3-CD)PYRENE	36	UG/KG	02/05/1998
SC-16515-S	12/19/1997	18 8	LEAD	0 69	UG/G	02/05/1998
SC-16515-S	12/19/1997	79 8	PERCENT SOLID	0 01	PRCNT	02/05/1998
SC-16515-S	12/19/1997	2 48	RADIUM-226	0 41	PCI/G	03/13/1998
SC-16515-S	12/19/1997	ND	THALLIUM	1 10	UG/G	02/05/1998
SC-16515-S	12/19/1997	0 93	THORIUM-230	0 62	PCI/G	03/13/1998
SC-16515-S-HS01	01/27/1998	10 2	RADIUM-226	0 38	PCI/G	03/16/1998
SC-16515-S-HS01	01/27/1998	1 10	RADIUM-228	0 63	PCI/G	03/16/1998
SC-16515-S-HS01	01/27/1998	0 98	THORIUM-230	0 62	PCI/G	03/16/1998
SC-16515-S-RS	07/08/1998	ND	2,4,6-TRINITROTOLUENE	0 130	UG/G	09/01/1998
SC-16515-S-RS	07/08/1998	ND	AROCLOR-1248	44	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	ND	AROCLOR-1254	44	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	ND	AROCLOR-1260	44	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	8 40	ARSENIC	0 80	UG/G	09/01/1998
SC-16515-S-RS	07/08/1998	ND	BENZO(A)ANTHRACENE	440	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	ND	BENZO(A)PYRENE	440	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	ND	BENZO(B)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	ND	BENZO(K)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	20 8	CHROMIUM	0 26	UG/G	09/01/1998
SC-16515-S-RS	07/08/1998	ND	CHRYSENE	440	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	ND	INDENO(1,2,3-CD)PYRENE	440	UG/KG	09/01/1998
SC-16515-S-RS	07/08/1998	19 1	LEAD	0 26	UG/G	09/01/1998
SC-16515-S-RS	07/08/1998	26 8	PERCENT MOISTURE	0 1	PRCNT	09/01/1998
SC-16515-S-RS	07/08/1998	1 23	RADIUM-226	0 29	PCI/G	09/16/1998
SC-16515-S-RS	07/08/1998	1 14	RADIUM-228	0 56	PCI/G	09/16/1998
SC-16515-S-RS	07/08/1998	3 20	THALLIUM	1 10	UG/G	09/01/1998
SC-16515-S-RS	07/08/1998	1 12	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16516-S	12/19/1997	ND	2,4,6-TRINITROTOLUENE	0 23	UG/G	02/05/1998
SC-16516-S	12/19/1997	ND	AROCLOR-1248	48	UG/KG	02/05/1998
SC-16516-S	12/19/1997	140	AROCLOR-1254	48	UG/KG	02/05/1998
SC-16516-S	12/19/1997	ND	AROCLOR-1260	48	UG/KG	02/05/1998
SC-16516-S	12/19/1997	6 9	ARSENIC	0 67	UG/G	02/05/1998
SC-16516-S	12/19/1997	ND	BENZO(A)ANTHRACENE	13	UG/KG	02/05/1998
SC-16516-S	12/19/1997	ND	BENZO(A)PYRENE	21	UG/KG	02/05/1998
SC-16516-S	12/19/1997	ND	BENZO(B)FLUORANTHENE	17	UG/KG	02/05/1998
SC-16516-S	12/19/1997	ND	BENZO(K)FLUORANTHENE	16	UG/KG	02/05/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16516-S	12/19/1997	12 7	CHROMIUM	0.17	UG/G	02/05/1998
SC-16516-S	12/19/1997	ND	CHRYSENE	140	UG/KG	02/05/1998
SC-16516-S	12/19/1997	ND	INDENO(1,2,3-CD)PYRENE	41	UG/KG	02/05/1998
SC-16516-S	12/19/1997	21.1	LEAD	0.80	UG/G	02/05/1998
SC-16516-S	12/19/1997	70 0	PERCENT SOLID	0.01	PRCNT	02/05/1998
SC-16516-S	12/19/1997	2 26	RADIUM-226	0.28	PCI/G	03/13/1998
SC-16516-S	12/19/1997	ND	THALLIUM	1.30	UG/G	02/05/1998
SC-16516-S	12/19/1997	1.05	THORIUM-230	0.62	PCI/G	03/13/1998
SC-16516-S-HS01	01/30/1998	7.56	RADIUM-226	0.64	PCI/G	03/25/1998
SC-16516-S-HS01	01/30/1998	1 18	RADIUM-228	0.61	PCI/G	03/25/1998
SC-16516-S-HS01	01/30/1998	1.49	THORIUM-230	0.62	PCI/G	03/25/1998
SC-16516-S-HS02	01/30/1998	258	RADIUM-226	1.94	PCI/G	03/25/1998
SC-16516-S-HS02	01/30/1998	ND	RADIUM-228	3.20	PCI/G	03/25/1998
SC-16516-S-HS02	01/30/1998	1.26	THORIUM-230	0.62	PCI/G	03/25/1998
SC-16516-S-RS	07/02/1998	ND	AROCLOR-1248	44	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	ND	AROCLOR-1254	44	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	ND	AROCLOR-1260	44	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	4 50	ARSENIC	0 78	UG/G	09/01/1998
SC-16516-S-RS	07/02/1998	ND	BENZO(A)ANTHRACENE	430	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	ND	BENZO(A)PYRENE	430	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	ND	BENZO(B)FLUORANTHENE	430	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	ND	BENZO(K)FLUORANTHENE	430	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	15 1	CHROMIUM	0 26	UG/G	09/01/1998
SC-16516 S-RS	07/02/1998	ND	CHRYSENE	430	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	ND	INDENO(1,2,3-CD)PYRENE	430	UG/KG	09/01/1998
SC-16516-S-RS	07/02/1998	10 5	LEAD	0 26	UG/G	09/01/1998
SC-16516-S-RS	07/02/1998	1.53	RADIUM-226	0.27	PCI/G	09/23/1998
SC-16516-S-RS	07/02/1998	1 22	RADIUM-228	0.50	PCI/G	09/23/1998
SC-16516-S-RS	07/02/1998	ND	THALLIUM	1 9	UG/G	09/01/1998
SC-16516-S-RS	07/02/1998	0 95	THORIUM-230	0.62	PCI/G	09/23/1998
SC-16516-S-RS-1	07/02/1998	ND	2,4,6-TRINITROTOLUENE	0.130	UG/G	09/01/1998
SC-16517-S	07/02/1998	ND	AROCLOR-1248	46	UG/KG	09/01/1998
SC-16517-S	07/02/1998	ND	AROCLOR-1254	46	UG/KG	09/01/1998
SC-16517-S	07/02/1998	ND	AROCLOR-1260	46	UG/KG	09/01/1998
SC-16517-S	07/02/1998	15.2	ARSENIC	0.85	UG/G	09/01/1998
SC-16517-S	07/02/1998	ND	BENZO(A)ANTHRACENE	460	UG/KG	09/01/1998
SC-16517-S	07/02/1998	ND	BENZO(A)PYRENE	460	UG/KG	09/01/1998
SC-16517-S	07/02/1998	ND	BENZO(B)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16517-S	07/02/1998	ND	BENZO(K)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16517-S	07/02/1998	23 5	CHROMIUM	0.28	UG/G	09/01/1998
SC-16517-S	07/02/1998	ND	CHRYSENE	460	UG/KG	09/01/1998
SC-16517-S	07/02/1998	ND	INDENO(1,2,3-CD)PYRENE	460	UG/KG	09/01/1998
SC-16517-S	07/02/1998	29.6	LEAD	0.28	UG/G	09/01/1998
SC-16517-S	07/02/1998	1 64	RADIUM-226	0.27	PCI/G	09/23/1998
SC-16517-S	07/02/1998	1 10	RADIUM-228	0.46	PCI/G	09/23/1998
SC-16517-S	07/02/1998	ND	THALLIUM	3.0	UG/G	09/01/1998
SC-16517-S	07/02/1998	1 13	THORIUM-230	0.62	PCI/G	09/23/1998
SC-16517-S-1	07/02/1998	ND	2,4,6-TRINITROTOLUENE	0.130	UG/G	09/01/1998
SC-16518-S	07/02/1998	ND	AROCLOR-1248	43	UG/KG	09/01/1998
SC-16518-S	07/02/1998	ND	AROCLOR-1254	43	UG/KG	09/01/1998
SC-16518-S	07/02/1998	ND	AROCLOR-1260	43	UG/KG	09/01/1998
SC-16518-S	07/02/1998	9 10	ARSENIC	0.78	UG/G	09/01/1998
SC-16518-S	07/02/1998	ND	BENZO(A)ANTHRACENE	440	UG/KG	09/01/1998
SC-16518-S	07/02/1998	ND	BENZO(A)PYRENE	440	UG/KG	09/01/1998
SC-16518-S	07/02/1998	ND	BENZO(B)FLUORANTHENE	440	UG/KG	09/01/1998
SC-16518-S	07/02/1998	ND	BENZO(K)FLUORANTHENE	440	UG/KG	09/01/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16518-S	07/02/1998	19 3	CHROMIUM	0 26	UG/G	09/01/1998
SC-16518-S	07/02/1998	ND	CHRYSENE	440	UG/KG	09/01/1998
SC-16518-S	07/02/1998	ND	INDENO(1,2,3-CD)PYRENE	440	UG/KG	09/01/1998
SC-16518-S	07/02/1998	16 3	LEAD	0 26	UG/G	09/01/1998
SC-16518-S	07/02/1998	1 68	RADIUM-226	0 28	PCI/G	09/23/1998
SC-16518-S	07/02/1998	1 40	RADIUM-228	0 37	PCI/G	09/23/1998
SC-16518-S	07/02/1998	ND	THALLIUM	1.4	UG/G	09/01/1998
SC-16518-S	07/02/1998	1 02	THORIUM-230	0.62	PCI/G	09/23/1998
SC-16518-S-1	07/02/1998	ND	2,4,6-TRINITROTOLUENE	0 130	UG/G	09/01/1998
SC-16519-S	07/08/1998	ND	2,4,6-TRINITROTOLUENE	0 130	UG/G	09/01/1998
SC-16519-S	07/08/1998	ND	AROCLOR-1248	45	UG/KG	09/01/1998
SC-16519-S	07/08/1998	ND	AROCLOR-1254	45	UG/KG	09/01/1998
SC-16519-S	07/08/1998	ND	AROCLOR-1260	45	UG/KG	09/01/1998
SC-16519-S	07/08/1998	8 30	ARSENIC	0 80	UG/G	09/01/1998
SC-16519-S	07/08/1998	ND	BENZO(A)ANTHRACENE	430	UG/KG	09/01/1998
SC-16519-S	07/08/1998	ND	BENZO(A)PYRENE	430	UG/KG	09/01/1998
SC-16519-S	07/08/1998	ND	BENZO(B)FLUORANTHENE	430	UG/KG	09/01/1998
SC-16519-S	07/08/1998	ND	BENZO(K)FLUORANTHENE	430	UG/KG	09/01/1998
SC-16519-S	07/08/1998	26 3	CHROMIUM	0 26	UG/G	09/01/1998
SC-16519-S	07/08/1998	ND	CHRYSENE	430	UG/KG	09/01/1998
SC-16519-S	07/08/1998	ND	INDENO(1,2,3-CD)PYRENE	430	UG/KG	09/01/1998
SC-16519-S	07/08/1998	14 3	LEAD	0 26	UG/G	09/01/1998
SC-16519-S	07/08/1998	26 9	PERCENT MOISTURE	0 1	PRCNT	09/01/1998
SC-16519-S	07/08/1998	0 94	RADIUM-226	0 19	PCI/G	09/16/1998
SC-16519-S	07/08/1998	1 13	RADIUM-228	0 43	PCI/G	09/16/1998
SC-16519-S	07/08/1998	2 50	THALLIUM	1 10	UG/G	09/01/1998
SC-16519-S	07/08/1998	0 95	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16520-S	07/08/1998	ND	2,4,6-TRINITROTOLUENE	0 130	UG/G	09/01/1998
SC-16520-S	07/08/1998	ND	AROCLOR-1248	39	UG/KG	09/01/1998
SC-16520-S	07/08/1998	ND	AROCLOR-1254	39	UG/KG	09/01/1998
SC-16520-S	07/08/1998	ND	AROCLOR-1260	39	UG/KG	09/01/1998
SC-16520-S	07/08/1998	6 60	ARSENIC	0 73	UG/G	09/01/1998
SC-16520-S	07/08/1998	ND	BENZO(A)ANTHRACENE	390	UG/KG	09/01/1998
SC-16520-S	07/08/1998	ND	BENZO(A)PYRENE	390	UG/KG	09/01/1998
SC-16520-S	07/08/1998	ND	BENZO(B)FLUORANTHENE	390	UG/KG	09/01/1998
SC-16520-S	07/08/1998	ND	BENZO(K)FLUORANTHENE	390	UG/KG	09/01/1998
SC-16520-S	07/08/1998	14 3	CHROMIUM	0 24	UG/G	09/01/1998
SC-16520-S	07/08/1998	ND	CHRYSENE	390	UG/KG	09/01/1998
SC-16520-S	07/08/1998	ND	INDENO(1,2,3-CD)PYRENE	390	UG/KG	09/01/1998
SC-16520-S	07/08/1998	19 3	LEAD	0 24	UG/G	09/01/1998
SC-16520-S	07/08/1998	19 5	PERCENT MOISTURE	0 1	PRCNT	09/01/1998
SC-16520-S	07/08/1998	1 19	RADIUM-226	0 36	PCI/G	09/16/1998
SC-16520-S	07/08/1998	1 48	RADIUM-228	0 59	PCI/G	09/16/1998
SC-16520-S	07/08/1998	ND	THALLIUM	0 97	UG/G	09/01/1998
SC-16520-S	07/08/1998	1.00	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16521-S	07/08/1998	ND	2,4,6-TRINITROTOLUENE	0 130	UG/G	09/01/1998
SC-16521-S	07/08/1998	ND	AROCLOR-1248	40	UG/KG	09/01/1998
SC-16521-S	07/08/1998	ND	AROCLOR-1254	40	UG/KG	09/01/1998
SC-16521-S	07/08/1998	ND	AROCLOR-1260	40	UG/KG	09/01/1998
SC-16521-S	07/08/1998	9 20	ARSENIC	0 75	UG/G	09/01/1998
SC-16521-S	07/08/1998	ND	BENZO(A)ANTHRACENE	420	UG/KG	09/01/1998
SC-16521-S	07/08/1998	ND	BENZO(A)PYRENE	420	UG/KG	09/01/1998
SC-16521-S	07/08/1998	ND	BENZO(B)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16521-S	07/08/1998	ND	BENZO(K)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16521-S	07/08/1998	20 1	CHROMIUM	0 25	UG/G	09/01/1998
SC-16521-S	07/08/1998	ND	CHRYSENE	420	UG/KG	09/01/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16521-S	07/08/1998	ND	INDENO(1,2,3-CD)PYRENE	420	UG/KG	09/01/1998
SC-16521-S	07/08/1998	15 9	LEAD	0.25	UG/G	09/01/1998
SC-16521-S	07/08/1998	21 4	PERCENT MOISTURE	0.1	PRCNT	09/01/1998
SC-16521-S	07/08/1998	1.13	RADIUM-226	0.27	PCI/G	09/16/1998
SC-16521-S	07/08/1998	1 39	RADIUM-228	0.30	PCI/G	09/16/1998
SC-16521-S	07/08/1998	1 70	THALLIUM	1.00	UG/G	09/01/1998
SC-16521-S	07/08/1998	1 11	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16522-S	07/08/1998	ND	2,4,6-TRINITROTOLUENE	0.130	UG/G	09/01/1998
SC-16522-S	07/08/1998	ND	AROCLOR-1248	38	UG/KG	09/01/1998
SC-16522-S	07/08/1998	ND	AROCLOR-1254	38	UG/KG	09/01/1998
SC-16522-S	07/08/1998	ND	AROCLOR-1260	38	UG/KG	09/01/1998
SC-16522-S	07/08/1998	8.10	ARSENIC	0.68	UG/G	09/01/1998
SC-16522-S	07/08/1998	ND	BENZO(A)ANTHRACENE	380	UG/KG	09/01/1998
SC-16522-S	07/08/1998	ND	BENZO(A)PYRENE	380	UG/KG	09/01/1998
SC-16522-S	07/08/1998	ND	BENZO(B)FLUORANTHENE	380	UG/KG	09/01/1998
SC-16522-S	07/08/1998	ND	BENZO(K)FLUORANTHENE	380	UG/KG	09/01/1998
SC-16522-S	07/08/1998	14 0	CHROMIUM	0.23	UG/G	09/01/1998
SC-16522-S	07/08/1998	ND	CHRYSENE	380	UG/KG	09/01/1998
SC-16522-S	07/08/1998	ND	INDENO(1,2,3-CD)PYRENE	380	UG/KG	09/01/1998
SC-16522-S	07/08/1998	14 5	LEAD	0.23	UG/G	09/01/1998
SC-16522-S	07/08/1998	14 6	PERCENT MOISTURE	0.1	PRCNT	09/01/1998
SC-16522-S	07/08/1998	1 48	RADIUM-226	0.29	PCI/G	09/16/1998
SC-16522-S	07/08/1998	1 02	RADIUM-228	0.51	PCI/G	09/16/1998
SC-16522-S	07/08/1998	1.10	THALLIUM	0.91	UG/G	09/01/1998
SC-16522-S	07/08/1998	1 05	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16523-S	07/10/1998	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	10/09/1998
SC-16523-S	07/10/1998	ND	AROCLOR-1248	42	UG/KG	10/09/1998
SC-16523-S	07/10/1998	ND	AROCLOR-1254	42	UG/KG	10/09/1998
SC-16523-S	07/10/1998	ND	AROCLOR-1260	42	UG/KG	10/09/1998
SC-16523-S	07/10/1998	9 7	ARSENIC	5.90	UG/G	10/09/1998
SC-16523-S	07/10/1998	ND	BENZO(A)ANTHRACENE	11	UG/KG	10/09/1998
SC-16523-S	07/10/1998	ND	BENZO(A)PYRENE	19	UG/KG	10/09/1998
SC-16523-S	07/10/1998	ND	BENZO(B)FLUORANTHENE	15	UG/KG	10/09/1998
SC-16523-S	07/10/1998	ND	BENZO(K)FLUORANTHENE	14	UG/KG	10/09/1998
SC-16523-S	07/10/1998	12 1	CHROMIUM	0.94	UG/G	10/09/1998
SC-16523-S	07/10/1998	ND	CHRYSENE	130	UG/KG	10/09/1998
SC-16523-S	07/10/1998	ND	INDENO(1,2,3-CD)PYRENE	37	UG/KG	10/09/1998
SC-16523-S	07/10/1998	8 7	LEAD	6.90	UG/G	10/09/1998
SC-16523-S	07/10/1998	78 7	PERCENT SOLID	0.01	PRCNT	10/09/1998
SC-16523-S	07/10/1998	0 73	RADIUM-226	0 28	PCI/G	09/16/1998
SC-16523-S	07/10/1998	ND	RADIUM-228	0.95	PCI/G	09/16/1998
SC-16523-S	07/10/1998	ND	THALLIUM	10.3	UG/G	10/09/1998
SC-16523-S	07/10/1998	0.84	THORIUM-230	0.62	PCI/G	09/16/1998
SC-16524-S	07/10/1998	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	10/09/1998
SC-16524-S	07/10/1998	ND	AROCLOR-1248	41	UG/KG	10/09/1998
SC-16524-S	07/10/1998	ND	AROCLOR-1254	41	UG/KG	10/09/1998
SC-16524-S	07/10/1998	ND	AROCLOR-1260	41	UG/KG	10/09/1998
SC-16524-S	07/10/1998	13 8	ARSENIC	6.00	UG/G	10/09/1998
SC-16524-S	07/10/1998	ND	BENZO(A)ANTHRACENE	11	UG/KG	10/09/1998
SC-16524-S	07/10/1998	ND	BENZO(A)PYRENE	18	UG/KG	10/09/1998
SC-16524-S	07/10/1998	ND	BENZO(B)FLUORANTHENE	15	UG/KG	10/09/1998
SC-16524-S	07/10/1998	ND	BENZO(K)FLUORANTHENE	14	UG/KG	10/09/1998
SC-16524-S	07/10/1998	20 3	CHROMIUM	0.94	UG/G	10/09/1998
SC-16524-S	07/10/1998	ND	CHRYSENE	120	UG/KG	10/09/1998
SC-16524-S	07/10/1998	ND	INDENO(1,2,3-CD)PYRENE	36	UG/KG	10/09/1998
SC-16524-S	07/10/1998	22 3	LEAD	6.90	UG/G	10/09/1998

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16524-S	07/10/1998	81 0	PERCENT SOLID	0.01	PRCNT	10/09/1998
SC-16524-S	07/10/1998	1 08	RADIUM-226	0 27	PCI/G	09/16/1998
SC-16524-S	07/10/1998	0 87	RADIUM-228	0 38	PCI/G	09/16/1998
SC-16524-S	07/10/1998	ND	THALLIUM	10 3	UG/G	10/09/1998
SC-16524-S	07/10/1998	1 04	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16525-S	07/10/1998	ND	2,4,6-TRINITROTOLUENE	0 24	UG/G	10/09/1998
SC-16525-S	07/10/1998	ND	AROCLOR-1248	40	UG/KG	10/09/1998
SC-16525-S	07/10/1998	ND	AROCLOR-1254	40	UG/KG	10/09/1998
SC-16525-S	07/10/1998	ND	AROCLOR-1260	40	UG/KG	10/09/1998
SC-16525-S	07/10/1998	13 6	ARSENIC	5.80	UG/G	10/09/1998
SC-16525-S	07/10/1998	ND	BENZO(A)ANTHRACENE	11	UG/KG	10/09/1998
SC-16525-S	07/10/1998	ND	BENZO(A)PYRENE	18	UG/KG	10/09/1998
SC-16525-S	07/10/1998	ND	BENZO(B)FLUORANTHENE	14	UG/KG	10/09/1998
SC-16525-S	07/10/1998	ND	BENZO(K)FLUORANTHENE	13	UG/KG	10/09/1998
SC-16525-S	07/10/1998	25 3	CHROMIUM	0 91	UG/G	10/09/1998
SC-16525-S	07/10/1998	ND	CHRYSENE	120	UG/KG	10/09/1998
SC-16525-S	07/10/1998	ND	INDENO(1,2,3-CD)PYRENE	35	UG/KG	10/09/1998
SC-16525-S	07/10/1998	23 1	LEAD	6 70	UG/G	10/09/1998
SC-16525-S	07/10/1998	83 8	PERCENT SOLID	0 01	PRCNT	10/09/1998
SC-16525-S	07/10/1998	1 24	RADIUM-226	0.26	PCI/G	09/16/1998
SC-16525-S	07/10/1998	0 95	RADIUM-228	0 45	PCI/G	09/16/1998
SC-16525-S	07/10/1998	ND	THALLIUM	9 90	UG/G	10/09/1998
SC-16525-S	07/10/1998	0 84	THORIUM-230	0 62	PCI/G	09/16/1998
SC-16601-C	06/18/1998	ND	2,4,6-TRINITROTOLUENE	0 23	UG/G	08/25/1998
SC-16601-C	06/18/1998	8 1	ARSENIC	0 49	UG/G	09/11/1998
SC-16601-C	06/18/1998	24 3	CHROMIUM	0 20	UG/G	09/11/1998
SC-16601-C	06/18/1998	42 8	LEAD	0 28	UG/G	09/11/1998
SC-16601-C	06/18/1998	21 9	PERCENT MOISTURE	0 10	PRCNT	09/11/1998
SC-16601-C	06/18/1998	1 0	THALLIUM	0 79	UG/G	09/11/1998
SC-16601-C	06/18/1998	0 94	THORIUM-230	0 62	PCI/G	09/01/1998
SC-16601-C	06/18/1998	ND	URANIUM-238	3 85	PCI/G	09/01/1998
SC-16601-C-RE	07/07/1998	ND	AROCLOR-1248	44	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	ND	AROCLOR-1254	44	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	ND	AROCLOR-1260	44	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	ND	BENZO(A)ANTHRACENE	220	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	ND	BENZO(A)PYRENE	220	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	ND	BENZO(B)FLUORANTHENE	220	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	ND	BENZO(K)FLUORANTHENE	220	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	ND	CHRYSENE	220	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	ND	INDENO(1,2,3-CD)PYRENE	220	UG/KG	09/11/1998
SC-16601-C-RE	07/07/1998	25 3	PERCENT MOISTURE	0 00	PRCNT	09/11/1998
SC-16602-C	06/18/1998	ND	2,4,6-TRINITROTOLUENE	0 24	UG/G	08/25/1998
SC-16602-C	06/18/1998	9 9	ARSENIC	0 48	UG/G	09/11/1998
SC-16602-C	06/18/1998	20 9	CHROMIUM	0 20	UG/G	09/11/1998
SC-16602-C	06/18/1998	14 1	LEAD	0 28	UG/G	09/11/1998
SC-16602-C	06/18/1998	21 4	PERCENT MOISTURE	0 10	PRCNT	09/11/1998
SC-16602-C	06/18/1998	0 83	THALLIUM	0 79	UG/G	09/11/1998
SC-16602-C	06/18/1998	1 24	THORIUM-230	0 62	PCI/G	09/01/1998
SC-16602-C	06/18/1998	365	URANIUM-238	6 03	PCI/G	09/01/1998
SC-16602-C-RE	07/07/1998	ND	AROCLOR-1248	42	UG/KG	09/11/1998
SC-16602-C-RE	07/07/1998	ND	AROCLOR-1254	42	UG/KG	09/11/1998
SC-16602-C-RE	07/07/1998	ND	AROCLOR-1260	42	UG/KG	09/11/1998
SC-16602-C-RE	07/07/1998	ND	BENZO(A)ANTHRACENE	210	UG/KG	09/11/1998
SC-16602-C-RE	07/07/1998	ND	BENZO(A)PYRENE	210	UG/KG	09/11/1998
SC-16602-C-RE	07/07/1998	ND	BENZO(B)FLUORANTHENE	210	UG/KG	09/11/1998
SC-16602-C-RE	07/07/1998	ND	BENZO(K)FLUORANTHENE	210	UG/KG	09/11/1998

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16602-C-RE	07/07/1998	ND	CHRYSENE	210	UG/KG	09/11/1998
SC-16602-C-RE	07/07/1998	ND	INDENO(1,2,3-CD)PYRENE	210	UG/KG	09/11/1998
SC-16602-C-RE	07/07/1998	21 0	PERCENT MOISTURE	0.00	PRCNT	09/11/1998
SC-16602-C-RS	06/22/1998	ND	URANIUM-238	3.72	PCI/G	09/10/1998
SC-16603-C	06/18/1998	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	08/25/1998
SC-16603-C	06/18/1998	10 4	ARSENIC	0.48	UG/G	09/11/1998
SC-16603-C	06/18/1998	15 2	CHROMIUM	0.20	UG/G	09/11/1998
SC-16603-C	06/18/1998	28.8	LEAD	0.28	UG/G	09/11/1998
SC-16603-C	06/18/1998	21 4	PERCENT MOISTURE	0.10	PRCNT	09/11/1998
SC-16603-C	06/18/1998	ND	THALLIUM	0 79	UG/G	09/11/1998
SC-16603-C	06/18/1998	1 04	THORIUM-230	0.62	PCI/G	09/01/1998
SC-16603-C	06/18/1998	ND	URANIUM-238	4.24	PCI/G	09/01/1998
SC-16603-C-RE	07/07/1998	ND	AROCLOR-1248	44	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	ND	AROCLOR-1254	44	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	ND	AROCLOR-1260	44	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	ND	BENZO(A)ANTHRACENE	220	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	ND	BENZO(A)PYRENE	220	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	ND	BENZO(B)FLUORANTHENE	220	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	ND	BENZO(K)FLUORANTHENE	220	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	ND	CHRYSENE	220	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	ND	INDENO(1,2,3-CD)PYRENE	220	UG/KG	09/11/1998
SC-16603-C-RE	07/07/1998	25 4	PERCENT MOISTURE	0.00	PRCNT	09/11/1998
SC-16604-C	06/18/1998	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	08/25/1998
SC-16604-C	06/18/1998	13 2	ARSENIC	0.56	UG/G	09/11/1998
SC-16604-C	06/18/1998	34 7	CHROMIUM	0.24	UG/G	09/11/1998
SC-16604-C	06/18/1998	158	LEAD	0.32	UG/G	09/11/1998
SC-16604-C	06/18/1998	32.2	PERCENT MOISTURE	0.10	PRCNT	09/11/1998
SC-16604-C	06/18/1998	1 4	THALLIUM	0.91	UG/G	09/11/1998
SC-16604-C	06/18/1998	0 95	THORIUM-230	0.62	PCI/G	09/01/1998
SC-16604-C	06/18/1998	12.6	URANIUM-238	3 16	PCI/G	09/01/1998
SC-16604-C-RE	07/07/1998	ND	AROCLOR-1248	48	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	ND	AROCLOR-1254	48	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	ND	AROCLOR-1260	48	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	ND	BENZO(A)ANTHRACENE	240	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	ND	BENZO(A)PYRENE	240	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	ND	BENZO(B)FLUORANTHENE	240	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	ND	BENZO(K)FLUORANTHENE	240	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	ND	CHRYSENE	240	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	ND	INDENO(1,2,3-CD)PYRENE	240	UG/KG	09/11/1998
SC-16604-C-RE	07/07/1998	31 1	PERCENT MOISTURE	0.00	PRCNT	09/11/1998
SC-16702-S	12/01/1997	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	02/05/1998
SC-16702-S	12/01/1997	ND	AROCLOR-1248	33	UG/KG	02/05/1998
SC-16702-S	12/01/1997	ND	AROCLOR-1254	33	UG/KG	02/05/1998
SC-16702-S	12/01/1997	ND	AROCLOR-1260	33	UG/KG	02/05/1998
SC-16702-S	12/01/1997	ND	ARSENIC	7.5	UG/G	02/05/1998
SC-16702-S	12/01/1997	ND	BENZO(A)ANTHRACENE	11	UG/KG	02/05/1998
SC-16702-S	12/01/1997	ND	BENZO(A)PYRENE	18	UG/KG	02/05/1998
SC-16702-S	12/01/1997	ND	BENZO(B)FLUORANTHENE	15	UG/KG	02/05/1998
SC-16702-S	12/01/1997	ND	BENZO(K)FLUORANTHENE	13	UG/KG	02/05/1998
SC-16702-S	12/01/1997	18 0	CHROMIUM	0.76	UG/G	02/05/1998
SC-16702-S	12/01/1997	ND	CHRYSENE	120	UG/KG	02/05/1998
SC-16702-S	12/01/1997	ND	INDENO(1,2,3-CD)PYRENE	35	UG/KG	02/05/1998
SC-16702-S	12/01/1997	8 0	LEAD	5 6	UG/G	02/05/1998
SC-16702-S	12/01/1997	81 8	PERCENT SOLID	0.01	PRCNT	02/05/1998
SC-16702-S	12/01/1997	1 40	RADIUM-226	0 27	PCI/G	02/09/1998
SC-16702-S	12/01/1997	1.04	RADIUM-228	0.64	PCI/G	02/09/1998

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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16702-S	12/01/1997	ND	THALLIUM	8 4	UG/G	02/05/1998
SC-16702-S	12/01/1997	0 99	THORIUM-230	0 62	PCI/G	02/09/1998
SC-16702-S	12/01/1997	ND	URANIUM-238	3 95	PCI/G	02/09/1998
SC-16703-C	12/01/1997	ND	2,4,6-TRINITROTOLUENE	0 24	UG/G	02/05/1998
SC-16703-C	12/01/1997	ND	AROCLOR-1248	33	UG/KG	02/05/1998
SC-16703-C	12/01/1997	ND	AROCLOR-1254	33	UG/KG	02/05/1998
SC-16703-C	12/01/1997	ND	AROCLOR-1260	33	UG/KG	02/05/1998
SC-16703-C	12/01/1997	10 9	ARSENIC	7 6	UG/G	02/05/1998
SC-16703-C	12/01/1997	ND	BENZO(A)ANTHRACENE	11	UG/KG	02/05/1998
SC-16703-C	12/01/1997	ND	BENZO(A)PYRENE	19	UG/KG	02/05/1998
SC-16703-C	12/01/1997	ND	BENZO(B)FLUORANTHENE	15	UG/KG	02/05/1998
SC-16703-C	12/01/1997	ND	BENZO(K)FLUORANTHENE	14	UG/KG	02/05/1998
SC-16703-C	12/01/1997	18 4	CHROMIUM	0 78	UG/G	02/05/1998
SC-16703-C	12/01/1997	ND	CHRYSENE	120	UG/KG	02/05/1998
SC-16703-C	12/01/1997	ND	INDENO(1,2,3-CD)PYRENE	36	UG/KG	02/05/1998
SC-16703-C	12/01/1997	13 3	LEAD	5 7	UG/G	02/05/1998
SC-16703-C	12/01/1997	80 0	PERCENT SOLID	0 01	PRCNT	02/05/1998
SC-16703-C	12/01/1997	1 60	RADIUM-226	0 29	PCI/G	02/09/1998
SC-16703-C	12/01/1997	1 61	RADIUM-228	0 42	PCI/G	02/09/1998
SC-16703-C	12/01/1997	ND	THALLIUM	8 6	UG/G	02/05/1998
SC-16703-C	12/01/1997	1 10	THORIUM-230	0 62	PCI/G	02/09/1998
SC-16703-C	12/01/1997	ND	URANIUM-238	2 96	PCI/G	02/09/1998
SC-16703-S	12/01/1997	ND	2,4,6-TRINITROTOLUENE	0 24	UG/G	02/05/1998
SC-16703-S	12/01/1997	ND	AROCLOR-1248	33	UG/KG	02/05/1998
SC-16703-S	12/01/1997	ND	AROCLOR-1254	33	UG/KG	02/05/1998
SC-16703-S	12/01/1997	ND	AROCLOR-1260	33	UG/KG	02/05/1998
SC-16703-S	12/01/1997	8 3	ARSENIC	7 4	UG/G	02/05/1998
SC-16703-S	12/01/1997	ND	BENZO(A)ANTHRACENE	11	UG/KG	02/05/1998
SC-16703-S	12/01/1997	ND	BENZO(A)PYRENE	18	UG/KG	02/05/1998
SC-16703-S	12/01/1997	ND	BENZO(B)FLUORANTHENE	15	UG/KG	02/05/1998
SC-16703-S	12/01/1997	ND	BENZO(K)FLUORANTHENE	13	UG/KG	02/05/1998
SC-16703-S	12/01/1997	18 3	CHROMIUM	0 75	UG/G	02/05/1998
SC-16703-S	12/01/1997	ND	CHRYSENE	120	UG/KG	02/05/1998
SC-16703-S	12/01/1997	ND	INDENO(1,2,3-CD)PYRENE	35	UG/KG	02/05/1998
SC-16703-S	12/01/1997	19 1	LEAD	5 5	UG/G	02/05/1998
SC-16703-S	12/01/1997	82 3	PERCENT SOLID	0 01	PRCNT	02/05/1998
SC-16703-S	12/01/1997	1 56	RADIUM-226	0 28	PCI/G	02/09/1998
SC-16703-S	12/01/1997	ND	RADIUM-228	1 18	PCI/G	02/09/1998
SC-16703-S	12/01/1997	ND	THALLIUM	8 4	UG/G	02/05/1998
SC-16703-S	12/01/1997	0 90	THORIUM-230	0 62	PCI/G	02/09/1998
SC-16703-S	12/01/1997	ND	URANIUM-238	3 91	PCI/G	02/09/1998
SC-16710-S	11/20/1997	ND	2,4,6-TRINITROTOLUENE	0 1	UG/G	01/07/1998
SC-16710-S	11/20/1997	ND	AROCLOR-1248	38 0	UG/KG	01/07/1998
SC-16710-S	11/20/1997	ND	AROCLOR-1254	38 0	UG/KG	01/07/1998
SC-16710-S	11/20/1997	ND	AROCLOR-1260	38.0	UG/KG	01/07/1998
SC-16710-S	11/20/1997	10 2	ARSENIC	0 9	UG/G	01/07/1998
SC-16710-S	11/20/1997	ND	BENZO(A)ANTHRACENE	29	UG/KG	01/07/1998
SC-16710-S	11/20/1997	ND	BENZO(A)PYRENE	29	UG/KG	01/07/1998
SC-16710-S	11/20/1997	ND	BENZO(B)FLUORANTHENE	29	UG/KG	01/07/1998
SC-16710-S	11/20/1997	ND	BENZO(K)FLUORANTHENE	29	UG/KG	01/07/1998
SC-16710-S	11/20/1997	15 9	CHROMIUM	0 5	UG/G	01/07/1998
SC-16710-S	11/20/1997	ND	CHRYSENE	29	UG/KG	01/07/1998
SC-16710-S	11/20/1997	ND	INDENO(1,2,3-CD)PYRENE	29	UG/KG	01/07/1998
SC-16710-S	11/20/1997	17 5	LEAD	0 5	UG/G	01/07/1998
SC-16710-S	11/20/1997	85 8	PERCENT SOLID	1 00	PRCNT	01/07/1998
SC-16710-S	11/20/1997	1 37	RADIUM-226	0 35	PCI/G	03/11/1998

Row Filter WSSRAP_ID between 'SC-162' and 'SC-169' (Marked Rows Only)
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WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16710-S	11/20/1997	ND	THALLIUM	1.6	UG/G	01/07/1998
SC-16710-S	11/20/1997	0.94	THORIUM-230	0.62	PCI/G	03/11/1998
SC-16713-C	11/04/1997	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	01/12/1998
SC-16713-C	11/04/1997	ND	AROCLOR-1248	38	UG/KG	01/12/1998
SC-16713-C	11/04/1997	ND	AROCLOR-1254	38	UG/KG	01/12/1998
SC-16713-C	11/04/1997	ND	AROCLOR-1260	38	UG/KG	01/12/1998
SC-16713-C	11/04/1997	ND	ARSENIC	7.0	UG/G	01/12/1998
SC-16713-C	11/04/1997	ND	BENZO(A)ANTHRACENE	10	UG/KG	01/12/1998
SC-16713-C	11/04/1997	ND	BENZO(A)PYRENE	17	UG/KG	01/12/1998
SC-16713-C	11/04/1997	ND	BENZO(B)FLUORANTHENE	14	UG/KG	01/12/1998
SC-16713-C	11/04/1997	ND	BENZO(K)FLUORANTHENE	13	UG/KG	01/12/1998
SC-16713-C	11/04/1997	17 3	CHROMIUM	0 71	UG/G	01/12/1998
SC-16713-C	11/04/1997	ND	CHRYSENE	110	UG/KG	01/12/1998
SC-16713-C	11/04/1997	ND	INDENO(1,2,3-CD)PYRENE	33	UG/KG	01/12/1998
SC-16713-C	11/04/1997	22 0	LEAD	5.2	UG/G	01/12/1998
SC-16713-C	11/04/1997	87 6	PERCENT SOLID	0.01	PRCNT	01/12/1998
SC-16713-C	11/04/1997	1 69	RADIUM-226	0 25	PCI/G	01/09/1998
SC-16713-C	11/04/1997	ND	THALLIUM	7.9	UG/G	01/12/1998
SC-16713-C	11/04/1997	1 37	THORIUM-230	0 62	PCI/G	01/09/1998
SC-16802-C	06/17/1998	ND	2,4,6-TRINITROTOLUENE	0.23	UG/G	08/25/1998
SC-16802-C	06/17/1998	24 9	CHROMIUM	0.21	UG/G	09/11/1998
SC-16802-C	06/17/1998	64 7	LEAD	0.30	UG/G	09/11/1998
SC-16802-C	06/17/1998	25 4	PERCENT MOISTURE	0.10	PRCNT	09/11/1998
SC-16802 C	06/17/1998	1.60	RADIUM-226	0.46	PCI/G	09/01/1998
SC-1680^-C	06/17/1998	ND	RADIUM-228	1.23	PCI/G	09/01/1998
SC-16802-C	06/17/1998	4 04	THORIUM-230	0.62	PCI/G	09/01/1998
SC-16802-C-RE	07/06/1998	ND	AROCLOR-1248	41	UG/KG	09/01/1998
SC-16802-C-RE	07/06/1998	ND	AROCLOR-1254	41	UG/KG	09/01/1998
SC-16802-C-RE	07/06/1998	ND	AROCLOR-1260	41	UG/KG	09/01/1998
SC-16802-C-RE	07/06/1998	ND	BENZO(A)ANTHRACENE	410	UG/KG	09/01/1998
SC-16802-C-RE	07/06/1998	(87)	BENZO(A)PYRENE	410	UG/KG	09/01/1998
SC-16802-C-RE	07/06/1998	(140)	BENZO(B)FLUORANTHENE	410	UG/KG	09/01/1998
SC-16802-C-RE	07/06/1998	(100)	BENZO(K)FLUORANTHENE	410	UG/KG	09/01/1998
SC-16802-C-RE	07/06/1998	(120)	CHRYSENE	410	UG/KG	09/01/1998
SC-16802-C-RE	07/06/1998	ND	INDENO(1,2,3-CD)PYRENE	410	UG/KG	09/01/1998
SC-16802-S	06/17/1998	ND	2,4,6-TRINITROTOLUENE	0.23	UG/G	08/25/1998
SC-16802-S	06/17/1998	21 1	CHROMIUM	0.20	UG/G	09/11/1998
SC-16802-S	06/17/1998	71 2	LEAD	0.28	UG/G	09/11/1998
SC-16802-S	06/17/1998	21 8	PERCENT MOISTURE	0.10	PRCNT	09/11/1998
SC-16802-S	06/17/1998	2 12	RADIUM-226	0.26	PCI/G	09/01/1998
SC-16802-S	06/17/1998	1 02	RADIUM-228	0.55	PCI/G	09/01/1998
SC-16802-S	06/17/1998	2.06	THORIUM-230	0.62	PCI/G	09/01/1998
SC-16802-S-RE	07/06/1998	ND	AROCLOR-1248	52	UG/KG	09/01/1998
SC-16802-S-RE	07/06/1998	ND	AROCLOR-1254	52	UG/KG	09/01/1998
SC-16802-S-RE	07/06/1998	ND	AROCLOR-1260	52	UG/KG	09/01/1998
SC-16802-S-RE	07/06/1998	ND	BENZO(A)ANTHRACENE	510	UG/KG	09/01/1998
SC-16802-S-RE	07/06/1998	ND	BENZO(A)PYRENE	510	UG/KG	09/01/1998
SC-16802-S-RE	07/06/1998	ND	BENZO(B)FLUORANTHENE	510	UG/KG	09/01/1998
SC-16802-S-RE	07/06/1998	ND	BENZO(K)FLUORANTHENE	510	UG/KG	09/01/1998
SC-16802-S-RE	07/06/1998	ND	CHRYSENE	510	UG/KG	09/01/1998
SC-16802-S-RE	07/06/1998	ND	INDENO(1,2,3-CD)PYRENE	510	UG/KG	09/01/1998
SC-16803-C	06/17/1998	ND	2,4,6-TRINITROTOLUENE	0.24	UG/G	08/25/1998
SC-16803-C	06/17/1998	18 3	CHROMIUM	0.20	UG/G	09/11/1998
SC-16803-C	06/17/1998	11 5	LEAD	0.27	UG/G	09/11/1998
SC-16803-C	06/17/1998	19.2	PERCENT MOISTURE	0.10	PRCNT	09/11/1998
SC-16803-C	06/17/1998	1 49	RADIUM-226	0 38	PCI/G	09/01/1998

WSSRAP_ID	DATE_SAM	CONC	PARAMETER	DL	UNITS	MERGDATE
SC-16803-C	06/17/1998	1 15	RADIUM-228	0 50	PCI/G	09/01/1998
SC-16803-C	06/17/1998	1 03	THORIUM-230	0 62	PCI/G	09/01/1998
SC-16803-C-RE	07/06/1998	ND	AROCLOR-1248	40	UG/KG	09/01/1998
SC-16803-C-RE	07/06/1998	ND	AROCLOR-1254	40	UG/KG	09/01/1998
SC-16803-C-RE	07/06/1998	ND	AROCLOR-1260	40	UG/KG	09/01/1998
SC-16803-C-RE	07/06/1998	ND	BENZO(A)ANTHRACENE	420	UG/KG	09/01/1998
SC-16803-C-RE	07/06/1998	ND	BENZO(A)PYRENE	420	UG/KG	09/01/1998
SC-16803-C-RE	07/06/1998	ND	BENZO(B)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16803-C-RE	07/06/1998	ND	BENZO(K)FLUORANTHENE	420	UG/KG	09/01/1998
SC-16803-C-RE	07/06/1998	ND	CHRYSENE	420	UG/KG	09/01/1998
SC-16803-C-RE	07/06/1998	ND	INDENO(1,2,3-CD)PYRENE	420	UG/KG	09/01/1998
SC-16804-C	06/17/1998	ND	2,4,6-TRINITROTOLUENE	0 24	UG/G	08/25/1998
SC-16804-C	06/17/1998	17 9	CHROMIUM	0 21	UG/G	09/11/1998
SC-16804-C	06/17/1998	19 8	LEAD	0 29	UG/G	09/11/1998
SC-16804-C	06/17/1998	22 9	PERCENT MOISTURE	0 10	PRCNT	09/11/1998
SC-16804-C	06/17/1998	3 21	RADIUM-226	0 30	PCI/G	09/01/1998
SC-16804-C	06/17/1998	1 08	RADIUM-228	0 46	PCI/G	09/01/1998
SC-16804-C	06/17/1998	2 83	THORIUM-230	0 62	PCI/G	09/01/1998
SC-16804-C-RE	07/06/1998	ND	AROCLOR-1248	46	UG/KG	09/01/1998
SC-16804-C-RE	07/06/1998	ND	AROCLOR-1254	46	UG/KG	09/01/1998
SC-16804-C-RE	07/06/1998	ND	AROCLOR-1260	46	UG/KG	09/01/1998
SC-16804-C-RE	07/06/1998	ND	BENZO(A)ANTHRACENE	460	UG/KG	09/01/1998
SC-16804-C-RE	07/06/1998	ND	BENZO(A)PYRENE	460	UG/KG	09/01/1998
SC-16804-C-RE	07/06/1998	ND	BENZO(B)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16804-C-RE	07/06/1998	ND	BENZO(K)FLUORANTHENE	460	UG/KG	09/01/1998
SC-16804-C-RE	07/06/1998	ND	CHRYSENE	460	UG/KG	09/01/1998
SC-16804-C-RE	07/06/1998	ND	INDENO(1,2,3-CD)PYRENE	460	UG/KG	09/01/1998
SC-16807-C	06/17/1998	ND	2,4,6-TRINITROTOLUENE	0 24	UG/G	08/25/1998
SC-16807-C	06/17/1998	21 6	CHROMIUM	0 20	UG/G	09/11/1998
SC-16807-C	06/17/1998	13 4	LEAD	0 27	UG/G	09/11/1998
SC-16807-C	06/17/1998	19 9	PERCENT MOISTURE	0 10	PRCNT	09/11/1998
SC-16807-C	06/17/1998	1 38	RADIUM-226	0 36	PCI/G	09/01/1998
SC-16807-C	06/17/1998	ND	RADIUM-228	1 31	PCI/G	09/01/1998
SC-16807-C	06/17/1998	1 41	THORIUM-230	0 62	PCI/G	09/01/1998
SC-16807-C-RE	07/06/1998	ND	AROCLOR-1248	41	UG/KG	09/01/1998
SC-16807-C-RE	07/06/1998	ND	AROCLOR-1254	41	UG/KG	09/01/1998
SC-16807-C-RE	07/06/1998	ND	AROCLOR-1260	41	UG/KG	09/01/1998
SC-16807-C-RE	07/06/1998	ND	BENZO(A)ANTHRACENE	410	UG/KG	09/01/1998
SC-16807-C-RE	07/06/1998	ND	BENZO(A)PYRENE	410	UG/KG	09/01/1998
SC-16807-C-RE	07/06/1998	ND	BENZO(B)FLUORANTHENE	410	UG/KG	09/01/1998
SC-16807-C-RE	07/06/1998	ND	BENZO(K)FLUORANTHENE	410	UG/KG	09/01/1998
SC-16807-C-RE	07/06/1998	ND	CHRYSENE	410	UG/KG	09/01/1998
SC-16807-C-RE	07/06/1998	ND	INDENO(1,2,3-CD)PYRENE	410	UG/KG	09/01/1998

APPENDIX D
Quality Control Data

WSSRAP_ID	DATE_SAM	PARAMETER	CONC	DL	UNITS	COMMENTS
SC-16510-S-EB	06/25/1998	2,4,6-TRINITROTOLUENE	ND	0.20	UG/L	-
SC-16510-S-FR	06/25/1998	2,4,6-TRINITROTOLUENE	ND	0.080	UG/G	-
SC-16510-S-MD	06/25/1998	2,4,6-TRINITROTOLUENE	0.757	0.080	UG/G	%REC=94.6 RPD=11.0
SC-16510-S-MS	06/25/1998	2,4,6-TRINITROTOLUENE	0.682	0.080	UG/G	%REC=85.3
SC-16510-S-SD	06/25/1998	2,4,6-TRINITROTOLUENE	ND	0.23	UG/G	-
SC-16602-C-EB	06/18/1998	2,4,6-TRINITROTOLUENE	ND	0.20	UG/L	-
SC-16602-C-FR	06/18/1998	2,4,6-TRINITROTOLUENE	ND	0.24	UG/G	-
SC-16602-C-MD	06/18/1998	2,4,6-TRINITROTOLUENE	1.5	0.24	UG/G	%REC=122 RPD=13
SC-16602-C-MS	06/18/1998	2,4,6-TRINITROTOLUENE	1.3	0.24	UG/G	%REC=107
SC-16803-C-EB	06/17/1998	2,4,6-TRINITROTOLUENE	ND	0.20	UG/L	-
SC-16803-C-FR	06/17/1998	2,4,6-TRINITROTOLUENE	ND	0.24	UG/G	-
SC-16803-C-MD	06/17/1998	2,4,6-TRINITROTOLUENE	1.2	0.24	UG/G	%REC=95.2 RPD=11
SC-16803-C-MS	06/17/1998	2,4,6-TRINITROTOLUENE	1.3	0.24	UG/G	%REC=106
SC-16210-S-EB	05/15/1998	AROCLOR-1248	ND	1.0	UG/L	-
SC-16210-S-FR	05/15/1998	AROCLOR-1248	ND	41	UG/KG	-
SC-16210-S-MD	05/15/1998	AROCLOR-1248	ND	41	UG/KG	-
SC-16210-S-MS	05/15/1998	AROCLOR-1248	ND	41	UG/KG	-
SC-16210-S-SD	05/15/1998	AROCLOR-1248	ND	40	UG/KG	-
SC-16228-C-EB	05/15/1998	AROCLOR-1248	ND	1.0	UG/L	-
SC-16228-C-FR	05/15/1998	AROCLOR-1248	ND	41	UG/KG	-
SC-16228-C-MD	05/15/1998	AROCLOR-1248	ND	42	UG/KG	-
SC-16228-C-MS	05/15/1998	AROCLOR-1248	ND	42	UG/KG	-
SC-16228-C-SD	05/15/1998	AROCLOR-1248	ND	42	UG/KG	-
SC-16310-C-EB	03/04/1998	AROCLOR-1248	ND	1.0	UG/L	-
SC-16310-C-FR	03/04/1998	AROCLOR-1248	ND	44	UG/KG	-
SC-16510-S-EB	06/25/1998	AROCLOR-1248	ND	1.00	UG/L	-
SC-16510-S-FR	06/25/1998	AROCLOR-1248	ND	42	UG/KG	-
SC-16510-S-MD	06/25/1998	AROCLOR-1248	ND	42	UG/KG	-
SC-16510-S-MS	06/25/1998	AROCLOR-1248	ND	42	UG/KG	-
SC-16510-S-SD	06/25/1998	AROCLOR-1248	ND	42	UG/KG	-
SC-16602-C-EB	06/18/1998	AROCLOR-1248	ND	1.00	UG/L	-
SC-16602-C-SD	06/18/1998	AROCLOR-1248	ND	43	UG/KG	-
SC-16803-C-EB	06/17/1998	AROCLOR-1248	ND	1.00	UG/L	-
SC-16803-C-SD	06/17/1998	AROCLOR-1248	ND	42	UG/KG	-
SC-16210-S-EB	05/15/1998	AROCLOR-1254	ND	1.0	UG/L	-
SC-16210-S-FR	05/15/1998	AROCLOR-1254	ND	41	UG/KG	-
SC-16210-S-MD	05/15/1998	AROCLOR-1254	140	41	UG/KG	% REC=90
SC-16210-S-MS	05/15/1998	AROCLOR-1254	140	41	UG/KG	% REC=87
SC-16210-S-SD	05/15/1998	AROCLOR-1254	ND	40	UG/KG	-
SC-16228-C-EB	05/15/1998	AROCLOR-1254	ND	1.0	UG/L	-
SC-16228-C-FR	05/15/1998	AROCLOR-1254	ND	41	UG/KG	-
SC-16228-C-MD	05/15/1998	AROCLOR-1254	140	42	UG/KG	% REC=90
SC-16228-C-MS	05/15/1998	AROCLOR-1254	140	42	UG/KG	% REC=92
SC-16228-C-SD	05/15/1998	AROCLOR-1254	ND	42	UG/KG	-
SC-16310-C-EB	03/04/1998	AROCLOR-1254	ND	1.0	UG/L	-
SC-16310-C-FR	03/04/1998	AROCLOR-1254	ND	44	UG/KG	-
SC-16510-S-EB	06/25/1998	AROCLOR-1254	ND	1.00	UG/L	-
SC-16510-S-FR	06/25/1998	AROCLOR-1254	ND	86	UG/KG	-
SC-16510-S-MD	06/25/1998	AROCLOR-1254	ND	86	UG/KG	-
SC-16510-S-MS	06/25/1998	AROCLOR-1254	ND	86	UG/KG	-
SC-16510-S-SD	06/25/1998	AROCLOR-1254	ND	42	UG/KG	-
SC-16602-C-EB	06/18/1998	AROCLOR-1254	ND	1.00	UG/L	-
SC-16602-C-SD	06/18/1998	AROCLOR-1254	ND	43	UG/KG	-
SC-16803-C-EB	06/17/1998	AROCLOR-1254	ND	1.00	UG/L	-
SC-16803-C-SD	06/17/1998	AROCLOR-1254	ND	42	UG/KG	-

SC-16210-S-EB	05/15/1998	AROCLOR-1260	ND	1 0	UG/L	-
SC-16210-S-FR	05/15/1998	AROCLOR-1260	ND	41	UG/KG	-
SC-16210-S-MD	05/15/1998	AROCLOR-1260	ND	41	UG/KG	-
SC-16210-S-MS	05/15/1998	AROCLOR-1260	ND	41	UG/KG	-
SC-16210-S-SD	05/15/1998	AROCLOR-1260	ND	40	UG/KG	-
SC-16228-C-EB	05/15/1998	AROCLOR-1260	ND	1.0	UG/L	-
SC-16228-C-FR	05/15/1998	AROCLOR-1260	ND	41	UG/KG	-
SC-16228-C-MD	05/15/1998	AROCLOR-1260	ND	42	UG/KG	-
SC-16228-C-MS	05/15/1998	AROCLOR-1260	ND	42	UG/KG	-
SC-16228-C-SD	05/15/1998	AROCLOR-1260	ND	42	UG/KG	-
SC-16310-C-EB	03/04/1998	AROCLOR-1260	ND	1.0	UG/L	-
SC-16310-C-FR	03/04/1998	AROCLOR-1260	ND	44	UG/KG	-
SC-16310-C-MD	03/04/1998	AROCLOR-1260	160	36	UG/KG	%REC=90 RPD=0 *T*
SC-16310-C-MS	03/04/1998	AROCLOR-1260	170	36	UG/KG	%REC=90 *T*
SC-16510-S-EB	06/25/1998	AROCLOR-1260	ND	1 00	UG/L	-
SC-16510-S-FR	06/25/1998	AROCLOR-1260	ND	86	UG/KG	-
SC-16510-S-MD	06/25/1998	AROCLOR-1260	320	86	UG/KG	%REC=84 RPD=1 5 *T*
SC-16510-S-MS	06/25/1998	AROCLOR-1260	330	86	UG/KG	%REC=85 *T*
SC-16510-S-SD	06/25/1998	AROCLOR-1260	ND	42	UG/KG	-
SC-16602-C-EB	06/18/1998	AROCLOR-1260	ND	1 00	UG/L	-
SC-16602-C-SD	06/18/1998	AROCLOR-1260	ND	43	UG/KG	-
SC-16803-C-EB	06/17/1998	AROCLOR-1260	ND	1 00	UG/L	-
SC-16803-C-SD	06/17/1998	AROCLOR-1260	ND	42	UG/KG	-
SC-16510-S-DU	06/25/1998	ARSENIC	11.2	0.98	UG/G	%RPD=47 8 *T*
SC-16510-S-EB	06/25/1998	ARSENIC	ND	24 1	UG/L	-
SC-16510-S-FR	06/25/1998	ARSENIC	10 1	1.00	UG/G	-
SC-16510-S-MS	06/25/1998	ARSENIC	23 1	1.00	UG/G	%REC=47 3 *T*
SC-16510-S-SD	06/25/1998	ARSENIC	16 4	5.90	UG/G	-
SC-16602-C-DU	06/18/1998	ARSENIC	8.4	0 48	UG/G	RPD=16
SC-16602-C-EB	06/18/1998	ARSENIC	ND	24 1	UG/L	-
SC-16602-C-FR	06/18/1998	ARSENIC	9 7	0 49	UG/G	-
SC-16602-C-MS	06/18/1998	ARSENIC	515	0 48	UG/G	%REC=99
SC-16602-C-SD	06/18/1998	ARSENIC	19 9	5.80	UG/G	-
SC-16510-S-EB	06/25/1998	BENZO(A)ANTHRACENE	ND	0 13	UG/L	-
SC-16510-S-FR	06/25/1998	BENZO(A)ANTHRACENE	ND	420	UG/KG	-
SC-16510-S-MD	06/25/1998	BENZO(A)ANTHRACENE	ND	420	UG/KG	N/C
SC-16510-S-MS	06/25/1998	BENZO(A)ANTHRACENE	ND	420	UG/KG	N/C
SC-16510-S-SD	06/25/1998	BENZO(A)ANTHRACENE	ND	11	UG/KG	-
SC-16602-C-EB	06/18/1998	BENZO(A)ANTHRACENE	ND	0 13	UG/L	-
SC-16602-C-SD	06/18/1998	BENZO(A)ANTHRACENE	ND	12	UG/KG	-
SC-16803-C-EB	06/17/1998	BENZO(A)ANTHRACENE	ND	0 13	UG/L	-
SC-16803-C-SD	06/17/1998	BENZO(A)ANTHRACENE	ND	11	UG/KG	-
SC-16510-S-EB	06/25/1998	BENZO(A)PYRENE	ND	0.23	UG/L	-
SC-16510-S-FR	06/25/1998	BENZO(A)PYRENE	ND	420	UG/KG	-
SC-16510-S-MD	06/25/1998	BENZO(A)PYRENE	ND	420	UG/KG	N/C
SC-16510-S-MS	06/25/1998	BENZO(A)PYRENE	ND	420	UG/KG	N/C
SC-16510-S-SD	06/25/1998	BENZO(A)PYRENE	ND	19	UG/KG	-
SC-16602-C-EB	06/18/1998	BENZO(A)PYRENE	ND	0 23	UG/L	-
SC-16602-C-SD	06/18/1998	BENZO(A)PYRENE	ND	19	UG/KG	-
SC-16803-C-EB	06/17/1998	BENZO(A)PYRENE	ND	0.23	UG/L	-
SC-16803-C-SD	06/17/1998	BENZO(A)PYRENE	ND	19	UG/KG	-
SC-16510-S-EB	06/25/1998	BENZO(B)FLUORANTHENE	ND	0 18	UG/L	-
SC-16510-S-FR	06/25/1998	BENZO(B)FLUORANTHENE	ND	420	UG/KG	-
SC-16510-S-MD	06/25/1998	BENZO(B)FLUORANTHENE	ND	420	UG/KG	N/C
SC-16510-S-MS	06/25/1998	BENZO(B)FLUORANTHENE	ND	420	UG/KG	N/C
SC-16510-S-SD	06/25/1998	BENZO(B)FLUORANTHENE	ND	15	UG/KG	-

SC-16602-C-EB	06/18/1998	BENZO(B)FLUORANTHENE	ND	0.18	UG/L	-
SC-16602-C-SD	06/18/1998	BENZO(B)FLUORANTHENE	ND	15	UG/KG	-
SC-16803-C-EB	06/17/1998	BENZO(B)FLUORANTHENE	ND	0.18	UG/L	-
SC-16803-C-SD	06/17/1998	BENZO(B)FLUORANTHENE	ND	15	UG/KG	-
SC-16510-S-EB	06/25/1998	BENZO(K)FLUORANTHENE	ND	0.17	UG/L	-
SC-16510-S-FR	06/25/1998	BENZO(K)FLUORANTHENE	ND	420	UG/KG	-
SC-16510-S-MD	06/25/1998	BENZO(K)FLUORANTHENE	ND	420	UG/KG	N/C
SC-16510-S-MS	06/25/1998	BENZO(K)FLUORANTHENE	ND	420	UG/KG	N/C
SC-16510-S-SD	06/25/1998	BENZO(K)FLUORANTHENE	ND	14	UG/KG	-
SC-16602-C-EB	06/18/1998	BENZO(K)FLUORANTHENE	ND	0.17	UG/L	-
SC-16602-C-SD	06/18/1998	BENZO(K)FLUORANTHENE	ND	14	UG/KG	-
SC-16803-C-EB	06/17/1998	BENZO(K)FLUORANTHENE	ND	0.17	UG/L	-
SC-16803-C-SD	06/17/1998	BENZO(K)FLUORANTHENE	ND	14	UG/KG	-
SC-16310-C-DU	03/04/1998	CHROMIUM	20.8	0.13	UG/G	RPD=16
SC-16310-C-EB	03/04/1998	CHROMIUM	ND	0.60	UG/L	-
SC-16310-C-FR	03/04/1998	CHROMIUM	28.0	0.16	UG/G	-
SC-16310-C-MS	03/04/1998	CHROMIUM	66.5	0.13	UG/G	%REC=109
SC-16510-S-DU	06/25/1998	CHROMIUM	17 1	0.25	UG/G	%RPD=48.9 *T*
SC-16510-S-EB	06/25/1998	CHROMIUM	ND	3.80	UG/L	-
SC-16510-S-FR	06/25/1998	CHROMIUM	10.0	0.25	UG/G	-
SC-16510-S-MS	06/25/1998	CHROMIUM	76.6	0.26	UG/G	%REC=129.3 *T*
SC-16510-S-SD	06/25/1998	CHROMIUM	19.3	0.93	UG/G	-
SC-16602-C-DU	06/18/1998	CHROMIUM	21.0	0.20	UG/G	RPD=0.1
SC-16602-C-EB	06/18/1998	CHROMIUM	ND	3.80	UG/L	-
SC-16602-C-FR	06/18/1998	CHROMIUM	20.3	0.21	UG/G	-
SC-16602-C-MS	06/18/1998	CHROMIUM	70.5	0.20	UG/G	%REC=97
SC-16602-C-SD	06/18/1998	CHROMIUM	21.1	0.91	UG/G	-
SC-16803-C-DU	06/17/1998	CHROMIUM	15 3	0.20	UG/G	RPD=18
SC-16803-C-EB	06/17/1998	CHROMIUM	ND	3.80	UG/L	-
SC-16803-C-FR	06/17/1998	CHROMIUM	20.0	0.20	UG/G	-
SC-16803-C-MS	06/17/1998	CHROMIUM	68 1	0.20	UG/G	%REC=101
SC-16803-C-SD	06/17/1998	CHROMIUM	18.7	0.72	UG/G	-
SC-16510-S-EB	06/25/1998	CHRYSENE	ND	1.50	UG/L	-
SC-16510-S-FR	06/25/1998	CHRYSENE	ND	420	UG/KG	-
SC-16510-S-MD	06/25/1998	CHRYSENE	ND	420	UG/KG	N/C
SC-16510-S-MS	06/25/1998	CHRYSENE	ND	420	UG/KG	N/C
SC-16510-S-SD	06/25/1998	CHRYSENE	ND	120	UG/KG	-
SC-16602-C-EB	06/18/1998	CHRYSENE	ND	1.50	UG/L	-
SC-16602-C-SD	06/18/1998	CHRYSENE	ND	130	UG/KG	-
SC-16803-C-EB	06/17/1998	CHRYSENE	ND	1.50	UG/L	-
SC-16803-C-SD	06/17/1998	CHRYSENE	ND	130	UG/KG	-
SC-16510-S-EB	06/25/1998	INDENO(1,2,3-CD)PYRENE	ND	0.43	UG/L	-
SC-16510-S-FR	06/25/1998	INDENO(1,2,3-CD)PYRENE	ND	420	UG/KG	-
SC-16510-S-MD	06/25/1998	INDENO(1,2,3-CD)PYRENE	ND	420	UG/KG	N/C
SC-16510-S-MS	06/25/1998	INDENO(1,2,3-CD)PYRENE	ND	420	UG/KG	N/C
SC-16510-S-SD	06/25/1998	INDENO(1,2,3-CD)PYRENE	ND	36	UG/KG	-
SC-16602-C-EB	06/18/1998	INDENO(1,2,3-CD)PYRENE	ND	0.43	UG/L	-
SC-16602-C-SD	06/18/1998	INDENO(1,2,3-CD)PYRENE	ND	37	UG/KG	-
SC-16803-C-EB	06/17/1998	INDENO(1,2,3-CD)PYRENE	ND	0.43	UG/L	-
SC-16803-C-SD	06/17/1998	INDENO(1,2,3-CD)PYRENE	ND	36	UG/KG	-
SC-16510-S-DU	06/25/1998	LEAD	17.3	0.49	UG/G	%RPD=33.4 *T*
SC-16510-S-EB	06/25/1998	LEAD	ND	27.9	UG/L	-
SC-16510-S-FR	06/25/1998	LEAD	12.2	0.50	UG/G	-
SC-16510-S-MS	06/25/1998	LEAD	42.1	0.51	UG/G	%REC=348.1 *T*
SC-16510-S-SD	06/25/1998	LEAD	20.4	6.83	UG/G	-
SC-16602-C-DU	06/18/1998	LEAD	28.6	0.28	UG/G	RPD=68

SC-16602-C-EB	06/18/1998	LEAD	ND	27 9	UG/L	-	
SC-16602-C-FR	06/18/1998	LEAD	19 7	0.28	UG/G	-	
SC-16602-C-MS	06/18/1998	LEAD	130	0.28	UG/G	%REC=91	
SC-16602-C-SD	06/18/1998	LEAD	37.1	6 70	UG/G	-	
SC-16803-C-DU	06/17/1998	LEAD	9.8	0 27	UG/G	RPD=16	
SC-16803-C-EB	06/17/1998	LEAD	ND	27 9	UG/L	-	
SC-16803-C-FR	06/17/1998	LEAD	13.6	0.28	UG/G	-	
SC-16803-C-MS	06/17/1998	LEAD	127	0 27	UG/G	%REC=93	
SC-16803-C-SD	06/17/1998	LEAD	16.9	5.30	UG/G	-	
SC-16210-S-DU	05/15/1998	RADIUM-226	1.42	0.44	PCI/G	RPD=.71	
SC-16210-S-EB	05/15/1998	RADIUM-226	(0.072)	0.095	PCI/L	-	
SC-16210-S-FR	05/15/1998	RADIUM-226	1 44	0.22	PCI/G	-	
SC-16210-S-SD	05/15/1998	RADIUM-226	7 57	3.10	PCI/G	-	
SC-16228-C-DU	05/15/1998	RADIUM-226	1 77	0.47	PCI/G	RPD=10 19	
SC-16228-C-EB	05/15/1998	RADIUM-226	(0 058)	0.096	PCI/L	-	
SC-16228-C-FR	05/15/1998	RADIUM-226	1.68	0 30	PCI/G	-	
SC-16228-C-SD	05/15/1998	RADIUM-226	8.26	3 49	PCI/G	-	
SC-16310-C-DU	03/04/1998	RADIUM-226	1.63	0.29	PCI/G	RPD 15 82	
SC-16310-C-EB	03/04/1998	RADIUM-226	(0 009)	0 102	PCI/L	-	
SC-16310-C-FR	03/04/1998	RADIUM-226	1 78	0 28	PCI/G	-	
SC-16310-C-SD	03/04/1998	RADIUM-226	8 79	4 21	PCI/G	-	
SC-16510-S-DU	06/25/1998	RADIUM-226	1 29	0.29	PCI/G	RPD=4.5	
SC-16510-S-EB	06/25/1998	RADIUM-226	(0 0603)	0 111	PCI/L	-	
SC-16510-S-FR	06/25/1998	RADIUM-226	1.20	0 28	PCI/G	-	
SC-16510-S-SD	06/25/1998	RADIUM-226	0 830	0 103	PCI/G	-	
SC-16518-S-EB	07/02/1998	RADIUM-226	(0 141)	0.213	PCI/L	-	
SC-16518-S-FR	07/02/1998	RADIUM-226	1 47	0 24	PCI/G	-	
SC-16518-S-SD	07/02/1998	RADIUM-226	(3 45)	5 18	PCI/G	-	
SC-16803-C-DU	06/17/1998	RADIUM-226	1 46	0 31	PCI/G	RPD=2.0	
SC-16803-C-EB	06/17/1998	RADIUM-226	ND	0 079	PCI/L	-	
SC-16803-C-FR	06/17/1998	RADIUM-226	1 41	0 34	PCI/G	-	
SC-16803-C-SD	06/17/1998	RADIUM-226	1 32	0 550	PCI/G	-	
SC-16210-S-DU	05/15/1998	RADIUM-228	1.60	0 48	PCI/G	RPD=19 93	
SC-16210-S-EB	05/15/1998	RADIUM-228	0 401	0.394	PCI/L	-	
SC-16210-S-FR	05/15/1998	RADIUM-228	1 15	0 40	PCI/G	-	
SC-16210-S-SD	05/15/1998	RADIUM-228	(1.22)	1 72	PCI/G	-	
SC-16228-C-DU	05/15/1998	RADIUM-228	1 12	0 57	PCI/G	RPD=1 80	
SC-16228-C-EB	05/15/1998	RADIUM-228	(0 336)	0 422	PCI/L	-	
SC-16228-C-FR	05/15/1998	RADIUM-228	1 42	0 54	PCI/G	-	
SC-16228-C-SD	05/15/1998	RADIUM-228	(0 873)	1.55	PCI/G	-	
SC-16310-C-DU	03/04/1998	RADIUM-228	ND	1.18	PCI/G	RPD: NC	
SC-16310-C-EB	03/04/1998	RADIUM-228	(0 211)	0 307	PCI/L	-	
SC-16310-C-FR	03/04/1998	RADIUM-228	1 36	0.42	PCI/G	-	
SC-16310-C-SD	03/04/1998	RADIUM-228	(1 42)	1.73	PCI/G	-	
SC-16510-S-DU	06/25/1998	RADIUM-228	1.33	0.49	PCI/G	RPD=5 8	
SC-16510-S-EB	06/25/1998	RADIUM-228	(1 11)	1.18	PCI/L	-	
SC-16510-S-FR	06/25/1998	RADIUM-228	1.62	0.35	PCI/G	-	
SC-16510-S-SD	06/25/1998	RADIUM-228	1.04	0 178	PCI/G	-	
SC-16518-S-EB	07/02/1998	RADIUM-228	1.28	0 766	PCI/L	-	
SC-16518-S-FR	07/02/1998	RADIUM-228	ND	0.88	PCI/G	-	
SC-16518-S-SD	07/02/1998	RADIUM-228	(1 33)	1 48	PCI/G	-	
SC-16803-C-DU	06/17/1998	RADIUM-228	1.23	0 65	PCI/G	RPD=6 7	
SC-16803-C-EB	06/17/1998	RADIUM-228	ND	0 469	PCI/L	-	
SC-16803-C-FR	06/17/1998	RADIUM-228	1 39	0 37	PCI/G	-	
SC-16803-C-SD	06/17/1998	RADIUM-228	1 46	0 776	PCI/G	-	
SC-16510-S-DU	06/25/1998	THALLIUM	1 90	0 98	UG/G	%RPD=4 4	"T"

SC-16510-S-EB	06/25/1998	THALLIUM	ND	41.6	UG/L	-
SC-16510-S-FR	06/25/1998	THALLIUM	1.30	1.00	UG/G	-
SC-16510-S-MS	06/25/1998	THALLIUM	15.6	1.00	UG/G	%REC=106.3 "T"
SC-16510-S-SD	06/25/1998	THALLIUM	ND	10.2	UG/G	-
SC-16602-C-DU	06/18/1998	THALLIUM	0.90	0.79	UG/G	RPD=9
SC-16602-C-EB	06/18/1998	THALLIUM	ND	41.6	UG/L	-
SC-16602-C-FR	06/18/1998	THALLIUM	ND	0.80	UG/G	-
SC-16602-C-MS	06/18/1998	THALLIUM	445	0.79	UG/G	%REC=87
SC-16602-C-SD	06/18/1998	THALLIUM	ND	10	UG/G	-
SC-16510-S-DU	06/25/1998	THORIUM-230	1.01	0.62	PCI/G	RPD=8.2
SC-16510-S-EB	06/25/1998	THORIUM-230	(0.247)	0.249	PCI/L	-
SC-16510-S-FR	06/25/1998	THORIUM-230	0.93	0.62	PCI/G	-
SC-16510-S-SD	06/25/1998	THORIUM-230	0.980	0.127	PCI/G	-
SC-16518-S-FR	07/02/1998	THORIUM-230	1.08	0.62	PCI/G	-
SC-16602-C-DU	06/18/1998	THORIUM-230	1.16	0.62	PCI/G	RPD=6.7
SC-16602-C-EB	06/18/1998	THORIUM-230	(0.036)	0.383	PCI/L	-
SC-16602-C-FR	06/18/1998	THORIUM-230	1.65	0.62	PCI/G	-
SC-16602-C-SD	06/18/1998	THORIUM-230	2.27	0.144	PCI/G	-
SC-16803-C-DU	06/17/1998	THORIUM-230	1.11	0.62	PCI/G	RPD=7.5
SC-16803-C-EB	06/17/1998	THORIUM-230	(0.182)	0.406	PCI/L	-
SC-16803-C-FR	06/17/1998	THORIUM-230	1.59	0.62	PCI/G	-
SC-16803-C-SD	06/17/1998	THORIUM-230	1.80	0.213	PCI/G	-
SC-16510-S-EB	06/25/1998	THORIUM-232	(0.123)	0.190	PCI/L	-
SC-16602-C-EB	06/18/1998	THORIUM-232	ND	0.438	PCI/L	-
SC-16803-C-EB	06/17/1998	THORIUM-232	ND	0.413	PCI/L	-
SC-16210-S-EB	05/15/1998	URANIUM, TOTAL	ND	0.677	PCI/L	-
SC-16228-C-EB	05/15/1998	URANIUM, TOTAL	ND	0.677	PCI/L	-
SC-16310-C-EB	03/04/1998	URANIUM, TOTAL	ND	0.677	PCI/L	-
SC-16602-C-EB	06/18/1998	URANIUM, TOTAL	1.88	0.677	PCI/L	-
SC-16210-S-DU	05/15/1998	URANIUM-238	8.80	3.76	PCI/G	RPD=21.11
SC-16210-S-FR	05/15/1998	URANIUM-238	8.73	2.68	PCI/G	-
SC-16210-S-SD	05/15/1998	URANIUM-238	3.56	1.59	PCI/G	-
SC-16228-C-DU	05/15/1998	URANIUM-238	ND	4.36	PCI/G	RPD=NC
SC-16228-C-FR	05/15/1998	URANIUM-238	ND	2.99	PCI/G	-
SC-16228-C-SD	05/15/1998	URANIUM-238	(0.736)	3.04	PCI/G	-
SC-16310-C-DU	03/04/1998	URANIUM-238	4.39	3.31	PCI/G	RPD: NC
SC-16310-C-FR	03/04/1998	URANIUM-238	4.12	2.11	PCI/G	-
SC-16310-C-SD	03/04/1998	URANIUM-238	5.52	2.33	PCI/G	-
SC-16602-C-DU	06/18/1998	URANIUM-238	361	6.40	PCI/G	RPD=1.1
SC-16602-C-FR	06/18/1998	URANIUM-238	288	12.3	PCI/G	-
SC-16602-C-SD	06/18/1998	URANIUM-238	273	8.02	PCI/G	-

APPENDIX E
Coordinate List

Appendix E WP-458 Coordinate List

Location ID	Northing	Easting	Elevation
SC-16202-S	1040924.5	753425.1	657
SC-16203-S	1040908.2	753453.7	658.2
SC-16204-S	1040892.7	753482.5	660.9
SC-16205-C	1040953.1	753348.3	653.7
SC-16207-S	1040911.8	753380.5	654.7
SC-16208-S	1040895.9	753409.1	656.8
SC-16209-S	1040879.8	753437.8	658.1
SC-16210-S	1040864.1	753466.5	658.8
SC-16211-S	1040848.1	753495	661.3
SC-16212-C	1040923.5	753309.9	653.4
SC-16213-C	1040917.5	753333.2	653.7
SC-16216-S	1040867.2	753393.1	657
SC-16217-S	1040831.2	753409.8	658.9
SC-16218-S	1040835.4	753450.3	659.8
SC-16219-S	1040819.6	753478.9	661.1
SC-16222-S	1040839.2	753377.1	656.9
SC-16225-C	1040882	753285.9	651.7
SC-16226-C	1040862.9	753297.8	651.8
SC-16227-C	1040839.3	753327.9	654.5
SC-16228-C	1040837.6	753357.3	655.6
SC-16231-S	1040778.2	753418.3	659.5
SC-16232-S	1040828.2	753546.9	662
SC-16233-S	1040837.6	753578.3	661.6
SC-16234-S	1040846.7	753609.9	660.8
SC-16235-S	1040858.6	753640.4	660.9
SC-16236-S	1040870.4	753670.8	660.9
SC-16237-S	1040883.6	753700.6	660.7
SC-16238-S	1040898.2	753730.2	660.8
SC-16239-S	1040915.1	753757.7	660.3
SC-16240-S	1040932.3	753785.6	660.3
SC-16301-C	1040934.5	752884.6	655.9
SC-16301-S	1040936	752867.5	656.8
SC-16304-C	1040946.8	752817.1	659.1
SC-16304-S	1040939.5	752794.3	659.9
SC-16305-C	1040935.4	752848.3	657.7
SC-16307-C	1040942.1	752741.5	663.2
SC-16308-S	1040926.9	752749.5	663.1
SC-16310-C	1040931.5	752698.8	665.6
SC-16311-S	1040914.3	752704.9	665.7
SC-16312-S	1040898.3	752733.5	666.9
SC-16314-S	1040965.9	752545.6	664.3
SC-16315-S	1040949.8	752574.3	665.2
SC-16316-S	1040933.8	752603.1	665.8
SC-16317-C	1040919.4	752651.4	665.9
SC-16317-S	1040917.8	752631.6	665.7
SC-16318-C	1040917.8	752684.1	665.7

Location ID	Northing	Easting	Elevation
SC-16320-S	1040969.3	752472.8	664.1
SC-16321-C	1040954.7	752527.5	664
SC-16322-S	1040937.2	752529.7	664.7
SC-16323-C	1040927	752580.5	665.9
SC-16323-S	1040921.2	752558.48	665.1
SC-16325-C	1040941.2	752480.9	665.8
SC-16326-S	1040924.6	752485.1	664.9
SC-16330-S	1040956.9	752499.8	664.9
SC-16402-C	1040100 2	751700.3	661.2
SC-16403-S	1040078.1	751701.2	660
SC-16406-C	1040072.6	751681.7	672.8
SC-16407-C	1040043.4	751723.1	660.3
SC-16501-S-HS01	1043103	752745.5	614.5
SC-16503-S	1043155.1	752622.8	610.5
SC-16504-S	1043171.9	752596.2	610
SC-16505-S	1043200.3	752608.5	609.6
SC-16506-S	1043228.1	752593	608.8
SC-16507-S	1043258.2	752578.4	606.7
SC-16508-S	1043277.6	752555.2	604.9
SC-16509-S	1043296.1	752570.4	605.1
SC-16510-S	1043316.9	752588.8	603.7
SC-16511-S	1043349.7	752597	606.1
SC-16512-S	1043346.3	752564.4	605.5
SC-16513-S	1043342.5	752532	603.5
SC-16514-S	1043355	752501.3	603.4
SC-16515-S	1043016.8	752827.7	614.2
SC-16515-S-HS01	1043001.2	752853.6	618.5
SC-16516-S	1042962.7	752986.3	619.1
SC-16516-S-HS01	1042962.7	752981.5	622.9
SC-16516-S-HS02	1042966.2	752973.3	621.4
SC-16517-S	1042968.6	752970.3	618.4
SC-16518-S	1042973.9	752946.3	620.6
SC-16519-S	1042992.7	752864.6	613
SC-16520-S	1043003.4	752834.8	612.1
SC-16521-S	1043024.4	752816.5	612.8
SC-16522-S	1043094.9	752747.1	607.8
SC-16523-S	1043127.9	752682.1	608.6
SC-16524-S	1043138.9	752660.8	609.8
SC-16525-S	1043149.5	752642.6	609.5
SC-16504-S-HS01	1043178.5	752597.9	609.9
SC-16504-S-HS02	1043172.3	752603.5	611.1
SC-16504-S-HS03	1043165.3	752596.4	611.9
SC-16504-S-HS04	1043170.4	752597.9	613.6
SC-16508-S-HS01	1043271.9	752554.1	606.4
SC-16508-S-HS02	1043277.2	752554.2	605.8
SC-16508-S-HS03	1043272.9	752560.5	606.5
SC-16508-S-HS04	1043266.6	752553.9	607.2
SC-16508-S-HS05	1043270.9	752549.8	610.1

Location ID	Northing	Easting	Elevation
SC-16508-S-HS01-ORISE	1043271.9	752554.1	607.3
SC-16508-S-HS1	1043285.2	752550.3	609.2
SC-16508-S-HS2	1043277.4	752562.7	608
SC-16508-S-HS3	1043271.7	752556	606.4
SC-16508-S-HS4	1043276.7	752548.8	608.9
SC-16601-C*	1045377.5	754088.6	616.7
SC-16602-C*	1045363.6	754095.8	620.3
SC-16603-C*	1045337.6	754111.1	619.6
SC-16604-C*	1045277.6	754135.4	616
SC-16702-S	1039286.1	747056.9	698.7
SC-16703-S	1039270.1	747085.5	698.9
SC-16703-C	1039272.4	747104.2	698.9
SC-16710-S	1039163.6	747477.1	697.3
SC-16713-C	1038741.9	747448.6	704.5
SC-16802-S	1039670.5	757142.2	583.1
SC-16802-C	1039674.5	757165.1	578.8
SC-16803-C	1039677.6	757187.3	577.2
SC-16804-C	1039660.3	757123.7	584.5
SC-16807-C	1039646.7	757103.7	585.7
SC-16901-C	1046605.9	741702.4	655.6
SC-16901-S	1046625.9	741702.4	655.7
SC-16902-S	1046605.9	741714.5	655.6
SC-16903-S	1046585.9	741702.5	655.7
SC-16904-S	1046605.8	741690.3	656.4

* elevations taken from the final asbuilts