Rocky Flats Environmental Technology Site

PRE-DEMOLITION SURVEY REPORT (PDSR)

BUILDING 881 CLOSURE PROJECT
SECOND FLOOR, SECOND FLOOR MEZZANINE, & 881/883 TUNNEL

VOLUME 1

June 8, 2004
Version 0

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ABBREVIATIONS/ACRONYMS

ACM	Asbestos Containing Material
Be	Beryllium
CDPHE	Colorado Department of Public Health and the Environment
$DCGL_{EMC}$	Derived Concentration Guideline Level – elevated measurement comparison
$DCGL_W$	Derived Concentration Guideline Level – Wilcoxon Rank Sum Test
D&D	Decontamination and Decommissioning
DDCP	Decontamination and Decommissioning Characterization Protocol
DOE	U.S. Department of Energy
DPP	Decommissioning Program Plan
DQA	Data quality assessment
DQOs	Data quality objectives
EPA	U.S. Environmental Protection Agency
FDPM	Facility Disposition Program Manual
HVAC	Heating, ventilation, air conditioning
HSAR	Historical Site Assessment Report
HEUN	Highly Enriched Uranyl Nitrate
IHSS	Individual Hazardous Substance Site
IVT	Independent Verification Team
IWCP	Integrated Work Control Package
K-H	Kaiser-Hill
LBP	Lead-based paint
LLW	Low-level waste
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
NORM	Naturally occurring radioactive material
NRA	Non-Rad-Added Verification
OSHA	Occupational Safety and Health Administration
PARCC	Precision, accuracy, representativeness, comparability and completeness
PCBs	Polychlorinated Biphenyls
PDS	Pre-Demolition Survey
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RFCA	Rocky Flats Cleanup Agreement
RFETS	Rocky Flats Environmental Technology Site
RFFO	Rocky Flats Field Office
RLC	Reconnaissance Level Characterization
RLCR	Reconnaissance Level Characterization Report
RSA	Removable Surface Activity
RSP	Radiological Safety Practices
SVOCs	Semi-volatile organic compounds
TCLP	Toxicity Characteristic Leaching Procedure
TSA	Total Surface Activity
VOCs	Volatile Organic Compounds

EXECUTIVE SUMMARY

A Pre-Demolition Survey (PDS) was performed to enable compliant disposition and waste management of Building 881. Because this Type 2 Facility will be demolished, the characterization was performed in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP). Building surfaces characterized as part of this PDS included the Building 881 2nd floor, 2nd floor Mezzanine and the 881/883 Tunnel interior floors, walls and ceilings. The Building 881 1st floor, 1st floor mezzanine (Volume 3) and the 881 Basement interior floors, walls and ceilings (Volume 2) will be reported in stand-alone PDSRs. The Building 881 exterior was characterized in accordance with Pre-Demolition Survey Plan (MAN-127-PDSP) requirements as part of the Building 881 Cluster RLCR, completed November 6, 2001. Environmental media beneath and surrounding Building 881 was not within the scope of this PDS and will be addressed in accordance with the Soil Disturbance Permit process and in compliance with RFCA.

The PDS encompassed both radiological and chemical characterization to enable compliant disposition and waste management pursuant to the D&D Characterization Protocol (MAN-077-DDCP). The characterization built upon physical, chemical and radiological hazards identified in the facility-specific Historical Site Assessment Report and Reconnaissance Level Characterization Report for the Building 881 Cluster.

Final "as left" PDS results indicate that radiological, beryllium, RCRA/CERCLA constituents and PCBs do not exist in excess of the PDSP unrestricted release limits. PCB ballasts, and other hazardous waste items (e.g., mercury thermostats, fluorescent light bulbs, mercury vapor light bulbs, mercury-containing gauges, circuit boards, leaded glass, and lead-acid batteries) have been removed and disposed of in compliance with Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) regulations. PCBs in paint meet the unrestricted release criteria of the RSOP for Facility Disposition (risk assessment 761.62c). All remaining 881 building materials are inert.

Asbestos abatement was conducted in Building 881 prior to the PDS. Friable and non-friable asbestos containing building materials were removed per CDPHE, Regulation No. 8, Part B, *Emission Standards for Asbestos*. Cinderblock walls containing non-friable asbestos block filler remain in portions of the building. Prior to the use of explosives, the ACM block walls will be mechanically backfilled into the 881 basement and pit areas in accordance with the RFCA Contact Record (refer to RFETS Contact Record prepared by Steve Nesta on August 21, 2003). Small quantities of mastic remain in portions of the building and will be used as fill in the 881 basement.

Based upon this PDSR, the Building 881 2nd floor and 2nd floor Mezzanine can be demolished. The 881/883 Tunnel can be left in place. Demolition concrete rubble will be used for backfill on-site per the RFCA Recycling Concrete RSOP. Appropriate approvals have been obtained for leaving portions of the facility in-place underground. To ensure the facility remains free of contamination and PDS data remain valid, Level 1 Isolation Controls have been established and the area posted accordingly.

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1 INTRODUCTION

A Pre-Demolition Survey (PDS) was performed to enable compliant disposition and waste management of Building 881. Because this Type 2 Facility will be demolished, the characterization was performed in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP). Building surfaces characterized as part of this PDS included Building 881 2nd Floor, 2nd Floor Mezzanine and the 881/883 Tunnel interior floors, pits, walls and ceilings. The Building 881 1st floor, 1st floor mezzanine (Volume 3) and the 881 Basement (Volume 2) interior floors, walls and ceilings will be reported in stand-alone PDSRs. The Building 881 exterior was characterized in accordance with Pre-Demolition Survey Plan (MAN-127-PDSP) requirements as part of the Building 881 Cluster RLCR, completed November 6, 2001. Additional confirmatory surveys of Building 881 exterior and interior were performed and all results were less than the applicable PDS transuranic and uranium DCGL values. Environmental media beneath and surrounding Building 881 was not within the scope of this PDS and will be addressed in accordance with the Soil Disturbance Permit process and in compliance with RFCA.

As part of the Rocky Flats Environmental Technology Site (RFETS) Closure Project, numerous facilities will be removed, among these is Building 881. The location of this facility is shown in Attachment A, *Facility Location Map*. This facility no longer supports the RFETS mission and will be removed to reduce Site infrastructure, risks and/or operating costs.

Before this Type 2 Facility can be demolished, the Data Quality Objectives (DQOs) for a Pre-Demolition Survey (PDS) must be satisfied; this document presents the PDS results for Building 881 2nd floor, 2nd floor Mezzanine and the 881/883 Tunnel. The PDS was conducted pursuant to the Decontamination and Decommissioning Characterization Protocol (MAN-077-DDCP) and the Pre-Demolition Survey Plan for D&D Facilities (MAN-127-PDSP). The PDS built upon physical, chemical and radiological hazards identified in the facility-specific Historical Site Assessment Report and Reconnaissance Level Characterization Report for the Building 881 Cluster, dated November 6, 2001, Revision 0.

1.1 Purpose

The purpose of this report is to communicate and document the results of the Building 881 2nd floor, 2nd floor Mezzanine and the 881/883 Tunnel PDS effort. A PDS is performed prior to building demolition to define the pre-demolition radiological and chemical conditions of the facility. The pre-demolition conditions are compared with the release limits for radiological and non-radiological contaminants. PDS results will enable project personnel to make final disposition decisions, develop related worker health and safety controls, and estimate waste volumes by waste types.

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1.2 Scope

This report presents the pre-demolition radiological and chemical conditions of Building 881 2nd floor, 2nd floor Mezzanine and the 881/883 Tunnel. The Building 881 1st floor, 1st floor Mezzanine (Volume 3) and the 881 Basement (Volume 2) interior floors, walls and ceilings will be reported in stand-alone PDSRs. Additionally, the stairwells leading from the 2nd floor down to the lower levels and the 149 elevator are also included in this report (i.e., survey units 881C12, 881D05, 881J10, 881J12). Environmental media beneath and surrounding the facilities are not within the scope of this PDSR and will be addressed in accordance with the Soil Disturbance Permit process and in compliance with RFCA.

1.3 Data Quality Objectives

The Data Quality Objectives (DQOs) used in designing this PDS were the same DQOs identified in the Pre-Demolition Survey Plan for D&D Facilities (MAN-127-PDSP). Refer to section 2.0 of MAN-127-PDSP for these DQOs.

2 HISTORICAL SITE ASSESSMENT

A Facility-specific Historical Site Assessment (HSA) and Reconnaissance Level Characterization (RLC) was conducted to understand the facility history and related hazards. The HSA consisted of facility walk-downs, interviews and document review, including review of the Historical Release Report, and were used to design the RLC. The Building 881 RLC was performed in the Fall of 2001, as part of the Building 881 Cluster RLCR (refer to *Reconnaissance Level Characterization Report for the Building 881 Cluster,* dated November 6, 2001, Revision 0). Based on the RLC results, beryllium and radiological contamination was identified, and Building 881 was classified as a Type 2 Facility. Therefore, a PDS characterization was required before demolition of the facility. The HSA, RLCR and in-process characterization results were used to identify PDS data gaps and needs, and to develop radiological and chemical PDS characterization packages. HSA and RLC documentation are located in the RISS Characterization Project files.

3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS

3.1 In-Process Stripout and Decontamination

Radiological contamination was identified during the RLC, as well as during the in-process stripout and decontamination phase in numerous areas of the facility. Thus, extensive stripout and decontamination was required prior to the PDS. All potentially contaminated equipment, system piping, and block walls were removed from the building prior to PDS. After stripout and decontamination was completed, the areas were cleaned up, isolated and re-surveyed prior to turnover to the PDS Team.

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3.2 Transuranic Versus and Uranium Activity Areas

Based on RLC data, and historical and process knowledge, transuranic and uranium activity were both a concern inside Building 881. Therefore, in-process media sampling was performed to determine transuranic and uranium areas of concern. Biased and random paint and concrete samples were collected throughout the building and were isotopically analyzed for transuranic and uranium contamination. Based on the isotopic results, Building 881 was divided into transuranic and uranium areas of concern. Any areas where the media samples were greater than the transuranic PDS unrestricted release criteria were designated transuranic areas and surveyed to the transuranic PDS unrestricted release criteria (i.e., SU 881C17 and 881J03). All other areas were designated uranium areas and surveyed to the uranium PDS unrestricted release criteria.

Some areas that were initially designated as transuranic areas were decontaminated and re-sampled. If the re-sample results were less than the transuranic PDS unrestricted release criteria, then these areas were re-designated to uranium areas and surveyed to the uranium PDS unrestricted release criteria. Rooms 249 Pit, 267, 282 and 292 were re-designated from transuranic to uranium areas via this method. Refer to Attachment B-1, *Media Sample Results Table and Sample Location Map*, for the "as left" media sample results and the sample locations.

3.3 Stainless Steel Floor Areas

Building 881 contains about 40,000 square feet of floor space that is covered over with 14 gage 304L stainless steel plating. The stainless steel plating was welded to concrete-embedded stainless steel channeling in approximately 3 x 8 feet rectangles. Random and biased locations underneath the stainless steel floor areas were surveyed during the RLCR. However, additional stainless steel floor areas were discovered during in-process stripout. Therefore, additional random and biased locations were chosen in the newly discovered stainless steel floor areas as well as in RLCR identified areas, to ensure an adequate sample population was collected. Electra probe sized holes (approximately 4 x 8 inches) were made in the stainless steel flooring and surveys of the bare concrete were performed. Additionally, at any survey location that indicated total surface activity above 100 dpm/100cm^2, a concrete media sample was collected and isotopically analyzed for transuranic and uranium contamination.

2nd floor and 2nd floor mezzanine stainless steel floor areas were designated uranium areas and surveyed to the uranium PDS unrestricted release criteria, except for Room 266C which was designated a transuranic area and surveyed to the transuranic PDS unrestricted release criteria. Since contamination above the uranium unrestricted release criteria was identified underneath the stainless steel flooring in Rooms 233 and 266C, stainless steel flooring was removed in these areas prior to the PDS. All final PDS stainless steel flooring surveys and sample results were less than the applicable PDS unrestricted release criteria. Refer to Attachment B-2, *Stainless Steel Flooring Survey/Sample Results Table and Survey/Sample Location Maps*, for the "as left" stainless steel flooring survey and sample results and locations. Based on discussions and agreements with DOE and CDPHE, the stainless steel flooring can remain in-place and be buried with the balance of the sanitary concrete demolition debris.

3.4 Room 266 Concrete Floor

Based on discussions with previous 881 workers, there was a potential for Room 266 to contain embedded contamination in the concrete floor slab from previous decontamination work during an earlier remodeling period. During the previous remodeling/decontamination period, portions of the floor might have been partially removed and then recovered with new concrete, thus covering over some contamination. Therefore, during in-process stripout and decon of Room 266, ten (10) concrete floor core samples were collected in the area of interest. The area of interest was determined by performing six *in-situ* gamma spectroscopy measurements of the Room 266 concrete floor. Three of the six *in-situ* gamma spectroscopy measurements indicated elevated transuranic activity. Therefore, five of the 10 concrete floor core samples were collected within the area of elevated transuranic activity, the remaining five samples were collected at the outside boundaries of the elevated transuranic activity area.

Once the 10 concrete floor core samples were collected, each sample was further subdivided by cutting the cores into thinner "biscuits" using either a concrete chop-saw or by manual methods (e.g. hammer and chisel). In other words, each of the ten cylindrical 3-inch diameter by 6-inch long core samples were cut into cylindrical 3-inch diameter by ¾-inch thick sub-sample "biscuits." If there were obvious lines or divisions within the core sample, then the biscuits were separated at these lines as well since these areas of the sample might have a higher potential of contamination. After the biscuits were cut, total surface activity surveys were performed on each side of the biscuits.

Two biscuits had activity above the PDS unrestricted release criteria on the very top surface of the floor. Since these elevated locations (i.e., sample locations 7A & 8A) were on the top surface of the concrete floor, the top floor surfaces of these areas were decontaminated. Follow up surveys of these areas indicated that the elevated activity had been remediated. Two other biscuits had activity above the PDS unrestricted release criteria at the one-inch deep level. Since these elevated locations (i.e., sample locations 1A & 8B) were approximately one inch below the top surface of the concrete floor, the top one-inch of the floor surface in these areas were removed. Other floor surfaces surrounding these locations were decontaminated and/or removed. Follow up PDS surveys of these areas indicated that the elevated activity had been successfully remediated.

Refer to Attachment B-5, *Radiological Survey Unit Data Summary and Survey Maps, Survey Unit 881C17* for the core survey and sample results and sample locations. Refer to Attachment B-5, *Radiological Survey Unit Data Summary and Survey Maps, Survey Units 881C03 and 881C017* results for follow up PDS surveys of these areas.

3.5 Building 881 Confirmatory Surveys (Exterior & Interior)

The Building 881 exterior was characterized in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP) requirements as part of the Building 881 Cluster RLCR completed November 6, 2001. All of the exterior surveys performed during the Building 881 Cluster RLCR were less than the applicable PDS uranium DCGL values. Additional confirmatory surveys of Building 881 exterior were performed during the 881 interior PDS survey, and all results were also less than the applicable PDS transuranic and uranium DCGL values. Additionally, interior confirmatory surveys (large area swipes and 100cm^2 area swipes) have been performed of all accessible areas. Refer to Attachment B-3, *881 Confirmatory Surveys, Radiological Data and Survey Maps* for the building exterior and interior confirmatory radiological survey data, survey locations, and radiological maps.

3.6 PDS Planning and Preparation

Building 881 was characterized for radiological hazards per the PDSP. Radiological characterization was performed to define the nature and extent of radioactive materials that may be present on the facility surfaces. Measurements were performed to evaluate the contaminants of concern. Based upon a review of the RLC, historical and process knowledge, building walk-downs, in-process survey and sample results, and MARSSIM guidance, a Radiological Characterization Plan was developed during the planning phase that describes the minimum survey requirements (refer to the RISS Characterization Project files for the 881 Radiological Characterization Plan).

Building 881 radiological survey unit packages were developed in accordance with Radiological Safety Practices (RSP) 16.01, *Radiological Survey/Sampling Package Design, Preparation, Control, Implementation and Closure*. Refer to Attachment B-4, *881 Survey Unit Maps* for the locations of these survey units. Total surface activity (TSA), removable surface activity (RSA), and scan measurements were collected in accordance with RSP 16.02 *Radiological Surveys of Surfaces and Structures*. Radiological survey data were verified, validated and evaluated in accordance with RSP 16.04, *Radiological Survey/Sample Data Analysis*. Quality control measures were implemented relative to the survey process in accordance with RSP 16.05, *Radiological Survey/Sample Quality Control*. Individual radiological survey unit packages are maintained in the RISS Characterization Project files.

3.7 PDS Survey Results

The table below summarizes the PDS radiological survey data by Survey Unit:

B881 Survey Unit Breakdown Table

Survey Area (MU)	Survey Unit	Iotope Area	MARSSIM Class	Description	Floor (m2)	Total (m2)	TSAs (minimum)	RSAs (minimum)	% Scan (minimum)	Scan (m2) (minimum)	Survey Unit Class Justification	PDS Results
B	881B01	Uranium	1	MU-B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A & 233 floor	597	597	97-systematically grid, 5-QC	97-systematically grid	100%	597	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
B	881B02	Uranium	2	MU-B, 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A & 233 walls and ceilings	597	700	23-systematically grid, 2-QC	23-systematically grid	25%	175	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C01	Uranium	1	MU-C Rooms 280A & 280B, floor	33	33	16-systematically grid, 2-QC	16-systematically grid	100%	33	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C02	Uranium	2	MU-C Rooms 280A & 280B, walls and ceilings	33	157	15-systematically grid, 2-QC	15-systematically grid	50%	79	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C03	Uranium	1	MU-C Rooms 267 & 282, floor	344	344	54-systematically grid, 3-QC	54-systematically grid	100%	344	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C04	Uranium	2	MU-C Rooms 267 & 282, walls, columns and ceilings	344	545	21-systematically grid, 2-QC	21-systematically grid	25%	137	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C05	Uranium	1	MU-C Rooms 260, 264, 264A, 265, 265A, 265B, 268A, & 269, floor	307	307	51-systematically grid, 2-QC	51-systematically grid	100%	307	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C06	Uranium	2	MU-C Rooms 260, 264, 264A, 265, 265A, 265B, 268A, & 269, walls and ceilings	307	531	18-systematically grid, 2-QC	18-systematically grid	25%	133	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C07	Uranium	2	MU-C Rooms 286	35	250	24-systematically grid, 2-QC	24-systematically grid	25%	63	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C08	Uranium	1	MU-C Room 254, floor	61	61	20-systematically grid, 2-QC	20-systematically grid	100%	61	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C09	Uranium	2	MU-C Room 254, walls and ceilings	61	198	16-systematically grid, 2-QC	16-systematically grid	50%	99	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.

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B881 Survey Unit Breakdown Table

Survey Area (MU)	Survey Unit	Iotope Area	MARSSIM Class	Description	Floor (m2)	Total (m2)	TSAs (minimum)	RSAs (minimum)	% Scan (minimum)	Scan (m2) (minimum)	Survey Unit Class Justification	PDS Results
C	881C10	Uranium	1	MU-C Rooms 266E, 280, 281, 283 & 283A floor	303	303	51-systematically grid, 3-QC	51-systematically grid	100%	303	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C11	Uranium	2	MU-C Rooms 266E, 280, 281, 283 & 283A, walls and ceilings	303	904	21-systematically grid, 2-QC	21-systematically grid	25%	226	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C12	Uranium	2	MU-C Stairwells 134 & 156	64	370	24-systematically grid, 2-QC	24-systematically grid	25%	93	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C13	Uranium	1	MU-C Rooms 239, 240, 241, 252, 253, 255 & 288 Floor	338	338	59-systematically grid, 3-QC	59-systematically grid	100%	338	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C14	Uranium	2	MU-C Rooms 239, 240, 241, 252, 253, 255 & 288 walls and ceilings	338	918	24-systematically grid, 2-QC	24-systematically grid	25%	230	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C15	Uranium	1	MU-C Rooms 250,251, 256, 258, 259, 272 & 276 Floor	598	598	98-systematically grid, 5-QC	98-systematically grid	100%	598	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C16	Uranium	2	MU-C Rooms 250,251, 256, 258, 259, 272 & 276, walls and ceilings	598	1,278	20-systematically grid, 2-QC	20-systematically grid	30%	384	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
C	881C17	Transuranic	1	MU-C Room 266, floor, walls, and ceiling	260	556	62-systematically grid, 4-QC 10 floor core samples	62-systematically grid	100%	556	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
D	881D01	Uranium	1	MU-D Rooms 232 & 242, floor	1,030	1,030	165-systematically grid, 9-QC	165-systematically grid	100%	1,030	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
D	881D02	Uranium	2	MU-D 232 & 242, walls and ceiling	1,030	1,619	19-systematically grid, 2-QC	19-systematically grid	25%	405	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
D	881D03	Uranium	1	MU-D Mezzanine, floor	859	859	130-systematically grid, 7-QC	130-systematically grid	100%	859	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.

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B881 Survey Unit Breakdown Table

Survey Area (MU)	Survey Unit	Iotope Area	MARSSIM Class	Description	Floor (m2)	Total (m2)	TSAs (minimum)	RSAs (minimum)	% Scan (minimum)	Scan (m2) (minimum)	Survey Unit Class Justification	PDS Results
D	881D04	Uranium	2	MU-D Mezzanine, walls and ceiling	859	1,640	17-systematically grid, 2-QC	17-systematically grid	50%	820	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
D	881D05	Uranium	1	MU-D 149 Elevator	8	126	21-systematically grid, 2-QC	21-systematically grid	100%	126	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G01	Uranium	1	Rooms 293A, 295; all surfaces	156	494	19-systematically grid, 10-biased, 2-QC	19-systematically grid, 10-biased	100% floor, 25% walls & ceiling	244	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G02	Uranium	1	MU-G Mezzanine, all surfaces	333	889	18-systematically grid, 10-biased, 2-QC	18-systematically grid, 10-biased	100% floor, 20% walls & ceiling	445	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G03	Uranium	1	MU-G 881–883 Tunnel, floor	135	135	23-systematically grid, 2-QC	23-systematically grid	100%	135	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G04	Uranium	2	MU-G 881–883 Tunnel, walls and ceilings	135	624	22-systematically grid, 2-QC	22-systematically grid	50%	312	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G05	Uranium	1	MU-G Room 292, floor	76	76	19-systematically grid, 2-QC	19-systematically grid	100%	76	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G06	Uranium	2	MU-G Room 292, walls and ceilings	76	171	20-systematically grid, 2-QC	20-systematically grid	50%	86	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G07	Uranium	1	MU-G Rooms 293, 294; floor	250	250	45-systematically grid, 3-QC	45-systematically grid	100%	250	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G08	Uranium	2	MU-G Rooms 293, 294; walls and ceilings	250	950	16-systematically grid, 2-QC	16-systematically grid	25%	238	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G09	Uranium	1	MU-G Rooms 296 & 297, floor	735	735	113-systematically grid, 6-QC	113-systematically grid	100%	735	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.

B881 Survey Unit Breakdown Table

Survey Area (MU)	Survey Unit	Iotope Area	MARSSIM Class	Description	Floor (m2)	Total (m2)	TSAs (minimum)	RSAs (minimum)	% Scan (minimum)	Scan (m2) (minimum)	Survey Unit Class Justification	PDS Results
G	881G10	Uranium	2	MU-G Rooms 296 & 297, walls and ceilings	735	2,152	15-systematically grid, 2-QC	15-systematically grid	50%	1,076	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G11	Uranium	1	MU-G Rooms 244, 245; floor	676	676	110-systematically grid, 6-QC	110-systematically grid	100%	676	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G12	Uranium	2	MU-G Rooms 244, 245; walls and ceilings	676	1,314	18-systematically grid, 2-QC	18-systematically grid	50%	657	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G13	Uranium	2	MU-G Rooms 247, 248, 249; walls and ceilings	302	1,770	16-systematically grid, 2-QC	16-systematically grid	50%	885	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G14	Uranium	1	MU-G Room 249A Pit, all surfaces	1	4	15-systematically grid, 2-QC	15-systematically grid	100%	4	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G15	Uranium	1	MU-G Room 246; floor	36	36	16-systematically grid, 2-QC	16-systematically grid	100%	36	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G16	Uranium	2	MU-G Room 246, walls and ceilings	36	236	15-systematically grid, 2-QC	15-systematically grid	50%	118	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
G	881G17	Uranium	1	MU-G Rooms 247, 248, 249; floor	302	302	51-systematically grid, 3-QC	51-systematically grid	100%	302	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
H	881H03	Uranium	2	MU-H, 159 Elevator, all surfaces	6	89	18-systematically grid, 2-QC	18-systematically grid	100% floor, 50% walls & ceiling	45	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J01	Uranium	1	MU-J West, Room 201, floor	934	934	150-systematically grid, 8-QC	150-systematically grid	100%	934	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J02	Uranium	2	MU-J West, Room 201, walls and ceilings	934	1,296	24-systematically grid, 2-QC	24-systematically grid	50%	648	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.

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B881 Survey Unit Breakdown Table

Survey Area (MU)	Survey Unit	Iotope Area	MARSSIM Class	Description	Floor (m2)	Total (m2)	TSAs (minimum)	RSAs (minimum)	% Scan (minimum)	Scan (m2) (minimum)	Survey Unit Class Justification	PDS Results
J	881J03	Transuranic	1	MU-J, Room 211; floor, walls and ceiling	24	24	21-systematically grid, 2-QC	21-systematically grid	100%	24	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J04	Uranium	1	MU-J Room 275 (includes room 271), floor	589	589	117-systematically grid, 5-QC	117-systematically grid	100%	589	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J05	Uranium	2	MU-J Rooms 275 (includes room 271), walls and ceilings	589	859	17-systematically grid, 2-QC	17-systematically grid	25%	215	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J06	Uranium	1	MU-J Room 288A, floors	73	73	15-systematically grid, 2-QC	15-systematically grid	100%	73	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J07	Uranium	2	MU-J Room 288A, walls and ceilings	73	258	24-systematically grid, 2-QC	24-systematically grid	50%	126	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J08	Uranium	1	MU-J Room 288B, floors	70	70	24-systematically grid, 2-QC	24-systematically grid	100%	70	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J09	Uranium	2	MU-J Room 288B, walls and ceilings	70	246	17-systematically grid, 2-QC	17-systematically grid	50%	123	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J10	Uranium	1	MU-J Rooms 234, 237, 291, Stairwells 167 & 111, floors	295	295	49-systematically grid, 3-QC	49-systematically grid	100%	295	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J11	Uranium	2	MU-J Rooms 234, 237, 291, Stairwells 167 & 111, walls and ceilings	295	1,051	23-systematically grid, 2-QC	23-systematically grid	25%	263	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
J	881J12	Uranium	2	MU-J Stairwell 133, floor, walls and ceiling	73	241	24-systematically grid, 2-QC	24-systematically grid	50%	121	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
L	881L01	Uranium	3	South Supply Plenum, Rooms 301, 302, 302A, 303, 305, 306, 307, 308; all surfaces	1,082	3,717	15-systematically grid, 20-biased, 2-QC	15-systematically grid, 20-biased	10%	372	Area is not expected to contain residual radioactivity, or expected to contain levels of residual radioactivity at a small fraction of the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.

B881 Survey Unit Breakdown Table

Survey Area (MU)	Survey Unit	Iotope Area	MARSSIM Class	Description	Floor (m2)	Total (m2)	TSAs (minimum)	RSAs (minimum)	% Scan (minimum)	Scan (m2) (minimum)	Survey Unit Class Justification	PDS Results
L	881L02	Uranium	3	North Supply Plenum, Rooms 311, 311A, 311B; all surfaces	310	1,113	15-systematically grid, 10-biased, 2-QC	15-systematically grid, 10-biased	10%	112	Area is not expected to contain residual radioactivity, or expected to contain levels of residual radioactivity at a small fraction of the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
R	881R01	Uranium	1	MU-R South Loading Dock, floors	103	103	16-systematically grid, 2-QC	16-systematically grid	100%	103	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
R	881R02	Uranium	2	MU-R South Loading Dock, walls and ceilings	103	452	22-systematically grid, 2-QC	22-systematically grid	25%	113	Area had, prior to remediation, a potential for radioactive contamination, or known contamination, but was not expected to exceed the DCGLW.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.
S	881S02	Uranium	1	ST2 Exhaust Tunnel and Base, all surfaces	41	273	28-systematically grid, 2-QC	28-systematically grid	100%	273	Area had, prior to remediation, a potential for radioactive contamination, or known contamination above the $DCGL_W$.	All survey and sample results in this survey unit are less than the PDSP unrestricted release criteria.

All final "as left" PDS radiological survey results were less than the applicable PDSP unrestricted release limits. Radiological survey unit data, statistical analysis results, survey locations and radiological scan maps are presented in Attachment B-5 *Radiological Survey Unit Data Summary and Survey Maps*. To ensure the facility remains free of further contamination and PDS data remain valid, Level 1-Isolation Controls have been established and the areas posted accordingly.

4 CHEMICAL CHARACTERIZATION AND HAZARDS

Building 881 was characterized for chemical hazards per the PDSP. Chemical characterization was performed to determine the nature and extent of chemical contamination that may be present on, or in Building 881. Based upon a review of historical and process knowledge, visual inspections, and PDSP DQOs, additional sampling needs were determined. A Chemical Characterization Plan was developed during the planning phase that describes sampling requirements and the justification for the sample locations and estimated number of samples. The contaminants of concern were asbestos, beryllium, metals, RCRA/CERCLA constituents and polychlorinated biphenyls (PCBs). Refer to Attachment C, *Chemical Summary Data and Sample Maps*, for details on sample results and sample locations. Level 1 Isolation Control postings are displayed on affected structures to ensure no hazardous materials are introduced.

4.1 Asbestos

A survey of building materials suspected of containing asbestos was conducted before and during in-process stripout and decontamination. A CDPHE-certified asbestos inspector conducted the inspections and sampling in accordance with the *Asbestos Characterization Protocol, PRO-563-ACPR, Revision 1*. Building materials suspected of containing asbestos were identified for sampling at the discretion of the inspector. Prior to the PDS, friable and non-friable asbestos abatement and satisfactory clearance sampling was conducted per CDPHE, Regulation No. 8, Part B, *Emission Standards for Asbestos*. Cinderblock walls containing non-friable asbestos block filler remain in portions of the building as fill in the 881 basement and pit areas in accordance with the RFCA Contact Record (refer to RFETS Contact Record prepared by Steve Nesta on August 21, 2003). Small quantities of mastic remain in portions of the building and will be used as fill in the 881 basement. On this basis, no additional asbestos sampling was required or performed as part of the PDS.

4.2 Beryllium (Be)

During the in-process stripout and decontamination phase of the 881 project, all areas containing loose beryllium contamination were decontaminated to below the unrestricted release limit of 0.2 $\mu g/100cm^2$. The use of fixatives was not necessary to decontaminate the areas below the unrestricted release limit. Since Building 881 was on the list of Known Beryllium Areas, both random and biased PDS sampling was required. Once the areas were de-posted from beryllium controls and the areas were isolated from the adjacent work areas, random and biased beryllium PDS swipes were collected. In addition to the random and biased PDS swipes, 189 in-process de-posting beryllium swipes are also included in the below PDS Beryllium Results Summary Table, as biased swipe data.

Building 881 was sub-divided into five (5) Beryllium Areas per the PDSP. The five (5) areas were: 1) second floor mezzanines and 881/883 tunnel, 2) second floor, 3) first floor mezzanines, 4) first floor, and 5) basement. Random and biased beryllium smear samples were collected in Building 881 in accordance with the PDSP and the *Beryllium Characterization Procedure,* PRO-536-BCPR, Revision 0, September 9, 1999. The table below summarizes the "as left" PDS beryllium swipe data for the 2nd floor, 2nd floor mezzanine and 881/883 tunnel. All beryllium PDS swipe results were less than the action levels of 0.2 μg/100cm^2 and 0.1 μg/100cm^2. Detailed PDS beryllium laboratory swipe data and location maps are contained in Attachment C-1, *PDS Beryllium Data Summary and Sample Maps*. Detailed in-process biased beryllium laboratory swipe data are contained in Attachment C-2, *In-process Biased Beryllium Data.*

881 PDS Beryllium Summary Table

Beryllium Area	Random Swipes Required	Random Swipes Collected	Biased Swipes Collected	Swipes Results
Second Floor Mezzanines & 881/883 Tunnel	57	59	10	All swipe results below PDS action levels
Second Floor	75	78	3	All swipe results below PDS action levels
In-process – 2nd Floor & Mezzanine & 881/883 Tunnel	0	0	189	All swipe results below PDS action levels
Totals	**132**	**137**	**202**	All swipe results below PDS action levels

4.3 RCRA/CERCLA Constituents [including metals and volatile organic compounds (VOCs)]

Based on the *Reconnaissance Level Characterization Report for the Building 881 Cluster*, dated November 6, 2001, and personnel interviews, facility walk-downs, in-process sample data, and a review of historical WEMS/WSRIC processes, Building 881 does not contain evidence of RCRA/CERCLA contamination. Furthermore, during the 881 RLC samples were taken and analyzed for metals, VOCs and SVOCs. All results were less than the regulatory limits confirming Building 881 is not contaminated by RCRA/CERCLA constituents.

All of the ancillary equipment associated with the permitted RCRA Storage Unit 887.2 was removed from Building 881 and appropriately managed and disposed of as LLM waste. All other temporary storage areas that may have managed RCRA regulated waste were evaluated and no additional closure activities were required. Closure of RCRA Storage Unit 887.2 cannot be completed until Building 887 meets clean closure criteria or is removed and disposed of per RCRA regulations, which will be addressed in the PDSR for Building 887. Therefore, no additional RCRA/CERCLA sampling was required or performed as part of the PDS.

The building may have contained some RCRA regulated items, such as mercury thermostats, fluorescent light bulbs, mercury vapor light bulbs, mercury containing gauges, circuit boards, and lead-acid batteries. However, these items have been removed and managed in accordance with the Colorado Hazardous Waste Act.

4.4 Polychlorinated Biphenyls (PCBs)

Based on the HSAR for the Building 881, personnel interviews, facility walk-downs and a review of historical WSRIC processes, Building 881 did house machinery containing PCB oil. As part of the removal of equipment from the pits, oil was drained from several machines and containerized. Because one of the oil containers tested positive for PCBs, RLC concrete core sample were collected and analyzed to check oil-stained areas beneath the equipment. All results were below 1.0 ppm confirming the lack of PCB contamination in the Building 881. Therefore, no additional PCB sampling was required or performed as part of the PDS.

Demolition concrete rubble will be used for backfill on-site per the RFCA Recycling Concrete RSOP. This concrete rubble material meets the unrestricted release criteria of the RSOP for Facility Disposition (specific to 40CFR 761.62c). All remaining 881 building materials are inert.

5 PHYSICAL HAZARDS

Physical hazards associated with Building 881 consists of those common to standard industrial environments, and include hazards associated with energized systems, utilities, and trips and falls. There are several below-grade levels in the building and a below-grade tunnel leading to Building 883. The facility has been relatively well maintained and is in good physical condition, therefore, does not present hazards associated with building deterioration. Physical hazards are controlled by the Site Occupational Safety and Industrial Hygiene Program, which is based on OSHA regulations, DOE orders, and standard industry practices.

6 DATA QUALITY ASSESSMENT

Data used in making management decisions for decommissioning of Building 881, and consequent waste management, is of adequate quality to support the decisions documented in this report. The data presented in this report (Attachments B and C) were verified and validated relative to DOE quality requirements, applicable EPA guidance, and original project DQOs.

In summary, the Verification and Validation (V&V) process corroborates that the following elements of the characterization process are adequate:

- the *number* of samples and surveys;
- the *types* of samples and surveys;
- the sampling/survey process as implemented "in the field"; and
- the laboratory analytical process, relative to accuracy and precision considerations.

Details of the DQA are provided in Attachment D.

7 DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES

The decommissioning of Building 881 will not generate any wastes. All remaining 881 building materials are inert. PCB ballasts and other hazardous waste items have been removed and managed pursuant to Site PCB and waste management procedures. Demolition concrete rubble will be used for backfill on-site per the RFCA Recycling Concrete RSOP and approval obtained from EPA in 2001 letter *RE: Approval of the Risk-Based Approach for Polychlorinated Biphenyls (PCB) – Based Painted Concrete*.

There will be approximately 9,000 cubic yards of concrete recycle material, and 2,000 cubic yards of various metal, and 6 cubic yard of stainless flooring material that will buried in place during the demolition of Building 881. The amount of metal is considered de minimis with respect to the 100,000 cubic yards of fill that will be required to bring the Building 881 Project Area to final grade, and has been addressed in the Facility Disposition RSOP Notification for the Building 881 demolition.

Cinderblock walls containing non-friable asbestos block filler remain in portions of the building as fill in the 881 basement and pits areas in accordance with the RFCA Contact Record (refer to RFETS Contact Record prepared by Steve Nesta on August 21, 2003). Small quantities of mastic remain in portions of the building and will be used as fill in the 881 basement. Locations and approximate quantities of non-friable asbestos block filler and mastic are as follows:

Block Filler

South Wall of Room 114	2,000 sf
Upper Walls of Elevator Room 159D	400 sf
Interior Wall Separating Rooms 283/283A	200 sf
Perimeter Walls of 250/250A/259/259A	800 sf

Mastic:

Wall Adhesive Pucks in Room 104 (assumed-ACM)	600 sf

8 FACILITY CLASSIFICATION AND CONCLUSIONS

Based on the analysis of radiological, chemical and physical hazards, Building 881 2nd floor, 2nd floor Mezzanine and the 881/883 Tunnel are classified as a RFCA Type 2 Facility pursuant to the RFETS Decommissioning Program Plan (DPP; K-H, 1999) and are ready for demolition. The PDS for the Building 881 2nd floor, 2nd floor Mezzanine and the 881/883 Tunnel was performed in accordance with the DDCP and PDSP, all PDSP DQOs were met, and all data satisfied the PDSP DQA criteria. Environmental media beneath and surrounding the facilities will be addressed at a future date in accordance with the Soil Disturbance Permit process and in compliance with RFCA.

Final "as left" PDS results indicated that radiological, beryllium, RCRA/CERCLA constituents and PCBs do not exist in excess of the PDSP unrestricted release limits. PCB ballasts, and other hazardous waste items (e.g., mercury thermostats, fluorescent light bulbs, mercury vapor light bulbs, mercury-containing gauges, circuit boards, leaded glass, and lead-acid batteries) have been removed and disposed of in compliance with Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) regulations. All remaining 881 building materials are inert.

Asbestos abatement was conducted in Building 881 prior to the PDS. Friable and non-friable asbestos containing building materials were removed per CDPHE, Regulation No. 8, Part B, *Emission Standards for Asbestos*. Cinderblock walls containing non-friable asbestos block filler remain in portions of the building and will be used as fill in the 881 basement and pit areas in accordance with the RFCA Contract Record (refer to RFETS Contact Record prepared by Steve Nesta on August 21, 2003). Small quantities of mastic remain in portions of the building and will be used as fill in the 881 basement.

The second floor Stack S2 tunnel (survey unit 881S02) and stack S2 foundation were included in this PDSR and will left in place after demolition. The two supply plenums located on the south and north ends of the 881 roof were also included in this PDSR (survey units 881L01 and 881 L02) and the concrete from these areas will be used as recycle material. Transuranic DCGLs were used for 881L01 and 881L02 for convenience sake only. These areas were not suspect transuranic or uranium areas, and the radiological surveys met both the uranium DCGLs and the more conservative transuranic DCGLs.

Based upon this PDSR, the Building 881 2nd floor and 2nd floor Mezzanine can be demolished. The 881/883 Tunnel meets unrestricted release limits and in accordance with the engineering provided with the Facility Disposition RSOP Notification for the Building 881 demolition the tunnel can be left in place. To ensure that the facility remains free of further contamination and that PDS data remain valid, Level 1-Isolation Controls have been established, and the area posted accordingly.

9 REFERENCES

DOE/RFFO, CDPHE, EPA, 1996. *Rocky Flats Cleanup Agreement (RFCA)*, July 19, 1996.

DOE Order 5400.5, *Radiation Protection of the Public and the Environment*

DOE Order 414.1A, *Quality Assurance*

EPA, 1994. *The Data Quality Objective Process,* EPA QA/G-4.

K-H, 1999. *Decommissioning Program Plan*, June 21, 1999.

MAN-131-QAPM, *Kaiser-Hill Team Quality Assurance Program*, Rev. 1, November 1, 2001.

MAN-076-FDPM, *Facility Disposition Program Manual*, Rev. 3, January 1, 2002.

MAN-077-DDCP, *Decontamination and Decommissioning Characterization Protocol*, Rev. 4, July 15, 2002.

MAN-127-PDSP, *Pre-Demolition Survey Plan for D&D Facilities*, Rev. 1, July 15, 2002.

MARSSIM - *Multi-Agency Radiation Survey and Site Investigation Manual* (NUREG-1575, EPA 402-R-97-016).

PRO-475-RSP-16.01, *Radiological Survey/Sampling Package Design, Preparation, Control, Implementation, and Closure,* Rev. 1, May 22, 2001.

PRO-476-RSP-16.02, *Pre-Demolition (Final Status) Radiological Surveys of Surfaces and Structures*, Rev. 1, May 22, 2001.

PRO-477-RSP-16.03, *Radiological Samples of Building Media*, Rev. 1, May 22, 2001.

PRO-478-RSP-16.04, *Radiological Survey/Sample Data Analysis for Final Status Survey*, Rev. 1, May 22, 2001.

PRO-479-RSP-16.05, *Radiological Survey/Sample Quality Control for Final Status Survey*, Rev. 1, May 22, 2001.

PRO-563-ACPR, *Asbestos Characterization Procedure,* Revision 0, August 24, 1999.

PRO-536-BCPR, *Beryllium Characterization Procedure*, Revision 0, August 24, 1999.

RFETS, Environmental Waste Compliance Guidance #25, Management of Polychlorinated Biphenyls (PCBs) in Paint and Other Bulk Product Waste During Facility Disposition.

RFETS, Environmental Waste Compliance Guidance #27, Lead-Based Paint (LBP) and Lead-Based Paint Debris Disposal.

RFETS, RFCA RSOP for Recycling Concrete, September 28, 1999

Reconnaissance Level Characterization Report for the Building 881 Cluster, Dated November 6, 2001, Revision 0.

Building 881 Historical Site Assessment Report, incorporated as part of the Building 881 Cluster RLCR, dated November 6, 2001.

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ATTACHMENT A

Facility Location Map

Rocky Flats Environmental Technology Site

Building 881

Map Features

- Buildings Remaining
- D&D Facility
- Paved Roads
- Dirt Roads
- Lakes
- Streams
- Railroad Removed
- Railroad Remaining
- Fence Removed
- Fence Remaining

N

1:2,294
1 inch equals 190 feet

State Plane Coordinate Projection
Colorado Central Zone (3476)
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

GIS Dept. (303) 966-7707

Prepared By: CH2MHILL

Prepared For: KAISER HILL

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ATTACHMENT B-1

MEDIA SAMPLE RESULTS TABLE AND SAMPLE LOCATION MAP

Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
150	881-883 tunnel	Wall, up 4'	4,222.9	0.0
151	881-883 tunnel	Wall, up 1'	4,222.9	0.0
152	881-883 tunnel	Wall, up 2'	4,222.9	0.0
153	881-883 tunnel	Wall, up 5'	4,222.9	0.0
154	881-883 tunnel	Wall, up 5'	4,222.9	0.0
155	881-883 tunnel	Wall, up 1'	4,222.9	0.0
156	881-883 tunnel	Wall, up 5'	4,427.9	0.0
157	881-883 tunnel	Wall, up 1'	4,427.9	0.0
158	881-883 tunnel	Wall, up 5'	4,427.9	0.0
159	881-883 tunnel	Wall, up 1'	4,427.9	0.0
160	881-883 tunnel	Wall, up 5'	4,427.9	0.0
161	881-883 tunnel	Wall, up 3'	4,427.9	0.0
162	881-883 tunnel	Ceiling	4,427.9	0.0
163	881-883 tunnel	Ceiling	4,427.9	0.0
164	881-883 tunnel	Ceiling	4,427.9	0.0
165	881-883 tunnel	Floor	1,776.9	0.0
167	881-883 tunnel	Floor	4,544.9	0.0
168	881-883 tunnel	Floor	1,222.6	0.0
186	148 Stairwell	Floor	1,990.0	0.0
187	148 Stairwell	Floor	181.7	0.0
188	148 Stairwell	Wall	1,990.0	0.0
200	West entrance Stairwell	Floor	1,685.4	0.0
201	West entrance Stairwell	Floor	2,090.2	0.0
202	237	Floor	2,090.2	0.0
203	237	Floor	1,682.2	0.0
204	237	Floor	1,682.2	0.0
206	222	Wall, up 1'	1,682.2	0.0
207	222	Wall, up 5'	1,682.2	0.0
208	222	Wall, up 2'	1,685.4	0.0
209	208	Column, up 1'	2,480.7	0.0
210	207	Wall, up 5'	2,480.7	0.0
211	207	Wall, up 5'	2,480.7	0.0
212	204	Wall, up 5'	1,389.7	0.0
213	205	Wall, up 0.5'	1,389.7	0.0
214	201A	Floor	4,552.3	72.5
215	201	Floor	4,552.3	72.5
216	210	Floor	2,351.5	0.0
217	206	Wall, up 1'	2,351.5	0.0
218	271	Wall, up 1'	1,389.7	0.0
219	279	Wall, up 1'	1,861.5	0.0
220	200	Floor	4,552.3	72.5
221	200	Wall, up 1'	2,351.5	0.0
222	221	Wall, up 1'	1,861.5	0.0

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Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
223	220	Wall, up 5'	276.4	0.0
224	220	Floor	1,861.5	0.0
225	212C	Wall, up 6'	276.4	0.0
226	212	Wall, up 2'	154.2	0.0
227	212	Wall, up 5'	154.2	0.0
228	212B	Wall,up 7'	154.2	0.0
230	211	Wall, up 3'	349.3	0.0
231	221	Wall, up 4'	349.3	0.0
232	221	Wall, up 1'	349.3	0.0
233	218	Wall, up 8'	349.3	0.0
234	218	Wall, up 6'	213.7	0.0
235	217A	Wall, up 5'	4,480.0	0.0
236	214B	Wall, up 2'	1,047.8	0.0
237	214B	Wall, up 4'	1,680.4	0.0
238	214B	Wall, up 6'	2,787.5	0.0
239	214C	Wall, up 3'	120.1	0.0
240	279	Wall, up 1'	2,787.5	0.0
241	236	Wall, up 1'	4,480.0	0.0
242	236	Wall, up 1'	4,480.0	0.0
243	236	Wall, up 1'	2,795.2	0.0
244	236	Wall, up 1'	3,696.7	0.0
245	236	Wall, up 3'	2,795.2	0.0
246	288	Wall, up 3'	1,614.9	0.0
247	288	Wall, up 1'	1,614.9	0.0
248	288	Wall, up 2'	3,342.7	0.0
249	288A	Wall, up 6'	1,614.9	0.0
250	288	Wall, up 1'	1,614.9	0.0
251	201	Floor	2,787.5	0.0
252	201	Floor	3,342.7	0.0
253	133 Stairwell	Floor	309.8	0.0
254	133 Stairwell	Floor	309.8	0.0
255	133 Stairwell	Floor	309.8	0.0
256	133 Stairwell	Floor	309.8	0.0
257	133 Stairwell	Floor	309.8	0.0
258	133 Stairwell	Wall, up 1'	123.5	0.0
259	133 Stairwell	Floor	85.4	0.0
260	133 Stairwell	Floor	1,614.9	0.0
261	133 Stairwell	Floor	119.7	0.0
262	279	Ceiling	85.4	0.0
263	279	Ceiling	2,307.9	0.0
264	279	Wall, up 4'	2,307.9	0.0
265	239	Wall, up 3'	2,307.9	0.0
266	241	Wall, up 4'	119.7	0.0
267	288B	Wall, up 5'	168.9	0.0
268	288B	Wall, up 1'	168.9	0.0

Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
269	296E	Floor	861.4	0.0
270	296E	Floor	532.8	0.0
271	296	Floor	532.8	0.0
272	296	Floor	2,513.0	0.0
273	296	Floor	532.8	0.0
274	296	Floor	2,556.8	0.0
275	296	Floor	2,513.0	0.0
276	296	Floor	2,513.0	0.0
277	296	Floor	1,744.2	0.0
278	296	Floor	2,556.8	0.0
279	296	Floor	84.4	0.0
280	296	Floor	84.4	0.0
281	296	Floor	85.5	0.0
282	296	Floor	85.5	0.0
283	296	Floor	4,347.5	0.0
284	296E	Wall	4,347.5	0.0
285	296E	Wall	4,347.5	0.0
286	296	Wall	2,698.9	0.0
287	296	Wall	2,698.9	0.0
288	296	Wall	296.3	0.0
289	296	Wall	2,556.8	0.0
290	296	Wall	1,622.0	0.0
292	296B	Wall	296.3	0.0
293	296D	Wall	2,652.8	0.0
294	296D	Wall	0.0	0.0
295	296C	Wall	2,550.5	0.0
296	296	Wall	2,652.8	0.0
297	296D	Wall	2,550.5	0.0
298	245	Wall	114.2	0.0
299	245	Wall	1,898.2	0.0
300	245	Wall	2,652.8	0.0
301	245D	Wall	19.3	0.0
302	245G	Wall	10.7	0.0
303	245	Wall	10.7	0.0
304	245	Wall	10.7	0.0
305	245	Wall	10.7	0.0
306	244	Wall	10.7	0.0
307	244	Wall	0.0	0.0
308	244A	Wall	1,149.4	0.0
309	244	Wall	2,998.0	0.0
310	244	Wall	1,149.4	0.0
311	245	Wall	2,998.0	0.0
313	244	Ceiling	19.8	0.0
314	245	Ceiling	0.0	0.0
315	296	Ceiling	2,998.0	0.0

Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
316	257F	Wall, up 3'	29.0	8.2
317	257E	Wall, up 9'	3.0	3.3
318	266C	Wall, up 9'	1,342.6	13.1
319	257A	Wall, up 6'	171.8	13.0
320	257B	Wall, up 6'	5.7	1.2
321	257C	Wall, up 9'	4.6	0.1
322	257C	Wall, up 9'	58.4	8.8
323	274	Wall, up 8'	79.7	13.4
324	257	Wall, up 8'	10.9	0.4
325	257	Wall, up 8'	51.0	9.6
326	266B	Wall, up 8'	40.6	8.4
327	274	Wall, up 8'	9.8	1.4
328	274	Wall, up 8'	71.8	30.9
331	264A	Wall, up 0.5'	88.1	23.6
332	265	Wall, up 3'	25.8	1.4
333	265B	Wall, up 5'	72.2	6.0
334	265B	Wall, up 3'	175.6	27.2
335	264A	Wall, up 7'	7.0	8.6
336	264	Wall, up 0.5'	367.4	30.3
337	265	Wall, up 0.5'	57.3	3.0
338	264	Wall, up 1'	1,281.6	9.2
339	265	Wall, up 6'	161.4	10.8
340	264A	Wall, up 6'	162.3	13.5
341	264	Wall, up 0.5'	2,747.1	6.9
342	264	Wall, up 16'	247.1	5.2
343	265	Wall, up 3'	112.3	7.9
344	265B	Wall, up 9'	150.8	5.8
345	264A	Wall, up 6'	1,690.9	37.6
346	267	Wall, up 4'	735.7	16.9
347	267	Wall, up 3'	61.0	3.7
348	267	Wall, up 5'	443.6	4.5
349	267	Wall, up 9'	424.7	19.5
350	267	Column, up 11'	347.8	7.1
351	267	Wall, up 6'	99.9	8.4
352	267	Wall, up 7'	78.1	9.0
353	267	Wall, up 6'	84.3	4.6
354	267	Wall, up 9'	353.6	22.7
355	267	Wall, up 1'	55.8	8.0
356	267	Wall, up 5'	265.8	3.4
357	267	Wall, up 4'	29.5	6.4
358	267	Wall, up 5'	1,604.5	18.9
359	267	Wall, up 8'	64.8	4.8
360	267	Wall, up 4'	19.9	1.9
361	299	Wall, up 8'	2,118.8	0.0
362	299	Wall, up 6'	2,118.8	0.0

Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
363	235F	Wall, up 2'	2,118.8	0.0
364	238A	Wall, up 1.5'	2,118.8	0.0
365	238B	Wall, up 6'	2,118.8	0.0
366	238	Wall, up 5'	2,118.8	0.0
367	231A	Wall, up 2'	2,118.8	0.0
368	243	Wall, up 4'	2,118.8	0.0
369	243	Floor	2,118.8	0.0
370	243	Wall, up 1'	2,118.8	0.0
371	243	Ceiling	2,118.8	0.0
372	242	Ceiling	2,118.8	0.0
373	242	Wall, up 3'	2,963.4	0.0
374	242	Wall, up 4'	2,963.4	0.0
375	242	Wall, up 6'	2,826.1	0.0
376	242	Wall, up 4'	3,378.4	0.0
377	242	Wall, up 3'	2,937.2	0.0
378	242	Wall, up 4'	2,937.2	0.0
379	232	Column, up 2'	8.2	0.0
380	232	Column, up 3'	3,378.4	0.0
381	232	Ceiling	3,378.4	0.0
382	231	Column, up 2'	3,378.4	0.0
383	231	Ceiling	3,378.4	0.0
384	309	Wall	77.8	0.0
385	309	Wall	3,516.4	0.0
386	309	Wall	3,516.4	0.0
387	309	Wall	3,516.4	0.0
388	309	Wall	3,516.4	0.0
389	309	Wall	2,363.7	0.0
390	309	Wall	2,363.7	0.0
391	300	Wall	159.7	0.0
392	300	Wall	252.4	0.0
393	300	Wall	252.4	0.0
394	300	Wall	149.3	0.0
395	300D	Wall	149.3	0.0
396	300	Wall	149.3	0.0
397	300B	Wall	2,363.7	0.0
398	300B	Wall	149.3	0.0
399	300	Floor	251.0	0.0
403	300D	Wall, up .5'	105.5	0.0
404	300	Floor	1,903.4	0.0
407	300	Floor	1,455.4	0.0
409	309	Ceiling	0.0	0.0
410	309	Ceiling	15.6	0.0
411	309	Ceiling	0.0	0.0
412	167 Stairwell	Floor	2.0	0.0
413	313	Wall, up 6'	33.3	0.0

Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
414	313	Ceiling, Col. B12	0.0	0.0
415	313	Wall, up 2'	2.0	0.0
416	313	Ceiling, Col. D12	82.6	0.0
417	313	Wall, up 1'	33.3	0.0
418	313	Wall, up 3'	0.0	0.0
419	314	Wall, up 1'	46.7	0.0
420	313	Ceiling	46.7	0.0
421	321	Column, up 4'	1,071.0	0.0
422	316	Wall, up 5'	3,535.6	0.0
423	316	Wall, up 2'	3,535.6	0.0
424	313	Wall, up 1'	3,512.4	0.0
425	318	Wall, up 2'	3,512.4	0.0
426	313	Ceiling	82.6	0.0
427	312	Wall, up .5'	1,586.8	0.0
428	317	Wall, up 6'	3,512.4	0.0
429	317	Wall, up 1'	3,512.4	0.0
430	317	Ceiling	206.4	0.0
431	317	Wall, up 5'	206.4	0.0
432	167 Stairwell	Floor	206.4	0.0
433	167 Stairwell	Floor	206.4	0.0
434	167 Stairwell	Wall, up 3'	206.4	0.0
435	167 Stairwell	Floor	206.4	0.0
436	167 Stairwell	Wall, up 5'	206.4	0.0
437	234A	Wall, up 0.5'	2,001.8	0.0
438	234A	Ceiling	2,275.3	0.0
439	292	Wall, up 4'	2,275.3	0.0
440	292	Ceiling	2,624.9	0.0
441	292	Wall, up 4'	2,001.8	0.0
442	294	Ceiling	2,275.3	0.0
443	294	Wall, up 0.5'	2,275.3	0.0
444	293A	Wall	2,624.9	0.0
445	294	Ceiling	2,275.3	0.0
446	295	Wall	328.1	0.0
447	295A	Wall	2,624.9	0.0
448	295	Ceiling	328.1	0.0
449	293	Wall, up 6'	99.7	0.0
450	293	Wall, up 12'	79.3	0.0
451	293	Column, up 1'	4,182.1	0.0
452	294	Floor	183.2	0.0
453	294	Floor	2,276.1	0.0
454	294	Floor	1,778.5	0.0
455	294	Floor	2,455.5	0.0
457	233	Floor	51.7	0.0
461	233	Wall, up 3'	8.6	0.0
462	233	Wall, up 12'	51.7	0.0

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Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
463	233	Wall, up 9'	51.7	0.0
464	233	Wall, up 3'	3,889.1	0.0
465	233	Wall, up 15'	51.7	0.0
466	233	Wall, up 0.5'	2,276.9	0.0
468	233	Wall, up 7'	3,889.1	0.0
469	233	Wall, up 15'	3,889.1	0.0
470	233	Ceiling	51.7	0.0
471	233	Ceiling	3,889.1	0.0
472	212	Wall, up 1'	146.0	1.4
473	212	Wall, up 0.5'	106.6	3.3
474	216	Wall, up 1'	39.4	24.4
475	220	Wall, up 5'	8.5	4.8
476	214B	Wall, up 0.5'	97.6	1.0
477	214B	Wall, up 0.5"	158.0	1.5
478	214C	Wall, up 6'	96.1	1.6
479	214C	Wall, up 1'	25.5	1.1
480	201	Wall, up 0.5'	51.6	3.0
481	201	Wall, up 6'	77.1	2.4
482	201	Wall, up 0.5'	10.4	0.9
483	201	Wall, up 0.5'	18.7	1.1
484	201B	Wall, up 0.5'	114.6	4.9
485	210	Wall, up 5'	484.3	8.6
486	214C	Wall, up 4'	436.1	2.7
556	229A	Wall Up	64.7	2.6
557	225	Wall Up	19.6	1.8
558	227	Wall Up	102.0	28.7
559	229	Wall Up	23.8	4.8
560	229A	Wall Up	35.1	0.9
561	223	Wall Up	63.1	2.3
562	225	Wall Up	71.6	2.9
563	225	Wall Up	105.3	10.6
564	229	Wall Up	324.5	17.4
565	227	Wall Up	119.6	5.2
566	224	Wall Up	19.3	1.3
567	224	Wall Up	77.1	4.0
568	225	Wall Up	62.2	7.7
569	227	Wall Up	52.2	38.7
570	224	Wall Up	113.7	15.5
571	224	Floor	202.5	0.0
572	223	Floor	141.9	0.0
573	225	Floor	371.4	0.0
574	225	Floor	78.5	0.0
575	227	Floor	4,160.0	0.0
576	227	Floor	4,160.0	0.0
577	229	Floor	4,160.0	0.0

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Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
578	229	Floor	4,160.0	0.0
600	134 Stairwell	Floor	3,151.9	0.0
601	134 Stairwell	Floor	3,151.9	0.0
602	134 Stairwell	Floor	3,151.9	0.0
603	134 Stairwell	Floor	3,151.9	0.0
604	134 Stairwell	Floor	3,151.9	0.0
605	280	Floor	3,151.9	0.0
606	280	Floor	3,151.9	0.0
607	280	Floor	3,151.9	0.0
608	280	Floor	192.8	0.0
609	266E	Floor	192.8	0.0
610	281	Floor	192.8	0.0
611	280	Floor	192.8	0.0
612	280	Floor	0.0	0.0
613	284	Floor	10.8	0.0
614	285	Floor	93.4	0.0
615	156 Stairwell	Floor	1.7	51.8
624	268A	Floor	66.2	0.0
625	269	Floor	71.2	0.0
626	258	Floor	66.2	0.0
627	272	Floor	3,188.2	0.0
628	257	Floor	991.9	0.0
629	277	Floor	1,305.5	0.0
630	276	Floor	2,248.4	0.0
631	276	Floor	2,730.8	0.0
632	272	Floor	2,052.2	0.0
633	251	Floor	2,886.7	0.0
634	256	Floor	119.2	0.0
635	212	Floor	119.2	0.0
636	279	Floor	306.0	0.0
638	212	Floor	74.7	0.0
639	279	Floor	40.0	0.0
640	279	Floor	306.0	0.0
641	216	Floor	306.0	0.0
642	214B	Floor	40.0	0.0
643	214B	Floor	306.0	0.0
644	214B	Floor	306.0	0.0
645	214C	Floor	2,031.8	0.0
646	214C	Floor	2,031.8	0.0
647	222	Floor	47.6	0.0
648	222	Floor	2,031.8	0.0
649	222	Floor	1,719.8	0.0
650	204	Floor	1,719.8	0.0
651	206	Floor	47.6	0.0
652	208	Floor	2,031.8	0.0

Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
656	278A	Floor	1,389.6	0.0
657	278C	Floor	1,389.6	0.0
658	278	Floor	1,389.6	0.0
659	278	Floor	1,389.6	0.0
660	275	Floor	1,389.6	0.0
661	271	Floor	2,842.1	0.0
662	271	Floor	2,842.1	0.0
663	279	Floor	2,842.1	0.0
664	279	Floor	2,842.1	0.0
665	275A	Floor	2,842.1	0.0
666	234	Floor	2,842.1	0.0
667	293	Floor	2,842.1	0.0
668	293	Floor	793.6	0.0
669	293	Floor	1,839.8	0.0
670	255	Floor	1,839.8	0.0
671	247	Floor	1,760.5	0.0
672	249B	Floor	5.7	0.0
673	236	Floor	1,839.8	0.0
674	236	Floor	1,839.8	0.0
675	236	Floor	2,031.1	0.0
676	288	Floor	3,343.5	0.0
677	288A	Floor	3,343.5	0.0
678	288A	Floor	3,343.5	0.0
679	288B	Floor	3,343.5	0.0
680	288B	Floor	2,980.5	0.0
681	248B	Floor	2,980.5	0.0
682	295	Floor	2,980.5	0.0
755	248A	Floor	3,352.1	0.0
756	297	Floor	3,352.1	0.0
757	297	Floor	3,352.1	0.0
758	297	Floor	4,615.0	0.0
759	297	Floor	4,615.0	0.0
760	296B	Floor	4,615.0	0.0
761	296A	Floor	4,615.0	0.0
762	297	Floor	292.1	0.0
770	156 stairwell	Floor	182.2	0.0
771	156 stairwell	Floor	73.8	0.0
772	156 stairwell	Floor	73.8	0.0
776	159 elevator	Floor	1,603.5	0.0
777	159 elevator	Wall	1,603.5	0.0
778	159 elevator	Wall	1,603.5	0.0
782	ST2	Floor	1,245.1	0.0
783	245	Floor	2,008.0	0.0
784	231	Floor	2,008.0	0.0
786	249A pit	Floor	1,651.7	0.0

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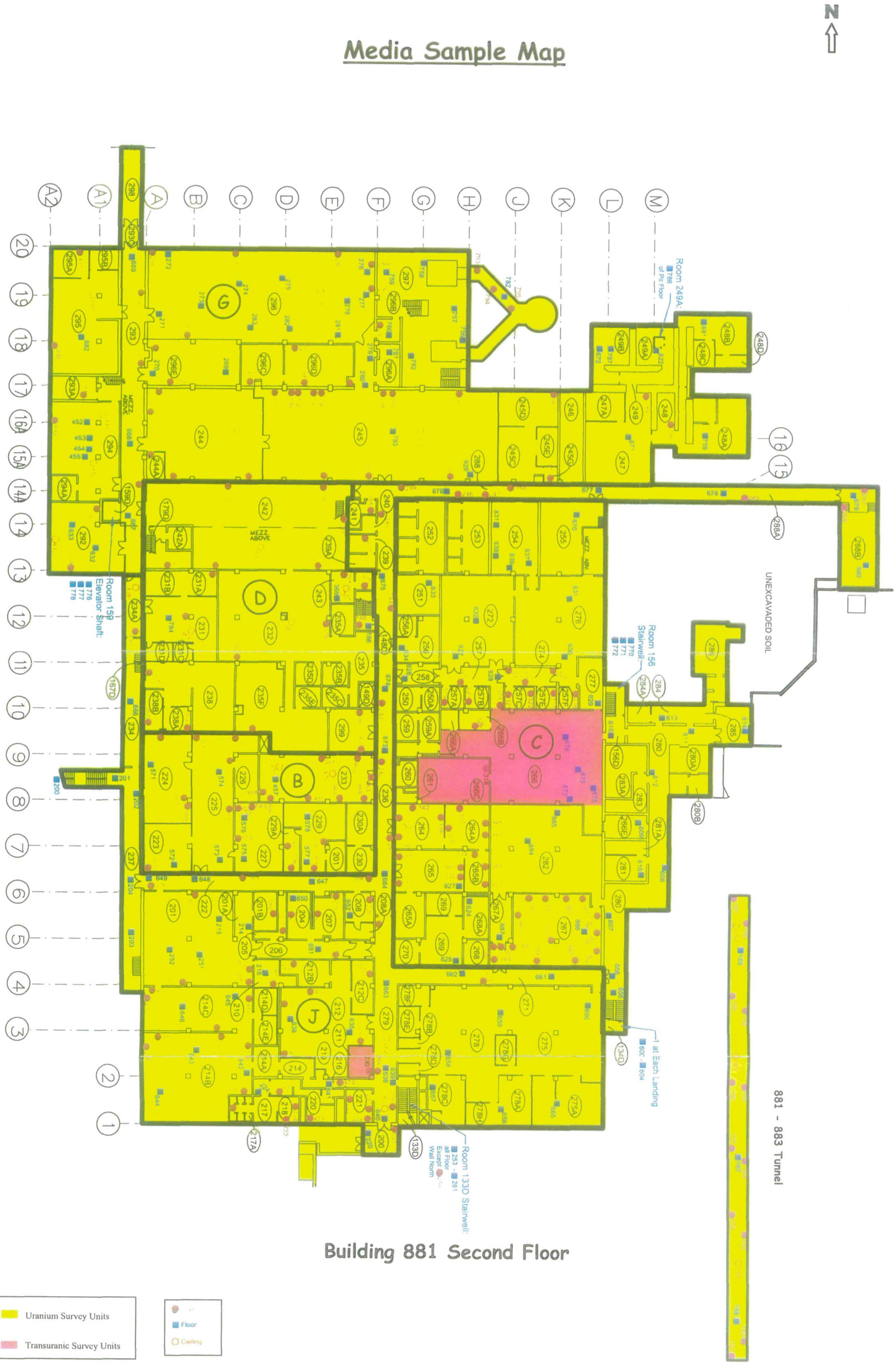
Building 881 2nd Floor
Media Sample Results Table

Map Location	Room	Location Description	Uranium Result (dpm/100cm2)	Transuranic Result (dpm/100cm2)
787	249B	Wall	2,502.1	0.0
788	248	Wall	1,738.3	0.0
789	247	Wall	2,760.3	0.0
793	ST2	Wall	190.9	0.0
794	ST2	Wall	2,578.3	0.0
795	ST2	Wall	4,627.2	0.0
796	245	Wall	1,322.6	0.0
797	245	Wall	86.4	0.0
798	245	Wall	1,555.1	0.0
799	245	Wall	1,606.1	0.0
822	249A	Floor	715.8	0.0
824	316	Floor	7.0	0.0
825	313	Floor	43.1	0.0
826	245	Floor	1,836.2	0.0
827	265	Floor	30.4	0.0
832	292	Floor	134.9	0.0
833	292	Floor	82.5	0.0
837	254	Floor	1,743.5	0.0
838	254	Floor	1,743.5	0.0
839	254	Floor	1,743.5	0.0
873	Rm266	Floor	3,204.0	0.0
875	Rm266	Floor	805.1	0.0
876	Rm266	Floor	2,630.9	60.1
878	Rm266	Floor	2,392.9	39.5
884	Rm282	Floor	40.0	53.3
885	Rm282	Floor	2,471.6	42.3
886	Rm267	Floor	1,305.1	39.3
887	Rm267A	Floor	1,497.6	41.9

36

Media Sample Map

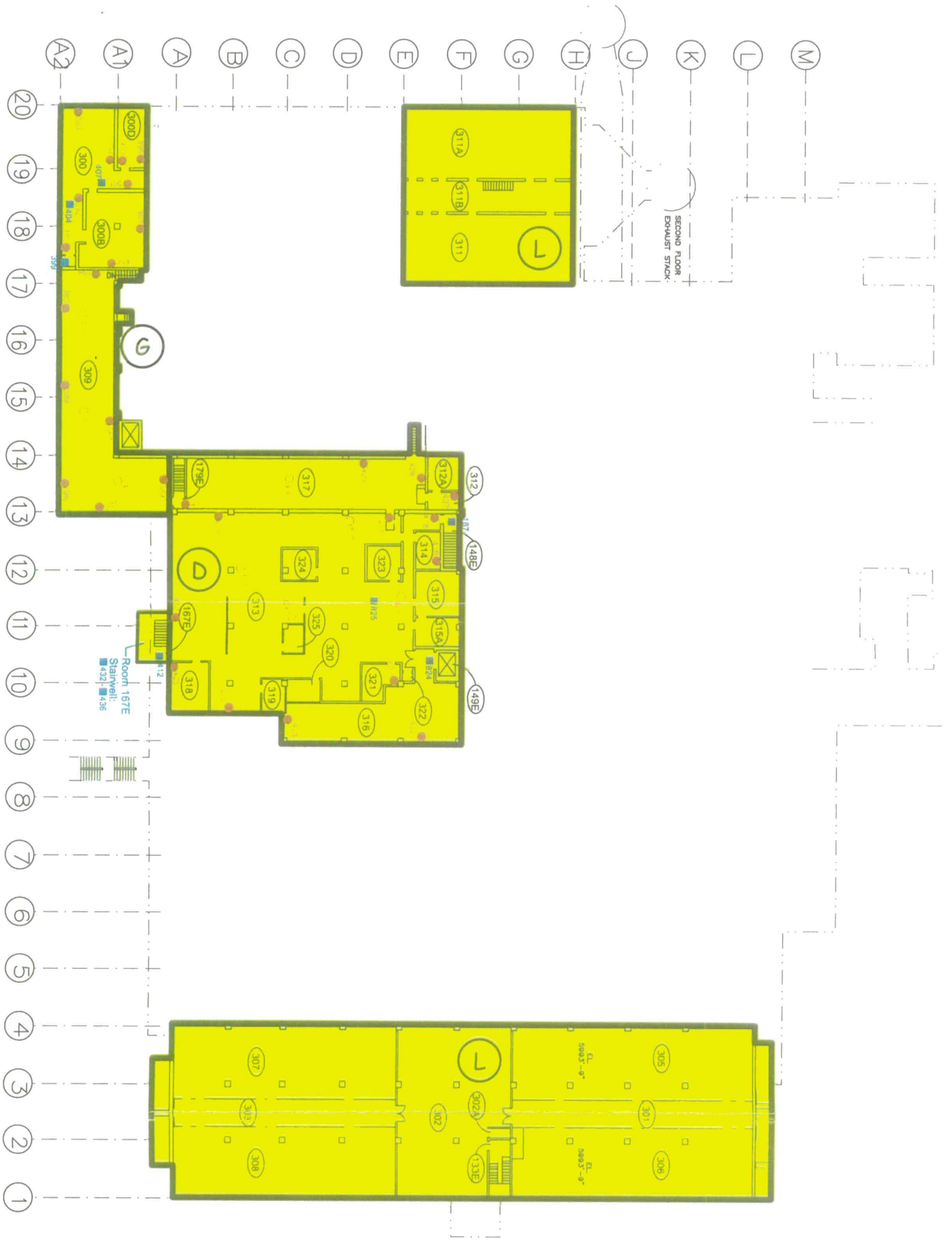


Building 881 Second Floor

Map ID: 2FLR_MedSam_J_17x11

37

Media Sample Map



Building 881 Second Floor Mezzanine

Map ID: 2FLR_Mez_MedSam_D_17x11

ATTACHMENT B-2

STAINLESS STEEL FLOORING SURVEY/SAMPLE RESULTS TABLE AND SURVEY/SAMPLE LOCATION MAPS

B881 2nd Floor Underneath Stainless Steel Flooring
Survey and Sample Results

UNDERNEATH STAINLESS STEEL FLOOR SURVEY RESULTS				UNDERNEATH SS FLOOR CONCRETE SAMPLE RESULTS	
Sample #	Location	Removable	Total	Uranium	Transuranics
		Alpha dpm/100cm^2	Alpha dpm/100cm^2	dpm/100cm^2	dpm/100cm^2
1	ROOM 232	2.6	18	N/A	N/A
6	ROOM 244	0	60	N/A	N/A
7	ROOM 235F	1.8	24	N/A	N/A
10	ROOM 232	5.7	0	N/A	N/A
11	ROOM 245	0	0	N/A	N/A
13	ROOM 232	0	0	N/A	N/A
14	ROOM 232	8.6	0	N/A	N/A
15	ROOM 245	0	180	2,008.0	0.0
16	ROOM 235C	5.7	8	N/A	N/A
18	ROOM 265A	5.5	18	N/A	N/A
20	ROOM 232	8.6	0	N/A	N/A
21	ROOM 238A	8.6	0	N/A	N/A
22	ROOM 232	8.6	0	N/A	N/A
23	ROOM 238	0	0	N/A	N/A
24	ROOM 265	2.6	18	N/A	N/A
25	ROOM 245	0	12	N/A	N/A
28	ROOM 244	0	18	N/A	N/A
37	ROOM 245	0	18	N/A	N/A
38	ROOM 232	0	0	N/A	N/A
39	ROOM 231	0	0	N/A	N/A
40	ROOM231	0	180	2,008.0	0.0
42	ROOM 253	2.8	0	N/A	N/A
43	ROOM 253	5.7	0	N/A	N/A
46	ROOM 316	5.7	0	N/A	N/A
48	ROOM 314	1.8	34	N/A	N/A
49	ROOM 316	-1.2	173.5	7.0	0.0
50	ROOM 313	4.8	123.2	43.1	0.0
51	ROOM 313	1.8	53.6	N/A	N/A
52	ROOM 313	4.8	18.6	N/A	N/A
53	ROOM 313	-1.2	46.5	N/A	N/A
54	ROOM 245C	1.8	-6.2	N/A	N/A
55	ROOM 245	-1.2	28.4	N/A	N/A
56	ROOM 245	10.9	356.9	1836.2	0.0
57	ROOM 253	1.8	-41.2	N/A	N/A
58	ROOM 245	-1.2	-30.9	N/A	N/A
59	ROOM 252	-1.2	12.8	N/A	N/A
60	ROOM 252	-1.2	3.3	N/A	N/A
61	ROOM 252	1.8	15.6	N/A	N/A
62	ROOM 245	-1.2	33.2	N/A	N/A
63	ROOM 245	-1.2	25.1	N/A	N/A
64	ROOM 245	-1.2	6.2	N/A	N/A
65	ROOM 244	4.8	3.3	N/A	N/A
66	ROOM 244	-1.2	25.6	N/A	N/A

B881 2nd Floor Underneath Stainless Steel Flooring
Survey and Sample Results

UNDERNEATH STAINLESS STEEL FLOOR SURVEY RESULTS				UNDERNEATH SS FLOOR CONCRETE SAMPLE RESULTS	
Sample #	Location	Removable	Total	Uranium	Transuranics
		Alpha dpm/100cm^2	Alpha dpm/100cm^2	dpm/100cm^2	dpm/100cm^2
67	ROOM 244	1.8	40.5	N/A	N/A
68	ROOM 256	-1.2	27.9	N/A	N/A
69	ROOM 256A	1.8	41.2	N/A	N/A
70	ROOM 235	-1.2	75.8	N/A	N/A
71	ROOM 235E	4.8	12.3	N/A	N/A
72	ROOM 238	-1.2	34.4	N/A	N/A
73	ROOM 238	1.8	54.5	N/A	N/A
74	ROOM 238	-1.2	85.3	N/A	N/A
75	ROOM 299	-1.2	31.8	N/A	N/A
78	ROOM 264	-1.2	12.1	N/A	N/A
79	ROOM 265	-1.2	186.3	30.4	0.0
80	ROOM 265	-1.2	25.1	N/A	N/A
99	ROOM 245D	1.8	19	N/A	N/A
100	ROOM 245E	-1.2	9.5	N/A	N/A
137	266C	3.0	15.3	N/A	N/A

Notes:

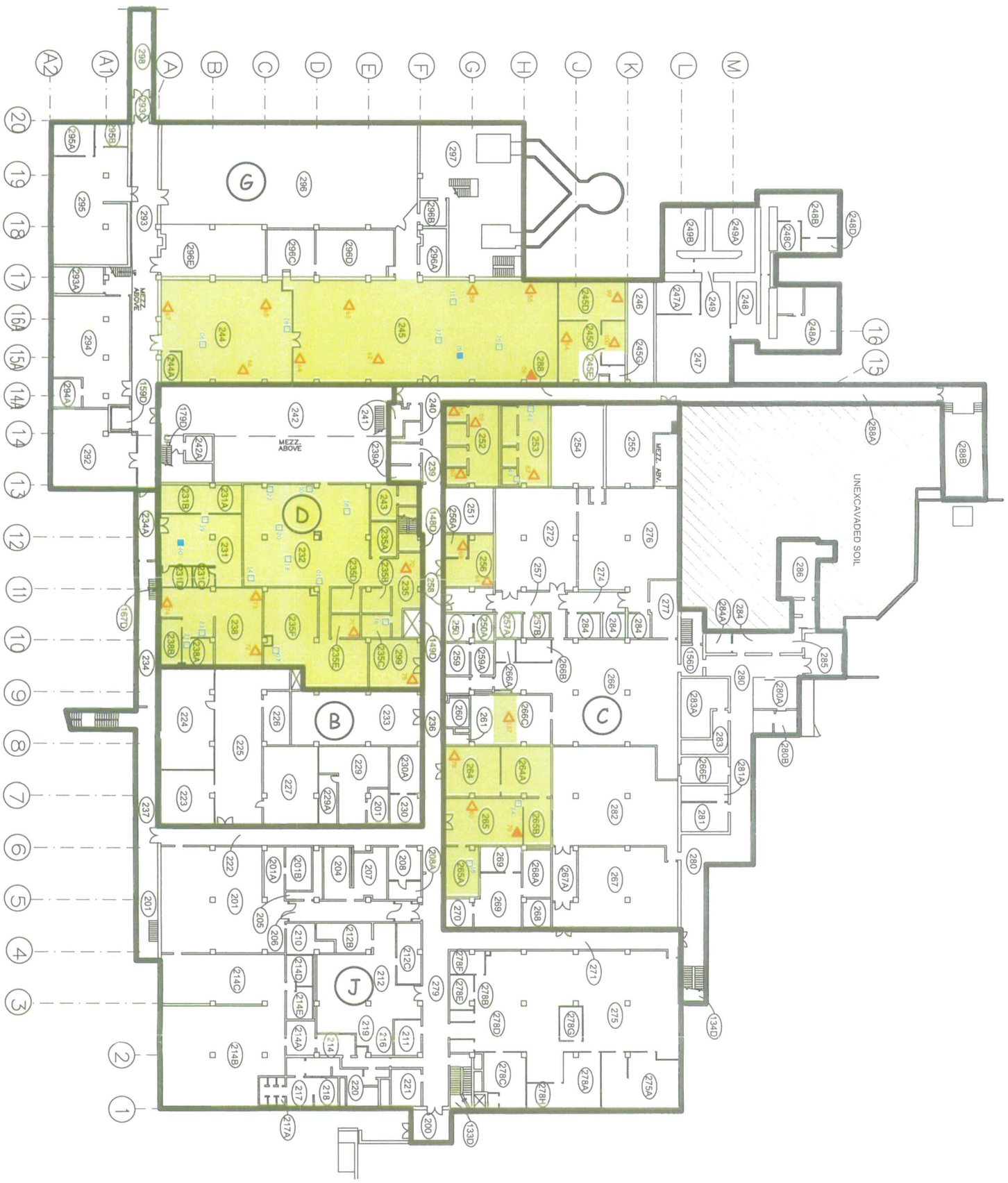
1. "As Left" final conditions are reported in these table and the map. All SS floors that were removed in-process are not reported or shown.
2. Locations 1-47 were surveyed during the RLC.
3. Locations 48-137 were surveyed during in-process stripout.
4. Total Surface Activity alpha survey result locations above 100 dpm/100cm2 was isotopiclly sampled to determine isotopic mix.
5. Concrete samples were collected during in-process stripout.

40

41

STAINLESS STEEL SURVEY & SAMPLE MAP

N



Building 881 Second Floor

□ = RLC, Under SS Floor, TSA/RSA Only
■ = RLC, Under SS Floor, TSA/RSA / Media Sample
△ = In-Process, Under SS Floor, TSA/RSA Survey Only
▲ = In-Process, Under SS Floor, TSA/RSA / Media Sample

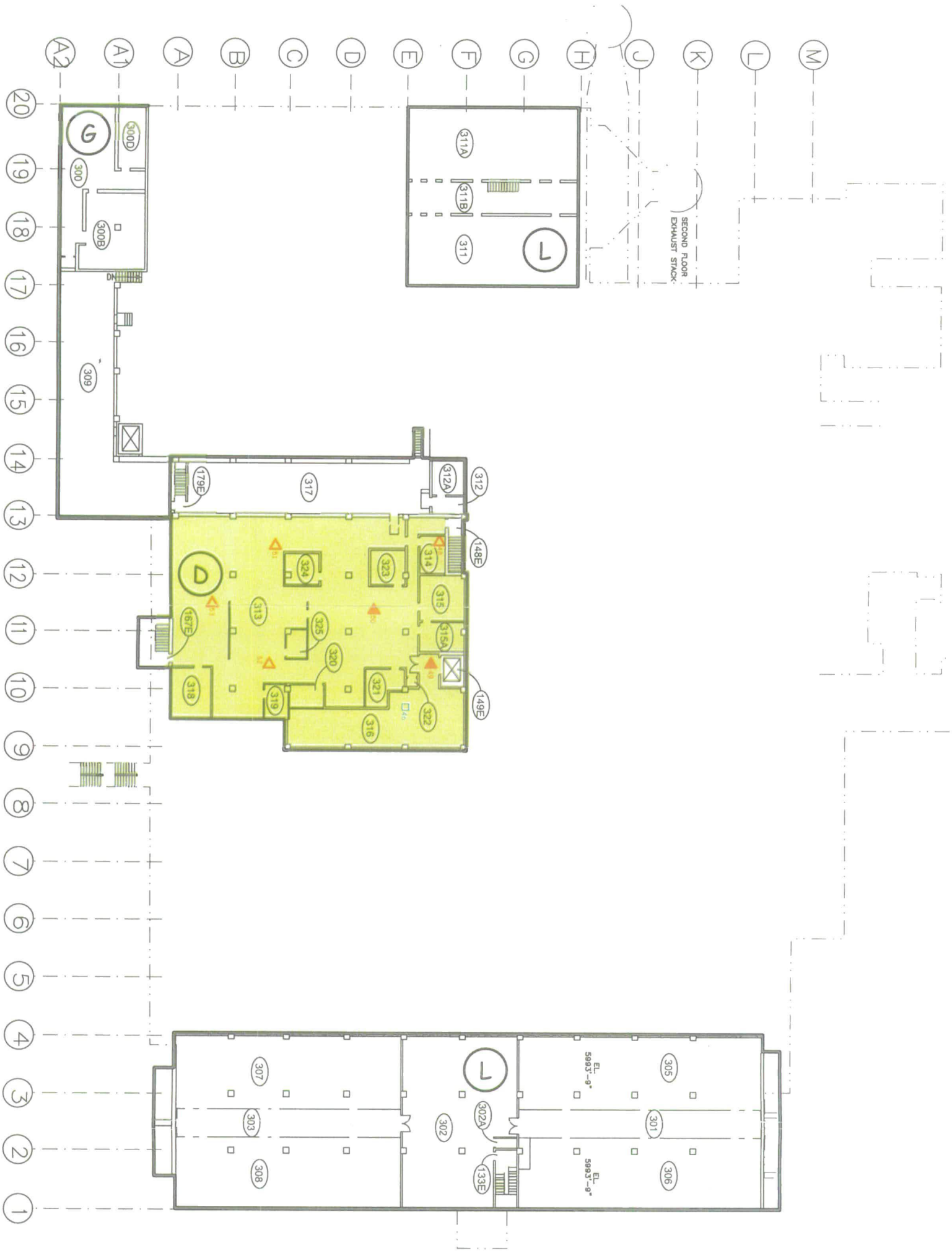
= Stainless Steel Floor

SS = Stainless Steel

Map ID: 2FLR_SSTL_J

STAINLESS STEEL SURVEY & SAMPLE MAP

N



Building 881 Second Floor Mezzanine

= Stainless Steel Floor

- = RLC, Under SS Floor, TSA/RSA Only
- = RLC, Under SS Floor, TSA/RSA / Media Sample
- = In-Process, Under SS Floor, TSA/RSA Survey Only
- = In-Process, Under SS Floor, TSA/RSA / Media Sample

SS = Stainless Steel

Map ID: 2FLR-Mezz_SSTL_D

ATTACHMENT B-3

881 CONFIRMATORY SURVEYS, RADIOLOGICAL DATA AND SURVEY MAPS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

INSTRUMENT DATA

Mfg.	Ludlum	Mfg.	NE Electra	Mfg.	NE Electra
Model	2929	Model	DP-6	Model	DP-6
Serial #	147742	Serial #	N/A	Serial #	1290
Cal Due	9/25/04	Cal Due	N/A	Cal Due	12/1/04
Bkg	0.4 cpmα	Bkg	N/A cpmα	Bkg	2.0 cpmα
Efficiency	35.10 %	Efficiency	N/A %	Efficiency	22.20 %
MDA	18 dpmα	MDA	###### dpmα	MDA	42 dpmα
Mfg.	Ludlum	Mfg.	NE Electra	Mfg.	NE Electra
Model	2929	Model	DP-6	Model	DP-6
Serial #	147742	Serial #	N/A	Serial #	1290
Cal Due	9/25/04	Cal Due	N/A	Cal Due	12/1/04
Bkg	107.7 cpmβ	Bkg	N/A cpmβ	Bkg	842.0 cpmβ
Efficiency	39.10 %	Efficiency	N/A %	Efficiency	30.70 %
MDA	205 dpmβ	MDA	###### dpmβ	MDA	448 dpmβ

Survey Tracking # N/A
Survey Type: Contamination
Building: 881
Location: External Walls and Roof of B881
Purpose: Pre-Demolition Verification Survey

RWP #: N/A

Date: 6/4/04 Time: 1030

RCT: [redacted] / 712193
Print name / Signature / Emp. #

RCT: NA / NA / NA
Print name / Signature / Emp. #

COPY

PRN/REN # : N/A
Comments: Nuclides of concern are Uranium and Plutonium. Survey performed to verify contamination levels prior to demolition of 881. Performed swipes of exterior wallsand roof of B881.

SURVEY RESULTS

		ALPHA			BETA		
#	LOCATION	Swipe dpm/100cm2	Direct dpm/100cm2	Wipe dpm/wipe	Swipe dpm/100cm2	Direct dpm/100cm2	Wipe dpm/wipe
1	881 Exterior Walls	<18	N/A	<42	N/A	N/A	N/A
2	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
3	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
4	881 Exterior Walls	<18	N/A	<42	N/A	N/A	N/A
5	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
6	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
7	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
8	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
9	881 Roof	<18	N/A	<42	N/A	N/A	N/A
10	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
11	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
12	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
13	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
14	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
15	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
16	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
17	881 Roof	<18	N/A	<42	N/A	N/A	N/A
18	881 Roof	<18	N/A	N/A	N/A	N/A	N/A
19	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
20	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A

Date Reviewed: 6/7/04 **RS Supervision:** [redacted] 1902791
Print Name / Signature / Emp. #

COPY

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

SURVEY RESULTS

		ALPHA			BETA		
	LOCATION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
#		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
21	881 Exterior Walls	<18	N/A	<42	N/A	N/A	N/A
22	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
23	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
24	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
25	881 Exterior Walls	<18	N/A	N/A	N/A	N/A	N/A
26	881 Exterior Walls	<18	N/A	<42	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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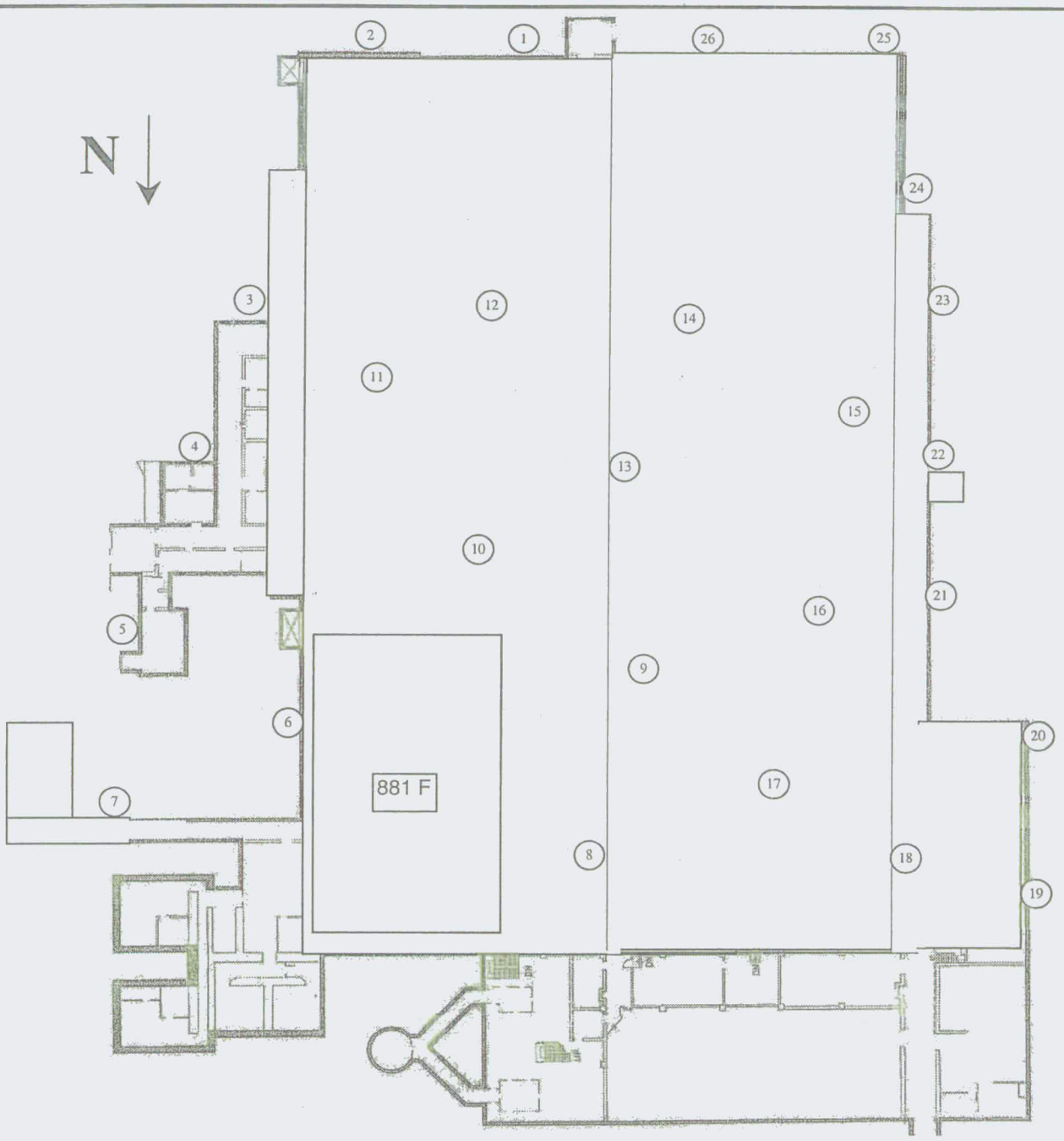
COPY

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE



ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

INSTRUMENT DATA

Mfg.	Ebeline	Mfg.	NE Electra	Mfg.	NE Electra
Model	SAC 4	Model	DP-6	Model	DP-6
Serial #	830	Serial #	N/A	Serial #	1518
Cal Due	10/30/04	Cal Due	N/A	Cal Due	12/2/04
Bkg	0.4 cpmα	Bkg	N/A cpmα	Bkg	4.0 cpmα
Efficiency	33.00 %	Efficiency	N/A %	Efficiency	21.70 %
MDA	20 dpmα	MDA	###### dpmα	MDA	55 dpmα
Mfg.	Eberline	Mfg.	NE Electra	Mfg.	NE Electra
Model	BC 4	Model	DP-6	Model	DP-6
Serial #	N/A	Serial #	N/A	Serial #	1518
Cal Due	N/A	Cal Due	N/A	Cal Due	12/2/04
Bkg	N/A cpmβ	Bkg	N/A cpmβ	Bkg	855.0 cpmβ
Efficiency	N/A %	Efficiency	N/A %	Efficiency	30.70 %
MDA	205 dpmβ	MDA	###### dpmβ	MDA	452 dpmβ

Survey Tracking # N/A
Survey Type: Contamination
Building: 881
Location: Second Floor of B881 South End
Purpose: Pre-Demolition Verification Survey

RWP #: N/A

Date: 6/7/04 Time: 1100

RCT: [redacted] / 712193
Print name / Signature / Emp. #

RCT: NA / NA / NA
Print name / Signature / Emp. #

COPY

PRN/REN # : N/A
Comments: Nuclides of concern are Uranium and Plutonium. Survey performed to verify contamination levels prior to demolition of 881 second floor excepting MU-G and exclusion dock previously surveyed. Performed swipes on floorsand walls.

SURVEY RESULTS

		ALPHA			BETA		
	LOCATION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
#		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
1	Floor	<20	N/A	<55	N/A	N/A	N/A
2	Floor	<20	N/A	N/A	N/A	N/A	N/A
3	Floor	<20	N/A	N/A	N/A	N/A	N/A
4	Floor	<20	N/A	<55	N/A	N/A	N/A
5	Floor	<20	N/A	N/A	N/A	N/A	N/A
6	Floor	<20	N/A	N/A	N/A	N/A	N/A
7	Floor	<20	N/A	N/A	N/A	N/A	N/A
8	Floor	<20	N/A	N/A	N/A	N/A	N/A
9	Floor	<20	N/A	<55	N/A	N/A	N/A
10	Floor	<20	N/A	N/A	N/A	N/A	N/A
11	Floor	<20	N/A	N/A	N/A	N/A	N/A
12	Floor	<20	N/A	N/A	N/A	N/A	N/A
13	Floor	<20	N/A	N/A	N/A	N/A	N/A
14	Floor	<20	N/A	N/A	N/A	N/A	N/A
15	Floor	<20	N/A	N/A	N/A	N/A	N/A
16	Floor	<20	N/A	N/A	N/A	N/A	N/A
17	Floor	<20	N/A	<55	N/A	N/A	N/A
18	Floor	<20	N/A	N	N/A	N/A	N/A
19	Floor	<20	N/A	N	N/A	N/A	N/A
20	Floor	<20	N/A	N	N/A	N/A	N/A

Date Reviewed: 6/7/04 **RS Supervision:** [redacted] 190791
Print Name / Signature / Emp. #

COPY

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

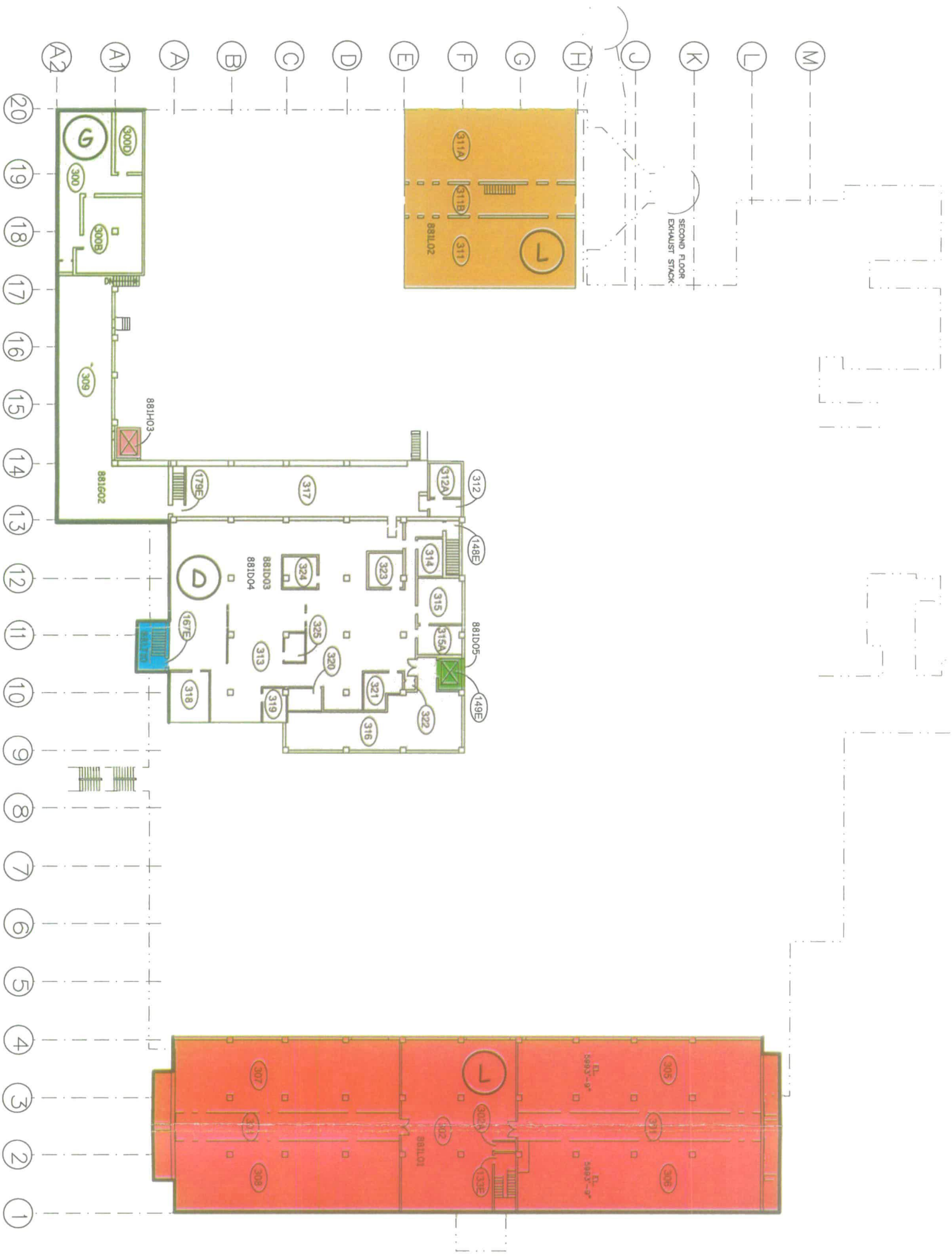
SURVEY RESULTS

		ALPHA			BETA		
	LOCATION	Swipe	Direct	Wipe	Swipe	Direct	Wipe
#		dpm/100cm2	dpm/100cm2	dpm/wipe	dpm/100cm2	dpm/100cm2	dpm/wipe
21	Floor	<20	N/A	<55	N/A	N/A	N/A
22	Floor	<20	N/A	N/A	N/A	N/A	N/A
23	Floor	<20	N/A	N/A	N/A	N/A	N/A
24	Floor	<20	N/A	N/A	N/A	N/A	N/A
25	Floor	<20	N/A	N/A	N/A	N/A	N/A
26	Floor	<20	N/A	<55	N/A	N/A	N/A
27	Floor	<20	N/A	N/A	N/A	N/A	N/A
28	Floor	<20	N/A	N/A	N/A	N/A	N/A
29	Floor	<20	N/A	N/A	N/A	N/A	N/A
30	Floor	<20	N/A	<55	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ATTACHMENT B-4

881 SURVEY UNIT MAPS

Survey Units



Building 881 Second Floor Mezzanine Management Units

Legend:

- Color area indicate the survey unit boundaries
- xxxxxx — Six digit characters designate survey unit ID.
- xxxxxx — Six digit characters with white backgound designate survey unit ID, walls, ceilings, & columns.

2FLR_Mez_Sur_Units_D_17x11

Survey Units

Building 881 Second Floor Management Units

Legend:

- Color area indicate the survey unit boundaries
- xxxxxx — Six digit characters designate survey unit ID.
- xxxxxx — Six digit characters with white backgound designate survey unit ID, walls, ceilings, & columns.

2FLR_Sur_Units_J_17x11

ATTACHMENT B-5

RADIOLOGICAL SURVEY UNIT DATA SUMMARY AND SURVEY MAPS

Survey Area: B	Survey Unit: 881B01	Building: 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 90 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 5

Nbr Random Measurements Performed: 97 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 5

Alpha

Maximum:	143.1 dpm/100cm²
Minimum:	5.4 dpm/100cm²
Mean:	37.5 dpm/100cm²
Standard Deviation:	22.1
QC Maximum:	151.5 dpm/100cm²
QC Minimum:	72.3 dpm/100cm²
QC Mean:	102.0 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 90 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 97 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	14.0 dpm/100cm²
Minimum:	-1.2 dpm/100cm²
Mean:	2.0 dpm/100cm²
Standard Deviation:	2.8
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: B | **Survey Unit:** 881B01 | **Building:** 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	05/05/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	T
2	711447	05/05/04	Electra	666	DP-8	06/16/04	0.175	NA	93.0	NA	S
3	711799	05/05/04	Electra	668	DP-8	06/22/04	0.166	NA	93.0	NA	S
4	711447	05/05/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T
5	512590	05/05/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
6	512590	05/05/04	SAC-4	823	NA	10/22/04	0.330	NA	16.0	NA	R
7	711799	05/07/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	T
8	712193	05/07/04	Electra	1244	DP-6	10/29/04	0.202	NA	93.0	NA	Q
9	711799	05/07/04	SAC-4	1171	NA	10/29/04	0.330	NA	16.0	NA	R
10	711799	05/07/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
11	711799	05/07/04	Electra	668	DP-8	06/22/04	0.166	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B **Survey Unit:** 881B01 **Building:** 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B01PRP-N001	5	2.6	N/A	
881B01PRP-N002	6	4.9	N/A	
881B01PRP-N003	5	5.4	N/A	
881B01PRP-N004	6	1.8	N/A	
881B01PRP-N005	5	5.4	N/A	
881B01PRP-N006	6	4.9	N/A	
881B01PRP-N007	5	-0.3	N/A	
881B01PRP-N008	6	1.8	N/A	
881B01PRP-N009	5	2.6	N/A	
881B01PRP-N010	6	-1.2	N/A	
881B01PRP-N011	5	-0.3	N/A	
881B01PRP-N012	6	-1.2	N/A	
881B01PRP-N013	5	2.6	N/A	
881B01PRP-N014	6	-1.2	N/A	
881B01PRP-N015	5	-0.3	N/A	
881B01PRP-N016	6	-1.2	N/A	
881B01PRP-N017	5	-0.3	N/A	
881B01PRP-N018	6	-1.2	N/A	
881B01PRP-N019	5	5.4	N/A	
881B01PRP-N020	6	1.8	N/A	
881B01PRP-N021	5	-0.3	N/A	
881B01PRP-N022	6	4.9	N/A	
881B01PRP-N023	5	-0.3	N/A	
881B01PRP-N024	6	1.8	N/A	
881B01PRP-N025	5	2.6	N/A	
881B01PRP-N026	6	1.8	N/A	
881B01PRP-N027	5	2.6	N/A	
881B01PRP-N028	6	-1.2	N/A	
881B01PRP-N029	5	2.6	N/A	

Survey Area: B **Survey Unit:** 881B01 **Building:** 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B01PRP-N030	6	1.8	N/A	
881B01PRP-N031	5	8.3	N/A	
881B01PRP-N032	6	7.9	N/A	
881B01PRP-N033	5	-0.3	N/A	
881B01PRP-N034	6	7.9	N/A	
881B01PRP-N035	5	-0.3	N/A	
881B01PRP-N036	6	4.9	N/A	
881B01PRP-N037	5	8.3	N/A	
881B01PRP-N038	6	4.9	N/A	
881B01PRP-N039	5	2.6	N/A	
881B01PRP-N040	6	1.8	N/A	
881B01PRP-N041	5	-0.3	N/A	
881B01PRP-N042	6	-1.2	N/A	
881B01PRP-N043	5	5.4	N/A	
881B01PRP-N044	6	1.8	N/A	
881B01PRP-N045	5	2.6	N/A	
881B01PRP-N046	6	1.8	N/A	
881B01PRP-N047	5	-0.3	N/A	
881B01PRP-N048	6	1.8	N/A	
881B01PRP-N049	5	-0.3	N/A	
881B01PRP-N050	6	4.9	N/A	
881B01PRP-N051	5	5.4	N/A	
881B01PRP-N052	6	-1.2	N/A	
881B01PRP-N053	5	2.6	N/A	
881B01PRP-N054	6	4.9	N/A	
881B01PRP-N055	5	2.6	N/A	
881B01PRP-N056	6	4.9	N/A	
881B01PRP-N057	5	14.0	N/A	
881B01PRP-N058	6	1.8	N/A	

Survey Area: B | **Survey Unit:** 881B01 | **Building:** 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B01PRP-N059	5	2.6	N/A	
881B01PRP-N060	6	-1.2	N/A	
881B01PRP-N061	5	5.4	N/A	
881B01PRP-N062	6	-1.2	N/A	
881B01PRP-N063	5	2.6	N/A	
881B01PRP-N064	6	1.8	N/A	
881B01PRP-N065	5	2.6	N/A	
881B01PRP-N066	6	1.8	N/A	
881B01PRP-N067	5	2.6	N/A	
881B01PRP-N068	6	1.8	N/A	
881B01PRP-N069	5	-0.3	N/A	
881B01PRP-N070	6	1.8	N/A	
881B01PRP-N071	5	2.6	N/A	
881B01PRP-N072	6	-1.2	N/A	
881B01PRP-N073	5	2.6	N/A	
881B01PRP-N074	6	1.8	N/A	
881B01PRP-N075	5	2.6	N/A	
881B01PRP-N076	6	1.8	N/A	
881B01PRP-N077	5	-0.3	N/A	
881B01PRP-N078	6	-1.2	N/A	
881B01PRP-N079	5	-0.3	N/A	
881B01PRP-N080	6	4.9	N/A	
881B01PRP-N081	5	2.6	N/A	
881B01PRP-N082	6	-1.2	N/A	
881B01PRP-N083	5	2.6	N/A	
881B01PRP-N084	6	-1.2	N/A	
881B01PRP-N085	9	-1.2	N/A	
881B01PRP-N086	10	4.8	N/A	
881B01PRP-N087	9	-1.2	N/A	

Survey Area: B	Survey Unit: 881B01	Building: 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B01PRP-N088	10	4.8	N/A	
881B01PRP-N089	9	-1.2	N/A	
881B01PRP-N090	10	2.0	N/A	
881B01PRP-N091	9	1.8	N/A	
881B01PRP-N092	10	-0.9	N/A	
881B01PRP-N093	9	-1.2	N/A	
881B01PRP-N094	10	4.8	N/A	
881B01PRP-N095	9	-1.2	N/A	
881B01PRP-N096	10	-0.9	N/A	
881B01PRP-N097	9	1.8	N/A	

Comments:

Survey Area: B	Survey Unit: 881B01	Building: 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B01PRP-N001	1	37.5	N/A	
881B01PRP-N002	1	37.5	N/A	
881B01PRP-N003	4	10.7	N/A	
881B01PRP-N004	1	55.9	N/A	
881B01PRP-N005	4	10.7	N/A	
881B01PRP-N006	4	10.7	N/A	
881B01PRP-N007	1	55.9	N/A	
881B01PRP-N008	4	6.0	N/A	
881B01PRP-N009	1	19.2	N/A	
881B01PRP-N010	4	38.8	N/A	
881B01PRP-N011	1	60.5	N/A	
881B01PRP-N012	4	34.1	N/A	
881B01PRP-N013	1	78.8	N/A	
881B01QRP-N013	8	82.2	N/A	
881B01PRP-N014	1	33.0	N/A	
881B01PRP-N015	4	38.8	N/A	
881B01PRP-N016	1	69.7	N/A	
881B01PRP-N017	4	76.4	N/A	
881B01PRP-N018	1	37.5	N/A	
881B01PRP-N019	4	15.4	N/A	
881B01PRP-N020	1	65.1	N/A	
881B01PRP-N021	4	24.8	N/A	
881B01PRP-N022	1	143.1	N/A	
881B01QRP-N022	8	151.5	N/A	
881B01PRP-N023	4	6.0	N/A	
881B01PRP-N024	1	23.8	N/A	
881B01PRP-N025	4	38.8	N/A	

Survey Area: B **Survey Unit:** 881B01 **Building:** 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B01PRP-N026	1	55.9	N/A	
881B01PRP-N027	4	43.5	N/A	
881B01PRP-N028	1	69.7	N/A	
881B01PRP-N029	4	85.8	N/A	
881B01QRP-N029	8	102.0	N/A	
881B01PRP-N030	1	23.8	N/A	
881B01PRP-N031	4	20.1	N/A	
881B01PRP-N032	1	28.4	N/A	
881B01PRP-N033	4	24.8	N/A	
881B01PRP-N034	1	46.7	N/A	
881B01PRP-N035	4	38.8	N/A	
881B01PRP-N036	1	51.3	N/A	
881B01PRP-N037	4	20.1	N/A	
881B01PRP-N038	1	51.3	N/A	
881B01PRP-N039	4	38.8	N/A	
881B01PRP-N040	1	33.0	N/A	
881B01PRP-N041	4	48.2	N/A	
881B01PRP-N042	1	46.7	N/A	
881B01PRP-N043	4	15.4	N/A	
881B01PRP-N044	1	78.8	N/A	
881B01QRP-N044	8	102.0	N/A	
881B01PRP-N045	4	71.7	N/A	
881B01PRP-N046	1	42.1	N/A	
881B01PRP-N047	4	20.1	N/A	
881B01PRP-N048	1	60.5	N/A	
881B01PRP-N049	4	6.0	N/A	
881B01PRP-N050	1	51.3	N/A	

Survey Area: B	Survey Unit: 881B01	Building: 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B01PRP-N051	4	29.4	N/A	
881B01PRP-N052	1	19.2	N/A	
881B01PRP-N053	4	29.4	N/A	
881B01PRP-N054	1	28.4	N/A	
881B01PRP-N055	1	33.0	N/A	
881B01PRP-N056	4	38.8	N/A	
881B01PRP-N057	1	10.0	N/A	
881B01PRP-N058	4	24.8	N/A	
881B01PRP-N059	1	33.0	N/A	
881B01PRP-N060	4	71.7	N/A	
881B01PRP-N061	1	51.3	N/A	
881B01PRP-N062	4	38.8	N/A	
881B01PRP-N063	1	33.0	N/A	
881B01PRP-N064	4	29.4	N/A	
881B01PRP-N065	1	33.0	N/A	
881B01PRP-N066	4	38.8	N/A	
881B01PRP-N067	1	51.3	N/A	
881B01PRP-N068	4	24.8	N/A	
881B01PRP-N069	1	28.4	N/A	
881B01PRP-N070	4	24.8	N/A	
881B01PRP-N071	1	19.2	N/A	
881B01PRP-N072	4	48.2	N/A	
881B01PRP-N073	1	14.6	N/A	
881B01PRP-N074	4	38.8	N/A	
881B01PRP-N075	1	23.8	N/A	
881B01PRP-N076	4	29.4	N/A	
881B01PRP-N077	1	5.4	N/A	

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Survey Area: B **Survey Unit:** 881B01 **Building:** 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Floor

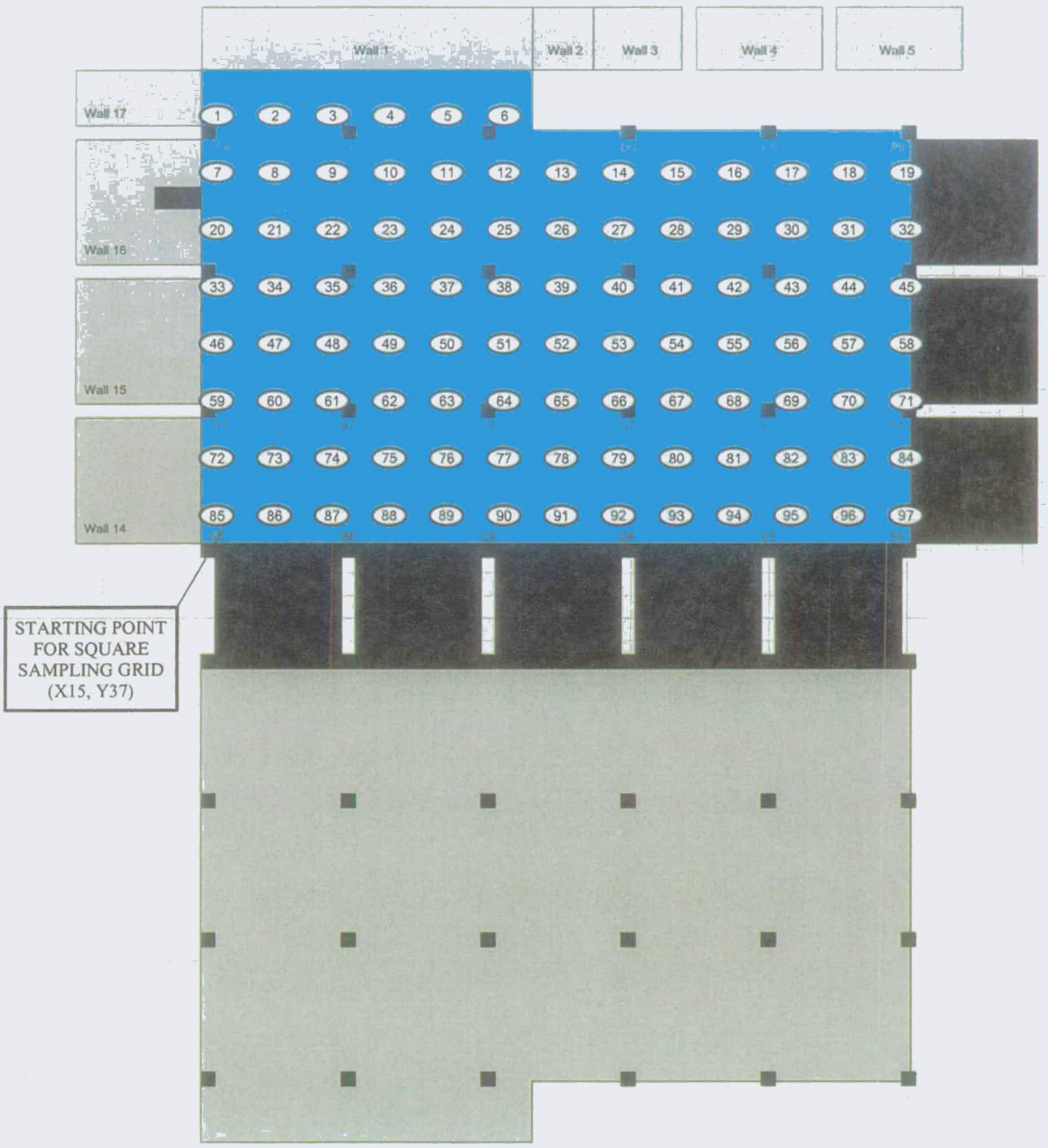
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B01PRP-N078	4	38.8	N/A	
881B01PRP-N079	1	10.0	N/A	
881B01PRP-N080	4	43.5	N/A	
881B01PRP-N081	1	14.6	N/A	
881B01PRP-N082	1	28.4	N/A	
881B01PRP-N083	4	57.6	N/A	
881B01PRP-N084	1	65.1	N/A	
881B01PRP-N085	7	33.0	N/A	
881B01PRP-N086	7	42.1	N/A	
881B01PRP-N087	7	14.6	N/A	
881B01PRP-N088	7	14.6	N/A	
881B01PRP-N089	7	5.4	N/A	
881B01PRP-N090	7	23.8	N/A	
881B01PRP-N091	7	37.5	N/A	
881B01PRP-N092	7	23.8	N/A	
881B01PRP-N093	7	23.8	N/A	
881B01PRP-N094	7	55.9	N/A	
881B01PRP-N095	7	28.4	N/A	
881B01PRP-N096	7	78.8	N/A	
881B01QRP-N096	8	72.3	N/A	
881B01PRP-N097	7	46.7	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: B **Survey Unit:** 881B01 **Classification:** 1
Building: 881
Survey Unit Description: Building 881 Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A &233, Floors
Total Area: 597 sq. m. **Total Floor Area:** 597 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.



Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 3, 11

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707

CH2MHILL Communications Group

Prepared for: KAISER-HILL COMPANY

MAP ID: 03-0568/881B01-SC

May 27, 2004

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Survey Area: B	Survey Unit: 881B02	Building: 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 23 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	50.6 dpm/100cm²
Minimum:	4.8 dpm/100cm²
Mean:	29.1 dpm/100cm²
Standard Deviation:	13.2
QC Maximum:	59.2 dpm/100cm²
QC Minimum:	37.2 dpm/100cm²
QC Mean:	48.2 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 23 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	5.4 dpm/100cm²
Minimum:	-1.2 dpm/100cm²
Mean:	1.2 dpm/100cm²
Standard Deviation:	2.4
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: B	Survey Unit: 881B02	Building: 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	512590	05/04/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	T
2	512590	05/04/04	Electra	1518	DP-6	06/23/04	0.228	NA	93.0	NA	S
3	711799	05/04/04	Electra	1518	DP-6	06/23/04	0.228	NA	93.0	NA	Q
4	711799	05/04/04	Electra	668	DP-8	06/22/04	0.166	NA	93.0	NA	S
5	512590	05/05/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
6	512590	05/05/04	SAC-4	823	NA	10/22/04	0.330	NA	16.0	NA	R
7	512590	05/05/04	Electra	1518	DP-6	06/23/04	0.228	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B	Survey Unit: 881B02	Building: 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B02PRP-N001	5	-0.3	N/A	
881B02PRP-N002	5	2.6	N/A	
881B02PRP-N003	6	-1.2	N/A	
881B02PRP-N004	5	-0.3	N/A	
881B02PRP-N005	6	1.8	N/A	
881B02PRP-N006	5	5.4	N/A	
881B02PRP-N007	6	-1.2	N/A	
881B02PRP-N008	5	-0.3	N/A	
881B02PRP-N009	6	-1.2	N/A	
881B02PRP-N010	5	5.4	N/A	
881B02PRP-N011	6	4.9	N/A	
881B02PRP-N012	5	-0.3	N/A	
881B02PRP-N013	6	1.8	N/A	
881B02PRP-N014	5	2.6	N/A	
881B02PRP-N015	6	-1.2	N/A	
881B02PRP-N016	5	-0.3	N/A	
881B02PRP-N017	6	-1.2	N/A	
881B02PRP-N018	5	-0.3	N/A	
881B02PRP-N019	6	1.8	N/A	
881B02PRP-N020	5	2.6	N/A	
881B02PRP-N021	6	-1.2	N/A	
881B02PRP-N022	5	5.4	N/A	
881B02PRP-N023	6	1.8	N/A	

Comments:

6/6

Survey Area: B	Survey Unit: 881B02	Building: 881

Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A, & 233 Walls and Ceiling

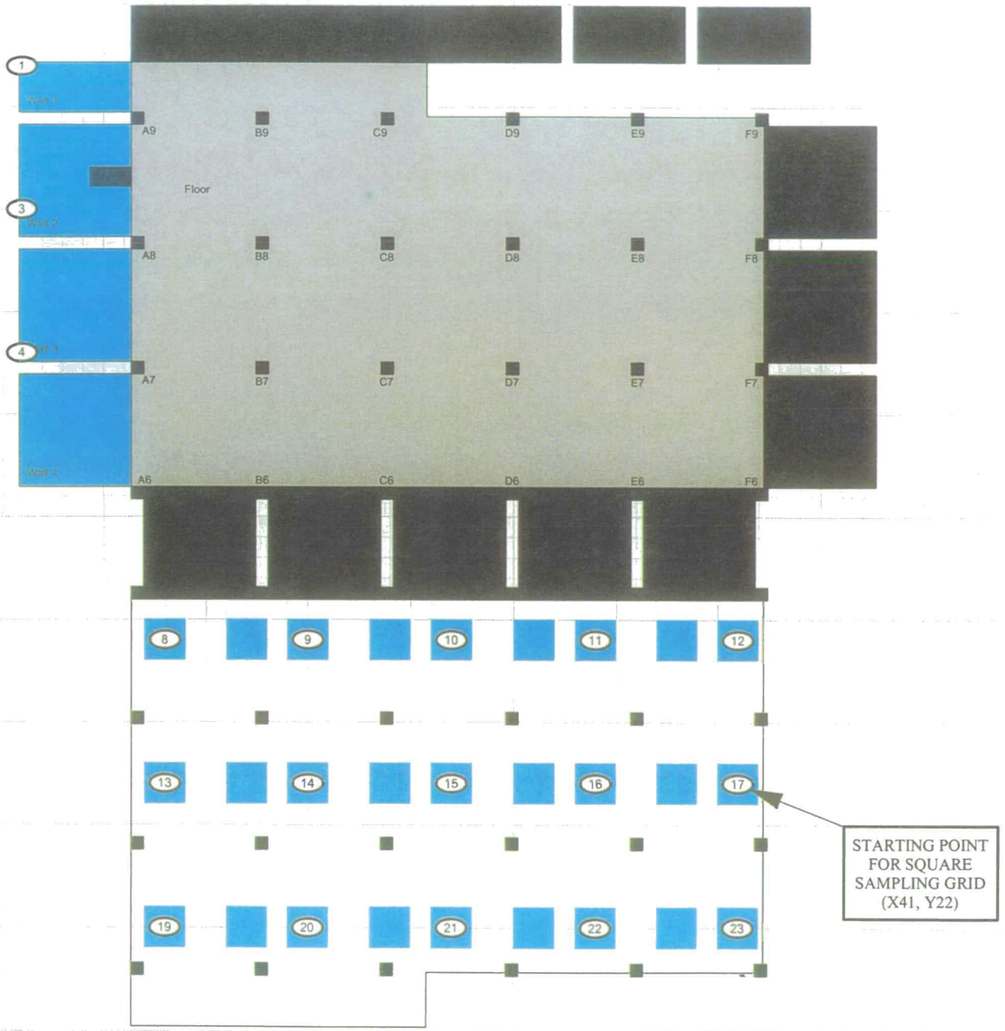
Random/QC Total Surface Activity Data Sheet

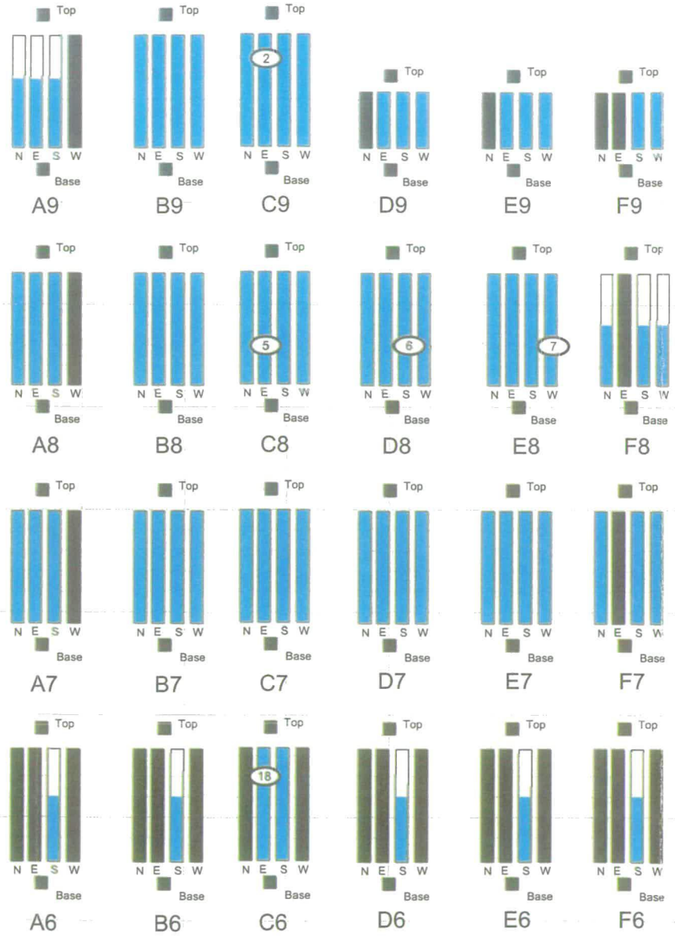
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881B02PRP-N001	1	41.5	N/A	
881B02PRP-N002	1	27.7	N/A	
881B02PRP-N003	1	50.6	N/A	
881B02PRP-N004	1	32.3	N/A	
881B02PRP-N005	1	18.5	N/A	
881B02PRP-N006	1	13.9	N/A	
881B02PRP-N007	1	50.6	N/A	
881B02QRP-N007	3	37.2	N/A	
881B02PRP-N008	1	4.8	N/A	
881B02PRP-N009	1	32.3	N/A	
881B02PRP-N010	1	46.0	N/A	
881B02PRP-N011	1	32.3	N/A	
881B02PRP-N012	1	9.3	N/A	
881B02PRP-N013	1	41.5	N/A	
881B02PRP-N014	1	18.5	N/A	
881B02PRP-N015	1	18.5	N/A	
881B02PRP-N016	1	23.1	N/A	
881B02PRP-N017	1	41.5	N/A	
881B02QRP-N017	3	59.2	N/A	
881B02PRP-N018	1	36.9	N/A	
881B02PRP-N019	1	18.5	N/A	
881B02PRP-N020	1	36.9	N/A	
881B02PRP-N021	1	18.5	N/A	
881B02PRP-N022	1	36.9	N/A	
881B02PRP-N023	1	18.5	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: B **Survey Unit: 881B02** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit B, Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A & 233, Walls & Ceilling
Total Area: 700 sq. m. **Total Floor Area: 597 sq. m.**
Grid Spacing for Survey Points: 7 m. X 7 m.





Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 4, 7

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881B02-SC **May 27, 2004**

Survey Area: C	Survey Unit: 881C01	Building: 881

Description: Building 881, Management Unit C, Rooms 280A & 280B Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 16 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	39.4 dpm/100cm²
Minimum:	-8.0 dpm/100cm²
Mean:	16.9 dpm/100cm²
Standard Deviation:	14.5
QC Maximum:	34.2 dpm/100cm²
QC Minimum:	25.1 dpm/100cm²
QC Mean:	29.7 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 16 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	10.3 dpm/100cm²
Minimum:	1.2 dpm/100cm²
Mean:	4.4 dpm/100cm²
Standard Deviation:	2.6
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: C **Survey Unit:** 881C01 **Building:** 881

Description: Building 881, Management Unit C, Rooms 280A & 280B Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	03/25/04	Electra	668	DP-6	06/22/04	0.157	NA	93.0	NA	T/S
2	711447	03/25/04	Electra	1513	DP-6	09/17/04	0.181	NA	93.0	NA	T/S
3	711447	03/25/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/S
4	712193	03/25/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T
5	711447	03/25/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
6	711447	03/25/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C	Survey Unit: 881C01	Building: 881

Description: Building 881, Management Unit C, Rooms 280A & 280B Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C01PRP-N001	5	7.3	N/A	
881C01PRP-N002	5	1.2	N/A	
881C01PRP-N003	5	1.2	N/A	
881C01PRP-N004	5	4.2	N/A	
881C01PRP-N005	5	7.3	N/A	
881C01PRP-N006	5	4.2	N/A	
881C01PRP-N007	5	1.2	N/A	
881C01PRP-N008	5	4.2	N/A	
881C01PRP-N009	5	4.2	N/A	
881C01PRP-N010	5	4.2	N/A	
881C01PRP-N011	5	10.3	N/A	
881C01PRP-N012	5	4.2	N/A	
881C01PRP-N013	5	7.3	N/A	
881C01PRP-N014	5	1.2	N/A	
881C01PRP-N015	5	4.2	N/A	
881C01PRP-N016	5	4.2	N/A	

Comments:

71

Survey Area: C	Survey Unit: 881C01	Building: 881

Description: Building 881, Management Unit C, Rooms 280A & 280B Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C01PRP-N001	4	15.7	N/A	
881C01PRP-N002	4	11.0	N/A	
881C01PRP-N003	4	25.2	N/A	
881C01PRP-N004	4	6.2	N/A	
881C01PRP-N005	4	-8.0	N/A	
881C01PRP-N006	4	-8.0	N/A	
881C01PRP-N007	4	34.7	N/A	
881C01QRP-N007	6	25.1	N/A	
881C01PRP-N008	4	11.0	N/A	
881C01PRP-N009	4	29.9	N/A	
881C01PRP-N010	4	20.4	N/A	
881C01PRP-N011	4	39.4	N/A	
881C01PRP-N012	4	29.9	N/A	
881C01PRP-N013	4	11.0	N/A	
881C01PRP-N014	4	34.7	N/A	
881C01QRP-N014	6	34.2	N/A	
881C01PRP-N015	4	11.0	N/A	
881C01PRP-N016	4	6.2	N/A	

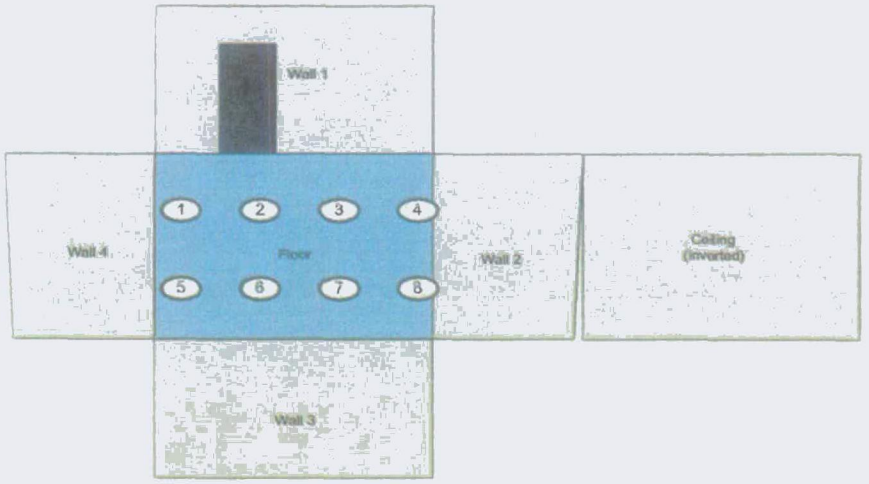
Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

72

PRE-DEMOLITION SURVEY FOR B881

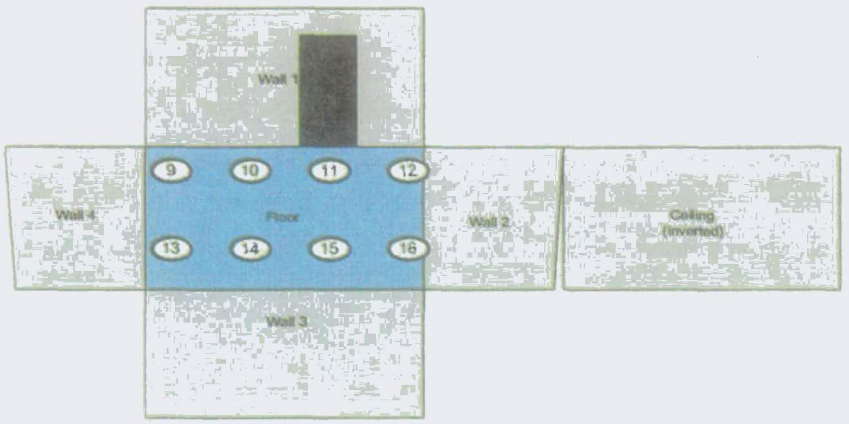
Survey Area: C **Survey Unit: 881C01** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit C, Rooms 280A & 280B, Floors
Total Area: 33 sq. m. **Total Floor Area: 33 sq. m.**
Grid Spacing for Survey Points: 1.5 m. X 1.5 m.

Room 280A



STARTING POINT FOR SQUARE SAMPLING GRID (X3, Y10)

Room 280B



Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 15
0 METERS 5

1 inch = 12 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707

CH2MHILL Communications Group

Prepared for: KAISER-HILL

MAP ID: 03-0568/881C01-SC **Mar. 30, 2004**

73

Survey Area: C **Survey Unit:** 881C02 **Building:** 881

Description: Building 881, Management unit C, Rooms 280A & 280B WallsAnd Ceilings

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 Nbr Biased Measurements Required: 2 Nbr QC Required: 2

Nbr Random Measurements Performed: 15 Nbr Biased Measurements Performed: 2 Nbr QC Performed: 2

Alpha

Maximum:	54.4 dpm/100cm²
Minimum:	-7.2 dpm/100cm²
Mean:	16.2 dpm/100cm²
Standard Deviation:	16.2
QC Maximum:	45.7 dpm/100cm²
QC Minimum:	32.0 dpm/100cm²
QC Mean:	38.8 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 Nbr Biased Measurements Required: 2

Nbr Random Measurements Performed: 15 Nbr Biased Measurements Performed: 2

Alpha

Maximum:	10.3 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	3.9 dpm/100cm²
Standard Deviation:	2.8
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 Nbr Biased Required: 0

Nbr Random Collected: 0 Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: C | **Survey Unit:** 881C02 | **Building:** 881

Description: Building 881, Management unit C, Rooms 280A & 280B WallsAnd Ceilings

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	03/25/04	Electra	668	DP-6	06/22/04	0.157	NA	93.0	NA	T/S
2	711447	03/25/04	Electra	1513	DP-6	09/17/04	0.181	NA	93.0	NA	T/S
3	711447	03/25/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/S
4	712193	03/25/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T
5	711447	03/25/04	SAC-4	823	NA	08/19/04	0.330	NA	10.0	NA	R
6	711447	03/25/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C	Survey Unit: 881C02	Building: 881

Description: Building 881, Management unit C, Rooms 280A & 280B WallsAnd Ceilings

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C02PRP-N001	5	4.2	N/A	
881C02PRP-N002	5	4.2	N/A	
881C02PRP-N003	5	-1.8	N/A	
881C02PRP-N004	5	1.2	N/A	
881C02PRP-N005	5	4.2	N/A	
881C02PRP-N006	5	10.3	N/A	
881C02PRP-N007	5	4.2	N/A	
881C02PRP-N008	5	7.3	N/A	
881C02PRP-N009	5	4.2	N/A	
881C02PRP-N010	5	1.2	N/A	
881C02PRP-N011	5	4.2	N/A	
881C02PRP-N012	5	4.2	N/A	
881C02PRP-N013	5	4.2	N/A	
881C02PRP-N014	5	7.3	N/A	
881C02PRP-N015	5	4.2	N/A	

Survey Area: C	Survey Unit: 881C02	Building: 881

Description: Building 881, Management unit C, Rooms 280A & 280B WallsAnd Ceilings

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C02PBP-N016	5	1.2	N/A	
881C02PBP-N017	5	1.2	N/A	

Comments:

77

Survey Area: C	Survey Unit: 881C02	Building: 881
Description: Building 881, Management unit C, Rooms 280A & 280B WallsAnd Ceilings		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C02PRP-N001	4	7.0	N/A	
881C02PRP-N002	4	7.0	N/A	
881C02PRP-N003	4	11.7	N/A	
881C02PRP-N004	4	30.7	N/A	
881C02PRP-N005	4	54.4	N/A	
881C02QRP-N005	6	45.7	N/A	
881C02PRP-N006	4	21.2	N/A	
881C02PRP-N007	4	30.7	N/A	
881C02PRP-N008	4	26.0	N/A	
881C02PRP-N009	4	2.3	N/A	
881C02PRP-N010	4	-7.2	N/A	
881C02PRP-N011	4	35.4	N/A	
881C02PRP-N012	4	7.0	N/A	
881C02PRP-N013	4	2.3	N/A	
881C02PRP-N014	4	26.0	N/A	
881C02QRP-N014	6	32.0	N/A	
881C02PRP-N015	4	21.2	N/A	

Survey Area: C	Survey Unit: 881C02	Building: 881

Description: Building 881, Management unit C, Rooms 280A & 280B WallsAnd Ceilings

Biased Total Surface Activity Data Sheet

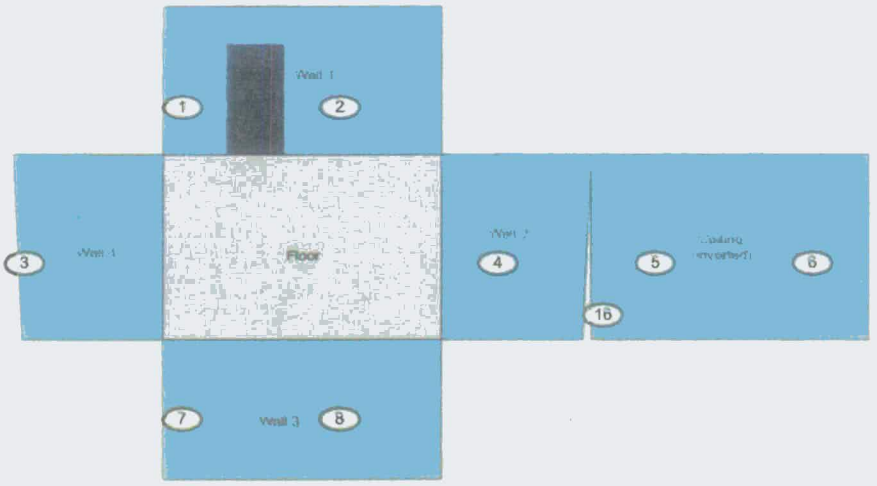
Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C02PBP-N016	4	0.0	N/A	
881C02PBP-N017	4	0.0	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

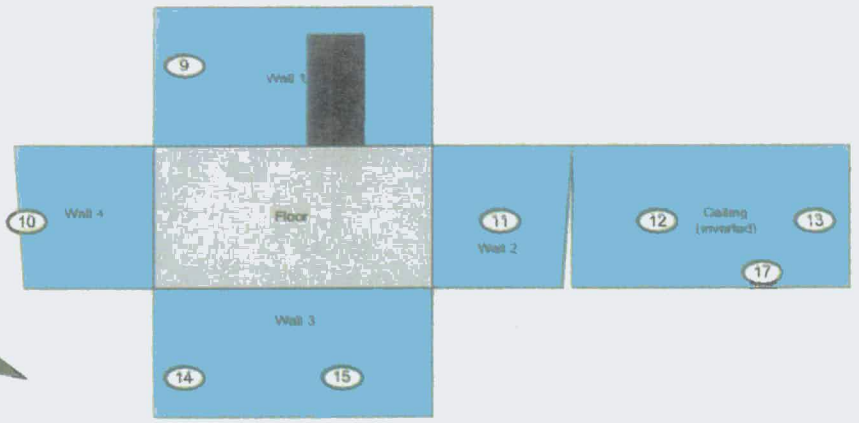
PRE-DEMOLITION SURVEY FOR B881

Survey Area: C **Survey Unit: 881C02** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit C, Rooms 280A & 280B, Walls & Ceilings
Total Area: 157 sq. m. **Total Floor Area: 33 sq. m.**
Grid Spacing for Survey Points: 3 m. X 3 m.

Room 280A



Room 280B



STARTING POINT FOR SQUARE SAMPLING GRID (X6, Y3)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 15
0 METERS 5

1 inch = 12 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707

CH2MHILL Communications Group

Prepared for: KAISER-HILL

MAP ID: 03-0568/881C02-SC **Mar. 30, 2004**

80

Survey Area: C	Survey Unit: 881C03	Building: 881

Description: Building 881, Management Unit C, Rooms 267 & 282 Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 52 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 3

Nbr Random Measurements Performed: 54 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 3

Alpha

Maximum:	152.5 dpm/100cm²
Minimum:	-9.6 dpm/100cm²
Mean:	27.2 dpm/100cm²
Standard Deviation:	25.3
QC Maximum:	126.0 dpm/100cm²
QC Minimum:	66.1 dpm/100cm²
QC Mean:	89.1 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 52 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 54 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	3.0 dpm/100cm²
Minimum:	0.0 dpm/100cm²
Mean:	0.6 dpm/100cm²
Standard Deviation:	1.2
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

81

Survey Area: C	Survey Unit: 881C03	Building: 881

Description: Building 881, Management Unit C, Rooms 267 & 282 Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	05/14/04	Electra	279	DP-8	10/01/04	0.178	NA	93.0	NA	S
2	711447	05/14/04	Electra	660	DP-8	10/08/04	0.170	NA	93.0	NA	S
3	711746	05/14/04	Electra	668	DP-8	06/22/04	0.166	NA	93.0	NA	S
4	711746	05/21/04	Electra	667	DP-6	10/22/04	0.222	NA	93.0	NA	T
5	711746	05/21/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	T
6	711746	05/21/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
7	712193	05/21/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

82

Survey Area: C	Survey Unit: 881C03	Building: 881

Description: Building 881, Management Unit C, Rooms 267 & 282 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C03PRP-N004	6	0.0	N/A	
881C03PRP-N005	6	0.0	N/A	
881C03PRP-N006	6	0.0	N/A	
881C03PRP-N007	6	0.0	N/A	
881C03PRP-N008	6	0.0	N/A	
881C03PRP-N009	6	3.0	N/A	
881C03PRP-N014	6	0.0	N/A	
881C03PRP-N015	6	3.0	N/A	
881C03PRP-N016	6	0.0	N/A	
881C03PRP-N017	6	0.0	N/A	
881C03PRP-N018	6	3.0	N/A	
881C03PRP-N019	6	0.0	N/A	
881C03PRP-N020	6	0.0	N/A	
881C03PRP-N021	6	0.0	N/A	
881C03PRP-N022	6	0.0	N/A	
881C03PRP-N023	6	0.0	N/A	
881C03PRP-N024	6	0.0	N/A	
881C03PRP-N025	6	0.0	N/A	
881C03PRP-N026	6	0.0	N/A	
881C03PRP-N027	6	0.0	N/A	
881C03PRP-N028	6	3.0	N/A	
881C03PRP-N029	6	3.0	N/A	
881C03PRP-N030	6	0.0	N/A	
881C03PRP-N031	6	3.0	N/A	
881C03PRP-N032	6	3.0	N/A	
881C03PRP-N033	6	0.0	N/A	
881C03PRP-N034	6	0.0	N/A	
881C03PRP-N035	6	0.0	N/A	
881C03PRP-N036	6	0.0	N/A	

Survey Area: C	Survey Unit: 881C03	Building: 881

Description: Building 881, Management Unit C, Rooms 267 & 282 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C03PRP-N037	6	0.0	N/A	
881C03PRP-N038	6	0.0	N/A	
881C03PRP-N039	6	0.0	N/A	
881C03PRP-N040	6	0.0	N/A	
881C03PRP-N041	6	0.0	N/A	
881C03PRP-N042	6	0.0	N/A	
881C03PRP-N043	6	0.0	N/A	
881C03PRP-N044	6	0.0	N/A	
881C03PRP-N045	6	0.0	N/A	
881C03PRP-N046	6	0.0	N/A	
881C03PRP-N047	6	3.0	N/A	
881C03PRP-N048	6	0.0	N/A	
881C03PRP-N049	6	0.0	N/A	
881C03PRP-N050	6	0.0	N/A	
881C03PRP-N051	6	0.0	N/A	
881C03PRP-N052	6	0.0	N/A	
881C03PRP-N053	6	3.0	N/A	
881C03PRP-N054	6	0.0	N/A	
881C03PRP-N055	6	0.0	N/A	
881C03PRP-N056	6	0.0	N/A	
881C03PRP-N057	6	3.0	N/A	
881C03PRP-N058	6	0.0	N/A	
881C03PRP-N059	6	0.0	N/A	
881C03PRP-N060	6	0.0	N/A	
881C03PRP-N061	6	0.0	N/A	

Comments:

Survey Area: C	Survey Unit: 881C03	Building: 881

Description: Building 881, Management Unit C, Rooms 267 & 282 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C03PRP-N004	4	39.9	N/A	
881C03PRP-N005	5	59.2	N/A	
881C03PRP-N006	4	152.5	N/A	
881C03QRP-N006	7	126.0	N/A	
881C03PRP-N007	5	17.9	N/A	
881C03PRP-N008	4	30.8	N/A	
881C03PRP-N009	5	31.7	N/A	
881C03PRP-N014	4	30.8	N/A	
881C03PRP-N015	5	40.8	N/A	
881C03PRP-N016	4	12.8	N/A	
881C03PRP-N017	5	13.3	N/A	
881C03PRP-N018	4	48.9	N/A	
881C03PRP-N019	5	31.7	N/A	
881C03PRP-N020	4	26.3	N/A	
881C03PRP-N021	5	8.7	N/A	
881C03PRP-N022	4	66.9	N/A	
881C03QRP-N022	7	75.3	N/A	
881C03PRP-N023	5	17.9	N/A	
881C03PRP-N024	4	12.8	N/A	
881C03PRP-N025	5	22.5	N/A	
881C03PRP-N026	4	12.8	N/A	
881C03PRP-N027	5	4.1	N/A	
881C03PRP-N028	4	3.8	N/A	
881C03PRP-N029	5	45.4	N/A	
881C03PRP-N030	4	39.9	N/A	
881C03PRP-N031	5	22.5	N/A	
881C03PRP-N032	4	26.3	N/A	

Survey Area: C	Survey Unit: 881C03	Building: 881

Description: Building 881, Management Unit C, Rooms 267 & 282 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C03PRP-N033	5	4.1	N/A	
881C03PRP-N034	4	39.9	N/A	
881C03PRP-N035	5	82.1	N/A	
881C03QRP-N035	7	66.1	N/A	
881C03PRP-N036	4	17.3	N/A	
881C03PRP-N037	5	63.8	N/A	
881C03PRP-N038	4	35.3	N/A	
881C03PRP-N039	5	36.3	N/A	
881C03PRP-N040	4	3.8	N/A	
881C03PRP-N041	5	27.1	N/A	
881C03PRP-N042	4	17.3	N/A	
881C03PRP-N043	5	40.8	N/A	
881C03PRP-N044	4	39.9	N/A	
881C03PRP-N045	5	40.8	N/A	
881C03PRP-N046	4	26.3	N/A	
881C03PRP-N047	5	-0.4	N/A	
881C03PRP-N048	4	3.8	N/A	
881C03PRP-N049	5	8.7	N/A	
881C03PRP-N050	4	21.8	N/A	
881C03PRP-N051	5	27.1	N/A	
881C03PRP-N052	4	3.8	N/A	
881C03PRP-N053	5	8.7	N/A	
881C03PRP-N054	4	17.3	N/A	
881C03PRP-N055	5	13.3	N/A	
881C03PRP-N056	4	17.3	N/A	
881C03PRP-N057	5	-9.6	N/A	
881C03PRP-N058	4	3.8	N/A	

Survey Area: C	Survey Unit: 881C03	Building: 881

Description: Building 881, Management Unit C, Rooms 267 & 282 Floor

Random/QC Total Surface Activity Data Sheet

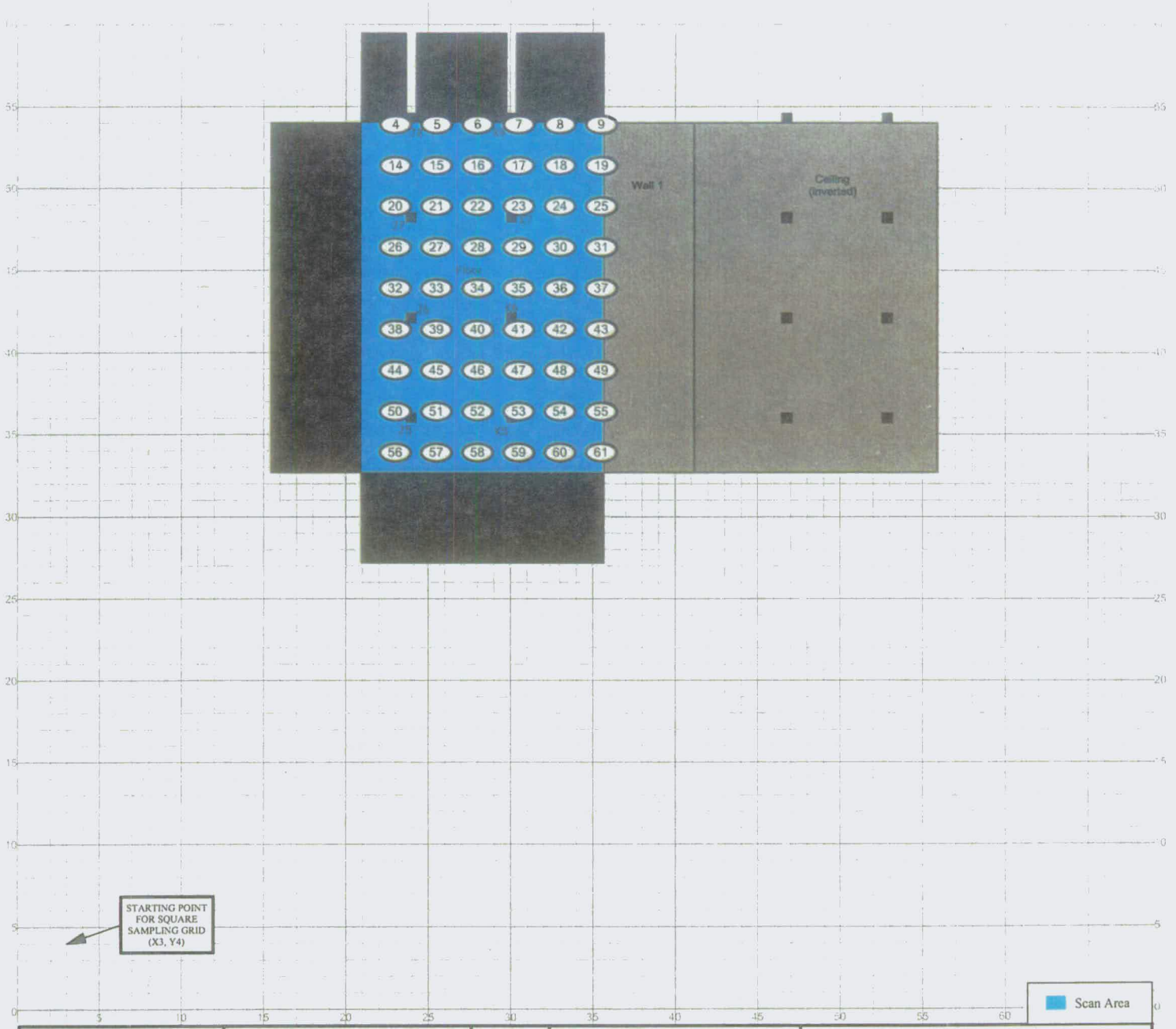
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C03PRP-N059	5	4.1	N/A	
881C03PRP-N060	4	21.8	N/A	
881C03PRP-N061	5	31.7	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: C Survey Unit: 881C03 Classification: 1
Building: 881
Survey Unit Description: Building 881 Management Unit C, Rooms 267 & 282, Floor
Total Area: 344 sq. m. Total Floor Area: 344 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

Rooms 267 & 282



SURVEY MAP LEGEND

- (#) Smear & TSA Location
- ◇(#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group KAISER-HILL

MAP ID: 03-0568/881C03-SC June 2, 2004

88

Survey Area: C	Survey Unit: 881C04	Building: 881

Description: Building 881, Management unit C, Rooms 267 & 282, Walls, Columns and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 21 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	66.0 dpm/100cm²
Minimum:	-7.7 dpm/100cm²
Mean:	16.9 dpm/100cm²
Standard Deviation:	15.7
QC Maximum:	55.0 dpm/100cm²
QC Minimum:	45.8 dpm/100cm²
QC Mean:	50.4 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 21 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	2.4 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	0.1 dpm/100cm²
Standard Deviation:	1.3
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: C	Survey Unit: 881C04	Building: 881

Description: Building 881, Management unit C, Rooms 267 & 282, Walls, Columns and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	512590	05/21/04	SAC-4	1170	NA	11/20/04	0.330	NA	16.0	NA	R
2	711746	05/21/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	T/S
3	712193	05/21/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	Q/S
4	712193	05/21/04	Electra	658	DP-8	06/04/04	0.168	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

90

Survey Area: C	Survey Unit: 881C04	Building: 881

Description: Building 881, Management unit C, Rooms 267 & 282, Walls, Columns and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C04PRP-N001	1	-0.6	N/A	
881C04PRP-N002	1	-0.6	N/A	
881C04PRP-N003	1	-0.6	N/A	
881C04PRP-N004	1	2.4	N/A	
881C04PRP-N006	1	-0.6	N/A	
881C04PRP-N007	1	2.4	N/A	
881C04PRP-N008	1	2.4	N/A	
881C04PRP-N009	1	-0.6	N/A	
881C04PRP-N010	1	-0.6	N/A	
881C04PRP-N011	1	-0.6	N/A	
881C04PRP-N012	1	-0.6	N/A	
881C04PRP-N013	1	-0.6	N/A	
881C04PRP-N014	1	2.4	N/A	
881C04PRP-N015	1	2.4	N/A	
881C04PRP-N016	1	-0.6	N/A	
881C04PRP-N017	1	-0.6	N/A	
881C04PRP-N018	1	-0.6	N/A	
881C04PRP-N019	1	-0.6	N/A	
881C04PRP-N020	1	-0.6	N/A	
881C04PRP-N021	1	-0.6	N/A	
881C04PRP-N022	1	-0.6	N/A	

Comments:

91

Survey Area: C	Survey Unit: 881C04	Building: 881

Description: Building 881, Management unit C, Rooms 267 & 282, Walls, Columns and Ceiling

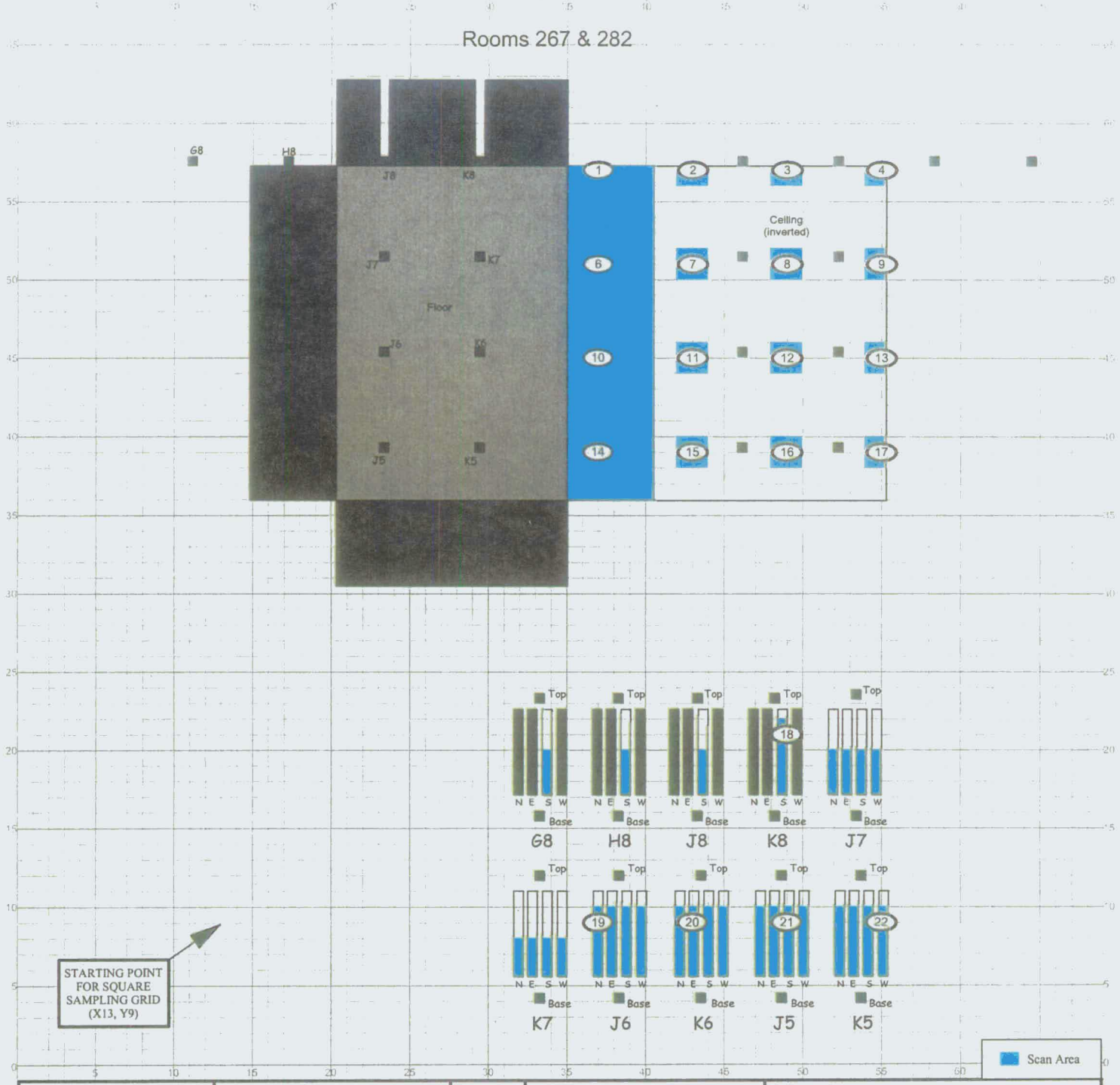
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C04PRP-N001	2	6.1	N/A	
881C04PRP-N002	2	24.6	N/A	
881C04PRP-N003	2	10.7	N/A	
881C04PRP-N004	2	15.4	N/A	
881C04PRP-N006	2	20.0	N/A	
881C04PRP-N007	2	33.8	N/A	
881C04QRP-N007	3	45.8	N/A	
881C04PRP-N008	2	6.1	N/A	
881C04PRP-N009	2	15.4	N/A	
881C04PRP-N010	2	-7.7	N/A	
881C04PRP-N011	2	15.4	N/A	
881C04PRP-N012	2	6.1	N/A	
881C04PRP-N013	2	6.1	N/A	
881C04PRP-N014	2	20.0	N/A	
881C04PRP-N015	2	20.0	N/A	
881C04PRP-N016	2	15.4	N/A	
881C04PRP-N017	2	43.0	N/A	
881C04PRP-N018	2	15.4	N/A	
881C04PRP-N019	2	1.5	N/A	
881C04PRP-N020	2	10.7	N/A	
881C04PRP-N021	2	10.7	N/A	
881C04PRP-N022	2	66.0	N/A	
881C04QRP-N022	3	55.0	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: C **Survey Unit: 881C04** **Classification: 2**
Building: 881
Survey Unit Description: Building 881 Management Unit C, Rooms 267 & 282, Walls, Ceiling & Columns
Total Area: 545 sq. m. **Total Floor Area: 344 sq. m.**
Grid Spacing for Survey Points: 6 m. X 6 m.



SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 3, 4

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER HILL

MAP ID: 03-0568/881C04-SC June 2, 2004

93

Survey Area: C	Survey Unit: 881C05	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 47 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 3

Nbr Random Measurements Performed: 57 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 3

Alpha

Maximum:	213.0 dpm/100cm²
Minimum:	-19.7 dpm/100cm²
Mean:	38.5 dpm/100cm²
Standard Deviation:	36.7
QC Maximum:	214.6 dpm/100cm²
QC Minimum:	84.9 dpm/100cm²
QC Mean:	138.9 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 47 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 57 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	13.6 dpm/100cm²
Minimum:	1.5 dpm/100cm²
Mean:	5.9 dpm/100cm²
Standard Deviation:	3.3
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: C	Survey Unit: 881C05	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712591	05/08/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
2	712591	05/08/04	Electra	1260	DP-6	06/02/04	0.219	NA	93.0	NA	T
3	711799	05/09/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T
4	711799	05/09/04	Electra	1260	DP-6	06/02/04	0.219	NA	93.0	NA	T
5	712193	05/09/04	Electra	1515	DP-6	07/12/04	0.216	NA	93.0	NA	Q
6	711447	05/09/04	Electra	2404	DP-8	10/08/04	0.162	NA	93.0	NA	S
7	712193	05/09/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

95

Survey Area: C	Survey Unit: 881C05	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C05PRP-N001	7	4.5	N/A	
881C05PRP-N002	7	4.5	N/A	
881C05PRP-N003	7	4.5	N/A	
881C05PRP-N004	7	1.5	N/A	
881C05PRP-N005	7	7.6	N/A	
881C05PRP-N006	7	10.6	N/A	
881C05PRP-N007	7	10.6	N/A	
881C05PRP-N008	7	1.5	N/A	
881C05PRP-N009	7	1.5	N/A	
881C05PRP-N010	7	4.5	N/A	
881C05PRP-N011	7	10.6	N/A	
881C05PRP-N012	7	7.6	N/A	
881C05PRP-N013	7	13.6	N/A	
881C05PRP-N014	7	7.6	N/A	
881C05PRP-N015	7	7.6	N/A	
881C05PRP-N016	7	4.5	N/A	
881C05PRP-N017	7	4.5	N/A	
881C05PRP-N018	7	1.5	N/A	
881C05PRP-N019	7	4.5	N/A	
881C05PRP-N020	7	4.5	N/A	
881C05PRP-N021	7	4.5	N/A	
881C05PRP-N022	7	7.6	N/A	
881C05PRP-N023	7	7.6	N/A	
881C05PRP-N024	7	1.5	N/A	
881C05PRP-N025	7	1.5	N/A	
881C05PRP-N026	7	4.5	N/A	
881C05PRP-N027	7	4.5	N/A	
881C05PRP-N028	7	4.5	N/A	
881C05PRP-N029	7	7.6	N/A	

Survey Area: C	Survey Unit: 881C05	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C05PRP-N030	7	4.5	N/A	
881C05PRP-N031	7	4.5	N/A	
881C05PRP-N032	7	7.6	N/A	
881C05PRP-N033	7	7.6	N/A	
881C05PRP-N034	7	4.5	N/A	
881C05PRP-N035	7	1.5	N/A	
881C05PRP-N036	7	4.5	N/A	
881C05PRP-N037	7	10.6	N/A	
881C05PRP-N038	7	10.6	N/A	
881C05PRP-N039	7	13.6	N/A	
881C05PRP-N040	7	1.5	N/A	
881C05PRP-N041	7	4.5	N/A	
881C05PRP-N042	7	7.6	N/A	
881C05PRP-N043	7	1.5	N/A	
881C05PRP-N044	7	4.5	N/A	
881C05PRP-N045	7	1.5	N/A	
881C05PRP-N046	7	4.5	N/A	
881C05PRP-N047	7	7.6	N/A	
881C05PRP-N048	7	7.6	N/A	
881C05PRP-N049	7	7.6	N/A	
881C05PRP-N050	7	13.6	N/A	
881C05PRP-N051	7	7.6	N/A	
881C05PRP-N052	7	7.6	N/A	
881C05PRP-N053	7	10.6	N/A	
881C05PRP-N054	7	4.5	N/A	
881C05PRP-N055	7	1.5	N/A	
881C05PRP-N056	7	1.5	N/A	
881C05PRP-N057	7	7.6	N/A	

Comments:

97

Survey Area: C	Survey Unit: 881C05	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C05PRP-N001	1	83.6	N/A	
881C05PRP-N002	1	22.5	N/A	
881C05PRP-N003	1	22.5	N/A	
881C05PRP-N004	1	17.9	N/A	
881C05PRP-N005	1	36.6	N/A	
881C05PRP-N006	1	78.9	N/A	
881C05PRP-N007	1	64.8	N/A	
881C05PRP-N008	1	55.4	N/A	
881C05PRP-N009	1	22.5	N/A	
881C05PRP-N010	1	3.8	N/A	
881C05PRP-N011	1	22.5	N/A	
881C05PRP-N012	2	3.0	N/A	
881C05PRP-N013	1	27.2	N/A	
881C05PRP-N014	1	36.6	N/A	
881C05PRP-N015	1	74.2	N/A	
881C05PRP-N016	2	25.8	N/A	
881C05PRP-N017	1	22.5	N/A	
881C05PRP-N018	2	16.7	N/A	
881C05PRP-N019	1	64.8	N/A	
881C05PRP-N020	2	48.7	N/A	
881C05PRP-N021	1	69.5	N/A	
881C05PRP-N022	1	27.2	N/A	
881C05PRP-N023	2	21.3	N/A	
881C05PRP-N024	2	39.5	N/A	
881C05PRP-N025	1	17.9	N/A	
881C05PRP-N026	1	60.1	N/A	
881C05PRP-N027	2	89.8	N/A	

98

Survey Area: C	Survey Unit: 881C05	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C05QRP-N027	5	84.9	N/A	
881C05PRP-N028	1	17.9	N/A	
881C05PRP-N029	1	13.2	N/A	
881C05PRP-N030	2	39.5	N/A	
881C05PRP-N031	1	8.5	N/A	
881C05PRP-N032	2	213.0	N/A	
881C05QRP-N032	5	214.6	N/A	
881C05PRP-N033	2	126.3	N/A	
881C05PRP-N034	3	64.8	N/A	
881C05PRP-N035	4	12.1	N/A	
881C05PRP-N036	3	31.9	N/A	
881C05PRP-N037	4	7.6	N/A	
881C05PRP-N038	3	31.9	N/A	
881C05PRP-N039	4	21.3	N/A	
881C05PRP-N040	3	55.4	N/A	
881C05PRP-N041	4	94.3	N/A	
881C05QRP-N041	5	117.3	N/A	
881C05PRP-N042	3	8.5	N/A	
881C05PRP-N043	4	25.8	N/A	
881C05PRP-N044	3	17.9	N/A	
881C05PRP-N045	4	57.8	N/A	
881C05PRP-N046	3	88.3	N/A	
881C05PRP-N047	4	35.0	N/A	
881C05PRP-N048	3	-19.7	N/A	
881C05PRP-N049	4	16.7	N/A	
881C05PRP-N050	3	8.5	N/A	
881C05PRP-N051	4	21.3	N/A	

99

Survey Area: C	Survey Unit: 881C05	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C05PRP-N052	3	27.2	N/A	
881C05PRP-N053	4	3.0	N/A	
881C05PRP-N054	3	31.9	N/A	
881C05PRP-N055	4	16.7	N/A	
881C05PRP-N056	3	3.8	N/A	
881C05PRP-N057	4	39.5	N/A	

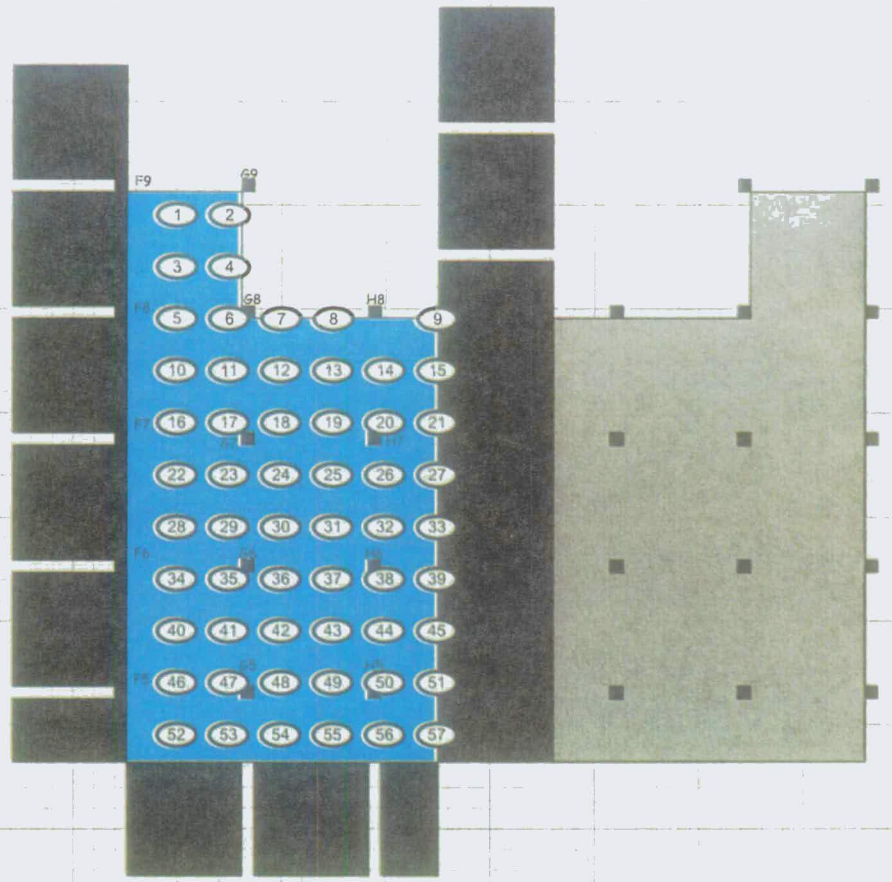
Comments:

100

PRE-DEMOLITION SURVEY FOR B881

Survey Area: C Survey Unit: 881C05 Classification: 1
Building: 881
Survey Unit Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269, Floors
Total Area: 307 sq. m. Total Floor Area: 307 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

Rooms 260, 264, 264A, 265, 265A,
265B, 268A & 269



STARTING POINT FOR SQUARE SAMPLING GRID (X5, Y7)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 6

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group KAISER-HILL COMPANY

MAP ID: 03-0568/881C05-SC June 1, 2004

101

Survey Area: C	Survey Unit: 881C06	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 18 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	34.6 dpm/100cm²
Minimum:	-8.6 dpm/100cm²
Mean:	20.7 dpm/100cm²
Standard Deviation:	11.7
QC Maximum:	34.7 dpm/100cm²
QC Minimum:	25.5 dpm/100cm²
QC Mean:	30.1 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 18 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.6 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	0.7 dpm/100cm²
Standard Deviation:	2.5
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: C	Survey Unit: 881C06	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	05/08/04	Electra	290	DP-6	09/16/04	0.231	NA	93.0	NA	T/S
2	712193	05/08/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
3	711799	05/08/04	Electra	1515	DP-6	07/12/04	0.216	NA	93.0	NA	Q
4	712193	05/08/04	Electra	2404	DP-8	10/08/04	0.162	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Printed On: 06/05/04 05:57

103

Survey Area: C	Survey Unit: 881C06	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C06PRP-N001	2	-1.5	N/A	
881C06PRP-N002	2	-1.5	N/A	
881C06PRP-N003	2	-1.5	N/A	
881C06PRP-N004	2	1.5	N/A	
881C06PRP-N005	2	-1.5	N/A	
881C06PRP-N006	2	7.6	N/A	
881C06PRP-N007	2	-1.5	N/A	
881C06PRP-N008	2	1.5	N/A	
881C06PRP-N009	2	1.5	N/A	
881C06PRP-N010	2	4.5	N/A	
881C06PRP-N011	2	-1.5	N/A	
881C06PRP-N012	2	-1.5	N/A	
881C06PRP-N013	2	1.5	N/A	
881C06PRP-N014	2	-1.5	N/A	
881C06PRP-N015	2	1.5	N/A	
881C06PRP-N016	2	1.5	N/A	
881C06PRP-N017	2	1.5	N/A	
881C06PRP-N018	2	1.5	N/A	

Comments:

104

Survey Area: C	Survey Unit: 881C06	Building: 881

Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A & 269 Walls and Ceiling

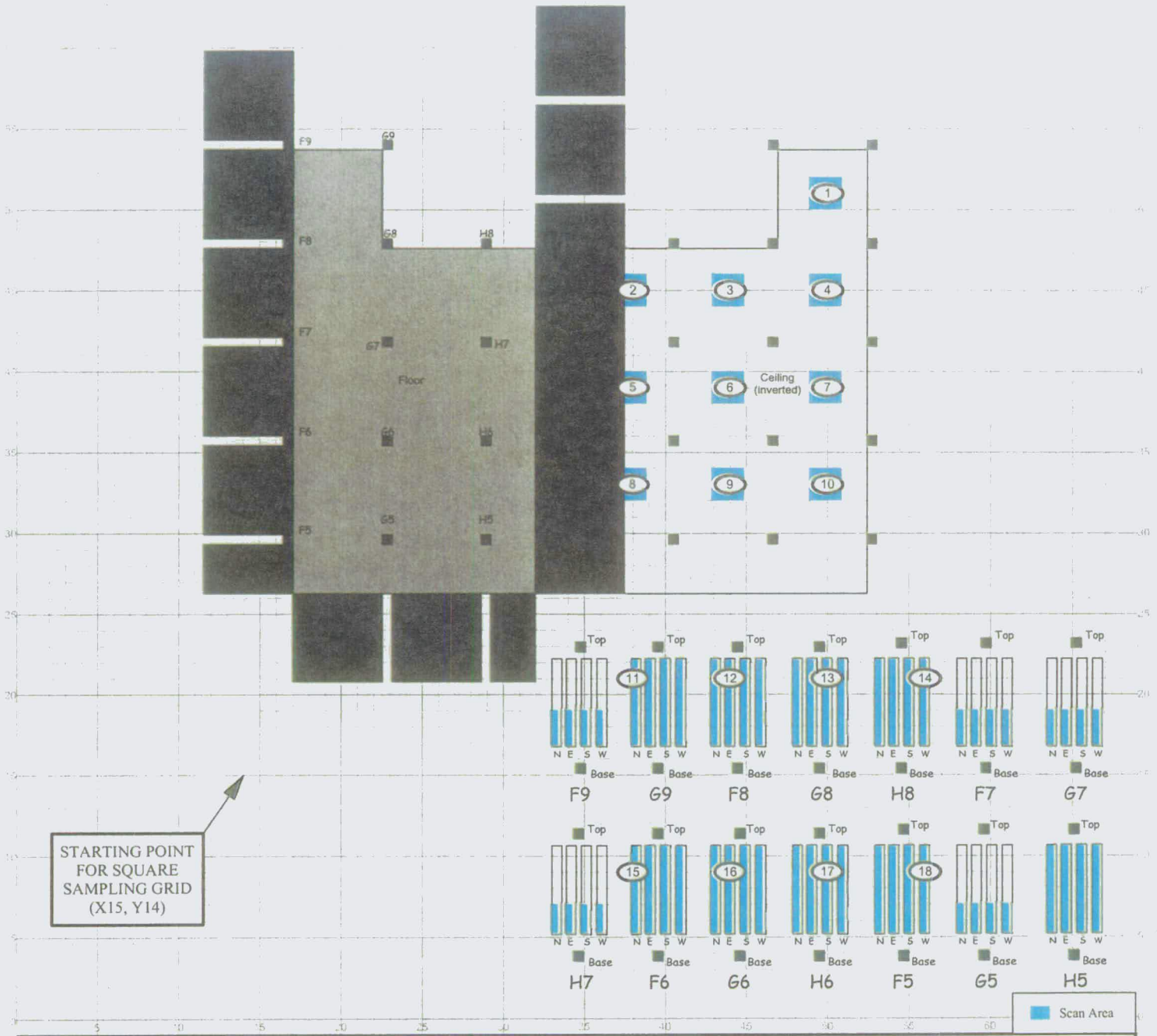
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C06PRP-N001	1	13.0	N/A	
881C06PRP-N002	1	17.3	N/A	
881C06PRP-N003	1	21.7	N/A	
881C06PRP-N004	1	26.0	N/A	
881C06PRP-N005	1	30.3	N/A	
881C06QRP-N005	3	34.7	N/A	
881C06PRP-N006	1	-4.3	N/A	
881C06PRP-N007	1	13.0	N/A	
881C06PRP-N008	1	17.3	N/A	
881C06PRP-N009	1	-8.6	N/A	
881C06PRP-N010	1	30.3	N/A	
881C06PRP-N011	1	34.6	N/A	
881C06PRP-N012	1	21.7	N/A	
881C06PRP-N013	1	26.0	N/A	
881C06PRP-N014	1	21.7	N/A	
881C06PRP-N015	1	26.0	N/A	
881C06PRP-N016	1	34.6	N/A	
881C06QRP-N016	3	25.5	N/A	
881C06PRP-N017	1	26.0	N/A	
881C06PRP-N018	1	26.0	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: C Survey Unit: 881C06 Classification: 2
Building: 881
Survey Unit Description: Building 881, Management Unit C, Rooms 260, 264, 264A, 265, 265A, 265B, 268, 268A & 269, Walls & Ceiling
Total Area: 531 sq. m. Total Floor Area: 307 sq. m.
Grid Spacing for Survey Points: 6 m. X 6 m.



SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group KAISER-HILL COMPANY

MAP ID: 03-0568/881C06-SC May 26, 2004

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 4

106

Survey Area: C	Survey Unit: 881C07	Building: 881

Description: Building 881, Management Unit C, Room 286

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	33.1	dpm/100cm²
Minimum:	-18.5	dpm/100cm²
Mean:	13.6	dpm/100cm²
Standard Deviation:	12.1	
QC Maximum:	30.6	dpm/100cm²
QC Minimum:	30.6	dpm/100cm²
QC Mean:	30.6	dpm/100cm²
Uranium DCGL$_W$:	5,000.0	dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0	dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	10.0	dpm/100cm²
Minimum:	-1.8	dpm/100cm²
Mean:	1.2	dpm/100cm²
Standard Deviation:	3.1	
Uranium DCGL$_W$:	1,000.0	

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: C	Survey Unit: 881C07	Building: 881

Description: Building 881, Management Unit C, Room 286

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency Alpha	Instru Efficiency Beta	A-Priori MDA (dpm/100cm²) Alpha	A-Priori MDA (dpm/100cm²) Beta	Survey Type
1	712193	04/12/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	T/S
2	712193	04/12/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	T/S
3	711447	04/13/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	T/S
4	712193	04/13/04	Electra	1290	DP-6	05/17/04	0.223	NA	93.0	NA	T/S
5	711447	04/13/04	Electra	1383	DP-6	04/30/04	0.196	NA	93.0	NA	T/Q/S
6	711447	04/13/04	Ludlum 292	147744	NA	08/12/04	0.341	NA	16.0	NA	R
7	711447	04/14/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	T/S
8	712193	04/14/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	T
9	712193	04/14/04	Ludlum 292	147744	NA	08/12/04	0.341	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C	Survey Unit: 881C07	Building: 881
Description: Building 881, Management Unit C, Room 286		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C07PRP-N001	9	-1.8	N/A	
881C07PRP-N002	6	-1.5	N/A	
881C07PRP-N003	9	4.1	N/A	
881C07PRP-N004	9	-1.8	N/A	
881C07PRP-N005	6	1.5	N/A	
881C07PRP-N006	6	1.5	N/A	
881C07PRP-N007	9	4.1	N/A	
881C07PRP-N008	9	10.0	N/A	
881C07PRP-N009	6	-1.5	N/A	
881C07PRP-N010	6	1.5	N/A	
881C07PRP-N011	6	-1.5	N/A	
881C07PRP-N012	6	4.4	N/A	
881C07PRP-N013	9	-1.8	N/A	
881C07PRP-N014	6	-1.5	N/A	
881C07PRP-N015	6	1.5	N/A	
881C07PRP-N016	6	-1.5	N/A	
881C07PRP-N017	6	1.5	N/A	
881C07PRP-N018	6	1.5	N/A	
881C07PRP-N019	6	1.5	N/A	
881C07PRP-N020	6	-1.5	N/A	
881C07PRP-N021	6	7.3	N/A	
881C07PRP-N022	6	-1.5	N/A	
881C07PRP-N023	6	1.5	N/A	
881C07PRP-N024	6	1.5	N/A	

Comments:

Survey Area: C | **Survey Unit:** 881C07 | **Building:** 881

Description: Building 881, Management Unit C, Room 286

Random/QC Total Surface Activity Data Sheet

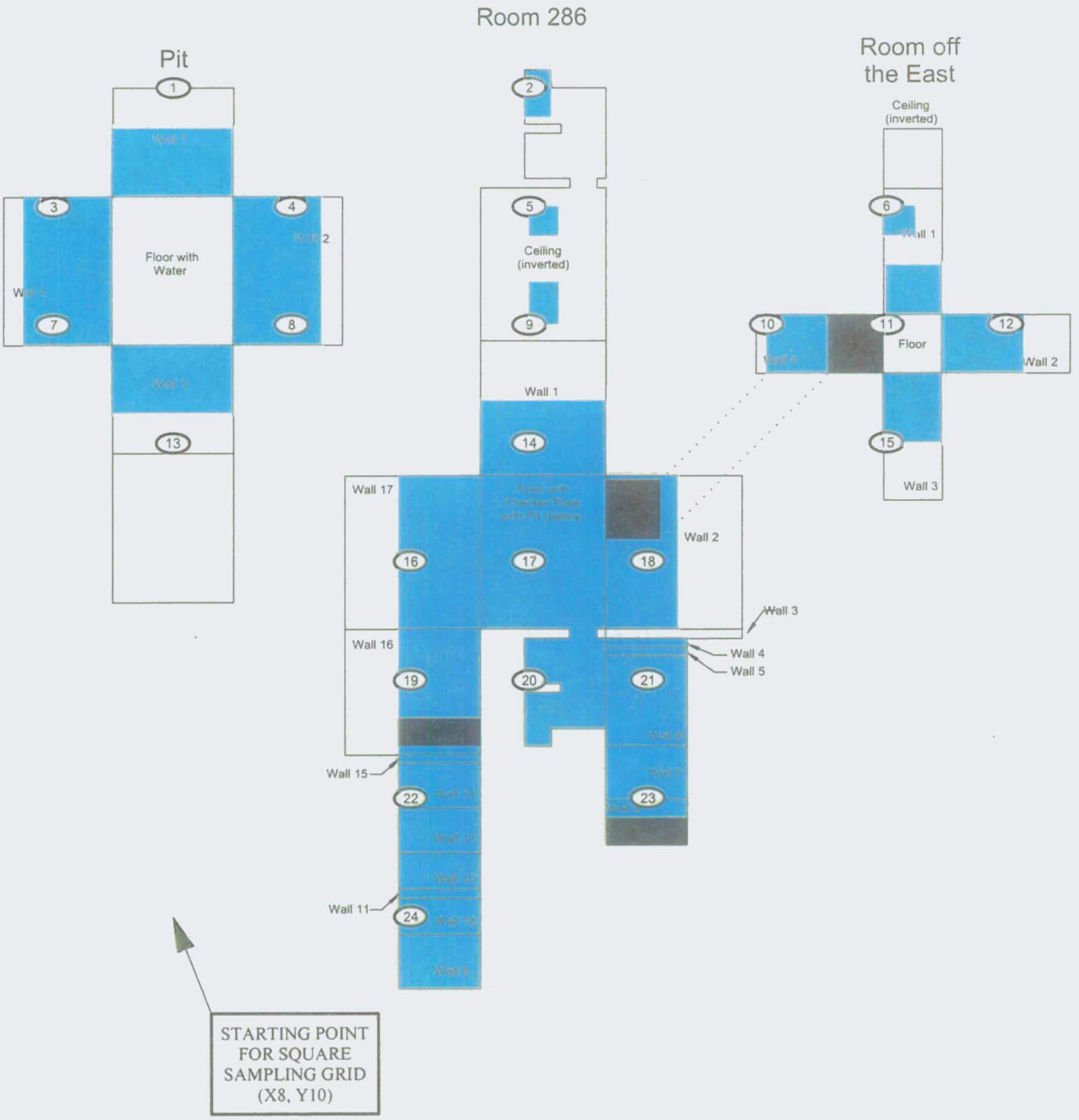
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C07PRP-N001	8	6.8	N/A	
881C07PRP-N002	4	10.6	N/A	
881C07PRP-N003	8	21.9	N/A	
881C07PRP-N004	8	-18.5	N/A	
881C07PRP-N005	4	19.6	N/A	
881C07PRP-N006	4	10.6	N/A	
881C07PRP-N007	8	16.9	N/A	
881C07PRP-N008	8	32.0	N/A	
881C07PRP-N009	4	-7.3	N/A	
881C07PRP-N010	4	19.6	N/A	
881C07PRP-N011	4	33.1	N/A	
881C07PRP-N012	4	6.2	N/A	
881C07PRP-N013	8	27.0	N/A	
881C07PRP-N014	4	28.6	N/A	
881C07PRP-N015	4	6.2	N/A	
881C07PRP-N016	4	1.7	N/A	
881C07PRP-N017	4	15.1	N/A	
881C07QRP-N017	5	30.6	N/A	
881C07PRP-N018	4	24.1	N/A	
881C07PRP-N019	4	1.7	N/A	
881C07PRP-N020	4	10.6	N/A	
881C07PRP-N021	4	10.6	N/A	
881C07PRP-N022	4	15.1	N/A	
881C07PRP-N023	4	15.1	N/A	
881C07PRP-N024	4	19.6	N/A	
881C07QRP-N024	5	30.6	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

1/0

PRE-DEMOLITION SURVEY FOR B881

Survey Area: C **Survey Unit: 881C07** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit C, Room 286
Total Area: 250 sq. m. **Total Floor Area: 35 sq. m.**
Grid Spacing for Survey Points: 4 m. X 4 m.



Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3, 4, 5, 7

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER HILL COMPANY

MAP ID: 03-0568/881C07-SC **April. 27, 2004**

111

Survey Area: C	Survey Unit: 881C08	Building: 881

Description: Building 881, Management Unit C, Room 254, Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 20 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	919.7 dpm/100cm²
Minimum:	23.0 dpm/100cm²
Mean:	185.4 dpm/100cm²
Standard Deviation:	198.0
QC Maximum:	892.0 dpm/100cm²
QC Minimum:	413.1 dpm/100cm²
QC Mean:	652.6 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 20 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	25.1 dpm/100cm²
Minimum:	5.1 dpm/100cm²
Mean:	11.1 dpm/100cm²
Standard Deviation:	5.7
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

N2

Survey Area: C	Survey Unit: 881C08	Building: 881

Description: Building 881, Management Unit C, Room 254, Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	04/16/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	S
2	711799	04/16/04	Electra	1665	DP-6	08/11/04	0.213	NA	93.0	NA	T/S
3	712193	04/16/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
4	712193	04/16/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
5	712193	04/16/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

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Survey Area: C	Survey Unit: 881C08	Building: 881
Description: Building 881, Management Unit C, Room 254, Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C08PRP-N001	4	8.0	N/A	
881C08PRP-N002	4	10.8	N/A	
881C08PRP-N003	4	10.8	N/A	
881C08PRP-N004	4	8.0	N/A	
881C08PRP-N005	4	5.1	N/A	
881C08PRP-N006	4	5.1	N/A	
881C08PRP-N007	4	8.0	N/A	
881C08PRP-N008	4	19.4	N/A	
881C08PRP-N009	4	8.0	N/A	
881C08PRP-N010	4	10.8	N/A	
881C08PRP-N011	4	10.8	N/A	
881C08PRP-N012	4	16.5	N/A	
881C08PRP-N013	4	25.1	N/A	
881C08PRP-N014	4	10.8	N/A	
881C08PRP-N015	4	10.8	N/A	
881C08PRP-N016	4	13.7	N/A	
881C08PRP-N017	4	22.2	N/A	
881C08PRP-N018	4	5.1	N/A	
881C08PRP-N019	4	8.0	N/A	
881C08PRP-N020	4	5.1	N/A	

Comments:

Survey Area: C | **Survey Unit:** 881C08 | **Building:** 881

Description: Building 881, Management Unit C, Room 254, Floor

Random/QC Total Surface Activity Data Sheet

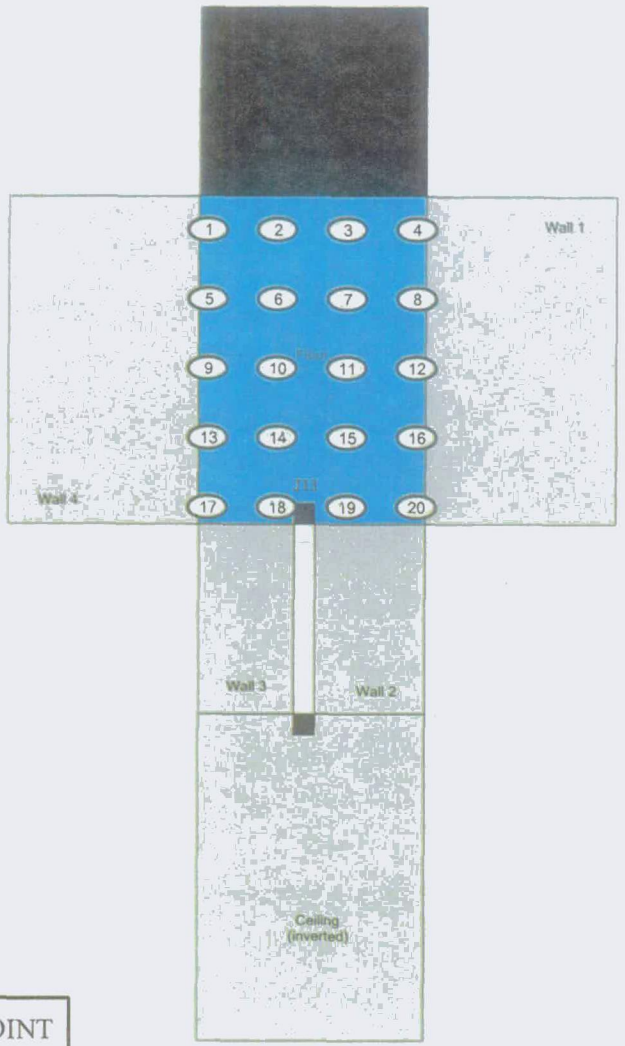
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C08PRP-N001	2	112.2	N/A	
881C08PRP-N002	2	84.0	N/A	
881C08PRP-N003	2	23.0	N/A	
881C08PRP-N004	2	23.0	N/A	
881C08PRP-N005	2	46.5	N/A	
881C08PRP-N006	2	145.1	N/A	
881C08PRP-N007	2	60.6	N/A	
881C08PRP-N008	2	361.0	N/A	
881C08QRP-N008	5	413.1	N/A	
881C08PRP-N009	2	234.3	N/A	
881C08PRP-N010	2	98.1	N/A	
881C08PRP-N011	2	177.9	N/A	
881C08PRP-N012	2	107.5	N/A	
881C08PRP-N013	2	919.7	N/A	
881C08QRP-N013	5	892.0	N/A	
881C08PRP-N014	2	121.6	N/A	
881C08PRP-N015	2	93.4	N/A	
881C08PRP-N016	2	224.9	N/A	
881C08PRP-N017	2	365.7	N/A	
881C08PRP-N018	2	116.9	N/A	
881C08PRP-N019	2	163.8	N/A	
881C08PRP-N020	2	229.6	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: C **Survey Unit: 881C08** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit C, Room 254, Floor
Total Area: 61 sq. m. **Total Floor Area: 61 sq. m.**
Grid Spacing for Survey Points: 2 m. X 2 m.

Room 254



STARTING POINT FOR SQUARE SAMPLING GRID (X3, Y3)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881C08-SC **May 3, 2004**

Survey Area: C	Survey Unit: 881C09	Building: 881

Description: Building 881, Management Unit C, Room 254, Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 16 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	1,122.7 dpm/100cm²
Minimum:	28.8 dpm/100cm²
Mean:	236.2 dpm/100cm²
Standard Deviation:	330.6
QC Maximum:	1,176.1 dpm/100cm²
QC Minimum:	899.1 dpm/100cm²
QC Mean:	1,037.6 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 16 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	16.5 dpm/100cm²
Minimum:	2.3 dpm/100cm²
Mean:	8.9 dpm/100cm²
Standard Deviation:	3.4
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: C | **Survey Unit:** 881C09 | **Building:** 881

Description: Building 881, Management Unit C, Room 254, Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	04/16/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
2	712193	04/16/04	Electra	1238	DP-6	09/17/04	0.226	NA	93.0	NA	S
3	711447	04/16/04	Electra	1665	DP-6	08/11/04	0.213	NA	93.0	NA	Q
4	712193	04/16/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

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Survey Area: C | **Survey Unit:** 881C09 | **Building:** 881

Description: Building 881, Management Unit C, Room 254, Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C09PRP-N001	4	8.0	N/A	
881C09PRP-N002	4	10.8	N/A	
881C09PRP-N003	4	16.5	N/A	
881C09PRP-N004	4	5.1	N/A	
881C09PRP-N005	4	8.0	N/A	
881C09PRP-N006	4	8.0	N/A	
881C09PRP-N007	4	5.1	N/A	
881C09PRP-N008	4	8.0	N/A	
881C09PRP-N009	4	2.3	N/A	
881C09PRP-N010	4	10.8	N/A	
881C09PRP-N011	4	13.7	N/A	
881C09PRP-N012	4	10.8	N/A	
881C09PRP-N013	4	8.0	N/A	
881C09PRP-N014	4	8.0	N/A	
881C09PRP-N015	4	8.0	N/A	
881C09PRP-N016	4	10.8	N/A	

Comments:

Survey Area: C	Survey Unit: 881C09	Building: 881
Description: Building 881, Management Unit C, Room 254, Walls and Ceiling		

Random/QC Total Surface Activity Data Sheet

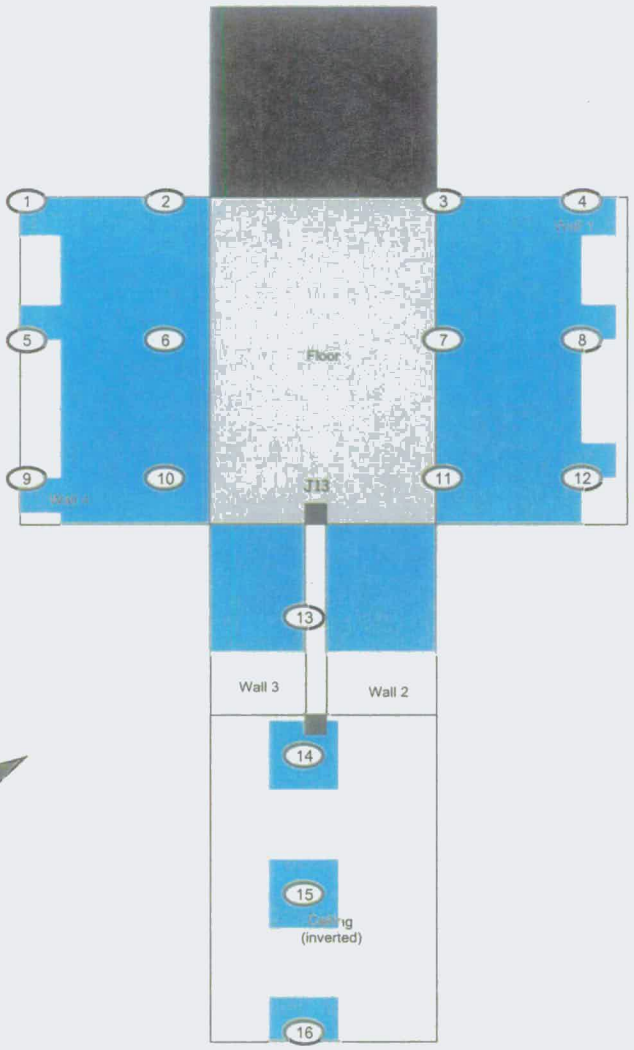
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C09PRP-N001	1	52.2	N/A	
881C09PRP-N002	1	108.6	N/A	
881C09PRP-N003	1	338.6	N/A	
881C09PRP-N004	1	89.8	N/A	
881C09PRP-N005	1	33.5	N/A	
881C09PRP-N006	1	240.0	N/A	
881C09PRP-N007	1	939.6	N/A	
881C09QRP-N007	3	899.1	N/A	
881C09PRP-N008	1	85.1	N/A	
881C09PRP-N009	1	66.3	N/A	
881C09PRP-N010	1	399.6	N/A	
881C09PRP-N011	1	1,122.7	N/A	
881C09QRP-N011	3	1,176.1	N/A	
881C09PRP-N012	1	61.6	N/A	
881C09PRP-N013	1	99.2	N/A	
881C09PRP-N014	1	42.8	N/A	
881C09PRP-N015	1	71.0	N/A	
881C09PRP-N016	1	28.8	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

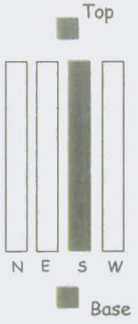
PRE-DEMOLITION SURVEY FOR B881

Survey Area: C Survey Unit: 881C09 Classification: 2
Building: 881
Survey Unit Description: Building 881, Management Unit C, Room 254, Walls, Ceiling & Column
Total Area: 198 sq. m. Total Floor Area: 61 sq. m.
Grid Spacing for Survey Points: 4 m. X 4 m.

Room 254



STARTING POINT FOR SQUARE SAMPLING GRID (X11, Y15)



J13

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group KAISER-HILL COMPANY

MAP ID: 03-0568/881C09-SC May 3, 2004

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Survey Area: C	Survey Unit: 881C10	Building: 881

Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, 283A Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 46 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 3

Nbr Random Measurements Performed: 51 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 3

Alpha

Maximum:	88.6 dpm/100cm²
Minimum:	-13.3 dpm/100cm²
Mean:	18.2 dpm/100cm²
Standard Deviation:	22.3
QC Maximum:	84.1 dpm/100cm²
QC Minimum:	52.6 dpm/100cm²
QC Mean:	66.1 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 46 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 51 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	16.4 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	3.6 dpm/100cm²
Standard Deviation:	5.0
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: C | **Survey Unit:** 881C10 | **Building:** 881

Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, 283A Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	05/09/04	Electra	1515	DP-6	07/12/04	0.216	NA	93.0	NA	T/S
2	711799	05/09/04	Electra	2136	DP-6	08/02/04	0.221	NA	93.0	NA	T
3	711447	05/09/04	Electra	2404	DP-8	10/08/04	0.162	NA	93.0	NA	S
4	712452	05/19/04	Electra	1241	AP-6	10/06/04	0.193	NA	93.0	NA	S
5	512590	05/20/04	SAC-4	960	NA	11/12/04	0.330	NA	16.0	NA	R
6	512590	05/20/04	Electra	3105	DP-6	11/18/04	0.198	NA	93.0	NA	T
7	711746	05/21/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	T
8	712193	05/21/04	Electra	667	DP-6	10/22/04	0.222	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

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Survey Area: C	Survey Unit: 881C10	Building: 881
Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, 283A Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C10PRP-N001	5	1.2	N/A	
881C10PRP-N002	5	1.2	N/A	
881C10PRP-N003	5	-1.8	N/A	
881C10PRP-N004	5	10.3	N/A	
881C10PRP-N005	5	1.2	N/A	
881C10PRP-N006	5	10.3	N/A	
881C10PRP-N007	5	-1.8	N/A	
881C10PRP-N008	5	7.3	N/A	
881C10PRP-N009	5	-1.8	N/A	
881C10PRP-N010	5	1.2	N/A	
881C10PRP-N011	5	1.2	N/A	
881C10PRP-N012	5	1.2	N/A	
881C10PRP-N013	5	1.2	N/A	
881C10PRP-N014	5	1.2	N/A	
881C10PRP-N015	5	7.3	N/A	
881C10PRP-N016	5	1.2	N/A	
881C10PRP-N017	5	-1.8	N/A	
881C10PRP-N018	5	10.3	N/A	
881C10PRP-N019	5	1.2	N/A	
881C10PRP-N020	5	1.2	N/A	
881C10PRP-N021	5	-1.8	N/A	
881C10PRP-N022	5	4.2	N/A	
881C10PRP-N023	5	7.3	N/A	
881C10PRP-N024	5	10.3	N/A	
881C10PRP-N025	5	7.3	N/A	
881C10PRP-N026	5	4.2	N/A	
881C10PRP-N027	5	7.3	N/A	
881C10PRP-N028	5	1.2	N/A	
881C10PRP-N029	5	13.3	N/A	

Survey Area: C **Survey Unit:** 881C10 **Building:** 881

Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, 283A Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C10PRP-N030	5	1.2	N/A	
881C10PRP-N031	5	-1.8	N/A	
881C10PRP-N032	5	1.2	N/A	
881C10PRP-N033	5	7.3	N/A	
881C10PRP-N034	5	4.2	N/A	
881C10PRP-N035	5	7.3	N/A	
881C10PRP-N036	5	16.4	N/A	
881C10PRP-N037	5	-1.8	N/A	
881C10PRP-N038	5	7.3	N/A	
881C10PRP-N039	5	-1.8	N/A	
881C10PRP-N040	5	13.3	N/A	
881C10PRP-N041	5	-1.8	N/A	
881C10PRP-N042	5	13.3	N/A	
881C10PRP-N043	5	-1.8	N/A	
881C10PRP-N044	5	7.3	N/A	
881C10PRP-N045	5	-1.8	N/A	
881C10PRP-N046	5	7.3	N/A	
881C10PRP-N047	5	-1.8	N/A	
881C10PRP-N048	5	7.3	N/A	
881C10PRP-N049	5	1.2	N/A	
881C10PRP-N050	5	-1.8	N/A	
881C10PRP-N051	5	-1.8	N/A	

Comments:

Survey Area: C **Survey Unit:** 881C10 **Building:** 881

Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, 283A Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C10PRP-N001	1	33.0	N/A	
881C10PRP-N002	1	-8.7	N/A	
881C10PRP-N003	1	9.8	N/A	
881C10PRP-N004	1	65.4	N/A	
881C10PRP-N005	1	28.4	N/A	
881C10PRP-N006	1	5.2	N/A	
881C10PRP-N007	1	23.7	N/A	
881C10PRP-N008	1	9.8	N/A	
881C10PRP-N009	1	88.6	N/A	
881C10QRP-N009	8	84.1	N/A	
881C10PRP-N010	1	74.7	N/A	
881C10QRP-N010	8	61.6	N/A	
881C10PRP-N011	1	51.5	N/A	
881C10PRP-N012	1	37.6	N/A	
881C10PRP-N013	1	37.6	N/A	
881C10PRP-N014	1	33.0	N/A	
881C10PRP-N015	6	1.9	N/A	
881C10PRP-N016	6	72.6	N/A	
881C10QRP-N016	8	52.6	N/A	
881C10PRP-N017	6	-3.2	N/A	
881C10PRP-N018	6	27.1	N/A	
881C10PRP-N019	6	6.9	N/A	
881C10PRP-N020	6	17.0	N/A	
881C10PRP-N021	6	27.1	N/A	
881C10PRP-N022	6	12.0	N/A	
881C10PRP-N023	6	6.9	N/A	
881C10PRP-N024	6	-8.2	N/A	

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Survey Area: C	Survey Unit: 881C10	Building: 881
Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, 283A Floor		

Random/QC Total Surface Activity Data Sheet

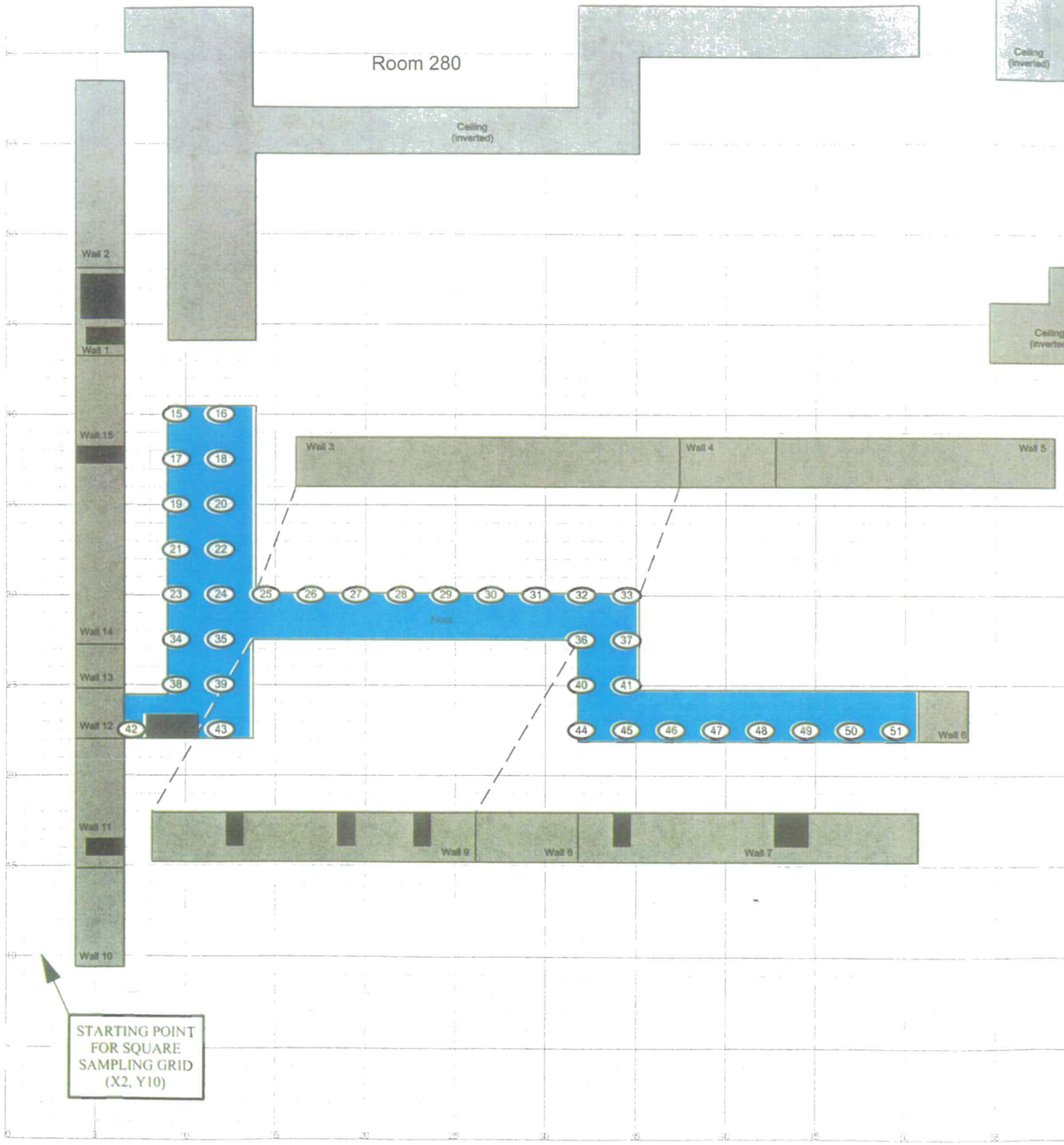
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C10PRP-N025	6	6.9	N/A	
881C10PRP-N026	6	37.2	N/A	
881C10PRP-N027	6	-3.2	N/A	
881C10PRP-N028	6	-3.2	N/A	
881C10PRP-N029	6	6.9	N/A	
881C10PRP-N030	6	6.9	N/A	
881C10PRP-N031	7	14.3	N/A	
881C10PRP-N032	7	-8.7	N/A	
881C10PRP-N033	7	5.1	N/A	
881C10PRP-N034	7	9.7	N/A	
881C10PRP-N035	7	42.0	N/A	
881C10PRP-N036	7	-13.3	N/A	
881C10PRP-N037	7	0.5	N/A	
881C10PRP-N038	7	5.1	N/A	
881C10PRP-N039	7	14.3	N/A	
881C10PRP-N040	7	9.7	N/A	
881C10PRP-N041	7	-4.1	N/A	
881C10PRP-N042	7	0.5	N/A	
881C10PRP-N043	7	32.8	N/A	
881C10PRP-N044	7	14.3	N/A	
881C10PRP-N045	7	28.2	N/A	
881C10PRP-N046	7	19.0	N/A	
881C10PRP-N047	7	19.0	N/A	
881C10PRP-N048	7	14.3	N/A	
881C10PRP-N049	7	9.7	N/A	
881C10PRP-N050	7	9.7	N/A	
881C10PRP-N051	7	5.1	N/A	

Survey Area: C	Survey Unit: 881C10	Building: 881
Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, 283A Floor		

Comments:

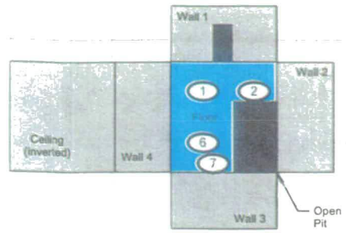
PRE-DEMOLITION SURVEY FOR B881

Survey Area: C Survey Unit: 881C10 Classification: 1
Building: 881
Survey Unit Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283 & 283A, Floors
Total Area: 303 sq. m. Total Floor Area: 303 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

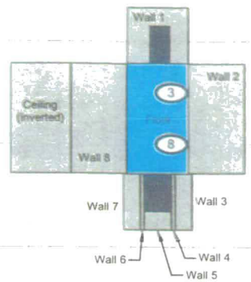


STARTING POINT FOR SQUARE SAMPLING GRID (X2, Y10)

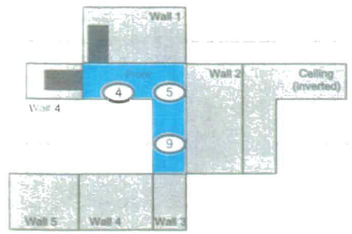
Room 281



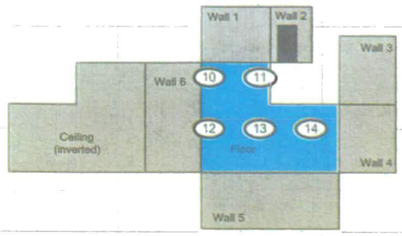
Room 266E



Room 283



Room 283A



Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 3, 4

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group
Prepared for: KAISER-HILL

MAP ID: 03-0568/881C10-SC
May 27, 2004

Survey Area: C	Survey Unit: 881C11	Building: 881

Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, & 283A Walls And Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 21 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	53.7 dpm/100cm²
Minimum:	-14.1 dpm/100cm²
Mean:	10.4 dpm/100cm²
Standard Deviation:	15.7
QC Maximum:	49.5 dpm/100cm²
QC Minimum:	44.5 dpm/100cm²
QC Mean:	47.0 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 21 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	17.6 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	6.4 dpm/100cm²
Standard Deviation:	4.9
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: C	Survey Unit: 881C11	Building: 881

Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, & 283A Walls And Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	05/09/04	Electra	1515	DP-6	07/12/04	0.216	NA	93.0	NA	T/S
2	711799	05/09/04	Electra	2136	DP-6	08/02/04	0.221	NA	93.0	NA	T
3	711447	05/09/04	Electra	2404	DP-8	10/08/04	0.162	NA	93.0	NA	S
4	712452	05/19/04	Electra	1241	AP-6	10/06/04	0.193	NA	93.0	NA	S
5	512590	05/19/04	SAC-4	960	NA	11/12/04	0.330	NA	16.0	NA	R
6	512590	05/20/04	SAC-4	960	NA	11/12/04	0.330	NA	16.0	NA	R
7	712452	05/20/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	T/S
8	712193	05/20/04	Electra	1383	DP-6	10/19/04	0.202	NA	93.0	NA	Q/S
9	512590	05/21/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

131

Survey Area: C | **Survey Unit:** 881C11 | **Building:** 881

Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, & 283A Walls And Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C11PRP-N001	5	5.5	N/A	
881C11PRP-N002	5	5.5	N/A	
881C11PRP-N003	6	7.3	N/A	
881C11PRP-N004	6	4.2	N/A	
881C11PRP-N005	6	1.2	N/A	
881C11PRP-N006	6	7.3	N/A	
881C11PRP-N007	6	1.2	N/A	
881C11PRP-N008	5	8.5	N/A	
881C11PRP-N009	5	5.5	N/A	
881C11PRP-N010	6	7.3	N/A	
881C11PRP-N011	6	1.2	N/A	
881C11PRP-N012	6	13.3	N/A	
881C11PRP-N013	5	8.5	N/A	
881C11PRP-N014	5	14.5	N/A	
881C11PRP-N015	5	8.5	N/A	
881C11PRP-N016	5	-0.6	N/A	
881C11PRP-N017	5	17.6	N/A	
881C11PRP-N018	5	-0.6	N/A	
881C11PRP-N019	5	11.5	N/A	
881C11PRP-N020	5	2.4	N/A	
881C11PRP-N021	5	5.5	N/A	

Comments:

132

Survey Area: C | **Survey Unit:** 881C11 | **Building:** 881

Description: Building 881, Management Unit C, Rooms 266E, 280, 281, 283, & 283A Walls And Ceiling

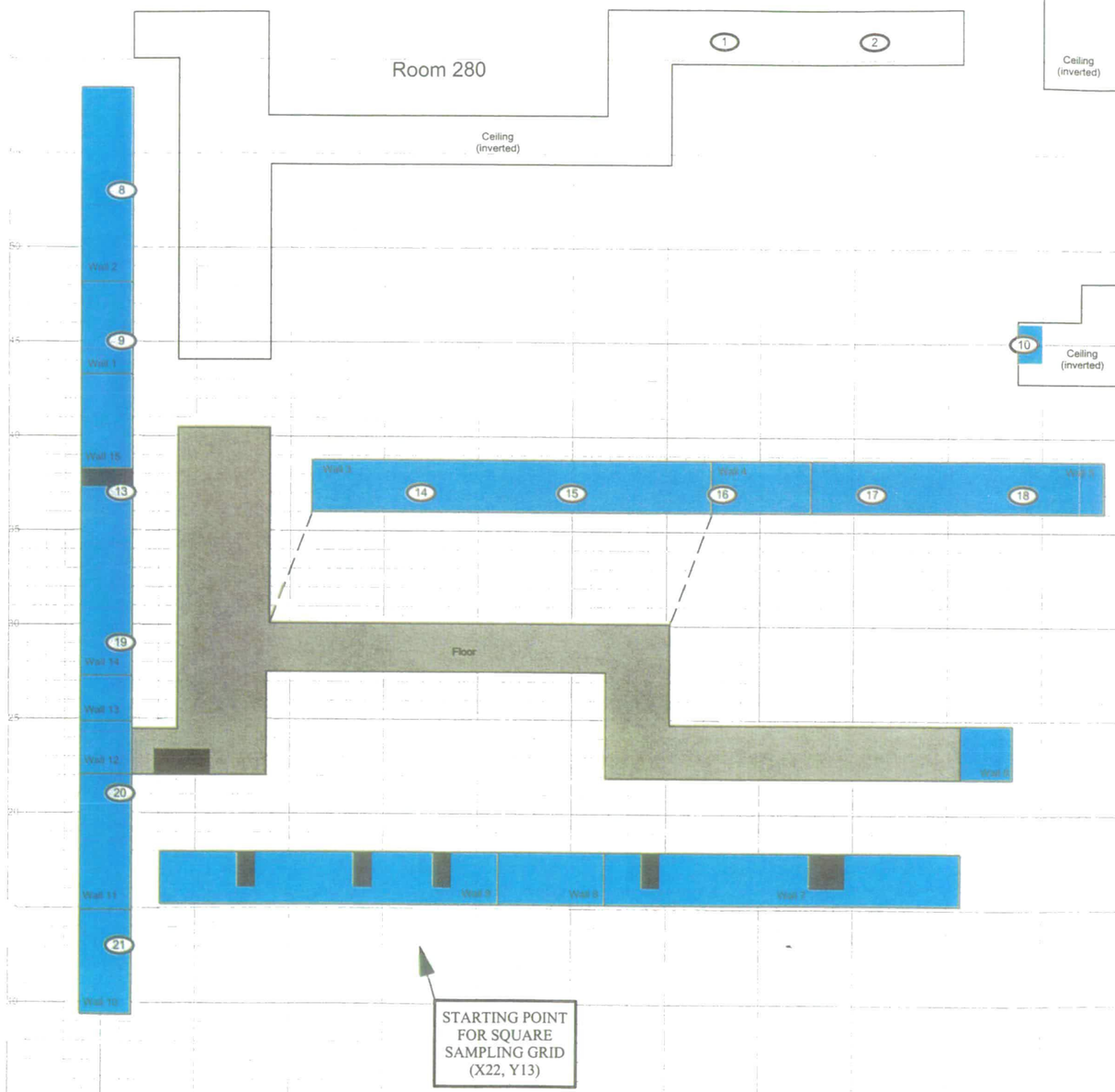
Random/QC Total Surface Activity Data Sheet

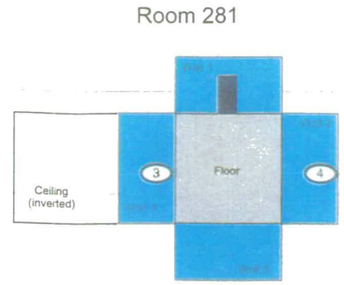
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C11PRP-N001	9	-0.3	N/A	
881C11PRP-N002	9	8.9	N/A	
881C11PRP-N003	2	3.9	N/A	
881C11PRP-N004	2	40.1	N/A	
881C11QRP-N004	8	49.5	N/A	
881C11PRP-N005	2	17.5	N/A	
881C11PRP-N006	2	3.9	N/A	
881C11PRP-N007	2	17.5	N/A	
881C11PRP-N008	9	8.9	N/A	
881C11PRP-N009	9	4.3	N/A	
881C11PRP-N010	2	53.7	N/A	
881C11QRP-N010	8	44.5	N/A	
881C11PRP-N011	2	26.5	N/A	
881C11PRP-N012	2	17.5	N/A	
881C11PRP-N013	9	18.2	N/A	
881C11PRP-N014	9	-4.9	N/A	
881C11PRP-N015	9	8.9	N/A	
881C11PRP-N016	9	-14.1	N/A	
881C11PRP-N017	9	-0.3	N/A	
881C11PRP-N018	9	8.9	N/A	
881C11PRP-N019	9	-9.5	N/A	
881C11PRP-N020	9	-0.3	N/A	
881C11PRP-N021	9	8.9	N/A	

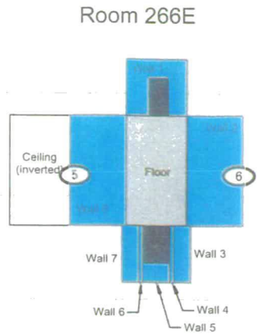
Comments:

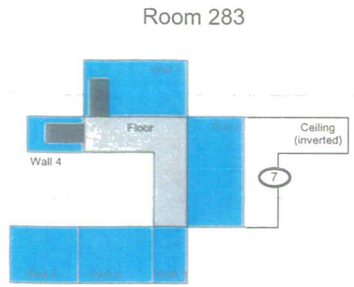
PRE-DEMOLITION SURVEY FOR B881

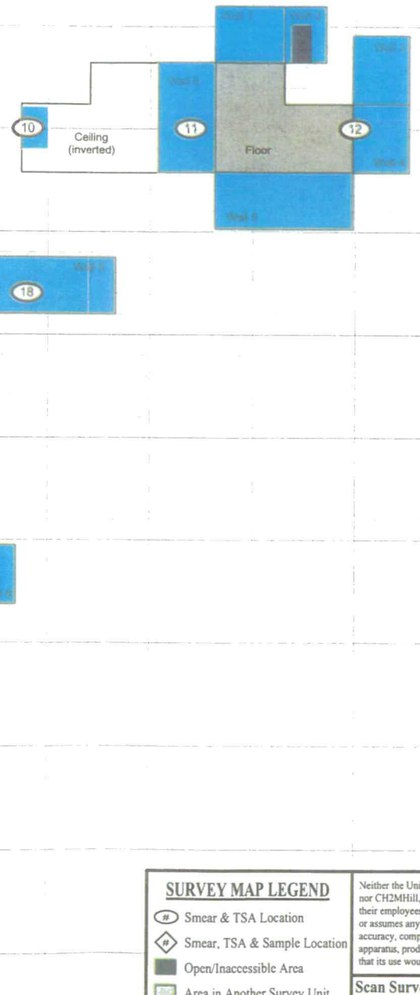
Survey Area: 1 Survey Unit: 881C11 Classification: 2
Building: 881
Survey Unit Description: Building 881, Management Unit C, Rooms 266 E, 280, 281, 283 & 283A, Walls & Ceilings
Total Area: 904 sq. m. Total Floor Area: 303 sq. m.
Grid Spacing for Survey Points: 8 m. X 8 m.











Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 3, 4, 7, 8

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group

Prepared for: KAISER-HILL COMPANY

MAP ID: 03-0568/881C11-SC June 2, 2004

Survey Area: C	Survey Unit: 881C12	Building: 881

Description: Building 881, Management Unit C, Stairwells 134 & 156

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	53.6 dpm/100cm²
Minimum:	-19.8 dpm/100cm²
Mean:	18.6 dpm/100cm²
Standard Deviation:	17.1
QC Maximum:	43.0 dpm/100cm²
QC Minimum:	32.9 dpm/100cm²
QC Mean:	37.9 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	17.6 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	7.2 dpm/100cm²
Standard Deviation:	4.9
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

135

Survey Area: C	Survey Unit: 881C12	Building: 881

Description: Building 881, Management Unit C, Stairwells 134 & 156

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	05/18/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	T/S
2	512590	05/18/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	T/S
3	712452	05/19/04	Electra	1241	AP-6	10/06/04	0.193	NA	93.0	NA	S
4	512590	05/19/04	SAC-4	960	NA	11/12/04	0.330	NA	16.0	10.0	R
5	712193	05/20/04	Electra	3105	DP-6	11/18/04	0.198	NA	93.0	NA	T/Q/S
6	712193	05/21/04	SAC-4	1170	NA	11/20/04	0.330	NA	16.0	10.0	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C	Survey Unit: 881C12	Building: 881

Description: Building 881, Management Unit C, Stairwells 134 & 156

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C12PRP-N001	4	5.5	N/A	
881C12PRP-N002	4	2.4	N/A	
881C12PRP-N003	4	5.5	N/A	
881C12PRP-N004	4	11.5	N/A	
881C12PRP-N005	4	11.5	N/A	
881C12PRP-N006	4	8.5	N/A	
881C12PRP-N007	4	8.5	N/A	
881C12PRP-N008	4	8.5	N/A	
881C12PRP-N009	4	8.5	N/A	
881C12PRP-N010	4	11.5	N/A	
881C12PRP-N011	4	-0.6	N/A	
881C12PRP-N012	4	17.6	N/A	
881C12PRP-N013	4	11.5	N/A	
881C12PRP-N014	4	2.4	N/A	
881C12PRP-N015	4	2.4	N/A	
881C12PRP-N016	4	5.5	N/A	
881C12PRP-N017	4	14.5	N/A	
881C12PRP-N018	4	-0.6	N/A	
881C12PRP-N019	6	-0.6	N/A	
881C12PRP-N020	6	8.5	N/A	
881C12PRP-N021	6	8.5	N/A	
881C12PRP-N022	4	11.5	N/A	
881C12PRP-N023	4	8.5	N/A	
881C12PRP-N024	6	2.4	N/A	

Comments:

Survey Area: C	Survey Unit: 881C12	Building: 881

Description: Building 881, Management Unit C, Stairwells 134 & 156

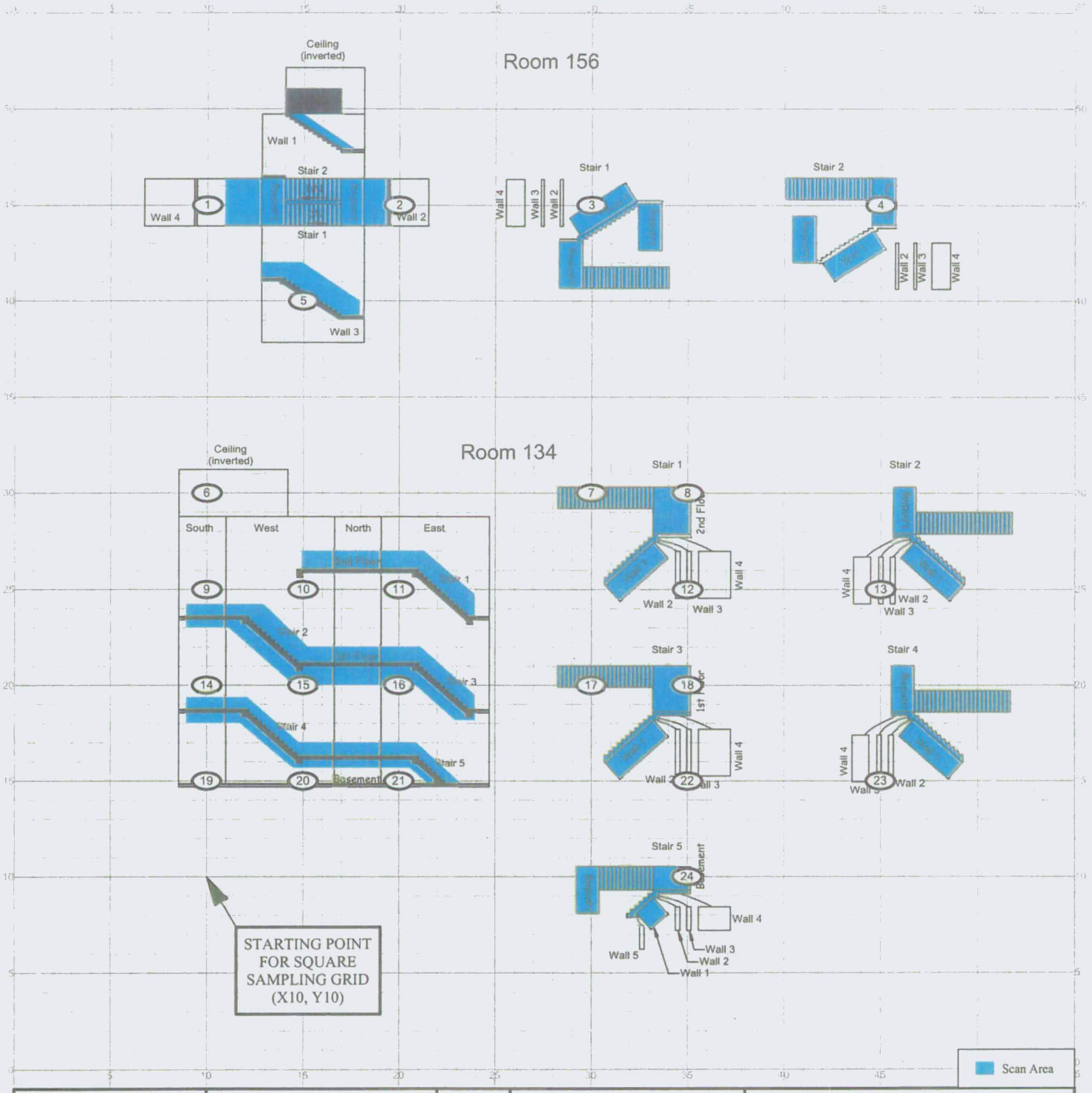
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C12PRP-N001	1	3.2	N/A	
881C12PRP-N002	2	-6.0	N/A	
881C12PRP-N003	2	-19.8	N/A	
881C12PRP-N004	2	21.5	N/A	
881C12PRP-N005	2	-6.0	N/A	
881C12PRP-N006	2	30.7	N/A	
881C12QRP-N006	5	32.9	N/A	
881C12PRP-N007	2	35.2	N/A	
881C12PRP-N008	2	53.6	N/A	
881C12PRP-N009	2	26.1	N/A	
881C12PRP-N010	2	7.7	N/A	
881C12PRP-N011	2	7.7	N/A	
881C12PRP-N012	2	16.9	N/A	
881C12PRP-N013	2	12.3	N/A	
881C12PRP-N014	2	21.5	N/A	
881C12PRP-N015	2	3.1	N/A	
881C12PRP-N016	2	39.8	N/A	
881C12QRP-N016	5	43.0	N/A	
881C12PRP-N017	2	12.3	N/A	
881C12PRP-N018	2	30.7	N/A	
881C12PRP-N019	5	35.8	N/A	
881C12PRP-N020	5	30.7	N/A	
881C12PRP-N021	5	20.6	N/A	
881C12PRP-N022	2	7.7	N/A	
881C12PRP-N023	2	35.2	N/A	
881C12PRP-N024	5	25.7	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: 1 **Survey Unit: 881C12** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit C Stairs 134 & 156
Total Area: 370 sq. m. **Total Floor Area: 64 sq. m.**
Grid Spacing for Survey Points: 5 m. X 5 m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3, 5

N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881C12-SC June 2, 2004

Survey Area: C **Survey Unit:** 881C13 **Building:** 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 51 Nbr Biased Measurements Required: 0 Nbr QC Required: 3

Nbr Random Measurements Performed: 59 Nbr Biased Measurements Performed: 0 Nbr QC Performed: 3

Alpha

Maximum:	310.1 dpm/100cm²
Minimum:	-2.4 dpm/100cm²
Mean:	52.1 dpm/100cm²
Standard Deviation:	57.0
QC Maximum:	262.9 dpm/100cm²
QC Minimum:	220.6 dpm/100cm²
QC Mean:	244.1 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 51 Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 59 Nbr Biased Measurements Performed: 0

Alpha

Maximum:	24.5 dpm/100cm²
Minimum:	-1.4 dpm/100cm²
Mean:	4.8 dpm/100cm²
Standard Deviation:	5.7
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 Nbr Biased Required: 0

Nbr Random Collected: 0 Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: C **Survey Unit:** 881C13 **Building:** 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	702567	04/17/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S
2	711447	04/17/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
3	712193	04/17/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	S
4	711449	04/24/04	Electra	3105	DP-6	09/17/04	0.202	NA	93.0	NA	T
5	711449	04/24/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
6	712193	04/25/04	Electra	2394	DP-6	08/19/04	0.208	NA	93.0	NA	T
7	712193	04/25/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
8	711447	04/25/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C	Survey Unit: 881C13	Building: 881
Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C13PRP-N001	5	-1.1	N/A	
881C13PRP-N002	5	16.0	N/A	
881C13PRP-N003	7	7.1	N/A	
881C13PRP-N004	7	4.3	N/A	
881C13PRP-N005	7	-1.4	N/A	
881C13PRP-N006	7	7.1	N/A	
881C13PRP-N007	5	-1.1	N/A	
881C13PRP-N008	5	24.5	N/A	
881C13PRP-N009	5	7.4	N/A	
881C13PRP-N010	7	7.1	N/A	
881C13PRP-N011	7	1.4	N/A	
881C13PRP-N012	7	1.4	N/A	
881C13PRP-N013	7	-1.4	N/A	
881C13PRP-N014	7	4.3	N/A	
881C13PRP-N015	7	1.4	N/A	
881C13PRP-N016	7	7.1	N/A	
881C13PRP-N017	7	1.4	N/A	
881C13PRP-N018	7	-1.4	N/A	
881C13PRP-N019	7	4.3	N/A	
881C13PRP-N020	7	10.0	N/A	
881C13PRP-N021	7	4.3	N/A	
881C13PRP-N022	7	10.0	N/A	
881C13PRP-N023	7	1.4	N/A	
881C13PRP-N024	5	7.4	N/A	
881C13PRP-N025	5	-1.1	N/A	
881C13PRP-N026	7	7.1	N/A	
881C13PRP-N027	7	-1.4	N/A	
881C13PRP-N028	7	4.3	N/A	
881C13PRP-N029	7	1.4	N/A	

Survey Area: C	Survey Unit: 881C13	Building: 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C13PRP-N030	5	-1.1	N/A	
881C13PRP-N031	5	-1.1	N/A	
881C13PRP-N032	5	7.4	N/A	
881C13PRP-N033	5	7.4	N/A	
881C13PRP-N034	5	-1.1	N/A	
881C13PRP-N035	7	4.3	N/A	
881C13PRP-N036	7	12.8	N/A	
881C13PRP-N037	7	10.0	N/A	
881C13PRP-N038	7	7.1	N/A	
881C13PRP-N039	5	-1.1	N/A	
881C13PRP-N040	5	16.0	N/A	
881C13PRP-N041	5	16.0	N/A	
881C13PRP-N042	5	-1.1	N/A	
881C13PRP-N043	7	4.3	N/A	
881C13PRP-N044	7	4.3	N/A	
881C13PRP-N045	7	7.1	N/A	
881C13PRP-N046	5	-1.1	N/A	
881C13PRP-N047	5	16.0	N/A	
881C13PRP-N048	5	-1.1	N/A	
881C13PRP-N049	5	-1.1	N/A	
881C13PRP-N050	5	-1.1	N/A	
881C13PRP-N051	5	7.4	N/A	
881C13PRP-N052	5	-1.1	N/A	
881C13PRP-N053	5	-1.1	N/A	
881C13PRP-N054	5	7.4	N/A	
881C13PRP-N055	5	7.4	N/A	
881C13PRP-N056	7	4.3	N/A	
881C13PRP-N057	5	7.4	N/A	
881C13PRP-N058	5	7.4	N/A	

Survey Area: C	Survey Unit: 881C13	Building: 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C13PRP-N059	7	10.0	N/A	

Comments:

Survey Area: C	Survey Unit: 881C13	Building: 881
Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C13PRP-N001	4	87.3	N/A	
881C13PRP-N002	4	285.3	N/A	
881C13QRP-N002	8	248.8	N/A	
881C13PRP-N003	6	40.9	N/A	
881C13PRP-N004	6	69.7	N/A	
881C13PRP-N005	6	50.5	N/A	
881C13PRP-N006	6	60.1	N/A	
881C13PRP-N007	4	225.9	N/A	
881C13QRP-N007	8	220.6	N/A	
881C13PRP-N008	4	37.8	N/A	
881C13PRP-N009	4	42.8	N/A	
881C13PRP-N010	6	50.5	N/A	
881C13PRP-N011	6	64.9	N/A	
881C13PRP-N012	6	26.5	N/A	
881C13PRP-N013	6	16.9	N/A	
881C13PRP-N014	6	45.7	N/A	
881C13PRP-N015	6	36.1	N/A	
881C13PRP-N016	6	36.1	N/A	
881C13PRP-N017	6	40.9	N/A	
881C13PRP-N018	6	21.7	N/A	
881C13PRP-N019	6	36.1	N/A	
881C13PRP-N020	6	7.2	N/A	
881C13PRP-N021	6	16.9	N/A	
881C13PRP-N022	6	31.3	N/A	
881C13PRP-N023	6	-2.4	N/A	
881C13PRP-N024	4	47.7	N/A	
881C13PRP-N025	4	37.8	N/A	

Survey Area: C **Survey Unit:** 881C13 **Building:** 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C13PRP-N026	6	36.1	N/A	
881C13PRP-N027	6	12.1	N/A	
881C13PRP-N028	6	55.3	N/A	
881C13PRP-N029	6	40.9	N/A	
881C13PRP-N030	4	52.7	N/A	
881C13PRP-N031	4	32.9	N/A	
881C13PRP-N032	4	32.9	N/A	
881C13PRP-N033	4	52.7	N/A	
881C13PRP-N034	4	42.8	N/A	
881C13PRP-N035	6	310.1	N/A	
881C13QRP-N035	8	262.9	N/A	
881C13PRP-N036	6	36.1	N/A	
881C13PRP-N037	6	132.2	N/A	
881C13PRP-N038	6	93.8	N/A	
881C13PRP-N039	4	37.8	N/A	
881C13PRP-N040	4	57.6	N/A	
881C13PRP-N041	4	8.1	N/A	
881C13PRP-N042	4	18.0	N/A	
881C13PRP-N043	6	16.9	N/A	
881C13PRP-N044	6	12.1	N/A	
881C13PRP-N045	6	50.5	N/A	
881C13PRP-N046	4	67.5	N/A	
881C13PRP-N047	4	32.9	N/A	
881C13PRP-N048	4	47.7	N/A	
881C13PRP-N049	4	3.2	N/A	
881C13PRP-N050	4	57.6	N/A	
881C13PRP-N051	4	27.9	N/A	

Survey Area: C **Survey Unit:** 881C13 **Building:** 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Floor

Random/QC Total Surface Activity Data Sheet

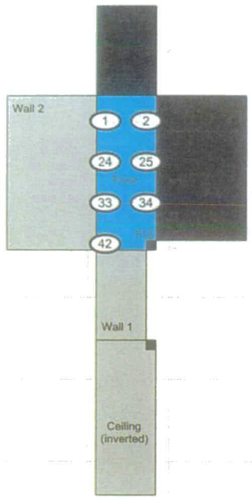
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C13PRP-N052	4	23.0	N/A	
881C13PRP-N053	4	27.9	N/A	
881C13PRP-N054	4	37.8	N/A	
881C13PRP-N055	4	32.9	N/A	
881C13PRP-N056	6	55.3	N/A	
881C13PRP-N057	4	62.6	N/A	
881C13PRP-N058	4	23.0	N/A	
881C13PRP-N059	6	31.3	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

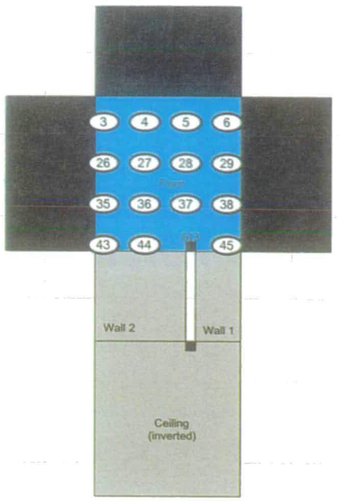
PRE-DEMOLITION SURVEY FOR B881

Survey Area: C Survey Unit: 881C13 Classification: 1
Building: 881
Survey Unit Description: Building 881, Management Unit C, 239, 240, 241, 252, 253, 255 & 288, Floor
Total Area: 338 sq. m. Total Floor Area: 338 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

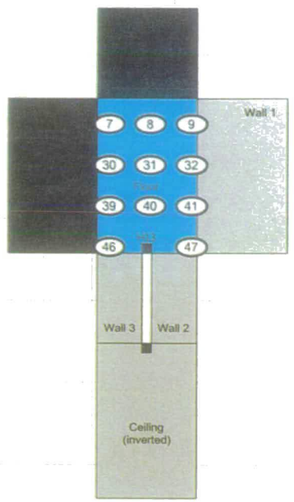
Room 239, 240 & 241



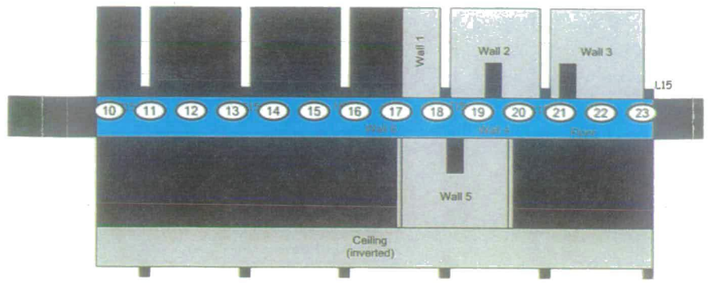
Room 252



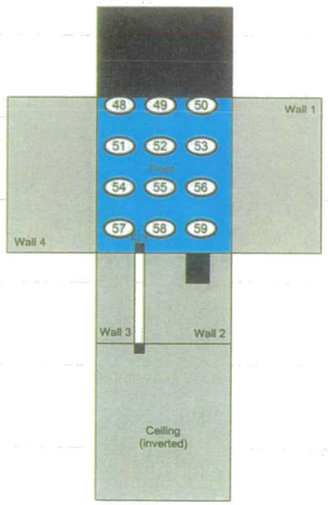
Room 253



Room 288 Hallway



Room 255



STARTING POINT FOR SQUARE SAMPLING GRID (X31, Y33)

Room 254
Roof

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group
Prepared for: KAISER-HILL COMPANY

MAP ID: 03-0568/881C13-SC
May, 3 2004

Survey Area: C	Survey Unit: 881C14	Building: 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Walls and Ceilings

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	163.4 dpm/100cm²
Minimum:	-5.6 dpm/100cm²
Mean:	33.7 dpm/100cm²
Standard Deviation:	40.7
QC Maximum:	158.7 dpm/100cm²
QC Minimum:	67.4 dpm/100cm²
QC Mean:	113.0 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	12.8 dpm/100cm²
Minimum:	-1.4 dpm/100cm²
Mean:	3.8 dpm/100cm²
Standard Deviation:	3.8
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: C **Survey Unit:** 881C14 **Building:** 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253. 255, & 288 Walls and Ceilings

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	702567	04/17/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S
2	711447	04/17/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	S
3	712193	04/17/04	Electra	1665	DP-6	08/11/04	0.213	NA	93.0	NA	S
4	712193	04/25/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
5	712193	04/25/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
6	711799	04/25/04	Electra	2394	DP-6	08/19/04	0.208	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

150

Survey Area: C | **Survey Unit:** 881C14 | **Building:** 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253, 255, & 288 Walls and Ceilings

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C14PRP-N001	5	10.0	N/A	
881C14PRP-N002	5	4.3	N/A	
881C14PRP-N003	5	4.3	N/A	
881C14PRP-N004	5	1.4	N/A	
881C14PRP-N005	5	7.1	N/A	
881C14PRP-N006	5	1.4	N/A	
881C14PRP-N007	5	1.4	N/A	
881C14PRP-N008	5	10.0	N/A	
881C14PRP-N009	5	4.3	N/A	
881C14PRP-N010	5	-1.4	N/A	
881C14PRP-N011	5	-1.4	N/A	
881C14PRP-N012	5	1.4	N/A	
881C14PRP-N013	5	4.3	N/A	
881C14PRP-N014	5	12.8	N/A	
881C14PRP-N015	5	4.3	N/A	
881C14PRP-N016	5	4.3	N/A	
881C14PRP-N017	5	1.4	N/A	
881C14PRP-N018	5	-1.4	N/A	
881C14PRP-N019	5	7.1	N/A	
881C14PRP-N020	5	-1.4	N/A	
881C14PRP-N021	5	4.3	N/A	
881C14PRP-N022	5	4.3	N/A	
881C14PRP-N023	5	1.4	N/A	
881C14PRP-N024	5	7.1	N/A	

Comments:

151

Survey Area: C | **Survey Unit:** 881C14 | **Building:** 881

Description: Building 881, Management Unit C, Rooms 239, 240, 241, 252, 253. 255, & 288 Walls and Ceilings

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C14PRP-N001	4	163.4	N/A	
881C14QRP-N001	6	158.7	N/A	
881C14PRP-N002	4	-5.6	N/A	
881C14PRP-N003	4	22.5	N/A	
881C14PRP-N004	4	-0.9	N/A	
881C14PRP-N005	4	8.5	N/A	
881C14PRP-N006	4	3.8	N/A	
881C14PRP-N007	4	3.8	N/A	
881C14PRP-N008	4	41.3	N/A	
881C14PRP-N009	4	13.2	N/A	
881C14PRP-N010	4	13.2	N/A	
881C14PRP-N011	4	22.5	N/A	
881C14PRP-N012	4	8.5	N/A	
881C14PRP-N013	4	17.8	N/A	
881C14PRP-N014	4	-0.9	N/A	
881C14PRP-N015	4	8.5	N/A	
881C14PRP-N016	4	41.3	N/A	
881C14PRP-N017	4	60.1	N/A	
881C14QRP-N017	6	67.4	N/A	
881C14PRP-N018	4	41.3	N/A	
881C14PRP-N019	4	27.2	N/A	
881C14PRP-N020	4	55.4	N/A	
881C14PRP-N021	4	111.7	N/A	
881C14PRP-N022	4	8.5	N/A	
881C14PRP-N023	4	97.7	N/A	
881C14PRP-N024	4	46.0	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

Printed On: 06/04/04 13:47

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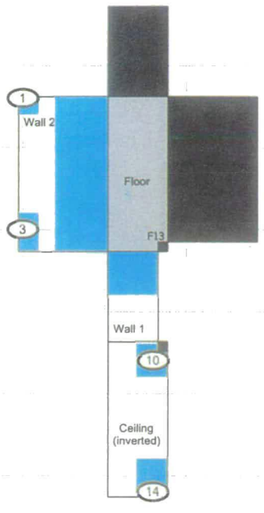
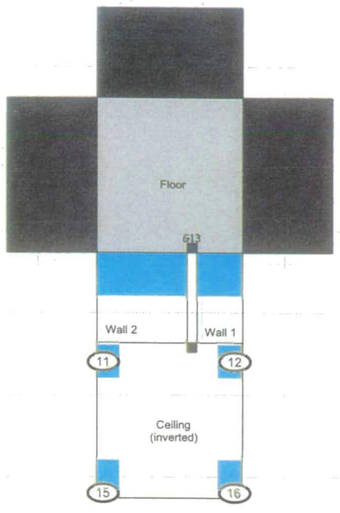
PRE-DEMOLITION SURVEY FOR B881

Survey Area: C **Survey Unit:** 881C14 **Classification:** 2
Building: 881
Survey Unit Description: Building 881, Management Unit C, 239, 240, 241, 252, 253, 255 & 288, Walls & Ceilings
Total Area: 918 sq. m. **Total Floor Area:** 338 sq. m.
Grid Spacing for Survey Points: 8 m. X 8 m.

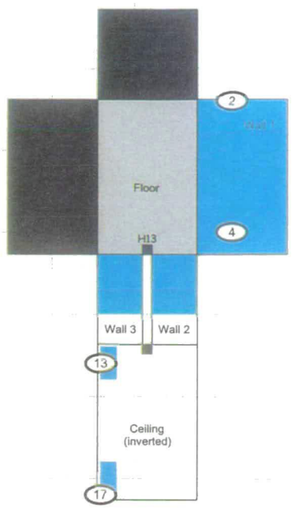
Room 239, 240 & 241



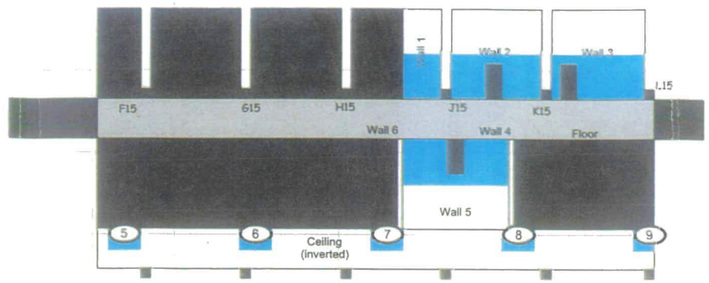
Room 252

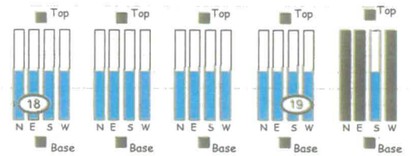


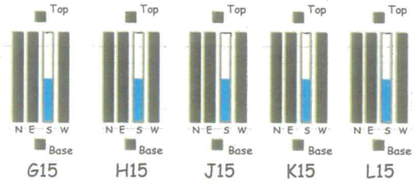
Room 253



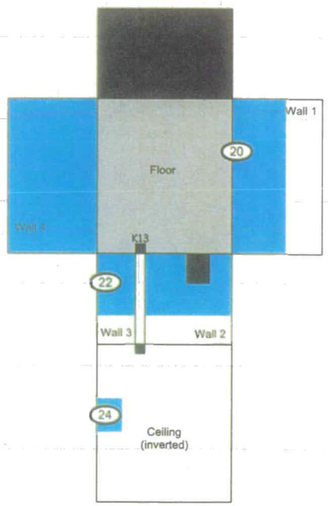
Room 288 Hallway







Room 255



STARTING POINT FOR SQUARE SAMPLING GRID (X29, Y36)

Room 254 Roof

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1-4

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 — CH2MHILL Communications Group
Prepared for: KAISER-HILL COMPANY

MAP ID: 03-0568/881C14-SC May 3, 2004

Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 90 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 5

Nbr Random Measurements Performed: 98 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 5

Alpha

Maximum:	423.2 dpm/100cm²
Minimum:	-4.3 dpm/100cm²
Mean:	37.8 dpm/100cm²
Standard Deviation:	45.8
QC Maximum:	411.0 dpm/100cm²
QC Minimum:	64.0 dpm/100cm²
QC Mean:	152.5 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 90 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 98 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	14.9 dpm/100cm²
Minimum:	-1.2 dpm/100cm²
Mean:	3.0 dpm/100cm²
Standard Deviation:	3.4
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	05/05/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
2	512590	05/05/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	T/S
3	512590	05/05/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
4	512590	05/05/04	SAC-4	823	NA	10/22/04	0.330	NA	16.0	NA	R
5	512590	05/05/04	SAC-4	1171	NA	10/29/04	0.330	NA	16.0	NA	R
6	711799	05/06/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T
7	712193	05/06/04	Electra	1833	DP-6	09/03/04	0.219	NA	93.0	NA	Q
8	712193	05/06/04	Electra	668	DP-8	06/22/04	0.166	NA	93.0	NA	S
9	711447	05/06/04	Electra	666	DP-8	06/16/04	0.175	NA	93.0	NA	S
10	711799	05/06/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
11	711799	05/06/04	SAC-4	1171	NA	10/29/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C15PRP-N001	10	-0.3	N/A	
881C15PRP-N002	3	-0.3	N/A	
881C15PRP-N003	4	1.8	N/A	
881C15PRP-N004	5	1.8	N/A	
881C15PRP-N005	3	5.4	N/A	
881C15PRP-N006	4	-1.2	N/A	
881C15PRP-N007	5	1.8	N/A	
881C15PRP-N008	3	2.6	N/A	
881C15PRP-N009	4	1.8	N/A	
881C15PRP-N010	5	-1.2	N/A	
881C15PRP-N011	3	8.3	N/A	
881C15PRP-N012	4	4.9	N/A	
881C15PRP-N013	11	5.5	N/A	
881C15PRP-N014	5	-1.2	N/A	
881C15PRP-N015	3	5.4	N/A	
881C15PRP-N016	4	7.9	N/A	
881C15PRP-N017	5	4.9	N/A	
881C15PRP-N018	3	5.4	N/A	
881C15PRP-N019	4	-1.2	N/A	
881C15PRP-N020	5	1.8	N/A	
881C15PRP-N021	3	5.4	N/A	
881C15PRP-N022	4	1.8	N/A	
881C15PRP-N023	5	-1.2	N/A	
881C15PRP-N024	3	2.6	N/A	
881C15PRP-N025	10	8.8	N/A	
881C15PRP-N026	4	7.9	N/A	
881C15PRP-N027	3	-0.3	N/A	
881C15PRP-N028	4	1.8	N/A	
881C15PRP-N029	3	-0.3	N/A	

Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C15PRP-N030	4	4.9	N/A	
881C15PRP-N031	3	-0.3	N/A	
881C15PRP-N032	4	1.8	N/A	
881C15PRP-N033	3	-0.3	N/A	
881C15PRP-N034	4	4.9	N/A	
881C15PRP-N035	3	2.6	N/A	
881C15PRP-N036	4	4.9	N/A	
881C15PRP-N037	11	5.5	N/A	
881C15PRP-N038	3	2.6	N/A	
881C15PRP-N039	4	4.9	N/A	
881C15PRP-N040	3	2.6	N/A	
881C15PRP-N041	4	1.8	N/A	
881C15PRP-N042	3	-0.3	N/A	
881C15PRP-N043	4	1.8	N/A	
881C15PRP-N044	3	-0.3	N/A	
881C15PRP-N045	4	4.9	N/A	
881C15PRP-N046	3	-0.3	N/A	
881C15PRP-N047	4	-1.2	N/A	
881C15PRP-N048	3	2.6	N/A	
881C15PRP-N049	10	-0.3	N/A	
881C15PRP-N050	4	4.9	N/A	
881C15PRP-N051	3	-0.3	N/A	
881C15PRP-N052	4	4.9	N/A	
881C15PRP-N053	3	8.3	N/A	
881C15PRP-N054	4	-1.2	N/A	
881C15PRP-N055	3	2.6	N/A	
881C15PRP-N056	4	1.8	N/A	
881C15PRP-N057	3	2.6	N/A	
881C15PRP-N058	4	4.9	N/A	

Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C15PRP-N059	3	-0.3	N/A	
881C15PRP-N060	4	1.8	N/A	
881C15PRP-N061	10	-0.3	N/A	
881C15PRP-N062	11	5.5	N/A	
881C15PRP-N063	10	8.8	N/A	
881C15PRP-N064	11	5.5	N/A	
881C15PRP-N065	10	2.7	N/A	
881C15PRP-N066	11	-0.6	N/A	
881C15PRP-N067	10	-0.3	N/A	
881C15PRP-N068	11	2.4	N/A	
881C15PRP-N069	10	-0.3	N/A	
881C15PRP-N070	11	8.5	N/A	
881C15PRP-N071	10	2.7	N/A	
881C15PRP-N072	11	2.4	N/A	
881C15PRP-N073	10	5.8	N/A	
881C15PRP-N074	11	-0.6	N/A	
881C15PRP-N075	10	-0.3	N/A	
881C15PRP-N076	11	8.5	N/A	
881C15PRP-N077	10	14.9	N/A	
881C15PRP-N078	11	5.5	N/A	
881C15PRP-N079	10	-0.3	N/A	
881C15PRP-N080	11	2.4	N/A	
881C15PRP-N081	10	2.7	N/A	
881C15PRP-N082	11	8.5	N/A	
881C15PRP-N083	10	2.7	N/A	
881C15PRP-N084	11	5.5	N/A	
881C15PRP-N085	10	8.8	N/A	
881C15PRP-N086	11	-0.6	N/A	
881C15PRP-N087	10	2.7	N/A	

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Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C15PRP-N088	11	8.5	N/A	
881C15PRP-N089	10	2.7	N/A	
881C15PRP-N090	11	14.5	N/A	
881C15PRP-N091	10	2.7	N/A	
881C15PRP-N092	11	-0.6	N/A	
881C15PRP-N093	10	-0.3	N/A	
881C15PRP-N094	11	5.5	N/A	
881C15PRP-N095	10	2.7	N/A	
881C15PRP-N096	11	-0.6	N/A	
881C15PRP-N097	10	-0.3	N/A	
881C15PRP-N098	11	2.4	N/A	

Comments:

Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C15PRP-N001	6	28.8	N/A	
881C15PRP-N002	2	23.2	N/A	
881C15PRP-N003	1	66.4	N/A	
881C15PRP-N004	2	27.8	N/A	
881C15PRP-N005	1	57.0	N/A	
881C15PRP-N006	2	55.3	N/A	
881C15PRP-N007	1	47.6	N/A	
881C15PRP-N008	2	4.8	N/A	
881C15PRP-N009	1	57.0	N/A	
881C15PRP-N010	2	114.9	N/A	
881C15QRP-N010	7	95.9	N/A	
881C15PRP-N011	1	10.1	N/A	
881C15PRP-N012	2	4.8	N/A	
881C15PRP-N013	6	19.5	N/A	
881C15PRP-N014	1	52.3	N/A	
881C15PRP-N015	2	27.8	N/A	
881C15PRP-N016	1	52.3	N/A	
881C15PRP-N017	2	27.8	N/A	
881C15PRP-N018	1	10.1	N/A	
881C15PRP-N019	2	41.5	N/A	
881C15PRP-N020	2	46.1	N/A	
881C15PRP-N021	1	14.8	N/A	
881C15PRP-N022	1	28.8	N/A	
881C15PRP-N023	2	27.8	N/A	
881C15PRP-N024	1	19.5	N/A	
881C15PRP-N025	6	38.2	N/A	
881C15PRP-N026	2	119.5	N/A	

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Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C15QRP-N026	7	118.8	N/A	
881C15PRP-N027	1	99.3	N/A	
881C15PRP-N028	2	14.0	N/A	
881C15PRP-N029	1	80.5	N/A	
881C15PRP-N030	2	14.0	N/A	
881C15PRP-N031	1	28.8	N/A	
881C15PRP-N032	2	14.0	N/A	
881C15PRP-N033	1	42.9	N/A	
881C15PRP-N034	2	9.4	N/A	
881C15PRP-N035	1	14.8	N/A	
881C15PRP-N036	2	4.8	N/A	
881C15PRP-N037	6	61.7	N/A	
881C15PRP-N038	1	38.2	N/A	
881C15PRP-N039	2	36.9	N/A	
881C15PRP-N040	1	75.8	N/A	
881C15QRP-N040	7	64.0	N/A	
881C15PRP-N041	2	41.5	N/A	
881C15PRP-N042	1	57.0	N/A	
881C15PRP-N043	2	27.8	N/A	
881C15PRP-N044	1	24.2	N/A	
881C15PRP-N045	2	18.6	N/A	
881C15PRP-N046	1	33.5	N/A	
881C15PRP-N047	2	-4.3	N/A	
881C15PRP-N048	1	28.8	N/A	
881C15PRP-N049	6	57.0	N/A	
881C15PRP-N050	2	32.4	N/A	
881C15PRP-N051	1	24.2	N/A	

Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C15PRP-N052	2	23.2	N/A	
881C15PRP-N053	1	10.1	N/A	
881C15PRP-N054	2	55.3	N/A	
881C15PRP-N055	1	42.9	N/A	
881C15PRP-N056	2	32.4	N/A	
881C15PRP-N057	1	14.8	N/A	
881C15PRP-N058	2	41.5	N/A	
881C15PRP-N059	1	0.7	N/A	
881C15PRP-N060	2	32.4	N/A	
881C15PRP-N061	1	0.7	N/A	
881C15PRP-N062	6	38.2	N/A	
881C15PRP-N063	6	5.4	N/A	
881C15PRP-N064	6	52.3	N/A	
881C15PRP-N065	6	19.5	N/A	
881C15PRP-N066	6	42.9	N/A	
881C15PRP-N067	6	14.8	N/A	
881C15PRP-N068	6	52.3	N/A	
881C15PRP-N069	6	24.2	N/A	
881C15PRP-N070	6	33.5	N/A	
881C15PRP-N071	6	38.2	N/A	
881C15PRP-N072	6	47.6	N/A	
881C15PRP-N073	6	28.8	N/A	
881C15PRP-N074	6	10.1	N/A	
881C15PRP-N075	6	66.4	N/A	
881C15PRP-N076	6	24.2	N/A	
881C15PRP-N077	6	42.9	N/A	
881C15PRP-N078	6	0.7	N/A	

Survey Area: C	Survey Unit: 881C15	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C15PRP-N079	6	33.5	N/A	
881C15PRP-N080	6	38.2	N/A	
881C15PRP-N081	6	10.1	N/A	
881C15PRP-N082	6	57.0	N/A	
881C15PRP-N083	6	14.8	N/A	
881C15PRP-N084	6	38.2	N/A	
881C15PRP-N085	6	52.3	N/A	
881C15PRP-N086	6	66.4	N/A	
881C15QRP-N086	7	73.1	N/A	
881C15PRP-N087	6	28.8	N/A	
881C15PRP-N088	6	24.2	N/A	
881C15PRP-N089	6	38.2	N/A	
881C15PRP-N090	6	423.2	N/A	
881C15QRP-N090	7	411.0	N/A	
881C15PRP-N091	6	61.7	N/A	
881C15PRP-N092	6	14.8	N/A	
881C15PRP-N093	6	0.7	N/A	
881C15PRP-N094	6	14.8	N/A	
881C15PRP-N095	6	10.1	N/A	
881C15PRP-N096	6	57.0	N/A	
881C15PRP-N097	6	10.1	N/A	
881C15PRP-N098	6	14.8	N/A	

Comments:

Survey Area: C	Survey Unit: 881C16	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276 Walls and Ceilings

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 20 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	58.4 dpm/100cm²
Minimum:	-12.7 dpm/100cm²
Mean:	16.2 dpm/100cm²
Standard Deviation:	16.2
QC Maximum:	48.2 dpm/100cm²
QC Minimum:	39.0 dpm/100cm²
QC Mean:	43.6 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 20 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	10.3 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	1.2 dpm/100cm²
Standard Deviation:	3.4
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: C	Survey Unit: 881C16	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276 Walls and Ceilings

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	05/06/04	Electra	680	AP-6	06/03/04	0.177	NA	93.0	NA	S
2	512590	05/06/04	Electra	2352	DP-6	05/11/04	0.225	NA	93.0	NA	T/S
3	712193	05/07/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
4	711799	05/07/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	Q
5	712193	05/07/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

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Survey Area: C	Survey Unit: 881C16	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276 Walls and Ceilings

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C16PRP-N001	5	-1.8	N/A	
881C16PRP-N002	5	-1.8	N/A	
881C16PRP-N003	5	1.2	N/A	
881C16PRP-N004	5	-1.8	N/A	
881C16PRP-N005	5	1.2	N/A	
881C16PRP-N006	5	4.2	N/A	
881C16PRP-N007	5	-1.8	N/A	
881C16PRP-N008	5	4.2	N/A	
881C16PRP-N009	5	1.2	N/A	
881C16PRP-N010	5	1.2	N/A	
881C16PRP-N011	5	-1.8	N/A	
881C16PRP-N012	5	10.3	N/A	
881C16PRP-N013	5	-1.8	N/A	
881C16PRP-N014	5	4.2	N/A	
881C16PRP-N015	5	1.2	N/A	
881C16PRP-N016	5	1.2	N/A	
881C16PRP-N017	5	1.2	N/A	
881C16PRP-N018	5	-1.8	N/A	
881C16PRP-N019	5	7.3	N/A	
881C16PRP-N020	5	-1.8	N/A	

Comments:

Survey Area: C	Survey Unit: 881C16	Building: 881

Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276 Walls and Ceilings

Random/QC Total Surface Activity Data Sheet

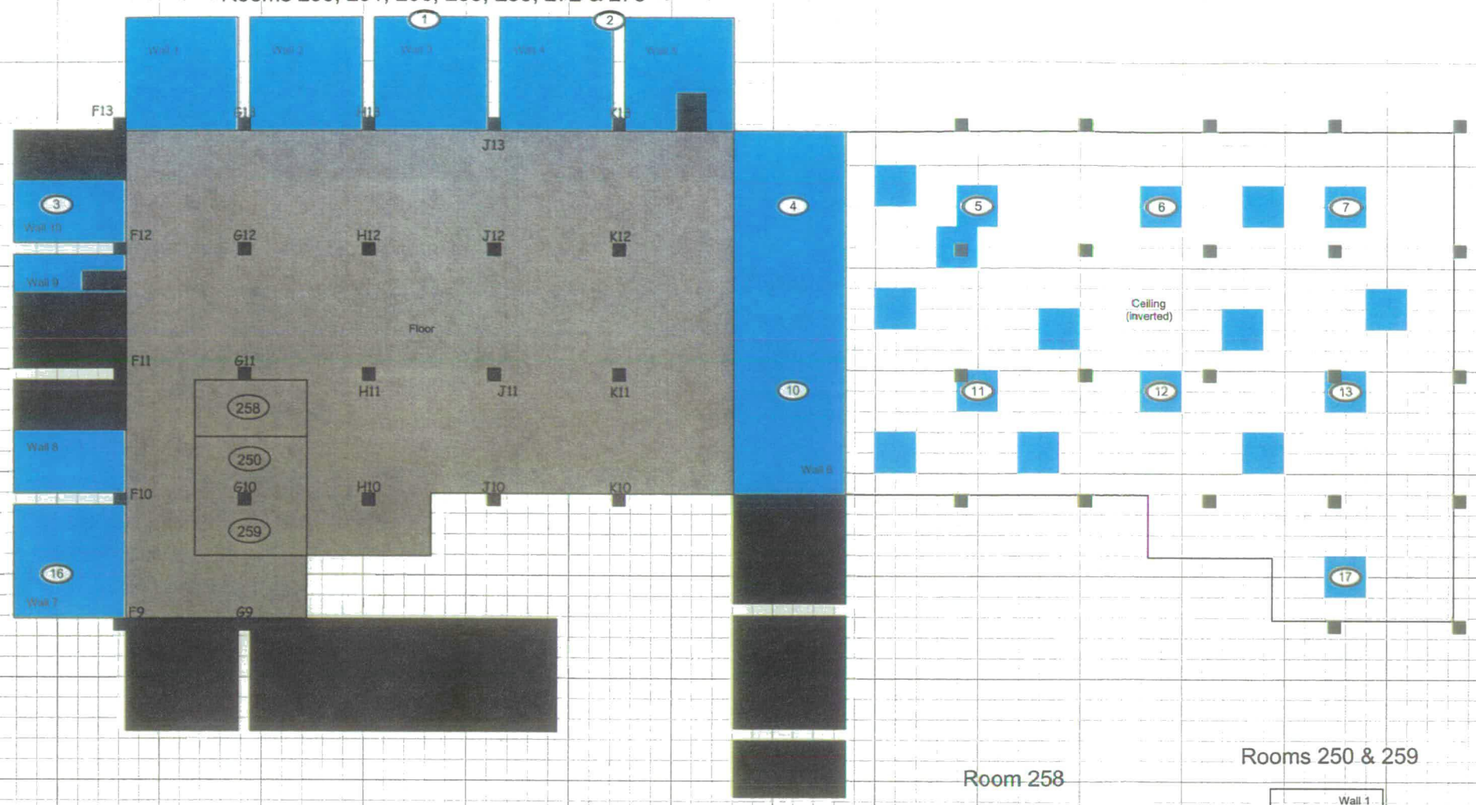
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C16PRP-N001	2	0.6	N/A	
881C16PRP-N002	2	40.6	N/A	
881C16PRP-N003	2	18.4	N/A	
881C16PRP-N004	2	58.4	N/A	
881C16QRP-N004	4	48.2	N/A	
881C16PRP-N005	2	14.0	N/A	
881C16PRP-N006	2	18.4	N/A	
881C16PRP-N007	2	9.5	N/A	
881C16PRP-N008	2	0.6	N/A	
881C16PRP-N009	2	-12.7	N/A	
881C16PRP-N010	2	22.8	N/A	
881C16PRP-N011	2	22.8	N/A	
881C16PRP-N012	2	27.3	N/A	
881C16PRP-N013	2	18.4	N/A	
881C16PRP-N014	2	0.6	N/A	
881C16PRP-N015	2	14.0	N/A	
881C16PRP-N016	2	5.1	N/A	
881C16PRP-N017	2	18.4	N/A	
881C16PRP-N018	2	36.2	N/A	
881C16QRP-N018	4	39.0	N/A	
881C16PRP-N019	2	5.1	N/A	
881C16PRP-N020	2	5.1	N/A	

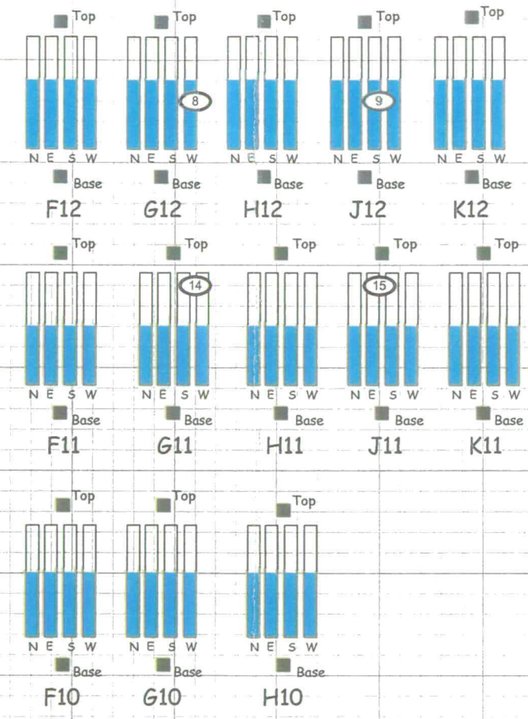
Comments:

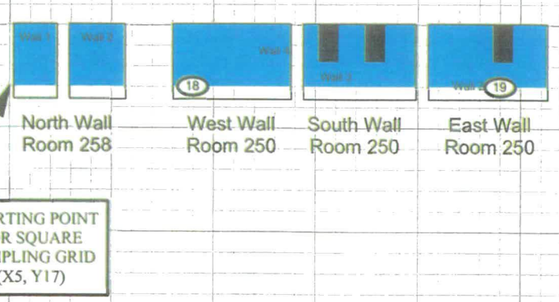
PRE-DEMOLITION SURVEY FOR B881

Survey Area: C **Survey Unit:** 881C16 **Classification:** 2
Building: 881
Survey Unit Description: Building 881, Management Unit C, Rooms 250, 251, 256, 258, 259, 272 & 276 Walls & Ceiling
Total Area: 1,278 sq. m. **Total Floor Area:** 598 sq. m.
Grid Spacing for Survey Points: 8 m. X 8 m.

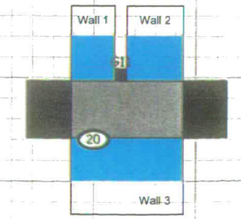
Rooms 250, 251, 256, 258, 259, 272 & 276



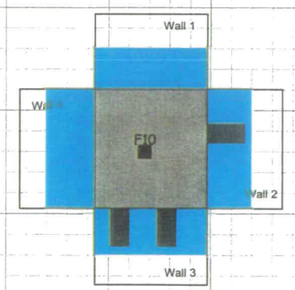




Room 258



Rooms 250 & 259



Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7707
Prepared for:
CH2MHILL Communications Group
KAISER-HILL COMPANY
MAP ID: 03-0568/881C16-SC
May 27, 2004

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Survey Area: C	Survey Unit: 881C17	Building: 881

Description: Building 881, Management Unit C, Room 266, Floor, Walls, And Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 39 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 4

Nbr Random Measurements Performed: 62 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 4

Alpha

Maximum:	60.9 dpm/100cm²
Minimum:	-19.5 dpm/100cm²
Mean:	21.2 dpm/100cm²
Standard Deviation:	16.4
QC Maximum:	67.1 dpm/100cm²
QC Minimum:	52.3 dpm/100cm²
QC Mean:	59.4 dpm/100cm²
Transuranic DCGL$_W$:	100.0 dpm/100cm²
Transuranic DCGL$_{EMC}$:	300.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 39 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 62 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	6.1 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	0.3 dpm/100cm²
Standard Deviation:	1.9
Transuranic DCGL$_W$:	20.0 dpm/100cm²

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: C	Survey Unit: 881C17	Building: 881

Description: Building 881, Management Unit C, Room 266, Floor, Walls, And Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	05/14/04	Electra	279	DP-8	10/01/04	0.178	NA	48.0	NA	S
2	702567	05/14/04	Electra	668	DP-8	06/22/04	0.166	NA	48.0	NA	S
3	702575	05/15/04	Electra	658	DP-8	06/04/04	0.168	NA	48.0	NA	S
4	712193	05/15/04	Electra	2404	DP-8	10/08/04	0.162	NA	48.0	NA	S
5	712193	05/16/04	Electra	1241	DP-6	10/06/04	0.193	NA	48.0	NA	S
6	711447	05/17/04	Electra	3109	DP-6	06/08/04	0.217	NA	48.0	NA	S
7	702567	05/19/04	Electra	658	DP-8	06/14/04	0.168	NA	48.0	NA	S
8	702575	05/19/04	Electra	3109	DP-6	06/08/04	0.217	NA	48.0	NA	S
9	711449	05/21/04	Electra	681	DP-8	06/29/04	0.151	NA	48.0	NA	S
10	711746	05/21/04	Electra	659	DP-8	06/10/04	0.164	NA	48.0	NA	S
11	711451	05/21/04	Electra	1241	DP-8	10/06/04	0.193	NA	48.0	NA	S
12	700835	05/21/04	Electra	658	DP-8	06/14/04	0.168	NA	48.0	NA	S
13	702575	05/21/04	Electra	2404	DP-8	10/08/04	0.162	NA	48.0	NA	S
14	711447	05/21/04	Electra	667	DP-6	10/22/04	0.222	NA	48.0	NA	S
15	712193	05/21/04	Electra	1260	DP-6	11/20/04	0.225	NA	48.0	NA	S
16	712193	05/22/04	Electra	2404	DP-8	10/08/04	0.162	NA	48.0	NA	S
17	711746	05/23/04	Electra	663	DP-6	09/18/04	0.218	NA	48.0	NA	T
18	712193	05/23/04	Electra	1672	DP-6	10/22/04	0.215	NA	48.0	NA	T
19	712193	05/23/04	SAC-4	830	NA	10/30/04	0.330	NA	10.0	NA	R
20	711447	05/24/04	Electra	1366	DP-6	10/14/04	0.203	NA	48.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

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Survey Area: C	Survey Unit: 881C17	Building: 881

Description: Building 881, Management Unit C, Room 266, Floor, Walls, And Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C17PRP-N001	19	-1.5	N/A	
881C17PRP-N002	19	-1.5	N/A	
881C17PRP-N003	19	-1.5	N/A	
881C17PRP-N004	19	-1.5	N/A	
881C17PRP-N005	19	-0.0	N/A	
881C17PRP-N006	19	-1.5	N/A	
881C17PRP-N007	19	-1.5	N/A	
881C17PRP-N010	19	-0.0	N/A	
881C17PRP-N011	19	1.5	N/A	
881C17PRP-N012	19	-0.0	N/A	
881C17PRP-N013	19	1.5	N/A	
881C17PRP-N014	19	-1.5	N/A	
881C17PRP-N015	19	-1.5	N/A	
881C17PRP-N016	19	-0.0	N/A	
881C17PRP-N017	19	1.5	N/A	
881C17PRP-N018	19	-0.0	N/A	
881C17PRP-N019	19	-0.0	N/A	
881C17PRP-N020	19	-0.0	N/A	
881C17PRP-N021	19	-0.0	N/A	
881C17PRP-N022	19	-1.5	N/A	
881C17PRP-N023	19	6.1	N/A	
881C17PRP-N024	19	3.0	N/A	
881C17PRP-N025	19	1.5	N/A	
881C17PRP-N026	19	4.5	N/A	
881C17PRP-N027	19	-0.0	N/A	
881C17PRP-N028	19	-0.0	N/A	
881C17PRP-N029	19	-1.5	N/A	
881C17PRP-N030	19	4.5	N/A	
881C17PRP-N031	19	1.5	N/A	

Survey Area: C	Survey Unit: 881C17	Building: 881

Description: Building 881, Management Unit C, Room 266, Floor, Walls, And Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C17PRP-N032	19	-0.0	N/A	
881C17PRP-N033	19	-0.0	N/A	
881C17PRP-N034	19	-0.0	N/A	
881C17PRP-N035	19	-0.0	N/A	
881C17PRP-N036	19	3.0	N/A	
881C17PRP-N037	19	1.5	N/A	
881C17PRP-N038	19	4.5	N/A	
881C17PRP-N039	19	6.1	N/A	
881C17PRP-N040	19	-0.0	N/A	
881C17PRP-N041	19	-0.0	N/A	
881C17PRP-N042	19	-1.5	N/A	
881C17PRP-N043	19	-1.5	N/A	
881C17PRP-N044	19	-1.5	N/A	
881C17PRP-N045	19	-1.5	N/A	
881C17PRP-N046	19	-0.0	N/A	
881C17PRP-N047	19	-0.0	N/A	
881C17PRP-N048	19	-0.0	N/A	
881C17PRP-N049	19	1.5	N/A	
881C17PRP-N050	19	-0.0	N/A	
881C17PRP-N051	19	-0.0	N/A	
881C17PRP-N052	19	-1.5	N/A	
881C17PRP-N053	19	-1.5	N/A	
881C17PRP-N054	19	-1.5	N/A	
881C17PRP-N055	19	-1.5	N/A	
881C17PRP-N056	19	-0.0	N/A	
881C17PRP-N057	19	-0.0	N/A	
881C17PRP-N058	19	-0.0	N/A	
881C17PRP-N059	19	1.5	N/A	
881C17PRP-N060	19	-0.0	N/A	

Survey Area: C	Survey Unit: 881C17	Building: 881

Description: Building 881, Management Unit C, Room 266, Floor, Walls, And Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C17PRP-N061	19	-0.0	N/A	
881C17PRP-N062	19	-0.0	N/A	
881C17PRP-N063	19	1.5	N/A	
881C17PRP-N064	19	-0.0	N/A	

Comments:

Survey Area: C	Survey Unit: 881C17	Building: 881

Description: Building 881, Management Unit C, Room 266, Floor, Walls, And Ceiling

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C17PRP-N001	17	-7.7	N/A	
881C17PRP-N002	17	9.3	N/A	
881C17PRP-N003	17	41.4	N/A	
881C17QRP-N003	20	60.7	N/A	
881C17PRP-N004	17	18.5	N/A	
881C17PRP-N005	17	23.1	N/A	
881C17PRP-N006	17	7.9	N/A	
881C17PRP-N007	17	53.8	N/A	
881C17PRP-N010	17	-1.2	N/A	
881C17PRP-N011	17	13.9	N/A	
881C17PRP-N012	17	17.1	N/A	
881C17PRP-N013	17	29.0	N/A	
881C17PRP-N014	17	50.6	N/A	
881C17QRP-N014	20	57.3	N/A	
881C17PRP-N015	17	29.0	N/A	
881C17PRP-N016	17	41.4	N/A	
881C17PRP-N017	17	4.7	N/A	
881C17PRP-N018	17	29.0	N/A	
881C17PRP-N019	17	44.6	N/A	
881C17PRP-N020	17	38.2	N/A	
881C17PRP-N021	18	8.4	N/A	
881C17PRP-N022	17	1.5	N/A	
881C17PRP-N023	18	60.9	N/A	
881C17PRP-N024	17	33.6	N/A	
881C17PRP-N025	18	22.3	N/A	
881C17PRP-N026	17	44.6	N/A	
881C17PRP-N027	18	45.6	N/A	

Survey Area: C	Survey Unit: 881C17	Building: 881

Description: Building 881, Management Unit C, Room 266, Floor, Walls, And Ceiling

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C17PRP-N028	17	15.3	N/A	
881C17PRP-N029	18	25.1	N/A	
881C17PRP-N030	17	12.5	N/A	
881C17PRP-N031	18	15.8	N/A	
881C17PRP-N032	17	13.9	N/A	
881C17PRP-N033	18	6.5	N/A	
881C17PRP-N034	17	15.3	N/A	
881C17PRP-N035	18	8.4	N/A	
881C17PRP-N036	17	15.3	N/A	
881C17PRP-N037	18	27.0	N/A	
881C17PRP-N038	17	19.9	N/A	
881C17PRP-N039	18	13.0	N/A	
881C17PRP-N040	17	15.3	N/A	
881C17PRP-N041	18	6.5	N/A	
881C17PRP-N042	18	17.7	N/A	
881C17PRP-N043	18	14.4	N/A	
881C17PRP-N044	18	8.4	N/A	
881C17PRP-N045	18	11.2	N/A	
881C17PRP-N046	18	-19.5	N/A	
881C17PRP-N047	18	5.1	N/A	
881C17PRP-N048	18	5.1	N/A	
881C17PRP-N049	18	11.2	N/A	
881C17PRP-N050	18	48.4	N/A	
881C17QRP-N050	20	67.1	N/A	
881C17PRP-N051	18	50.2	N/A	
881C17PRP-N052	18	20.5	N/A	
881C17PRP-N053	17	13.9	N/A	

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Survey Area: C	Survey Unit: 881C17	Building: 881

Description: Building 881, Management Unit C, Room 266, Floor, Walls, And Ceiling

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881C17PRP-N054	17	4.7	N/A	
881C17PRP-N055	17	19.9	N/A	
881C17PRP-N056	17	23.1	N/A	
881C17PRP-N057	17	27.7	N/A	
881C17PRP-N058	17	21.7	N/A	
881C17PRP-N059	17	12.5	N/A	
881C17PRP-N060	17	9.3	N/A	
881C17PRP-N061	17	47.4	N/A	
881C17PRP-N062	17	33.6	N/A	
881C17PRP-N063	17	44.6	N/A	
881C17QRP-N063	20	52.3	N/A	
881C17PRP-N064	17	17.1	N/A	

Comments:

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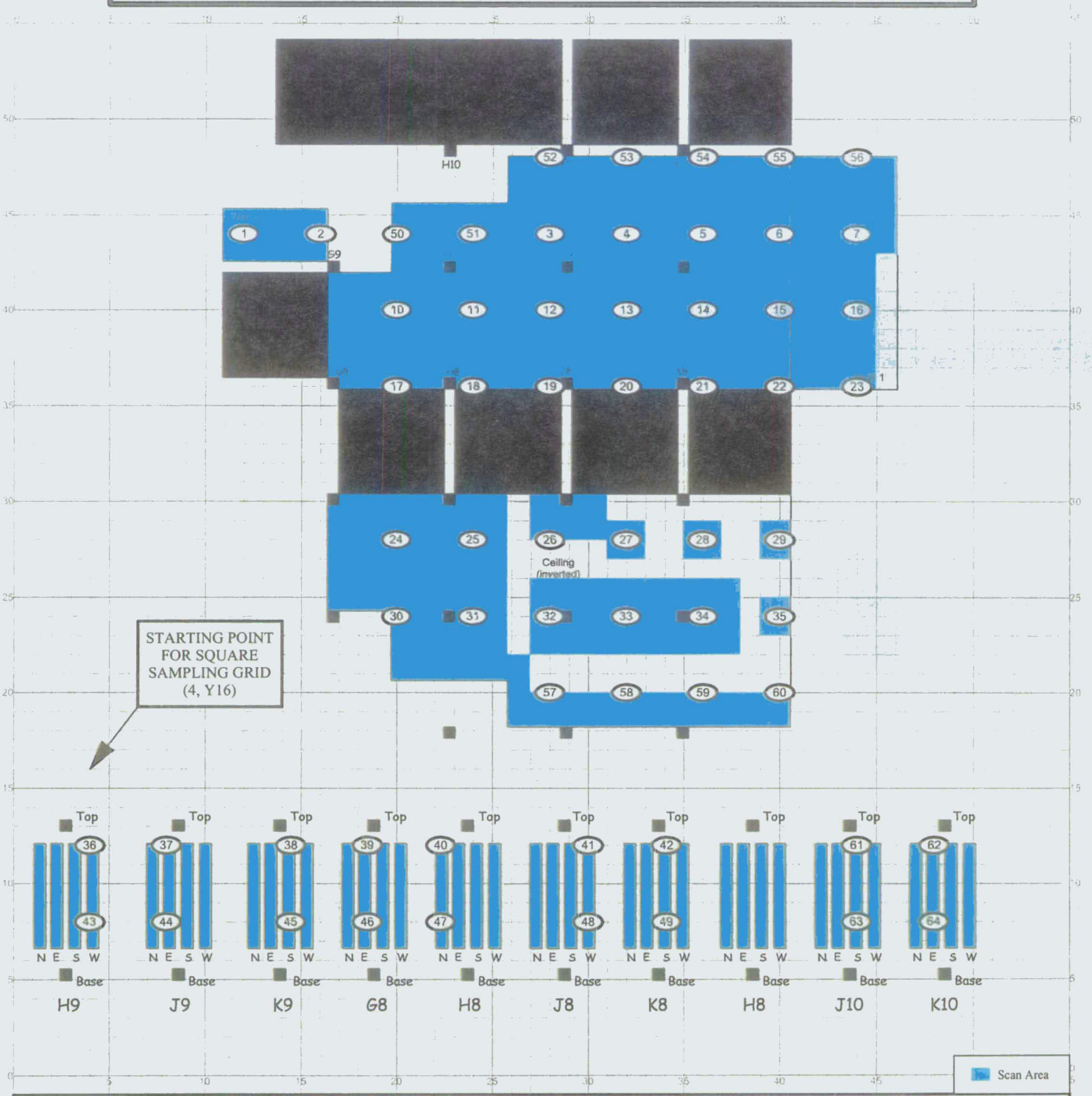
PRE-DEMOLITION SURVEY FOR B881

Survey Area: C Survey Unit: 881C17 Classification: 1
Building: 881
Survey Unit Description: Building 881, Management Unit C, Room 266, Floor, Walls & Ceiling
Total Area: 556 sq. m. Total Floor Area: 260 sq. m.
Grid Spacing for Survey Points: 4 m. X 4 m.



SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1 - 16

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
Prepared for:

CH2MHILL Communications Group
KAISER-HILL

MAP ID: 03-0568/881C17-SC
June 2, 2004

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881C17
Media Conversion Sheet

Survey Area: C	Survey Unit: 881C17	Building: 881

Survey Unit/Area Description:
MU C, Room 266, Concrete Floor Core Samples

Core Biscuit Total Surface Activity Data Sheet

Alpha_X_ Beta___

Sample Location	Depth	Total Surface Activity Measurements				Total Surface Activity Results			
		RCT-Inst ID #/Bkgd (cpm)		Top (cpm)	Bottom (cpm)	Top Net (cpm)	Bottom Net (cpm)	Top Net (dpm/100cm^2)	Bottom Net (dpm/100cm^2)
1A	0 - 1"	11	4.3	7.9	15.5	3.6	11.2	54.4	**169.2** [(1)]
1B	1" - 2"	9	3	5.0	5.3	2.0	2.3	30.2	34.8
1C	2" - 3"	10	4.2	4.3	6.1	0.1	1.9	1.5	28.7
1D	3" - 4"	8	4	5.0	5.7	1.0	1.7	15.1	25.7
1E	4" - 5"	11	4.3	4.1	4.1	-0.2	-0.2	-3.0	-3.0
2A	0 - 1"	10	4.2	5.2	5.6	1.0	1.4	15.1	21.2
2B	1" - 2"	9	3	4	3.3	1.0	0.3	15.1	4.5
2C	2" - 3"	8	4	5.1	9.3	1.1	5.3	16.6	80.1
2D	3" - 4"	8	4	5.9	5.9	1.9	1.9	28.7	28.7
2E	4" - 5"	9	3	4.6	6.1	1.6	3.1	24.2	46.8
2F	5" - 6"	11	4.3	4.6	4.1	0.3	-0.2	4.5	-3.0
3A	0 - 1"	10	4.2	5.1	7.5	0.9	3.3	13.6	49.9
3B	1" - 2"	11	4.3	4.1	5.2	-0.2	0.9	-3.0	13.6
3C	2" - 3"	8	4	5.9	5.4	1.9	1.4	28.7	21.2
3D	3" - 4"	9	3	5.0	3.7	2.0	0.7	30.2	10.6
3E	4" - 5"	10	4.2	4.3	4.2	0.1	0.0	1.5	0.0
4A	0 - 1"	12	4.2	6.6	7.2	2.4	3.0	36.3	45.3
4B	1" - 2"	13	4.2	4.4	5.2	0.2	1.0	3.0	15.1
4C	2" - 3"	14	3.5	5.7	5.4	2.2	1.9	33.2	28.7
4D	3" - 4"	15	3.7	5.3	5.2	1.6	1.5	24.2	22.7
4E	4" - 5"	16	3.7	3.8	5.5	0.1	1.8	1.5	27.2
4F	5" - 6"	17	4.7	5.4	4.2	0.7	-0.5	10.6	-7.6
5A	0 - 1"	12	4.2	6.5	7.5	2.3	3.3	34.8	49.9
5B	1" - 2"	13	4.2	3.7	3.6	-0.5	-0.6	-7.6	-9.1
5C	2" - 3"	14	3.5	4.3	5.2	0.8	1.7	12.1	25.7
5D	3" - 4"	15	3.7	4.7	6.1	1.0	2.4	15.1	36.3
5E	4" - 5"	16	3.7	5.8	5.7	2.1	2.0	31.7	30.2
5F	5" - 6"	17	4.6	6.1	6.0	1.5	1.4	22.7	21.2
6A	0 - 1"	12	4.2	5.1	6.6	0.9	2.4	13.6	36.3
6B	1" - 2"	13	4.2	6.5	6.8	2.3	2.6	34.8	39.3
6C	2" - 3"	14	3.5	5.0	5.4	1.5	1.9	22.7	28.7
6D	3" - 4"	14	3.5	5.1	6.5	1.6	3.0	24.2	45.3
6E	4" - 5"	12	4.2	3.1	4.8	-1.1	0.6	-16.6	9.1
6F	5" - 6"	13	4.2	5.9	7.5	1.7	3.3	25.7	49.9
6G	6" - 7"	13	4.2	5.5	5.2	1.3	1.0	19.6	15.1
7A	0 - 1"	13	4.2	61.2	5.8	57.0	1.6	**861.3** [(2)]	24.2
7B	1" - 2"	14	3.5	4.9	4.3	1.4	0.8	21.2	12.1
7C	2" - 3"	12	4.2	6.0	6.3	1.8	2.1	27.2	31.7
7D	3" - 4"	13	4.2	4.9	6.1	0.7	1.9	10.6	28.7

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Survey Area: C	Survey Unit: 881C17	Building: 881

Survey Unit/Area Description:
MU C, Room 266, Concrete Floor Core Samples

Core Biscuit Total Surface Activity Data Sheet

Alpha_X_ Beta___

Sample Location	Depth	Total Surface Activity Measurements				Total Surface Activity Results			
		RCT-Inst ID #/Bkgd (cpm)		Top (cpm)	Bottom (cpm)	Top Net (cpm)	Bottom Net (cpm)	Top Net (dpm/100cm^2)	Bottom Net (dpm/100cm^2)
7E	4" - 5"	14	3.5	5.1	3.8	1.6	0.3	24.2	4.5
7D	5" - 6"	15	3.7	5.6	3.8	1.9	0.1	28.7	1.5
7F	6" - 7"	16	3.7	4.8	6.3	1.1	2.6	16.6	39.3
8A	0 - 1"	9	3	25.9	6.4	22.9	3.4	**346** (2)	51.4
8B	1" - 2"	10	4.2	17.9	4.8	13.7	0.6	**207** (1)	9.1
8C	2" - 3"	10	4.2	3.4	4.7	-0.8	0.5	-12.1	7.6
8D	3" - 4"	11	4.3	5.9	5.9	1.6	1.6	24.2	24.2
8E	4" - 5"	8	4	6.1	6.0	2.1	2.0	31.7	30.2
8F	5" - 6"	10	4.2	5.2	4.1	1.0	-0.1	15.1	-1.5
8G	6" - 7"	11	4.3	4.9	4.1	0.6	-0.2	9.1	-3.0
9A	0 - 1"	11	4.3	5.2	4.6	0.9	0.3	13.6	4.5
9B	1" - 2"	8	4	5.7	6.3	1.7	2.3	25.7	34.8
9C	2" - 3"	9	3	3.3	4.0	0.3	1.0	4.5	15.1
9D	3" - 4"	8	4	3.9	6.4	-0.1	2.4	-1.5	36.3
9E	4" - 5"	10	4.2	4.2	5.6	0.0	1.4	0.0	21.2
9F	5" - 6"	9	3	3.5	4.7	0.5	1.7	7.6	25.7
10A	0 - 1"	14	3.5	4.4	4.8	0.9	1.3	13.6	19.6
10B	1" - 2"	13	4.2	6.7	4.3	2.5	0.1	37.8	1.5
10C	2" - 3"	12	4.2	4.4	6.3	0.2	2.1	3.0	31.7
10D	3" - 4"	12	4.2	6.5	7.5	2.3	3.3	34.8	49.9
10E	4" - 5"	14	3.5	3.6	4.9	0.1	1.4	1.5	21.2
10F	5" - 6"	13	4.2	5.1	4.4	0.9	0.2	13.6	3.0

Footnotes: (1) Since these elevated locations (i.e.,1A & 8B) were approximately one inch below the top surface of the concrete floor, the top one inch of the floor surface in these areas was removed. Follow up surveys of these areas indicated that the elevated activity had been remediatated. No further follow up investigations area required. (2) Since these elevated locations (i.e., 7A & 8A) were on the top surface of the concrete floor, the top floor surface of these areas were decontaminated. Follow up surveys of these areas indicated that the elevated activity had been remediatated. Refer to Survey Unit package 881C17 for follow up PDS surveys of these areas.

TSA COUNT TIME = 600 (SEC)

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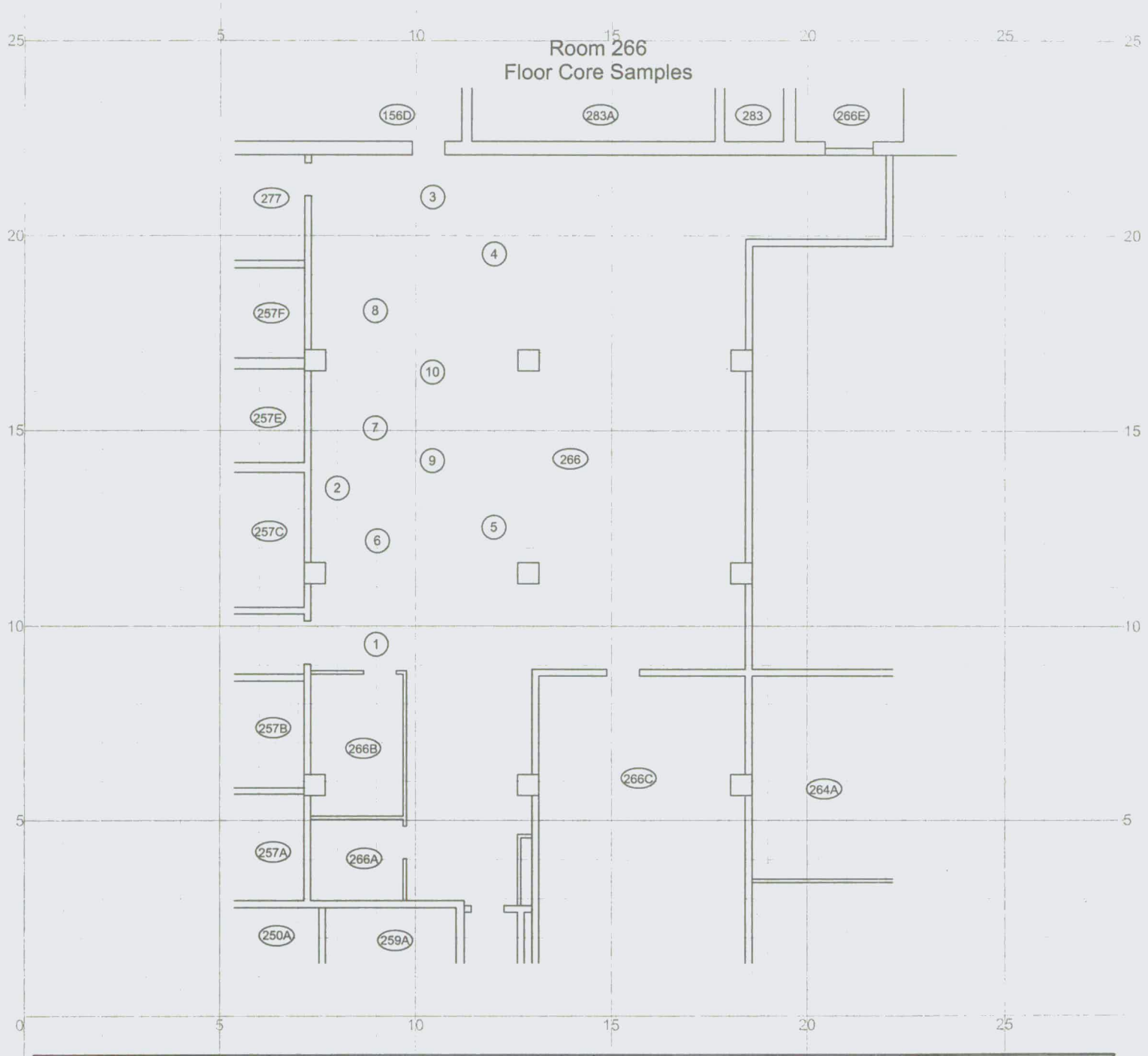
PRE-DEMOLITION SURVEY FOR B881

Survey Area: C **Survey Unit: 881C17** **Classification: 1**
Building: 881
Survey Unit Description: Room 266 Floor
Total Area: 556 **Total Floor Area: 260**
Grid Spacing for Survey Points: N/A



SURVEY MAP LEGEND

- (#) Core Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 15
0 METERS 5

1 inch = 12 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
N/A

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/UnitC/266-CorSam **Mar. 8, 2004**

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Survey Area: D	Survey Unit: 881D01	Building: 881
Description: Building 881, Management Unit D, Rooms 232 and 242, Floor		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 155 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 9

Nbr Random Measurements Performed: 159 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 9

Alpha

Maximum:	785.7 dpm/100cm²
Minimum:	-17.2 dpm/100cm²
Mean:	102.7 dpm/100cm²
Standard Deviation:	132.9
QC Maximum:	671.3 dpm/100cm²
QC Minimum:	398.5 dpm/100cm²
QC Mean:	514.7 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 155 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 159 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	10.6 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	1.9 dpm/100cm²
Standard Deviation:	3.3
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D | **Survey Unit:** 881D01 | **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 and 242, Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	04/20/04	Electra	666	DP-8	06/16/04	0.175	NA	93.0	NA	S
2	712193	04/20/04	Electra	2404	DP-8	10/08/04	0.162	NA	93.0	NA	S
3	712193	04/20/04	Electra	680	DP-8	06/03/04	0.177	NA	93.0	NA	S
4	712193	04/20/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
5	711447	04/20/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S
6	711447	04/21/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	S
7	702467	04/24/04	Electra	1518	DP-6	06/23/04	0.209	NA	93.0	NA	T
8	702467	04/24/04	Electra	3109	DP-6	06/08/04	0.213	NA	93.0	NA	T
9	702467	04/24/04	Electra	3141	DP-6	09/23/04	0.216	NA	93.0	NA	T
10	702467	04/24/04	SAC-4	960	NA	09/24/04	0.330	NA	16.0	NA	R
11	711447	04/29/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
12	711447	04/30/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S
13	711447	05/01/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
14	711447	05/01/04	Electra	1134	DP-6	10/19/04	0.215	NA	93.0	NA	T/S
15	711447	05/01/04	SAC-4	823	NA	10/22/04	0.330	NA	16.0	NA	R
16	712193	05/01/04	Electra	667	DP-6	10/22/04	0.220	NA	93.0	NA	Q
17	711447	05/02/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
18	712193	05/02/04	SAC-4	823	NA	10/22/04	0.330	NA	16.0	NA	R
19	712193	05/02/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

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Survey Area: D	Survey Unit: 881D01	Building: 881
Description: Building 881, Management Unit D, Rooms 232 and 242, Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N001	10	-1.2	N/A	
881D01PRP-N002	10	-1.2	N/A	
881D01PRP-N003	10	4.9	N/A	
881D01PRP-N004	10	-1.2	N/A	
881D01PRP-N005	10	-1.2	N/A	
881D01PRP-N006	10	4.9	N/A	
881D01PRP-N007	10	-1.2	N/A	
881D01PRP-N008	10	-1.2	N/A	
881D01PRP-N009	10	4.9	N/A	
881D01PRP-N010	10	1.8	N/A	
881D01PRP-N011	10	1.8	N/A	
881D01PRP-N012	10	1.8	N/A	
881D01PRP-N013	10	-1.2	N/A	
881D01PRP-N014	10	-1.2	N/A	
881D01PRP-N015	10	1.8	N/A	
881D01PRP-N016	10	-1.2	N/A	
881D01PRP-N017	10	1.8	N/A	
881D01PRP-N018	10	-1.2	N/A	
881D01PRP-N019	10	4.9	N/A	
881D01PRP-N020	10	-1.2	N/A	
881D01PRP-N021	10	7.9	N/A	
881D01PRP-N022	10	-1.2	N/A	
881D01PRP-N023	10	-1.2	N/A	
881D01PRP-N024	10	1.8	N/A	
881D01PRP-N025	10	-1.2	N/A	
881D01PRP-N026	10	-1.2	N/A	
881D01PRP-N027	10	1.8	N/A	
881D01PRP-N028	10	1.8	N/A	
881D01PRP-N029	10	4.9	N/A	

Survey Area: D **Survey Unit:** 881D01 **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 and 242, Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N030	10	4.9	N/A	
881D01PRP-N031	10	1.8	N/A	
881D01PRP-N032	10	-1.2	N/A	
881D01PRP-N033	10	4.9	N/A	
881D01PRP-N034	10	1.8	N/A	
881D01PRP-N035	10	-1.2	N/A	
881D01PRP-N036	10	-1.2	N/A	
881D01PRP-N037	10	-1.2	N/A	
881D01PRP-N038	10	-1.2	N/A	
881D01PRP-N039	10	7.9	N/A	
881D01PRP-N040	10	1.8	N/A	
881D01PRP-N041	10	-1.2	N/A	
881D01PRP-N042	10	-1.2	N/A	
881D01PRP-N043	10	1.8	N/A	
881D01PRP-N044	10	-1.2	N/A	
881D01PRP-N045	10	4.9	N/A	
881D01PRP-N046	10	4.9	N/A	
881D01PRP-N047	10	-1.2	N/A	
881D01PRP-N048	10	1.8	N/A	
881D01PRP-N049	10	1.8	N/A	
881D01PRP-N050	10	4.9	N/A	
881D01PRP-N051	10	-1.2	N/A	
881D01PRP-N052	10	-1.2	N/A	
881D01PRP-N053	10	-1.2	N/A	
881D01PRP-N054	10	1.8	N/A	
881D01PRP-N055	10	-1.2	N/A	
881D01PRP-N056	10	-1.2	N/A	
881D01PRP-N057	10	1.8	N/A	
881D01PRP-N058	10	-1.2	N/A	

Survey Area: D	Survey Unit: 881D01	Building: 881
Description: Building 881, Management Unit D, Rooms 232 and 242, Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N059	10	-1.2	N/A	
881D01PRP-N060	10	1.8	N/A	
881D01PRP-N061	15	7.6	N/A	
881D01PRP-N062	15	4.5	N/A	
881D01PRP-N063	15	-1.5	N/A	
881D01PRP-N064	15	-1.5	N/A	
881D01PRP-N065	15	-1.5	N/A	
881D01PRP-N066	15	1.5	N/A	
881D01PRP-N067	15	-1.5	N/A	
881D01PRP-N068	15	1.5	N/A	
881D01PRP-N069	15	4.5	N/A	
881D01PRP-N070	15	4.5	N/A	
881D01PRP-N071	15	1.5	N/A	
881D01PRP-N072	15	-1.5	N/A	
881D01PRP-N073	15	10.6	N/A	
881D01PRP-N074	15	4.5	N/A	
881D01PRP-N075	15	-1.5	N/A	
881D01PRP-N076	15	7.6	N/A	
881D01PRP-N077	15	-1.5	N/A	
881D01PRP-N078	15	1.5	N/A	
881D01PRP-N079	15	1.5	N/A	
881D01PRP-N080	15	4.5	N/A	
881D01PRP-N081	15	1.5	N/A	
881D01PRP-N082	15	7.6	N/A	
881D01PRP-N083	15	-1.5	N/A	
881D01PRP-N084	15	4.5	N/A	
881D01PRP-N085	15	-1.5	N/A	
881D01PRP-N086	15	-1.5	N/A	
881D01PRP-N087	15	10.6	N/A	

Survey Area: D	Survey Unit: 881D01	Building: 881
Description: Building 881, Management Unit D, Rooms 232 and 242, Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N088	15	4.5	N/A	
881D01PRP-N089	15	4.5	N/A	
881D01PRP-N090	15	4.5	N/A	
881D01PRP-N091	15	1.5	N/A	
881D01PRP-N092	15	1.5	N/A	
881D01PRP-N093	15	-1.5	N/A	
881D01PRP-N094	15	10.6	N/A	
881D01PRP-N095	15	4.5	N/A	
881D01PRP-N096	15	1.5	N/A	
881D01PRP-N097	15	1.5	N/A	
881D01PRP-N098	15	-1.5	N/A	
881D01PRP-N099	15	4.5	N/A	
881D01PRP-N100	15	7.6	N/A	
881D01PRP-N101	15	-1.5	N/A	
881D01PRP-N102	15	1.5	N/A	
881D01PRP-N103	15	7.6	N/A	
881D01PRP-N104	15	-1.5	N/A	
881D01PRP-N105	15	10.6	N/A	
881D01PRP-N106	15	4.5	N/A	
881D01PRP-N107	15	4.5	N/A	
881D01PRP-N108	15	1.5	N/A	
881D01PRP-N109	15	-1.5	N/A	
881D01PRP-N110	15	-1.5	N/A	
881D01PRP-N111	15	4.5	N/A	
881D01PRP-N112	15	1.5	N/A	
881D01PRP-N113	15	7.6	N/A	
881D01PRP-N114	15	7.6	N/A	
881D01PRP-N115	15	1.5	N/A	
881D01PRP-N116	15	-1.5	N/A	

Survey Area: D	Survey Unit: 881D01	Building: 881
Description: Building 881, Management Unit D, Rooms 232 and 242, Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N117	15	-1.5	N/A	
881D01PRP-N118	15	1.5	N/A	
881D01PRP-N119	15	1.5	N/A	
881D01PRP-N122	15	-1.5	N/A	
881D01PRP-N123	18	4.2	N/A	
881D01PRP-N124	18	-1.8	N/A	
881D01PRP-N125	18	4.2	N/A	
881D01PRP-N126	15	7.6	N/A	
881D01PRP-N127	15	-1.5	N/A	
881D01PRP-N128	15	1.5	N/A	
881D01PRP-N129	15	1.5	N/A	
881D01PRP-N130	15	-1.5	N/A	
881D01PRP-N133	15	4.5	N/A	
881D01PRP-N134	15	-1.5	N/A	
881D01PRP-N135	18	1.2	N/A	
881D01PRP-N136	18	4.2	N/A	
881D01PRP-N137	15	4.5	N/A	
881D01PRP-N138	15	7.6	N/A	
881D01PRP-N139	15	1.5	N/A	
881D01PRP-N140	15	-1.5	N/A	
881D01PRP-N141	15	-1.5	N/A	
881D01PRP-N144	15	4.5	N/A	
881D01PRP-N145	15	4.5	N/A	
881D01PRP-N146	15	1.5	N/A	
881D01PRP-N147	15	-1.5	N/A	
881D01PRP-N148	15	4.5	N/A	
881D01PRP-N149	15	1.5	N/A	
881D01PRP-N150	15	1.5	N/A	
881D01PRP-N151	15	1.5	N/A	

Survey Area: D | **Survey Unit:** 881D01 | **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 and 242, Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N152	15	7.6	N/A	
881D01PRP-N153	15	-1.5	N/A	
881D01PRP-N154	15	4.5	N/A	
881D01PRP-N155	18	1.2	N/A	
881D01PRP-N156	18	-1.8	N/A	
881D01PRP-N157	18	-1.8	N/A	
881D01PRP-N158	18	4.2	N/A	
881D01PRP-N159	18	4.2	N/A	
881D01PRP-N160	15	7.6	N/A	
881D01PRP-N161	15	1.5	N/A	
881D01PRP-N162	15	4.5	N/A	
881D01PRP-N163	18	1.2	N/A	
881D01PRP-N164	18	1.2	N/A	
881D01PRP-N165	18	7.3	N/A	

Comments:

Survey Area: D	Survey Unit: 881D01	Building: 881
Description: Building 881, Management Unit D, Rooms 232 and 242, Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N001	7	78.8	N/A	
881D01PRP-N002	7	50.1	N/A	
881D01PRP-N003	7	231.9	N/A	
881D01PRP-N004	7	7.0	N/A	
881D01PRP-N005	7	35.7	N/A	
881D01PRP-N006	7	74.0	N/A	
881D01PRP-N007	7	78.8	N/A	
881D01PRP-N008	7	475.9	N/A	
881D01QRP-N008	16	471.3	N/A	
881D01PRP-N009	7	64.4	N/A	
881D01PRP-N010	7	78.8	N/A	
881D01PRP-N011	7	93.1	N/A	
881D01PRP-N012	7	64.4	N/A	
881D01PRP-N013	8	81.5	N/A	
881D01PRP-N014	8	95.6	N/A	
881D01PRP-N015	8	147.2	N/A	
881D01PRP-N016	8	297.4	N/A	
881D01PRP-N017	8	208.2	N/A	
881D01PRP-N018	8	203.5	N/A	
881D01PRP-N019	8	480.5	N/A	
881D01QRP-N019	16	457.6	N/A	
881D01PRP-N020	8	569.7	N/A	
881D01QRP-N020	16	603.1	N/A	
881D01PRP-N021	8	95.6	N/A	
881D01PRP-N022	8	86.2	N/A	
881D01PRP-N023	8	34.5	N/A	
881D01PRP-N024	8	53.3	N/A	

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Survey Area: D	Survey Unit: 881D01	Building: 881

Description: Building 881, Management Unit D, Rooms 232 and 242, Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N025	8	123.7	N/A	
881D01PRP-N026	8	62.7	N/A	
881D01PRP-N027	8	95.6	N/A	
881D01PRP-N028	7	45.3	N/A	
881D01PRP-N029	7	69.2	N/A	
881D01PRP-N030	7	399.3	N/A	
881D01PRP-N031	7	59.6	N/A	
881D01PRP-N032	7	64.4	N/A	
881D01PRP-N033	7	54.8	N/A	
881D01PRP-N034	7	141.0	N/A	
881D01PRP-N035	7	30.9	N/A	
881D01PRP-N036	7	54.8	N/A	
881D01PRP-N037	8	29.8	N/A	
881D01PRP-N038	9	-8.0	N/A	
881D01PRP-N039	9	38.3	N/A	
881D01PRP-N040	9	75.4	N/A	
881D01PRP-N041	9	42.9	N/A	
881D01PRP-N042	9	38.3	N/A	
881D01PRP-N043	9	29.1	N/A	
881D01PRP-N044	9	89.2	N/A	
881D01PRP-N045	8	53.3	N/A	
881D01PRP-N046	8	546.3	N/A	
881D01QRP-N046	16	494.0	N/A	
881D01PRP-N047	8	-3.0	N/A	
881D01PRP-N048	8	119.0	N/A	
881D01PRP-N049	7	50.1	N/A	
881D01PRP-N050	7	74.0	N/A	

Survey Area: D | **Survey Unit:** 881D01 | **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 and 242, Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N051	7	11.8	N/A	
881D01PRP-N052	7	45.3	N/A	
881D01PRP-N053	7	141.0	N/A	
881D01PRP-N054	7	145.7	N/A	
881D01PRP-N055	7	-12.1	N/A	
881D01PRP-N056	7	54.8	N/A	
881D01PRP-N057	7	26.1	N/A	
881D01PRP-N058	7	54.8	N/A	
881D01PRP-N059	7	-2.6	N/A	
881D01PRP-N060	7	7.0	N/A	
881D01PRP-N061	13	11.1	N/A	
881D01PRP-N062	14	34.0	N/A	
881D01PRP-N063	13	53.3	N/A	
881D01PRP-N064	14	61.9	N/A	
881D01PRP-N065	13	29.8	N/A	
881D01PRP-N066	14	34.0	N/A	
881D01PRP-N067	13	43.9	N/A	
881D01PRP-N068	14	66.5	N/A	
881D01PRP-N069	13	29.8	N/A	
881D01PRP-N070	14	34.0	N/A	
881D01PRP-N071	13	53.3	N/A	
881D01PRP-N072	14	38.6	N/A	
881D01PRP-N073	13	58.0	N/A	
881D01PRP-N074	14	61.9	N/A	
881D01PRP-N075	13	105.0	N/A	
881D01PRP-N076	14	61.9	N/A	
881D01PRP-N077	13	58.0	N/A	

Survey Area: D	Survey Unit: 881D01	Building: 881
Description: Building 881, Management Unit D, Rooms 232 and 242, Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N078	14	108.4	N/A	
881D01PRP-N079	13	297.4	N/A	
881D01PRP-N080	14	108.4	N/A	
881D01PRP-N081	13	48.6	N/A	
881D01PRP-N082	13	1.7	N/A	
881D01PRP-N083	14	20.0	N/A	
881D01PRP-N084	13	25.1	N/A	
881D01PRP-N085	14	43.3	N/A	
881D01PRP-N086	13	15.8	N/A	
881D01PRP-N087	14	-17.2	N/A	
881D01PRP-N088	13	-12.4	N/A	
881D01PRP-N089	14	52.6	N/A	
881D01PRP-N090	13	137.8	N/A	
881D01PRP-N091	14	-7.9	N/A	
881D01PRP-N092	13	58.0	N/A	
881D01PRP-N093	14	-7.9	N/A	
881D01PRP-N094	13	25.1	N/A	
881D01PRP-N095	14	85.1	N/A	
881D01PRP-N096	13	48.6	N/A	
881D01PRP-N097	14	47.9	N/A	
881D01PRP-N098	13	62.7	N/A	
881D01PRP-N099	14	47.9	N/A	
881D01PRP-N100	13	67.4	N/A	
881D01PRP-N101	14	20.0	N/A	
881D01PRP-N102	13	11.1	N/A	
881D01PRP-N103	14	-3.2	N/A	
881D01PRP-N104	14	-17.2	N/A	

Survey Area: D | **Survey Unit:** 881D01 | **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 and 242, Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N105	13	15.8	N/A	
881D01PRP-N106	14	34.0	N/A	
881D01PRP-N107	13	67.4	N/A	
881D01PRP-N108	14	29.3	N/A	
881D01PRP-N109	13	58.0	N/A	
881D01PRP-N110	14	24.7	N/A	
881D01PRP-N111	13	156.6	N/A	
881D01PRP-N112	14	247.9	N/A	
881D01PRP-N113	13	86.2	N/A	
881D01PRP-N114	14	113.0	N/A	
881D01PRP-N115	13	11.1	N/A	
881D01PRP-N116	13	11.1	N/A	
881D01PRP-N117	14	-3.2	N/A	
881D01PRP-N118	13	128.4	N/A	
881D01PRP-N119	14	117.7	N/A	
881D01PRP-N122	13	339.7	N/A	
881D01PRP-N123	17	269.3	N/A	
881D01PRP-N124	17	67.4	N/A	
881D01PRP-N125	17	25.1	N/A	
881D01PRP-N126	14	-7.9	N/A	
881D01PRP-N127	13	-3.0	N/A	
881D01PRP-N128	14	285.1	N/A	
881D01PRP-N129	13	166.0	N/A	
881D01PRP-N130	14	127.0	N/A	
881D01PRP-N133	13	147.2	N/A	
881D01PRP-N134	14	145.6	N/A	
881D01PRP-N135	17	72.1	N/A	

Survey Area: D **Survey Unit:** 881D01 **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 and 242, Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01PRP-N136	17	48.6	N/A	
881D01PRP-N137	14	-12.5	N/A	
881D01PRP-N138	13	-7.7	N/A	
881D01PRP-N139	14	564.2	N/A	
881D01QRP-N139	16	557.6	N/A	
881D01PRP-N140	13	161.3	N/A	
881D01PRP-N141	14	34.0	N/A	
881D01PRP-N144	13	-12.4	N/A	
881D01PRP-N145	14	382.8	N/A	
881D01QRP-N145	16	398.5	N/A	
881D01PRP-N146	13	-17.1	N/A	
881D01PRP-N147	14	6.1	N/A	
881D01PRP-N148	13	34.5	N/A	
881D01PRP-N149	14	43.3	N/A	
881D01PRP-N150	13	283.4	N/A	
881D01PRP-N151	14	136.3	N/A	
881D01PRP-N152	13	288.1	N/A	
881D01PRP-N153	14	434.0	N/A	
881D01QRP-N153	16	439.4	N/A	
881D01PRP-N154	13	156.6	N/A	
881D01PRP-N155	17	189.5	N/A	
881D01PRP-N156	17	48.6	N/A	
881D01PRP-N157	17	11.1	N/A	
881D01PRP-N158	17	330.3	N/A	
881D01PRP-N159	17	133.1	N/A	
881D01PRP-N160	14	47.9	N/A	
881D01PRP-N161	13	785.7	N/A	

195

Survey Area: D | **Survey Unit:** 881D01 | **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 and 242, Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D01QRP-N161	16	671.3	N/A	
881D01PRP-N162	14	527.0	N/A	
881D01QRP-N162	16	539.4	N/A	
881D01PRP-N163	17	180.1	N/A	
881D01PRP-N164	17	105.0	N/A	
881D01PRP-N165	17	86.2	N/A	

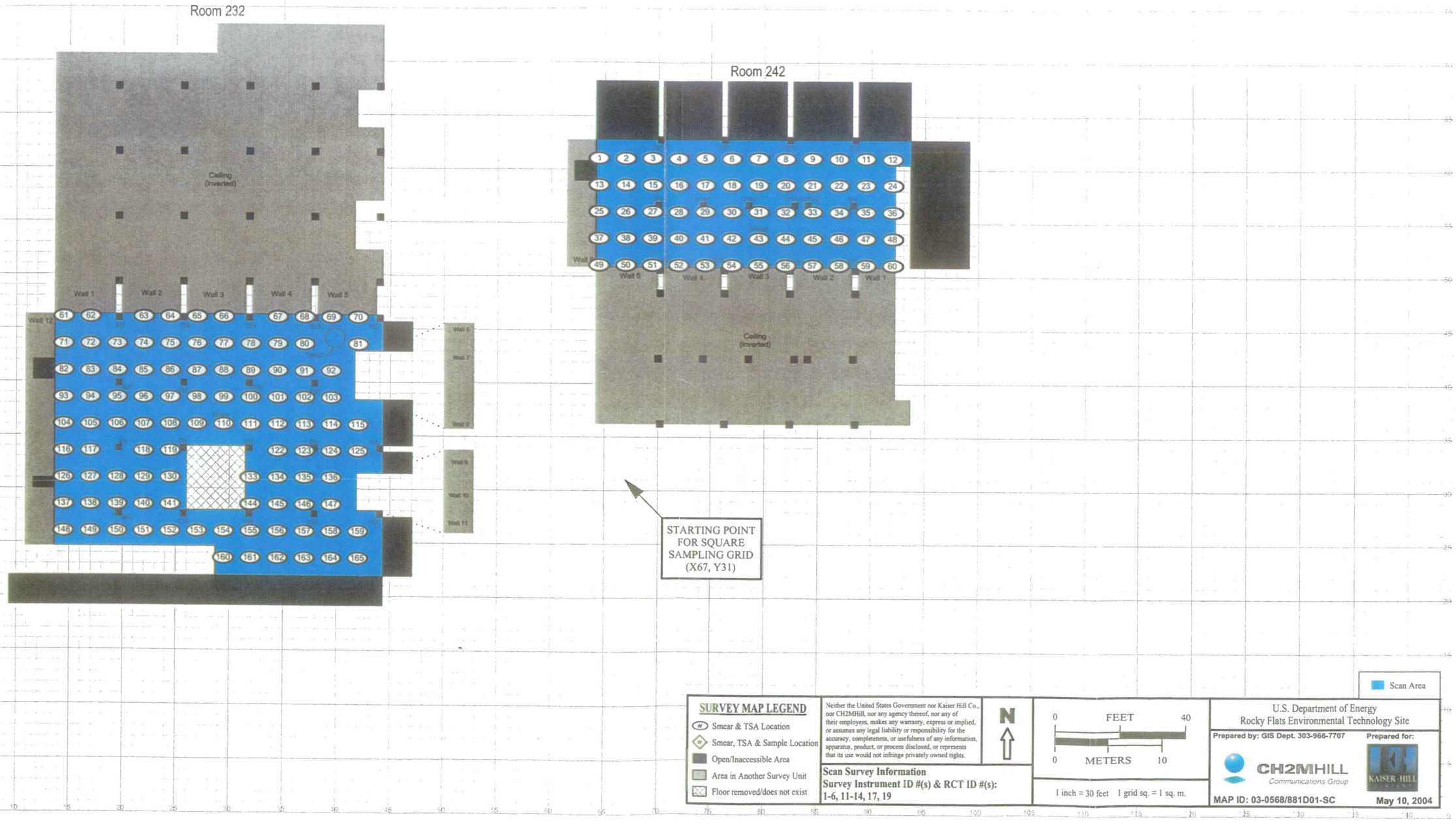
Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

Locations 120, 121, 131, 132, 142 &143 were deleted from this survey package. The floor section was removed.

196

PRE-DEMOLITION SURVEY FOR B881

Survey Area: D Survey Unit: 881D01 Classification: 1
Building: 881
Survey Unit Description: Building 881, Management Unit D, Rooms 232 & 242, Floor
Total Area: 1,030 sq. m. Total Floor Area: 1,030 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit
- Floor removed/does not exist

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1-6, 11-14, 17, 19

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group
Prepared for: KAISER-HILL COMPANY

MAP ID: 03-0568/881D01-SC
May 10, 2004

Survey Area: D	Survey Unit: 881D02	Building: 881

Description: Building 881, Management Unit D, Rooms 232 & 242, Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 16 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	44.2 dpm/100cm²
Minimum:	-26.4 dpm/100cm²
Mean:	2.9 dpm/100cm²
Standard Deviation:	18.2
QC Maximum:	29.5 dpm/100cm²
QC Minimum:	20.5 dpm/100cm²
QC Mean:	25.0 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 16 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.6 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	2.2 dpm/100cm²
Standard Deviation:	2.5
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: D | **Survey Unit:** 881D02 | **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 & 242, Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	04/21/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S
2	711447	04/21/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	S
3	712193	04/21/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
4	702467	04/25/04	Electra	3141	DP-6	09/23/04	0.216	NA	93.0	NA	T
5	702467	04/25/04	SAC-4	823	NA	10/22/04	0.330	NA	16.0	NA	R
6	711449	05/01/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	S
7	711447	05/01/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T
8	712193	05/01/04	SAC-4	823	NA	10/22/04	0.330	NA	16.0	NA	R
9	712193	05/01/04	Electra	667	DP-6	10/22/04	0.220	NA	93.0	NA	Q
10	712193	05/01/04	Electra	1134	DP-6	10/19/04	0.215	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D **Survey Unit:** 881D02 **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 & 242, Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D02PRP-N001	8	4.5	N/A	
881D02PRP-N002	8	4.5	N/A	
881D02PRP-N003	8	1.5	N/A	
881D02PRP-N004	8	4.5	N/A	
881D02PRP-N005	8	-1.5	N/A	
881D02PRP-N006	8	7.6	N/A	
881D02PRP-N007	5	-0.9	N/A	
881D02PRP-N008	8	4.5	N/A	
881D02PRP-N009	8	1.5	N/A	
881D02PRP-N010	8	1.5	N/A	
881D02PRP-N011	5	2.1	N/A	
881D02PRP-N012	5	-0.9	N/A	
881D02PRP-N013	5	2.1	N/A	
881D02PRP-N014	5	-0.9	N/A	
881D02PRP-N015	5	2.1	N/A	
881D02PRP-N016	5	5.2	N/A	
881D02PRP-N017	5	2.1	N/A	
881D02PRP-N018	5	-0.9	N/A	
881D02PRP-N019	5	2.1	N/A	

Comments:

200

Survey Area: D **Survey Unit:** 881D02 **Building:** 881

Description: Building 881, Management Unit D, Rooms 232 & 242, Walls and Ceiling

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D02PRP-N001	7	11.3	N/A	
881D02PRP-N002	7	44.2	N/A	
881D02QRP-N002	9	29.5	N/A	
881D02PRP-N003	7	11.3	N/A	
881D02PRP-N004	7	-7.5	N/A	
881D02PRP-N005	7	6.6	N/A	
881D02PRP-N006	7	1.9	N/A	
881D02PRP-N007	4	-26.4	N/A	
881D02PRP-N008	7	-21.6	N/A	
881D02PRP-N009	7	20.7	N/A	
881D02PRP-N010	7	30.1	N/A	
881D02PRP-N011	4	-17.1	N/A	
881D02PRP-N012	4	-17.1	N/A	
881D02PRP-N013	4	-3.2	N/A	
881D02PRP-N014	4	-7.9	N/A	
881D02PRP-N015	4	-7.9	N/A	
881D02PRP-N016	4	15.3	N/A	
881D02QRP-N016	9	20.5	N/A	
881D02PRP-N017	4	10.6	N/A	
881D02PRP-N018	4	15.3	N/A	
881D02PRP-N019	4	-3.2	N/A	

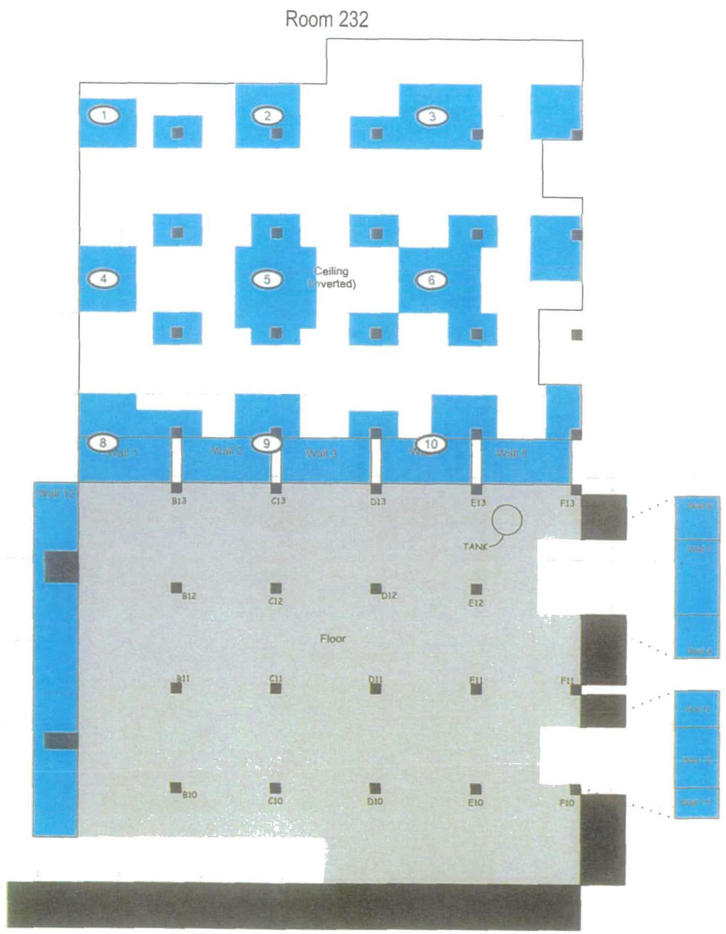
Comments:

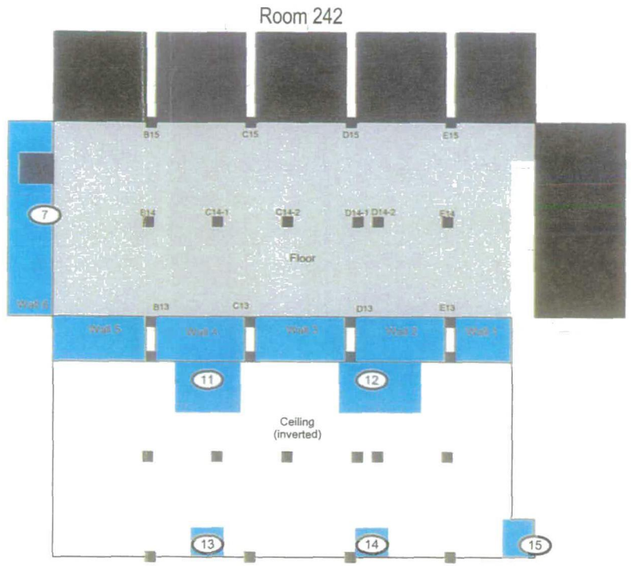
Printed On: 06/04/04 15:45

201

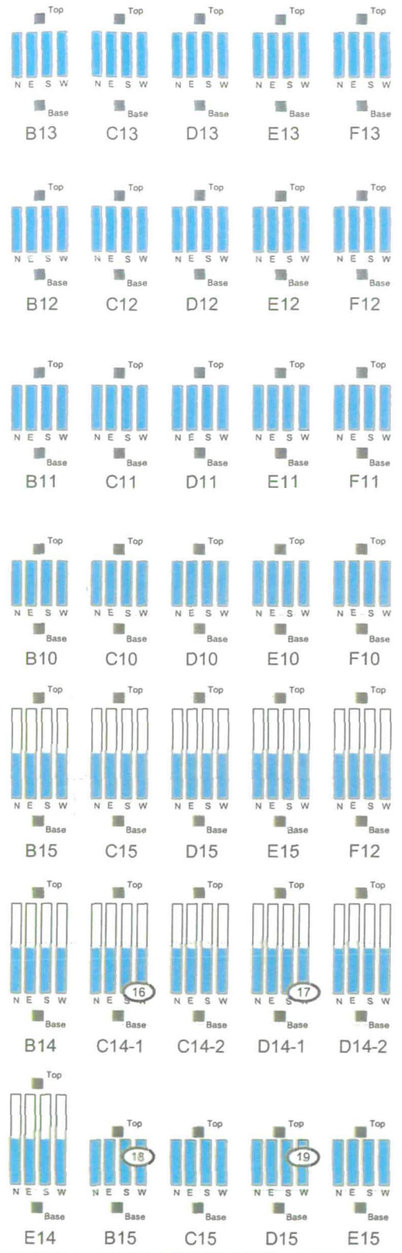
PRE-DEMOLITION SURVEY FOR B881

Survey Area: D **Survey Unit:** 881D02 **Classification:** 2
Building: 881
Survey Unit Description: Building 881, Management Unit D, Rooms 232 & 242, Walls & Ceiling
Total Area: 1,619 sq. m. **Total Floor Area:** 1,030 sq. m.
Grid Spacing for Survey Points: 10.0 m. X 10.0 m.





STARTING POINT FOR SQUARE SAMPLING GRID (X64, Y27)



Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3, 6, 10

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group

Prepared for: KAISER-HILL COMPANY

MAP ID: 03-0568/881D02-SC
May 10, 2004

202

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 124 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 7

Nbr Random Measurements Performed: 126 | Nbr Biased Measurements Performed: 4 | Nbr QC Performed: 7

Alpha

Maximum:	1,971.3 dpm/100cm²
Minimum:	-5.0 dpm/100cm²
Mean:	168.2 dpm/100cm²
Standard Deviation:	258.5
QC Maximum:	2,122.5 dpm/100cm²
QC Minimum:	178.6 dpm/100cm²
QC Mean:	910.4 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 124 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 126 | Nbr Biased Measurements Performed: 4

Alpha

Maximum:	10.3 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	2.2 dpm/100cm²
Standard Deviation:	3.0
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

203

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	02/19/04	Electra	661	DP-8	07/07/04	0.167	NA	93.0	NA	S
2	711799	02/19/04	Electra	3552	DP-6	04/16/04	0.217	NA	93.0	NA	T
4	712193	02/19/04	Electra	3552	DP-6	04/16/04	0.217	NA	93.0	NA	T
6	712193	02/19/04	SAC-4	960	NA	07/08/04	0.330	NA	16.0	NA	R
7	712193	02/19/04	Electra	1432	DP-6	08/05/04	0.212	NA	93.0	NA	T
8	712193	04/08/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	S
9	711447	04/08/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
10	712193	04/08/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	T
11	712193	04/08/04	Electra	3552	DP-6	09/30/04	0.217	NA	93.0	NA	T
12	711447	04/09/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
13	712193	04/09/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	T/S
14	711447	04/09/04	Electra	1383	DP-6	04/30/04	0.196	NA	93.0	NA	Q
15	712193	04/09/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

204

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N001	15	-1.8	N/A	
881D03PRP-N002	15	4.2	N/A	
881D03PRP-N003	15	4.2	N/A	
881D03PRP-N004	15	1.2	N/A	
881D03PRP-N005	15	1.2	N/A	
881D03PRP-N006	15	1.2	N/A	
881D03PRP-N007	15	4.2	N/A	
881D03PRP-N008	15	1.2	N/A	
881D03PRP-N009	15	-1.8	N/A	
881D03PRP-N010	15	4.2	N/A	
881D03PRP-N011	15	1.2	N/A	
881D03PRP-N012	15	4.2	N/A	
881D03PRP-N013	15	-1.8	N/A	
881D03PRP-N014	15	-1.8	N/A	
881D03PRP-N015	15	1.2	N/A	
881D03PRP-N016	15	7.3	N/A	
881D03PRP-N017	15	1.2	N/A	
881D03PRP-N018	15	4.2	N/A	
881D03PRP-N019	15	1.2	N/A	
881D03PRP-N020	15	-1.8	N/A	
881D03PRP-N021	15	4.2	N/A	
881D03PRP-N022	15	4.2	N/A	
881D03PRP-N023	6	1.2	N/A	
881D03PRP-N024	6	4.2	N/A	
881D03PRP-N025	6	4.2	N/A	
881D03PRP-N026	6	10.3	N/A	
881D03PRP-N027	6	-1.8	N/A	
881D03PRP-N028	6	7.3	N/A	
881D03PRP-N029	6	4.2	N/A	

205

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N030	6	1.2	N/A	
881D03PRP-N031	6	4.2	N/A	
881D03PRP-N032	6	1.2	N/A	
881D03PRP-N033	15	7.3	N/A	
881D03PRP-N034	15	1.2	N/A	
881D03PRP-N035	15	1.2	N/A	
881D03PRP-N036	15	-1.8	N/A	
881D03PRP-N037	15	1.2	N/A	
881D03PRP-N038	15	4.2	N/A	
881D03PRP-N039	15	7.3	N/A	
881D03PRP-N040	15	-1.8	N/A	
881D03PRP-N041	15	4.2	N/A	
881D03PRP-N042	15	-1.8	N/A	
881D03PRP-N043	15	-1.8	N/A	
881D03PRP-N044	15	1.2	N/A	
881D03PRP-N045	6	7.3	N/A	
881D03PRP-N046	6	4.2	N/A	
881D03PRP-N047	6	4.2	N/A	
881D03PRP-N048	6	4.2	N/A	
881D03PRP-N049	6	7.3	N/A	
881D03PRP-N050	6	1.2	N/A	
881D03PRP-N051	6	1.2	N/A	
881D03PRP-N052	6	4.2	N/A	
881D03PRP-N053	6	4.2	N/A	
881D03PRP-N054	6	-1.8	N/A	
881D03PRP-N055	15	-1.8	N/A	
881D03PRP-N056	15	1.2	N/A	
881D03PRP-N057	15	4.2	N/A	
881D03PRP-N058	15	1.2	N/A	

206

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N059	15	1.2	N/A	
881D03PRP-N060	15	4.2	N/A	
881D03PRP-N061	15	4.2	N/A	
881D03PRP-N062	15	10.3	N/A	
881D03PRP-N063	15	-1.8	N/A	
881D03PRP-N064	15	7.3	N/A	
881D03PRP-N065	15	-1.8	N/A	
881D03PRP-N066	15	1.2	N/A	
881D03PRP-N067	15	1.2	N/A	
881D03PRP-N068	15	1.2	N/A	
881D03PRP-N069	15	1.2	N/A	
881D03PRP-N070	15	4.2	N/A	
881D03PRP-N071	15	1.2	N/A	
881D03PRP-N072	15	-1.8	N/A	
881D03PRP-N073	15	-1.8	N/A	
881D03PRP-N074	15	-1.8	N/A	
881D03PRP-N075	15	-1.8	N/A	
881D03PRP-N076	15	4.2	N/A	
881D03PRP-N077	15	-1.8	N/A	
881D03PRP-N078	15	4.2	N/A	
881D03PRP-N079	15	4.2	N/A	
881D03PRP-N080	15	1.2	N/A	
881D03PRP-N081	15	4.2	N/A	
881D03PRP-N082	15	7.3	N/A	
881D03PRP-N085	15	4.2	N/A	
881D03PRP-N086	15	4.2	N/A	
881D03PRP-N087	15	7.3	N/A	
881D03PRP-N088	15	1.2	N/A	
881D03PRP-N089	15	-1.8	N/A	

207

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N090	15	1.2	N/A	
881D03PRP-N091	15	4.2	N/A	
881D03PRP-N092	15	1.2	N/A	
881D03PRP-N093	15	1.2	N/A	
881D03PRP-N096	15	1.2	N/A	
881D03PRP-N097	15	-1.8	N/A	
881D03PRP-N098	15	1.2	N/A	
881D03PRP-N099	15	1.2	N/A	
881D03PRP-N100	15	4.2	N/A	
881D03PRP-N101	15	1.2	N/A	
881D03PRP-N102	15	-1.8	N/A	
881D03PRP-N103	15	7.3	N/A	
881D03PRP-N104	15	-1.8	N/A	
881D03PRP-N105	15	4.2	N/A	
881D03PRP-N106	15	4.2	N/A	
881D03PRP-N107	15	1.2	N/A	
881D03PRP-N108	15	-1.8	N/A	
881D03PRP-N109	15	1.2	N/A	
881D03PRP-N110	15	1.2	N/A	
881D03PRP-N111	15	4.2	N/A	
881D03PRP-N112	15	1.2	N/A	
881D03PRP-N113	15	7.3	N/A	
881D03PRP-N114	15	-1.8	N/A	
881D03PRP-N115	15	-1.8	N/A	
881D03PRP-N116	15	1.2	N/A	
881D03PRP-N117	15	1.2	N/A	
881D03PRP-N118	15	4.2	N/A	
881D03PRP-N119	15	1.2	N/A	
881D03PRP-N120	15	10.3	N/A	

208

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N121	15	1.2	N/A	
881D03PRP-N122	15	1.2	N/A	
881D03PRP-N123	15	4.2	N/A	
881D03PRP-N124	15	1.2	N/A	
881D03PRP-N125	15	-1.8	N/A	
881D03PRP-N126	15	7.3	N/A	
881D03PRP-N127	15	4.2	N/A	
881D03PRP-N128	15	1.2	N/A	
881D03PRP-N129	15	1.2	N/A	
881D03PRP-N130	15	1.2	N/A	

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PBP-N131	15	1.2	N/A	
881D03PBP-N132	15	1.2	N/A	
881D03PBP-N133	15	-1.8	N/A	
881D03PBP-N134	15	1.2	N/A	

Comments:

309

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N001	10	5.3	N/A	
881D03PRP-N002	10	65.9	N/A	
881D03PRP-N003	10	40.7	N/A	
881D03PRP-N004	10	25.5	N/A	
881D03PRP-N005	10	111.4	N/A	
881D03PRP-N006	10	60.9	N/A	
881D03PRP-N007	10	40.7	N/A	
881D03PRP-N008	10	65.9	N/A	
881D03PRP-N009	10	65.9	N/A	
881D03PRP-N010	10	454.8	N/A	
881D03PRP-N011	10	166.9	N/A	
881D03PRP-N012	11	183.3	N/A	
881D03PRP-N013	11	91.1	N/A	
881D03PRP-N014	11	40.4	N/A	
881D03PRP-N015	11	160.2	N/A	
881D03PRP-N016	11	118.7	N/A	
881D03PRP-N017	11	114.1	N/A	
881D03PRP-N018	11	68.0	N/A	
881D03PRP-N019	11	363.0	N/A	
881D03QRP-N019	14	357.2	N/A	
881D03PRP-N020	11	86.5	N/A	
881D03PRP-N021	11	63.4	N/A	
881D03PRP-N022	11	26.6	N/A	
881D03PRP-N023	4	95.7	N/A	
881D03PRP-N024	4	81.9	N/A	
881D03PRP-N025	4	95.7	N/A	
881D03PRP-N026	4	12.7	N/A	

210

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N027	4	26.6	N/A	
881D03PRP-N028	4	77.3	N/A	
881D03PRP-N029	4	26.6	N/A	
881D03PRP-N030	4	164.8	N/A	
881D03PRP-N031	4	132.6	N/A	
881D03PRP-N032	4	187.9	N/A	
881D03QRP-N032	14	178.6	N/A	
881D03PRP-N033	10	242.7	N/A	
881D03PRP-N034	10	96.2	N/A	
881D03PRP-N035	10	252.8	N/A	
881D03PRP-N036	10	65.9	N/A	
881D03PRP-N037	10	146.7	N/A	
881D03PRP-N038	10	323.5	N/A	
881D03PRP-N039	10	35.6	N/A	
881D03PRP-N040	10	1,868.9	N/A	
881D03QRP-N040	14	1,770.4	N/A	
881D03PRP-N041	10	187.1	N/A	
881D03PRP-N042	10	40.7	N/A	
881D03PRP-N043	10	111.4	N/A	
881D03PRP-N044	10	182.1	N/A	
881D03PRP-N045	4	54.2	N/A	
881D03PRP-N046	4	100.3	N/A	
881D03PRP-N047	4	174.0	N/A	
881D03PRP-N048	4	137.2	N/A	
881D03PRP-N049	4	104.9	N/A	
881D03PRP-N050	4	160.2	N/A	
881D03PRP-N051	4	63.4	N/A	

211

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N052	2	68.0	N/A	
881D03PRP-N053	2	155.6	N/A	
881D03PRP-N054	2	151.0	N/A	
881D03PRP-N055	11	215.5	N/A	
881D03PRP-N056	11	1,971.3	N/A	
881D03QRP-N056	14	2,122.5	N/A	
881D03PRP-N057	11	104.9	N/A	
881D03PRP-N058	11	128.0	N/A	
881D03PRP-N059	11	280.0	N/A	
881D03PRP-N060	11	45.0	N/A	
881D03PRP-N061	11	128.0	N/A	
881D03PRP-N062	11	104.9	N/A	
881D03PRP-N063	11	151.0	N/A	
881D03PRP-N064	11	58.8	N/A	
881D03PRP-N065	11	197.1	N/A	
881D03PRP-N066	11	363.0	N/A	
881D03PRP-N067	10	106.3	N/A	
881D03PRP-N068	10	177.0	N/A	
881D03PRP-N069	10	838.6	N/A	
881D03QRP-N069	14	811.2	N/A	
881D03PRP-N070	10	131.6	N/A	
881D03PRP-N071	10	86.1	N/A	
881D03PRP-N072	13	121.5	N/A	
881D03PRP-N073	13	131.6	N/A	
881D03PRP-N074	13	651.8	N/A	
881D03QRP-N074	14	724.5	N/A	
881D03PRP-N075	13	237.6	N/A	

212

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N076	13	192.2	N/A	
881D03PRP-N077	13	611.4	N/A	
881D03PRP-N078	11	174.0	N/A	
881D03PRP-N079	11	58.8	N/A	
881D03PRP-N080	11	648.7	N/A	
881D03PRP-N081	11	238.6	N/A	
881D03PRP-N082	11	8.1	N/A	
881D03PRP-N085	13	65.9	N/A	
881D03PRP-N086	13	323.5	N/A	
881D03PRP-N087	13	384.1	N/A	
881D03PRP-N088	13	86.1	N/A	
881D03PRP-N089	10	86.1	N/A	
881D03PRP-N090	10	116.4	N/A	
881D03PRP-N091	10	86.1	N/A	
881D03PRP-N092	10	111.4	N/A	
881D03PRP-N093	10	0.3	N/A	
881D03PRP-N096	13	232.6	N/A	
881D03PRP-N097	13	298.2	N/A	
881D03PRP-N098	13	379.0	N/A	
881D03PRP-N099	13	86.1	N/A	
881D03PRP-N100	11	114.1	N/A	
881D03PRP-N101	11	284.6	N/A	
881D03PRP-N102	11	91.1	N/A	
881D03PRP-N103	11	109.5	N/A	
881D03PRP-N104	11	17.4	N/A	
881D03PRP-N105	13	252.8	N/A	
881D03PRP-N106	13	136.6	N/A	

213

Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PRP-N107	13	313.4	N/A	
881D03PRP-N108	13	76.0	N/A	
881D03PRP-N109	13	15.4	N/A	
881D03PRP-N110	13	81.1	N/A	
881D03PRP-N111	13	318.4	N/A	
881D03QRP-N111	14	408.2	N/A	
881D03PRP-N112	13	55.8	N/A	
881D03PRP-N113	13	20.5	N/A	
881D03PRP-N114	13	141.7	N/A	
881D03PRP-N115	13	187.1	N/A	
881D03PRP-N116	13	40.7	N/A	
881D03PRP-N117	13	20.5	N/A	
881D03PRP-N118	13	-4.8	N/A	
881D03PRP-N119	13	156.8	N/A	
881D03PRP-N120	13	10.4	N/A	
881D03PRP-N121	13	40.7	N/A	
881D03PRP-N122	13	15.4	N/A	
881D03PRP-N123	13	35.6	N/A	
881D03PRP-N124	13	76.0	N/A	
881D03PRP-N125	13	30.6	N/A	
881D03PRP-N126	13	227.5	N/A	
881D03PRP-N127	4	118.7	N/A	
881D03PRP-N128	4	114.1	N/A	
881D03PRP-N129	4	95.7	N/A	
881D03PRP-N130	4	128.0	N/A	

Biased Total Surface Activity Data Sheet

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

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Survey Area: D	Survey Unit: 881D03	Building: 881

Description: B881, MU-D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)

Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D03PBP-N131	13	10.1	N/A	
881D03PBP-N132	13	30.3	N/A	
881D03PBP-N133	13	50.5	N/A	
881D03PBP-N134	13	-5.0	N/A	

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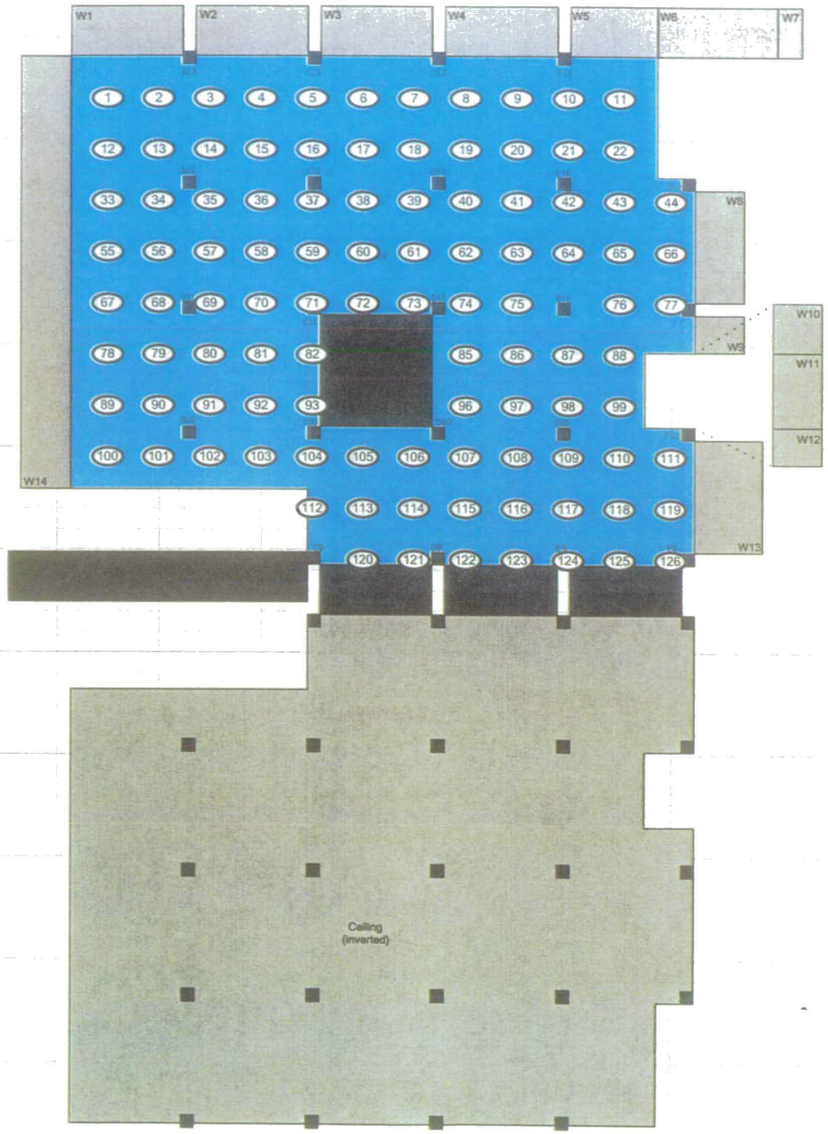
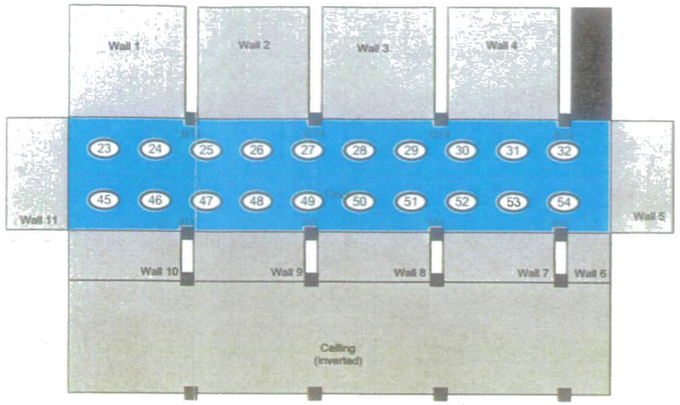
PRE-DEMOLITION SURVEY FOR B881

Survey Area: D Survey Unit: 881D03 Classification: 1
Building: 881
Survey Unit Description: Building 881, Management Unit D, Mezzanine Floor and 148 Stairwell (all remaining surfaces)
Total Area: 859 sq. m. Total Floor Area: 859 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

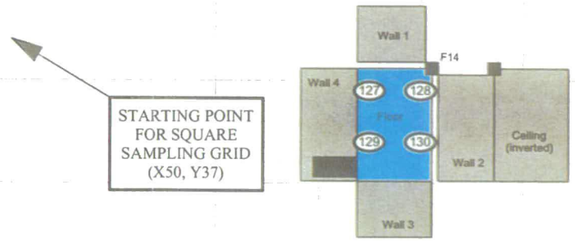
Room 313



Room 317



Rooms 312 & 312A



148 Stairwell

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 8, 9, 10, 12, 13, 14

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group KAISER-HILL COMPANY

MAP ID: 03-0568/881D03-SC April 29, 2004

Survey Area: D	Survey Unit: 881D04	Building: 881

Description: B881, MU-D, Mezzanine, Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 17
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0
Nbr QC Required: 2
Nbr QC Performed: 2

Alpha

Maximum:	552.9 dpm/100cm²
Minimum:	-4.7 dpm/100cm²
Mean:	51.8 dpm/100cm²
Standard Deviation:	129.9
QC Maximum:	535.4 dpm/100cm²
QC Minimum:	35.4 dpm/100cm²
QC Mean:	285.4 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 17
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.3 dpm/100cm²
Minimum:	-2.1 dpm/100cm²
Mean:	1.7 dpm/100cm²
Standard Deviation:	2.7
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: D	Survey Unit: 881D04	Building: 881

Description: B881, MU-D, Mezzanine, Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	02/19/04	Electra	3552	DP-6	04/16/04	0.217	NA	93.0	NA	T
2	712193	02/19/04	Electra	661	DP-8	07/07/04	0.167	NA	93.0	NA	S
3	712193	02/19/04	SAC-4	960	NA	07/08/04	0.330	NA	16.0	NA	R
4	711447	02/19/04	Electra	1432	DP-6	08/05/04	0.212	NA	93.0	NA	Q
5	512590	04/04/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
6	512590	04/04/04	Ludlum 292	147744	NA	08/12/04	0.341	NA	16.0	NA	R
7	712193	04/04/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/S
8	711799	04/04/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D	Survey Unit: 881D04	Building: 881

Description: B881, MU-D, Mezzanine, Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D04PRP-N001	5	0.9	N/A	
881D04PRP-N002	3	1.2	N/A	
881D04PRP-N003	3	7.3	N/A	
881D04PRP-N004	3	4.2	N/A	
881D04PRP-N005	6	-2.1	N/A	
881D04PRP-N006	3	4.2	N/A	
881D04PRP-N007	3	1.2	N/A	
881D04PRP-N008	3	1.2	N/A	
881D04PRP-N009	5	0.9	N/A	
881D04PRP-N010	6	-2.1	N/A	
881D04PRP-N011	3	-1.8	N/A	
881D04PRP-N012	3	4.2	N/A	
881D04PRP-N013	5	-2.0	N/A	
881D04PRP-N014	6	3.8	N/A	
881D04PRP-N015	5	0.9	N/A	
881D04PRP-N016	6	3.8	N/A	
881D04PRP-N017	5	3.7	N/A	

Comments:

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Survey Area: D | **Survey Unit:** 881D04 | **Building:** 881

Description: B881, MU-D, Mezzanine, Walls and Ceiling

Random/QC Total Surface Activity Data Sheet

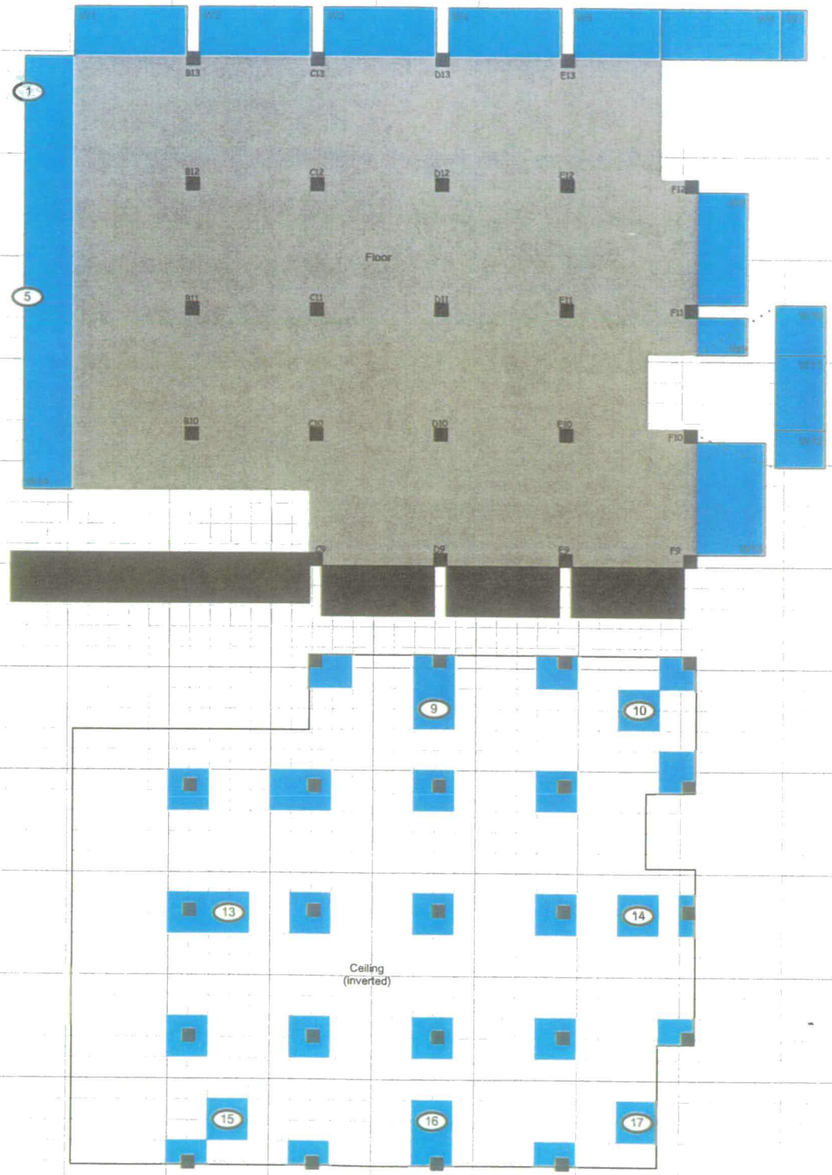
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D04PRP-N001	7	24.3	N/A	
881D04PRP-N002	1	552.9	N/A	
881D04QRP-N002	4	535.4	N/A	
881D04PRP-N003	1	46.0	N/A	
881D04PRP-N004	1	27.6	N/A	
881D04PRP-N005	7	19.6	N/A	
881D04PRP-N006	1	18.4	N/A	
881D04PRP-N007	1	4.5	N/A	
881D04PRP-N008	1	41.4	N/A	
881D04QRP-N008	4	35.4	N/A	
881D04PRP-N009	7	33.8	N/A	
881D04PRP-N010	7	38.5	N/A	
881D04PRP-N011	1	-4.7	N/A	
881D04PRP-N012	1	9.2	N/A	
881D04PRP-N013	7	14.8	N/A	
881D04PRP-N014	7	29.0	N/A	
881D04PRP-N015	7	5.3	N/A	
881D04PRP-N016	7	14.8	N/A	
881D04PRP-N017	7	5.3	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

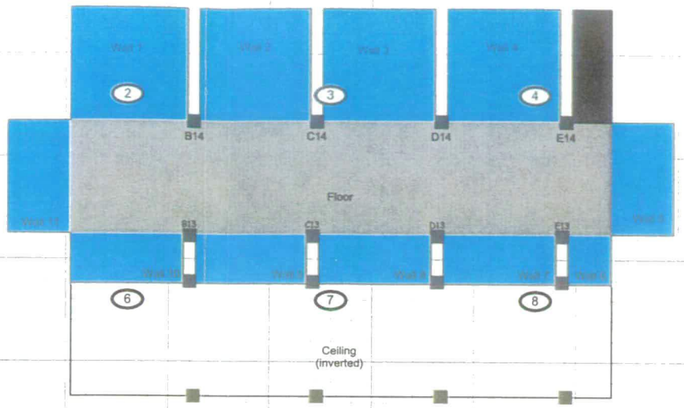
Survey Area: D Survey Unit: 881D04 Classification: 2
Building: 881
Survey Unit Description: Building 881, Management Unit D, Room 313, 317, 312 &312A
Total Area: 1,640 sq. m. Total Floor Area: 859 sq. m.
Grid Spacing for Survey Points: 10 m. X 10 m.

Room 313

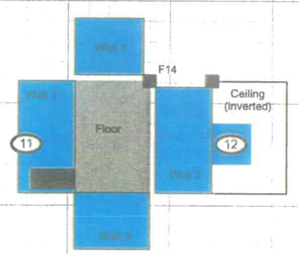


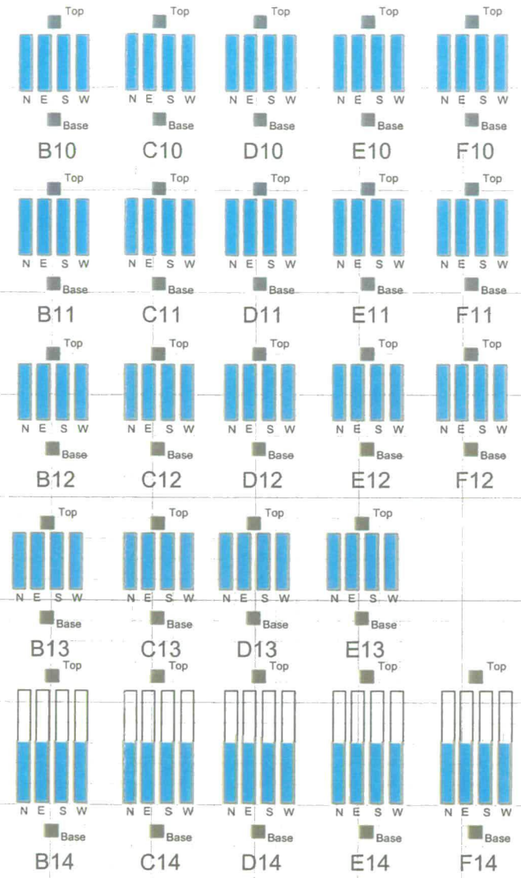
STARTING POINT FOR SQUARE SAMPLING GRID (X43, Y38)

Room 317



Rooms 312 & 312A





SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 7, 8

N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Area

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group KAISER-HILL COMPANY

MAP ID: 03-0568/881D04-SC April 29, 2004

Survey Area: D	Survey Unit: 881D05	Building: 881
Description: Building 881, Management Unit D, 149 Elevator		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 21
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0
Nbr QC Required: 2
Nbr QC Performed: 2

Alpha

Maximum:	2,127.5 dpm/100cm²
Minimum:	-15.4 dpm/100cm²
Mean:	255.2 dpm/100cm²
Standard Deviation:	473.2
QC Maximum:	1,944.0 dpm/100cm²
QC Minimum:	997.8 dpm/100cm²
QC Mean:	1,470.9 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 21
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0

Alpha

Maximum:	11.2 dpm/100cm²
Minimum:	-0.9 dpm/100cm²
Mean:	2.7 dpm/100cm²
Standard Deviation:	3.5
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

222

Survey Area: D **Survey Unit:** 881D05 **Building:** 881

Description: Building 881, Management Unit D, 149 Elevator

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	05/12/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	S
2	711447	05/12/04	Electra	290	DP-6	09/17/04	0.213	NA	93.0	NA	S
3	711449	05/15/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	T
4	711746	05/15/04	Electra	2394	DP-6	08/19/04	0.217	NA	93.0	NA	S
5	712193	05/16/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
6	712193	05/16/04	Electra	1518	DP-6	06/23/04	0.223	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

223

Survey Area: D | **Survey Unit:** 881D05 | **Building:** 881

Description: Building 881, Management Unit D, 149 Elevator

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D05PRP-N001	5	8.2	N/A	
881D05PRP-N002	5	-0.9	N/A	
881D05PRP-N003	5	2.1	N/A	
881D05PRP-N004	5	2.1	N/A	
881D05PRP-N005	5	-0.9	N/A	
881D05PRP-N006	5	5.2	N/A	
881D05PRP-N007	5	-0.9	N/A	
881D05PRP-N008	5	-0.9	N/A	
881D05PRP-N009	5	2.1	N/A	
881D05PRP-N010	5	2.1	N/A	
881D05PRP-N011	5	-0.9	N/A	
881D05PRP-N012	5	5.2	N/A	
881D05PRP-N013	5	11.2	N/A	
881D05PRP-N014	5	2.1	N/A	
881D05PRP-N015	5	-0.9	N/A	
881D05PRP-N016	5	-0.9	N/A	
881D05PRP-N017	5	8.2	N/A	
881D05PRP-N018	5	2.1	N/A	
881D05PRP-N019	5	5.2	N/A	
881D05PRP-N020	5	5.2	N/A	
881D05PRP-N021	5	2.1	N/A	

Comments:

224

Survey Area: D | **Survey Unit:** 881D05 | **Building:** 881

Description: Building 881, Management Unit D, 149 Elevator

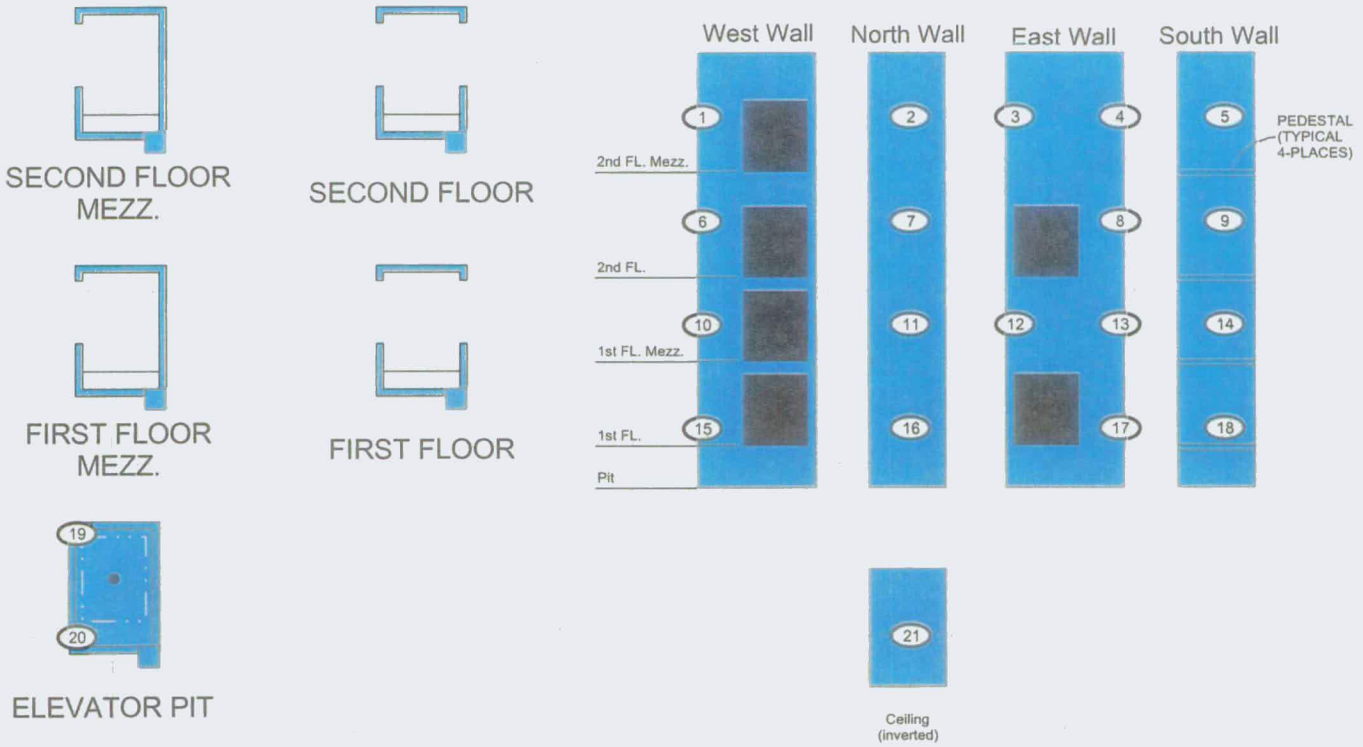
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881D05PRP-N001	3	86.0	N/A	
881D05PRP-N002	3	99.9	N/A	
881D05PRP-N003	3	35.3	N/A	
881D05PRP-N004	3	76.8	N/A	
881D05PRP-N005	3	132.1	N/A	
881D05PRP-N006	3	196.6	N/A	
881D05PRP-N007	3	2,127.5	N/A	
881D05QRP-N007	6	1,944.0	N/A	
881D05PRP-N008	3	270.4	N/A	
881D05PRP-N009	3	164.4	N/A	
881D05PRP-N010	3	12.3	N/A	
881D05PRP-N011	3	21.5	N/A	
881D05PRP-N012	3	169.0	N/A	
881D05PRP-N013	3	-15.4	N/A	
881D05PRP-N014	3	118.3	N/A	
881D05PRP-N015	3	95.2	N/A	
881D05PRP-N016	3	270.4	N/A	
881D05PRP-N017	3	90.6	N/A	
881D05PRP-N018	3	136.7	N/A	
881D05PRP-N019	3	966.2	N/A	
881D05QRP-N019	6	997.8	N/A	
881D05PRP-N020	3	205.8	N/A	
881D05PRP-N021	3	99.9	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881 CLUSTER

Survey Area: D **Survey Unit: 881D05** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit D, 149 Elevator
Total Area: 126 sq. m. **Total Floor Area: 8 sq. m.**
Grid Spacing for Survey Points: 3 m. X 3 m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 4

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881D05-SC **May 25, 2004**

226

Survey Area: G	Survey Unit: 881G01	Building: 881

Description: Building 881, MU-G, Rooms 293A, 295

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 10 | Nbr QC Required: 2

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 10 | Nbr QC Performed: 2

Alpha

Maximum:	53.9 dpm/100cm²
Minimum:	-4.4 dpm/100cm²
Mean:	16.3 dpm/100cm²
Standard Deviation:	16.9
QC Maximum:	22.5 dpm/100cm²
QC Minimum:	18.7 dpm/100cm²
QC Mean:	20.6 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 10

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 10

Alpha

Maximum:	4.8 dpm/100cm²
Minimum:	-1.2 dpm/100cm²
Mean:	0.5 dpm/100cm²
Standard Deviation:	1.6
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

227

Survey Area: G	Survey Unit: 881G01	Building: 881

Description: Building 881, MU-G, Rooms 293A, 295

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	510646	12/10/03	Electra	1260	DP-6	06/02/04	0.227	NA	48.0	NA	S
2	712448	12/10/03	Electra	1420	DP-6	05/19/04	0.222	NA	48.0	NA	S
3	711799	12/16/03	Electra	3110	DP-6	05/25/04	0.210	NA	48.0	NA	S
6	512592	01/07/04	Electra	1381	DP-6	04/15/04	0.199	NA	48.0	NA	T/Q
7	712448	01/07/04	Electra	1271	DP-6	06/22/04	0.227	NA	48.0	NA	T/Q
8	512592	01/08/04	Electra	1417	DP-6	06/02/04	0.208	NA	48.0	NA	T
9	512590	01/08/04	Electra	667	DP-8	06/10/04	0.168	NA	48.0	NA	S
11	511390	01/08/04	Electra	668	DP-8	06/22/04	0.157	NA	48.0	NA	S
12	512590	01/08/04	Electra	663	DP-8	06/04/04	0.147	NA	48.0	NA	S
13	511390	01/12/04	SAC-4	924	NA	04/27/04	0.333	NA	10.0	NA	R
14	511390	01/12/04	SAC-4	966	NA	04/23/04	0.333	NA	10.0	NA	R
15	511390	01/12/04	SAC-4	770	NA	03/17/04	0.333	NA	10.0	NA	R
16	511390	01/12/04	SAC-4	830	NA	04/22/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G	Survey Unit: 881G01	Building: 881

Description: Building 881, MU-G, Rooms 293A, 295

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G01PRP-N001	13	-0.6	N/A	
881G01PRP-N002	14	4.2	N/A	
881G01PRP-N003	15	1.8	N/A	
881G01PRP-N004	16	-0.6	N/A	
881G01PRP-N005	13	-0.6	N/A	
881G01PRP-N006	14	-0.3	N/A	
881G01PRP-N007	15	0.3	N/A	
881G01PRP-N008	16	-0.6	N/A	
881G01PRP-N009	13	-0.6	N/A	
881G01PRP-N010	14	-0.3	N/A	
881G01PRP-N011	15	-1.2	N/A	
881G01PRP-N012	16	-0.6	N/A	
881G01PRP-N013	13	0.9	N/A	
881G01PRP-N014	14	1.2	N/A	
881G01PRP-N015	15	4.8	N/A	
881G01PRP-N016	16	-0.6	N/A	
881G01PRP-N017	13	-0.6	N/A	
881G01PRP-N018	14	-0.3	N/A	
881G01PRP-N019	15	1.8	N/A	

Survey Area: G	Survey Unit: 881G01	Building: 881

Description: Building 881, MU-G, Rooms 293A, 295

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G01PBP-N020	16	-0.6	N/A	
881G01PBP-N021	13	-0.6	N/A	
881G01PBP-N022	14	1.2	N/A	
881G01PBP-N023	15	3.3	N/A	
881G01PBP-N024	16	-0.6	N/A	
881G01PBP-N025	13	-0.6	N/A	
881G01PBP-N026	14	1.2	N/A	
881G01PBP-N027	15	3.3	N/A	
881G01PBP-N028	16	-0.6	N/A	
881G01PBP-N029	13	0.9	N/A	

Comments:

230

Survey Area: G	Survey Unit: 881G01	Building: 881

Description: Building 881, MU-G, Rooms 293A, 295

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G01PRP-N001	7	7.0	N/A	
881G01PRP-N002	6	6.1	N/A	
881G01PRP-N003	7	22.0	N/A	
881G01PRP-N004	6	22.7	N/A	
881G01QRP-N004	7	18.7	N/A	
881G01PRP-N005	6	6.1	N/A	
881G01PRP-N006	7	15.8	N/A	
881G01PRP-N007	7	7.0	N/A	
881G01PRP-N008	6	36.2	N/A	
881G01PRP-N009	6	9.1	N/A	
881G01PRP-N010	6	-1.0	N/A	
881G01PRP-N011	7	10.1	N/A	
881G01PRP-N012	6	36.2	N/A	
881G01PRP-N013	6	39.2	N/A	
881G01PRP-N014	7	18.9	N/A	
881G01PRP-N015	7	13.2	N/A	
881G01PRP-N016	6	2.6	N/A	
881G01PRP-N017	6	-1.0	N/A	
881G01PRP-N018	6	2.6	N/A	
881G01PRP-N019	7	7.0	N/A	
881G01QRP-N020	6	22.5	N/A	

Survey Area: G	Survey Unit: 881G01	Building: 881

Description: Building 881, MU-G, Rooms 293A, 295

Biased Total Surface Activity Data Sheet

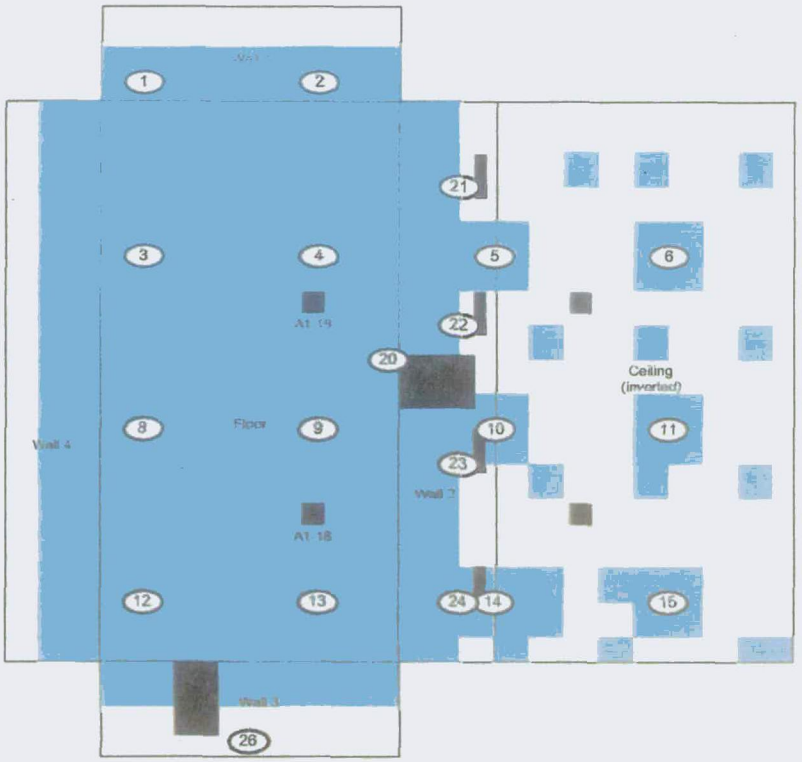
Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G01PBP-N020	7	38.9	N/A	
881G01PBP-N021	6	9.2	N/A	
881G01PBP-N022	6	-4.4	N/A	
881G01PBP-N023	7	15.5	N/A	
881G01PBP-N024	6	2.7	N/A	
881G01PBP-N025	6	-4.4	N/A	
881G01PBP-N026	7	6.7	N/A	
881G01PBP-N027	7	42.0	N/A	
881G01PBP-N028	7	53.9	N/A	
881G01PBP-N029	6	52.9	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

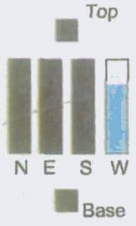
Survey Area: G **Survey Unit: 881G01** **Classification: 2**
Building: 881
Survey Unit Description: Building 881 Management Unit G, Rooms 295 & 293A
Total Area: 494 sq. m. **Total Floor Area: 156 sq. m.**
Grid Spacing for Survey Points: 5m. X 5m.

Room 295



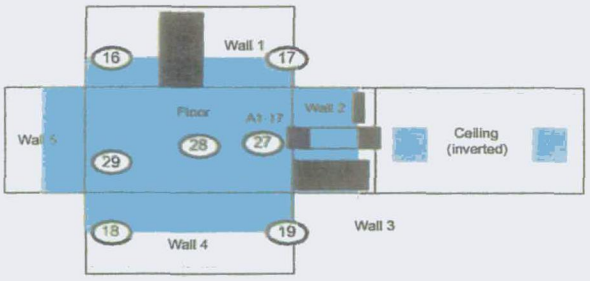
A1-19

A1-18



A1-17

Room 293A



STARTING POINT FOR SQUARE SAMPLING GRID (X3, Y6)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 8, 9, 11, 12

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER-HILL

MAP ID: 03-0568/881G01-SC Feb. 12, 2004

Survey Area: G	Survey Unit: 881G02	Building: 881
Description: Building 881, Management Unit G Mezzanine		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 10 | Nbr QC Required: 2

Nbr Random Measurements Performed: 18 | Nbr Biased Measurements Performed: 10 | Nbr QC Performed: 2

Alpha

Maximum:	600.6 dpm/100cm²
Minimum:	-12.9 dpm/100cm²
Mean:	48.0 dpm/100cm²
Standard Deviation:	113.5
QC Maximum:	690.1 dpm/100cm²
QC Minimum:	39.1 dpm/100cm²
QC Mean:	364.6 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 10

Nbr Random Measurements Performed: 18 | Nbr Biased Measurements Performed: 10

Alpha

Maximum:	3.9 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	0.9 dpm/100cm²
Standard Deviation:	1.4
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: G **Survey Unit:** 881G02 **Building:** 881

Description: Building 881, Management Unit G Mezzanine

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	02/16/04	Electra	3552	DP-6	04/16/04	0.217	NA	48.0	NA	T
2	712193	02/16/04	Electra	661	DP-6	07/07/04	0.167	NA	48.0	NA	T/S
3	712193	02/16/04	SAC-4	960	NA	07/08/04	0.330	NA	16.0	NA	R
4	712193	02/17/04	Electra	3552	DP-6	04/16/04	0.217	NA	48.0	NA	T
5	711447	02/17/04	Electra	661	DP-6	07/07/04	0.167	NA	48.0	NA	T/S
6	711447	02/17/04	Electra	1432	DP-6	08/05/04	0.212	NA	48.0	NA	T/Q
7	712193	02/17/04	SAC-4	960	NA	07/08/04	0.330	NA	16.0	NA	R
8	712193	02/17/04	Electra	3552	DP-6	04/16/04	0.217	NA	48.0	NA	I

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G	Survey Unit: 881G02	Building: 881
Description: Building 881, Management Unit G Mezzanine		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G02PRP-N001	3	1.2	N/A	
881G02PRP-N002	3	1.2	N/A	
881G02PRP-N003	3	-0.3	N/A	
881G02PRP-N004	3	-0.3	N/A	
881G02PRP-N005	3	1.2	N/A	
881G02PRP-N006	3	-0.3	N/A	
881G02PRP-N007	3	-0.3	N/A	
881G02PRP-N008	3	-0.3	N/A	
881G02PRP-N009	3	-0.3	N/A	
881G02PRP-N010	3	1.2	N/A	
881G02PRP-N011	3	1.2	N/A	
881G02PRP-N012	3	-1.8	N/A	
881G02PRP-N013	3	-0.3	N/A	
881G02PRP-N014	3	2.7	N/A	
881G02PRP-N015	3	-0.3	N/A	
881G02PRP-N016	3	-0.3	N/A	
881G02PRP-N017	3	-0.3	N/A	
881G02PRP-N018	3	-0.3	N/A	

Survey Area: G	Survey Unit: 881G02	Building: 881
Description: Building 881, Management Unit G Mezzanine		

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G02PBP-N019	7	2.4	N/A	
881G02PBP-N020	7	3.9	N/A	
881G02PBP-N021	7	2.4	N/A	
881G02PBP-N022	7	2.4	N/A	
881G02PBP-N023	7	0.9	N/A	
881G02PBP-N024	7	0.9	N/A	
881G02PBP-N025	7	3.9	N/A	
881G02PBP-N026	7	0.9	N/A	
881G02PBP-N027	7	0.9	N/A	
881G02PBP-N028	7	2.4	N/A	

Comments: The initial removable Net Alpha activity for location was 92.1 dpm/100cm2. This area was deconned and re-surveyed, Re-survey results are reported.

Survey Area: G **Survey Unit:** 881G02 **Building:** 881

Description: Building 881, Management Unit G Mezzanine

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G02PRP-N001	1	14.8	N/A	
881G02PRP-N002	1	-12.9	N/A	
881G02PRP-N003	1	20.8	N/A	
881G02PRP-N004	1	20.8	N/A	
881G02PRP-N005	1	7.4	N/A	
881G02PRP-N006	1	48.9	N/A	
881G02PRP-N007	1	2.3	N/A	
881G02PRP-N008	1	8.3	N/A	
881G02PRP-N009	1	174.2	N/A	
881G02PRP-N010	1	39.2	N/A	
881G02QRP-N010	6	39.1	N/A	
881G02PRP-N011	1	24.0	N/A	
881G02PRP-N012	1	14.8	N/A	
881G02PRP-N013	1	-12.9	N/A	
881G02PRP-N014	1	42.4	N/A	
881G02PRP-N015	1	20.8	N/A	
881G02PRP-N016	1	-6.9	N/A	
881G02PRP-N017	1	24.0	N/A	
881G02PRP-N018	1	5.6	N/A	
881G02QRP-N026	6	690.1	N/A	

Survey Area: G	Survey Unit: 881G02	Building: 881

Description: Building 881, Management Unit G Mezzanine

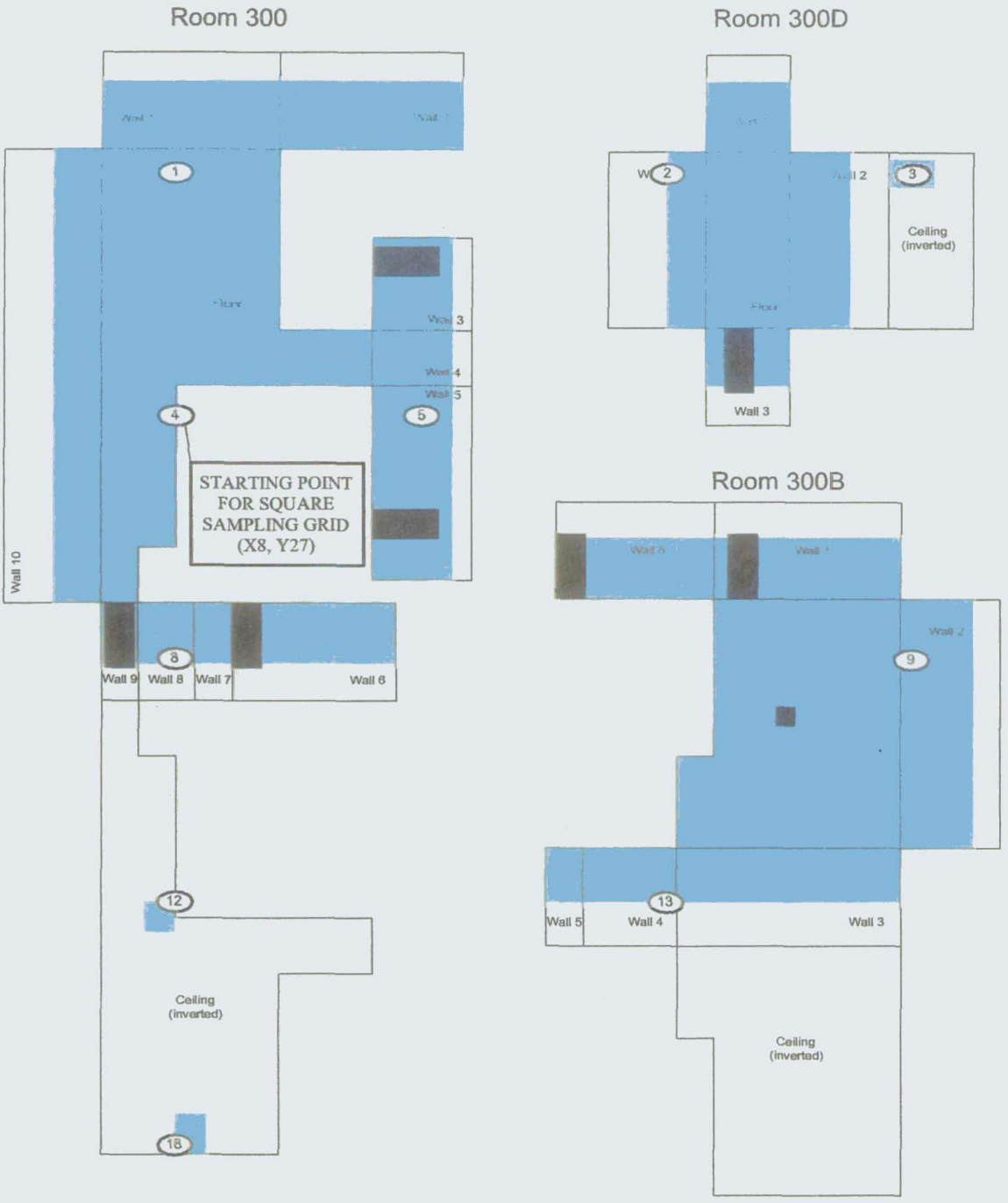
Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G02IBP-N019	8	18.9	N/A	
881G02PBP-N020	4	37.0	N/A	
881G02PBP-N021	4	35.2	N/A	
881G02PBP-N022	4	41.6	N/A	
881G02PBP-N023	4	24.6	N/A	
881G02PBP-N024	4	52.2	N/A	
881G02PBP-N025	4	9.4	N/A	
881G02PBP-N026	4	600.6	N/A	
881G02PBP-N027	4	49.0	N/A	
881G02PBP-N028	4	33.8	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2. The initial Alpha net Activity for location 19 was 5,109.6 dpm/100cm2. This location was deconned and re-surveyed. Re-survey results are reported. No further investigation is required.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G02** **Classification: 2**
Building: 881
Survey Unit Description: Building 881 Management Unit G, Mezzanine
Total Area: 889 sq. m. **Total Floor Area: 333 sq. m.**
Grid Spacing for Survey Points: 8m. X 8m.



Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 5

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

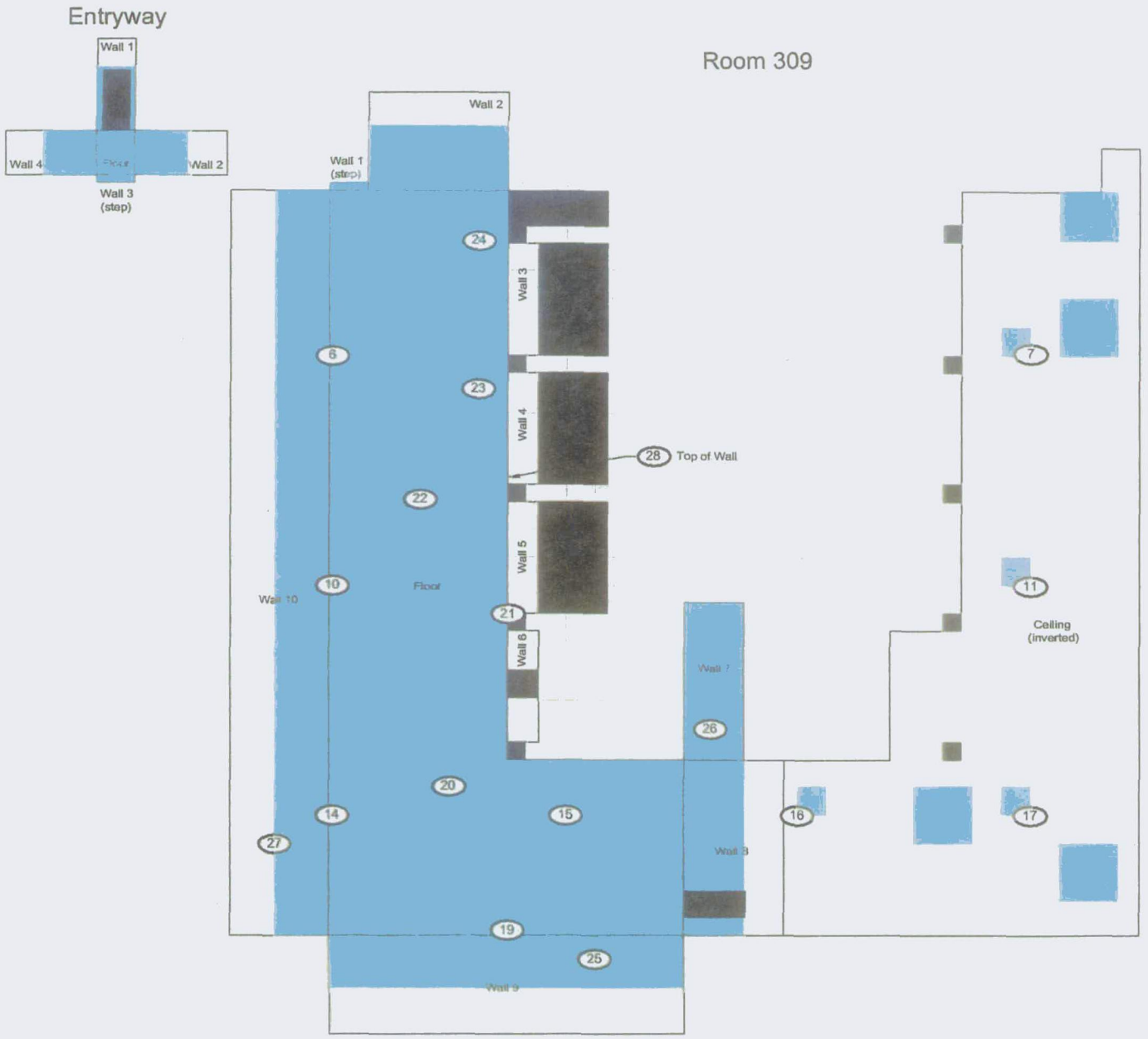
KAISER-HILL

MAP ID: 03-0568/Rm300-SC **Feb. 24, 2004**

240

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G02** **Classification: 2**
Building: 881
Survey Unit Description: Building 881 Management Unit G, Mezzanine
Total Area: 889 sq. m. ***Total Floor Area: 333 sq. m.***
Grid Spacing for Survey Points: 8m. X 8m.



Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 5

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/Rm309-SC **Feb. 24, 2004**

Survey Area: G **Survey Unit:** 881G03 **Building:** 881

Description: B881 Management Unit G, 881 - 883 Tunnel Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 21 Nbr Biased Measurements Required: 0 Nbr QC Required: 2

Nbr Random Measurements Performed: 23 Nbr Biased Measurements Performed: 0 Nbr QC Performed: 2

Alpha

Maximum:	1,146.9 dpm/100cm²
Minimum:	13.2 dpm/100cm²
Mean:	116.6 dpm/100cm²
Standard Deviation:	229.6
QC Maximum:	1,128.0 dpm/100cm²
QC Minimum:	170.6 dpm/100cm²
QC Mean:	649.3 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 21 Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 23 Nbr Biased Measurements Performed: 0

Alpha

Maximum:	10.3 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	2.5 dpm/100cm²
Standard Deviation:	3.8
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 Nbr Biased Required: 0

Nbr Random Collected: 0 Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: G | **Survey Unit:** 881G03 | **Building:** 881

Description: B881 Management Unit G, 881 - 883 Tunnel Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	03/05/04	Electra	662	DP-8	03/15/04	0.217	NA	93.0	NA	T/S
2	711799	03/05/04	Electra	663	DP-8	06/04/04	0.147	NA	93.0	NA	T/S
3	711447	03/05/04	Electra	667	DP-6	06/10/04	0.168	NA	93.0	NA	T/S
4	712193	03/05/04	Electra	2404	DP-6	04/16/04	0.211	NA	93.0	NA	T/Q
5	712193	03/05/04	SAC-4	961	NA	03/30/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G | **Survey Unit:** 881G03 | **Building:** 881

Description: B881 Management Unit G, 881 - 883 Tunnel Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G03PRP-N001	5	1.2	N/A	
881G03PRP-N002	5	-1.8	N/A	
881G03PRP-N003	5	4.2	N/A	
881G03PRP-N004	5	4.2	N/A	
881G03PRP-N005	5	10.3	N/A	
881G03PRP-N006	5	4.2	N/A	
881G03PRP-N007	5	7.3	N/A	
881G03PRP-N008	5	1.2	N/A	
881G03PRP-N009	5	-1.8	N/A	
881G03PRP-N010	5	-1.8	N/A	
881G03PRP-N011	5	1.2	N/A	
881G03PRP-N012	5	10.3	N/A	
881G03PRP-N013	5	4.2	N/A	
881G03PRP-N014	5	4.2	N/A	
881G03PRP-N015	5	1.2	N/A	
881G03PRP-N016	5	-1.8	N/A	
881G03PRP-N017	5	7.3	N/A	
881G03PRP-N018	5	-1.8	N/A	
881G03PRP-N019	5	1.2	N/A	
881G03PRP-N020	5	1.2	N/A	
881G03PRP-N021	5	4.2	N/A	
881G03PRP-N022	5	1.2	N/A	
881G03PRP-N023	5	-1.8	N/A	

Comments:

Survey Area: G	Survey Unit: 881G03	Building: 881
Description: B881 Management Unit G, 881 - 883 Tunnel Floor		

Random/QC Total Surface Activity Data Sheet

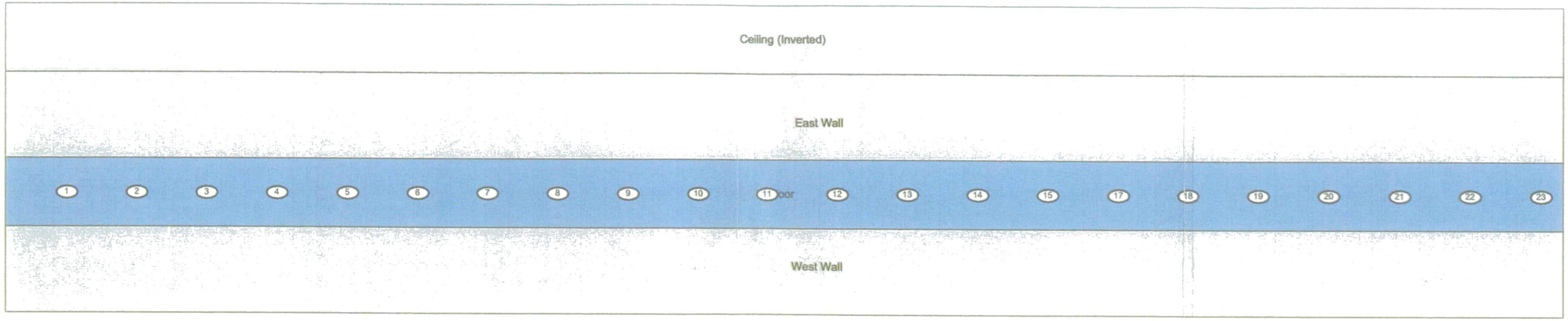
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G03PRP-N001	1	17.8	N/A	
881G03PRP-N002	1	31.7	N/A	
881G03PRP-N003	1	13.2	N/A	
881G03PRP-N004	1	110.0	N/A	
881G03PRP-N005	1	59.3	N/A	
881G03PRP-N006	1	82.3	N/A	
881G03PRP-N007	1	100.8	N/A	
881G03PRP-N008	1	17.8	N/A	
881G03PRP-N009	1	17.8	N/A	
881G03PRP-N010	1	87.0	N/A	
881G03PRP-N011	1	59.3	N/A	
881G03PRP-N012	1	169.9	N/A	
881G03PRP-N013	1	59.3	N/A	
881G03PRP-N014	1	183.7	N/A	
881G03QRP-N014	4	170.6	N/A	
881G03PRP-N015	1	40.9	N/A	
881G03PRP-N016	1	87.0	N/A	
881G03PRP-N017	1	68.5	N/A	
881G03PRP-N018	1	100.8	N/A	
881G03PRP-N019	1	22.4	N/A	
881G03PRP-N020	1	63.9	N/A	
881G03PRP-N021	1	128.4	N/A	
881G03PRP-N022	1	13.2	N/A	
881G03PRP-N023	1	1,146.9	N/A	
881G03QRP-N023	4	1,128.0	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G03** **Classification: 1**
Building: 881 & 883
Survey Unit Description: 881-883 Access Tunnel Interior Floors
Total Area: 135 sq. m. **Floor Area: 135 sq. m.**
Grid Spacing for Survey Points: 2.5m X 2.5m

B881 - B883 Access Tunnel



North Entrance

South Entrance

STARTING POINT FOR SQUARE SAMPLING GRID (X26, Y11)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 18
0 METERS 8

1 inch = 12 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881AccTun1-SC **Mar. 17, 2003**

Survey Area: G **Survey Unit:** 881G04 **Building:** 881

Description: Building 881 MU-G 881 - 883 Tunnel Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 Nbr Biased Measurements Required: 0 Nbr QC Required: 2

Nbr Random Measurements Performed: 22 Nbr Biased Measurements Performed: 0 Nbr QC Performed: 2

Alpha

Maximum:	26.4 dpm/100cm²
Minimum:	-10.5 dpm/100cm²
Mean:	5.5 dpm/100cm²
Standard Deviation:	10.2
QC Maximum:	28.4 dpm/100cm²
QC Minimum:	23.7 dpm/100cm²
QC Mean:	26.1 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 22 Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.3 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	1.8 dpm/100cm²
Standard Deviation:	2.8
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 Nbr Biased Required: 0

Nbr Random Collected: 0 Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Printed On: 06/04

Page: 1

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Survey Area: G	Survey Unit: 881G04	Building: 881

Description: Building 881 MU-G 881 - 883 Tunnel Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	03/05/04	Electra	663	DP-8	06/04/04	0.147	NA	93.0	NA	T/S
2	711447	03/05/04	Electra	667	DP-8	06/10/04	0.168	NA	93.0	NA	T/S
3	712193	03/05/04	Electra	2404	DP-6	04/16/04	0.211	NA	93.0	NA	T/Q/S
4	711799	03/05/04	Electra	662	DP-6	03/15/04	0.217	NA	93.0	NA	T
5	712193	03/05/04	SAC-4	961	NA	03/30/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G | **Survey Unit:** 881G04 | **Building:** 881

Description: Building 881 MU-G 881 - 883 Tunnel Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G04PRP-N001	5	1.2	N/A	
881G04PRP-N002	5	1.2	N/A	
881G04PRP-N003	5	-1.8	N/A	
881G04PRP-N004	5	4.2	N/A	
881G04PRP-N005	5	1.2	N/A	
881G04PRP-N006	5	7.3	N/A	
881G04PRP-N007	5	-1.8	N/A	
881G04PRP-N008	5	-1.8	N/A	
881G04PRP-N009	5	1.2	N/A	
881G04PRP-N010	5	4.2	N/A	
881G04PRP-N011	5	4.2	N/A	
881G04PRP-N012	5	1.2	N/A	
881G04PRP-N013	5	1.2	N/A	
881G04PRP-N014	5	7.3	N/A	
881G04PRP-N015	5	1.2	N/A	
881G04PRP-N016	5	4.2	N/A	
881G04PRP-N017	5	-1.8	N/A	
881G04PRP-N018	5	4.2	N/A	
881G04PRP-N019	5	1.2	N/A	
881G04PRP-N020	5	1.2	N/A	
881G04PRP-N021	5	-1.8	N/A	
881G04PRP-N022	5	1.2	N/A	

Comments:

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Survey Area: G | **Survey Unit:** 881G04 | **Building:** 881

Description: Building 881 MU-G 881 - 883 Tunnel Walls and Ceiling

Random/QC Total Surface Activity Data Sheet

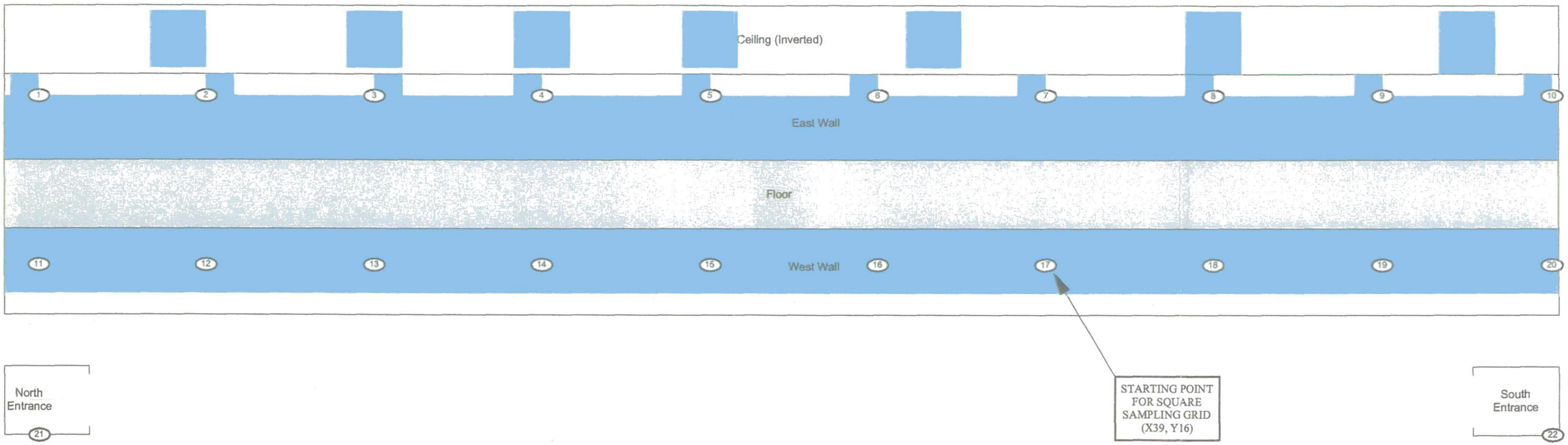
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G04QRP-N001	3	23.7	N/A	
881G04PRP-N001	4	21.8	N/A	
881G04PRP-N002	4	8.0	N/A	
881G04PRP-N003	4	26.4	N/A	
881G04PRP-N004	4	12.6	N/A	
881G04PRP-N005	4	8.0	N/A	
881G04PRP-N006	4	3.4	N/A	
881G04PRP-N007	4	-1.3	N/A	
881G04PRP-N008	4	17.2	N/A	
881G04PRP-N009	4	12.6	N/A	
881G04PRP-N010	4	-1.3	N/A	
881G04PRP-N011	4	3.4	N/A	
881G04PRP-N012	4	-5.9	N/A	
881G04PRP-N013	4	-5.9	N/A	
881G04PRP-N014	4	-5.9	N/A	
881G04PRP-N015	4	8.0	N/A	
881G04QRP-N016	3	28.4	N/A	
881G04PRP-N016	4	21.8	N/A	
881G04PRP-N017	4	8.0	N/A	
881G04PRP-N018	4	-1.3	N/A	
881G04PRP-N019	4	-5.9	N/A	
881G04PRP-N020	4	-1.3	N/A	
881G04PRP-N021	4	-10.5	N/A	
881G04PRP-N022	4	8.0	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G04** **Classification: 2**
Building: 881 & 883
Survey Unit Description: 881-883 Access Tunnel Interior, Walls, & Ceilings
Total Area: 624 sq. m. **Floor Area: 135 sq. m.**
Grid Spacing for Survey Points: 6m X 6m

B881 - B883 Access Tunnel



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 18
0 METERS 8

1 inch = 12 feet 1 grid sq. = 1 sq. m.

Scan Area

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL

MAP ID: 03-0568/881AccTun2-SC **Mar. 17, 2003**

Survey Area: G | **Survey Unit:** 881G05 | **Building:** 881

Description: Building 881 MU-G Room 292 Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	591.0 dpm/100cm²
Minimum:	-9.9 dpm/100cm²
Mean:	57.8 dpm/100cm²
Standard Deviation:	131.3
QC Maximum:	541.7 dpm/100cm²
QC Minimum:	81.1 dpm/100cm²
QC Mean:	311.4 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.6 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	3.1 dpm/100cm²
Standard Deviation:	2.9
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: G | **Survey Unit:** 881G05 | **Building:** 881

Description: Building 881 MU-G Room 292 Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	04/13/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	S
2	711447	04/13/04	Electra	1290	DP-6	05/17/04	0.223	NA	93.0	NA	T/S
3	711447	04/13/04	SAC-4	1171	NA	10/08/04	0.330	NA	16.0	NA	R
4	712193	04/13/04	Electra	1242	DP-6	07/13/04	0.228	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G | **Survey Unit:** 881G05 | **Building:** 881

Description: Building 881 MU-G Room 292 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G05PRP-N001	3	4.5	N/A	
881G05PRP-N002	3	4.5	N/A	
881G05PRP-N003	3	1.5	N/A	
881G05PRP-N004	3	4.5	N/A	
881G05PRP-N005	3	-1.5	N/A	
881G05PRP-N006	3	4.5	N/A	
881G05PRP-N007	3	7.6	N/A	
881G05PRP-N008	3	7.6	N/A	
881G05PRP-N009	3	4.5	N/A	
881G05PRP-N010	3	1.5	N/A	
881G05PRP-N011	3	1.5	N/A	
881G05PRP-N012	3	4.5	N/A	
881G05PRP-N013	3	1.5	N/A	
881G05PRP-N014	3	-1.5	N/A	
881G05PRP-N015	3	-1.5	N/A	
881G05PRP-N016	3	1.5	N/A	
881G05PRP-N017	3	4.5	N/A	
881G05PRP-N018	3	7.6	N/A	
881G05PRP-N019	3	1.5	N/A	

Comments:

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Survey Area: G **Survey Unit:** 881G05 **Building:** 881

Description: Building 881 MU-G Room 292 Floor

Random/QC Total Surface Activity Data Sheet

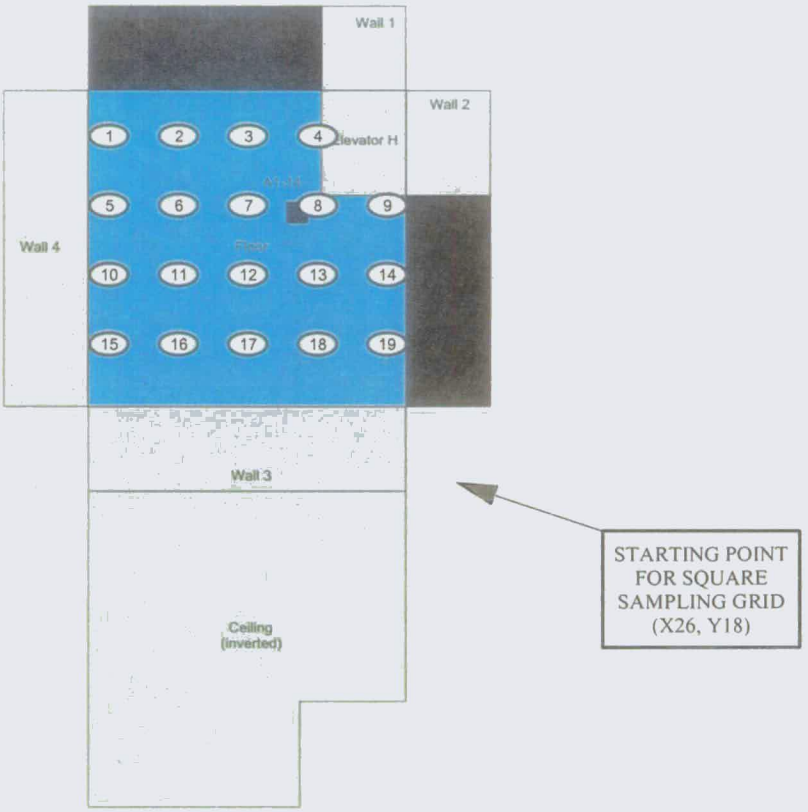
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G05PRP-N001	2	8.0	N/A	
881G05PRP-N002	2	-5.4	N/A	
881G05PRP-N003	2	-0.9	N/A	
881G05PRP-N004	2	17.0	N/A	
881G05PRP-N005	2	21.5	N/A	
881G05PRP-N006	2	17.0	N/A	
881G05PRP-N007	2	591.0	N/A	
881G05QRP-N007	4	541.7	N/A	
881G05PRP-N008	2	43.9	N/A	
881G05PRP-N009	2	-9.9	N/A	
881G05PRP-N010	2	17.0	N/A	
881G05PRP-N011	2	39.4	N/A	
881G05PRP-N012	2	75.3	N/A	
881G05QRP-N012	4	81.1	N/A	
881G05PRP-N013	2	66.3	N/A	
881G05PRP-N014	2	17.0	N/A	
881G05PRP-N015	2	43.9	N/A	
881G05PRP-N016	2	26.0	N/A	
881G05PRP-N017	2	57.4	N/A	
881G05PRP-N018	2	21.5	N/A	
881G05PRP-N019	2	52.9	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G05** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Room 292, Floor
Total Area: 76 sq. m. **Total Floor Area: 76 sq. m.**
Grid Spacing for Survey Points: 2 m. X 2 m.

Room 292



Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881G05-SC **May 3, 2004**

256

Survey Area: G | **Survey Unit:** 881G06 | **Building:** 881

Description: Building 881MU-G Room 292 Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 17 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	169.0 dpm/100cm²
Minimum:	-24.0 dpm/100cm²
Mean:	14.2 dpm/100cm²
Standard Deviation:	44.3
QC Maximum:	38.1 dpm/100cm²
QC Minimum:	20.2 dpm/100cm²
QC Mean:	29.2 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 17 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.6 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	3.5 dpm/100cm²
Standard Deviation:	2.8
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: G	Survey Unit: 881G06	Building: 881

Description: Building 881MU-G Room 292 Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	04/13/04	Electra	1242	DP-6	07/13/04	0.228	NA	93.0	NA	T/S
2	711447	04/13/04	Electra	1290	DP-6	05/17/04	0.223	NA	93.0	NA	Q/S
3	711447	04/13/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	S
4	712193	04/13/04	SAC-4	1171	NA	10/08/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G	Survey Unit: 881G06	Building: 881

Description: Building 881MU-G Room 292 Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G06PRP-N001	4	4.5	N/A	
881G06PRP-N003	4	7.6	N/A	
881G06PRP-N004	4	4.5	N/A	
881G06PRP-N005	4	1.5	N/A	
881G06PRP-N006	4	7.6	N/A	
881G06PRP-N008	4	-1.5	N/A	
881G06PRP-N010	4	4.5	N/A	
881G06PRP-N011	4	1.5	N/A	
881G06PRP-N012	4	1.5	N/A	
881G06PRP-N013	4	4.5	N/A	
881G06PRP-N014	4	1.5	N/A	
881G06PRP-N015	4	4.5	N/A	
881G06PRP-N016	4	4.5	N/A	
881G06PRP-N017	4	1.5	N/A	
881G06PRP-N018	4	7.6	N/A	
881G06PRP-N019	4	-1.5	N/A	
881G06PRP-N020	4	4.5	N/A	

Comments:

Survey Area: G **Survey Unit:** 881G06 **Building:** 881

Description: Building 881MU-G Room 292 Walls and Ceiling

Random/QC Total Surface Activity Data Sheet

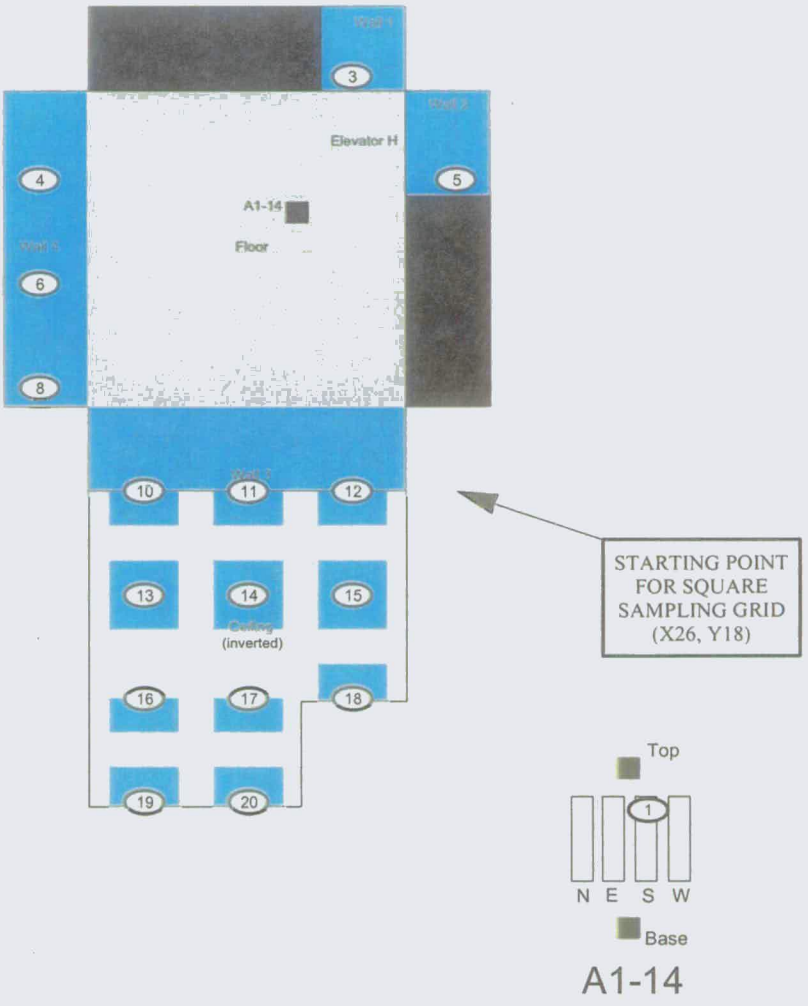
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G06PRP-N001	1	24.3	N/A	
881G06PRP-N003	1	-10.8	N/A	
881G06PRP-N004	1	-2.1	N/A	
881G06PRP-N005	1	-15.2	N/A	
881G06PRP-N006	1	24.3	N/A	
881G06PRP-N008	1	41.8	N/A	
881G06QRP-N008	2	38.1	N/A	
881G06PRP-N010	1	11.1	N/A	
881G06PRP-N011	1	33.0	N/A	
881G06PRP-N012	1	169.0	N/A	
881G06PRP-N013	1	-19.6	N/A	
881G06PRP-N014	1	2.3	N/A	
881G06PRP-N015	1	-2.1	N/A	
881G06PRP-N016	1	24.3	N/A	
881G06PRP-N017	1	-24.0	N/A	
881G06PRP-N018	1	6.7	N/A	
881G06QRP-N018	2	20.2	N/A	
881G06PRP-N019	1	-10.8	N/A	
881G06PRP-N020	1	-10.8	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G06** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Room 292, Walls & Ceiling
Total Area: 171 sq. m. **Total Floor Area: 76 sq. m.**
Grid Spacing for Survey Points: 3 m. X 3 m.

Room 292



A1-14

Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- ◇ (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER-HILL COMPANY

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

MAP ID: 03-0568/881G06-SC May 3, 2004

261

Survey Area: G	Survey Unit: 881G07	Building: 881
Description: B881 Management Unit G, Rooms 293, 294 Floor		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 39
Nbr Random Measurements Performed: 46
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0
Nbr QC Required: 3
Nbr QC Performed: 3

Alpha

Maximum:	382.7 dpm/100cm²
Minimum:	7.7 dpm/100cm²
Mean:	87.2 dpm/100cm²
Standard Deviation:	81.5
QC Maximum:	390.2 dpm/100cm²
QC Minimum:	177.0 dpm/100cm²
QC Mean:	271.7 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 39
Nbr Random Measurements Performed: 46
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0

Alpha

Maximum:	19.7 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	2.8 dpm/100cm²
Standard Deviation:	4.5
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: G **Survey Unit:** 881G07 **Building:** 881

Description: B881 Management Unit G, Rooms 293, 294 Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	03/20/04	Electra	666	DP-8	06/16/04	0.172	NA	93.0	NA	S
2	712193	03/20/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
3	712452	03/20/04	Electra	3105	DP-6	09/17/04	0.208	NA	93.0	NA	S
4	702377	03/21/04	Electra	3105	DP-6	09/17/04	0.208	NA	93.0	NA	T
5	702377	03/21/04	SAC-4	1171	NA	08/19/04	0.330	NA	16.0	NA	R
6	712193	03/21/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

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Survey Area: G	Survey Unit: 881G07	Building: 881
Description: B881 Management Unit G, Rooms 293, 294 Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G07PRP-N001	5	10.6	N/A	
881G07PRP-N002	5	-1.5	N/A	
881G07PRP-N003	5	4.5	N/A	
881G07PRP-N004	5	7.6	N/A	
881G07PRP-N005	5	4.5	N/A	
881G07PRP-N006	5	19.7	N/A	
881G07PRP-N007	5	1.5	N/A	
881G07PRP-N008	5	-1.5	N/A	
881G07PRP-N009	5	1.5	N/A	
881G07PRP-N010	5	-1.5	N/A	
881G07PRP-N011	5	-1.5	N/A	
881G07PRP-N012	5	1.5	N/A	
881G07PRP-N013	5	-1.5	N/A	
881G07PRP-N014	5	7.6	N/A	
881G07PRP-N015	5	-1.5	N/A	
881G07PRP-N016	5	1.5	N/A	
881G07PRP-N017	5	1.5	N/A	
881G07PRP-N018	5	7.6	N/A	
881G07PRP-N019	5	1.5	N/A	
881G07PRP-N020	5	-1.5	N/A	
881G07PRP-N021	5	1.5	N/A	
881G07PRP-N022	5	-1.5	N/A	
881G07PRP-N023	5	-1.5	N/A	
881G07PRP-N024	5	7.6	N/A	
881G07PRP-N025	5	1.5	N/A	
881G07PRP-N026	5	1.5	N/A	
881G07PRP-N027	5	4.5	N/A	
881G07PRP-N028	5	1.5	N/A	
881G07PRP-N029	5	-1.5	N/A	

Survey Area: G	Survey Unit: 881G07	Building: 881
Description: B881 Management Unit G, Rooms 293, 294 Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G07PRP-N030	5	13.6	N/A	
881G07PRP-N031	5	-1.5	N/A	
881G07PRP-N032	5	1.5	N/A	
881G07PRP-N033	5	4.5	N/A	
881G07PRP-N034	5	1.5	N/A	
881G07PRP-N035	5	-1.5	N/A	
881G07PRP-N036	5	1.5	N/A	
881G07PRP-N037	5	4.5	N/A	
881G07PRP-N038	5	4.5	N/A	
881G07PRP-N039	5	1.5	N/A	
881G07PRP-N040	5	10.6	N/A	
881G07PRP-N041	5	7.6	N/A	
881G07PRP-N042	5	1.5	N/A	
881G07PRP-N043	5	1.5	N/A	
881G07PRP-N044	5	1.5	N/A	
881G07PRP-N045	5	1.5	N/A	
881G07PRP-N046	5	1.5	N/A	

Comments:

Survey Area: G	Survey Unit: 881G07	Building: 881
Description: B881 Management Unit G, Rooms 293, 294 Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G07PRP-N001	4	60.5	N/A	
881G07PRP-N002	4	31.7	N/A	
881G07PRP-N003	4	36.5	N/A	
881G07PRP-N004	4	65.3	N/A	
881G07PRP-N005	4	252.8	N/A	
881G07PRP-N006	4	382.7	N/A	
881G07QRP-N006	6	390.2	N/A	
881G07PRP-N007	4	36.5	N/A	
881G07PRP-N008	4	22.1	N/A	
881G07PRP-N009	4	26.9	N/A	
881G07PRP-N010	4	60.5	N/A	
881G07PRP-N011	4	60.5	N/A	
881G07PRP-N012	4	26.9	N/A	
881G07PRP-N013	4	50.9	N/A	
881G07PRP-N014	4	41.3	N/A	
881G07PRP-N015	4	46.1	N/A	
881G07PRP-N016	4	50.9	N/A	
881G07PRP-N017	4	65.3	N/A	
881G07PRP-N018	4	12.5	N/A	
881G07PRP-N019	4	17.3	N/A	
881G07PRP-N020	4	41.3	N/A	
881G07PRP-N021	4	132.7	N/A	
881G07PRP-N022	4	84.6	N/A	
881G07PRP-N023	4	75.0	N/A	
881G07PRP-N024	4	89.4	N/A	
881G07PRP-N025	4	36.5	N/A	
881G07PRP-N026	4	26.9	N/A	

Survey Area: G | **Survey Unit:** 881G07 | **Building:** 881

Description: B881 Management Unit G, Rooms 293, 294 Floor

Random/QC Total Surface Activity Data Sheet

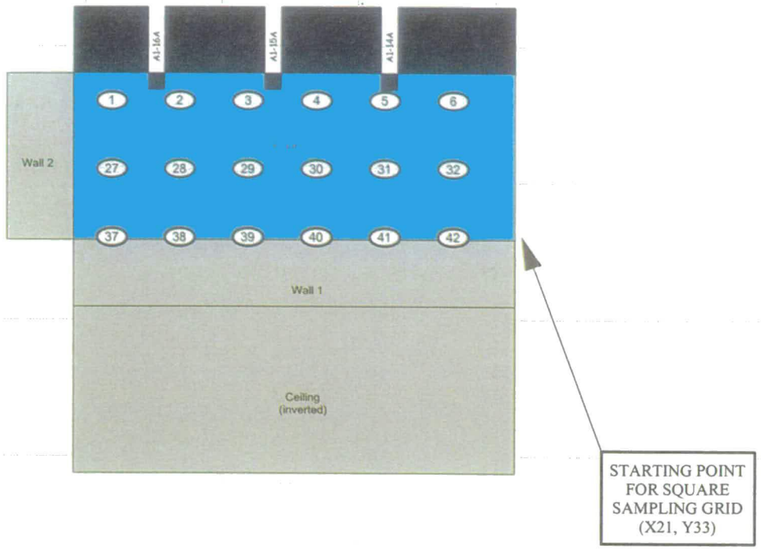
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G07PRP-N027	4	75.0	N/A	
881G07PRP-N028	4	113.4	N/A	
881G07PRP-N029	4	46.1	N/A	
881G07PRP-N030	4	262.5	N/A	
881G07QRP-N030	6	248.0	N/A	
881G07PRP-N031	4	75.0	N/A	
881G07PRP-N032	4	320.2	N/A	
881G07PRP-N033	4	50.9	N/A	
881G07PRP-N034	4	26.9	N/A	
881G07PRP-N035	4	137.5	N/A	
881G07PRP-N036	4	55.7	N/A	
881G07PRP-N037	4	127.8	N/A	
881G07PRP-N038	4	127.8	N/A	
881G07PRP-N039	4	166.3	N/A	
881G07PRP-N040	4	204.8	N/A	
881G07QRP-N040	6	177.0	N/A	
881G07PRP-N041	4	123.0	N/A	
881G07PRP-N042	4	41.3	N/A	
881G07PRP-N043	4	79.8	N/A	
881G07PRP-N044	4	22.1	N/A	
881G07PRP-N045	4	7.7	N/A	
881G07PRP-N046	4	113.4	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

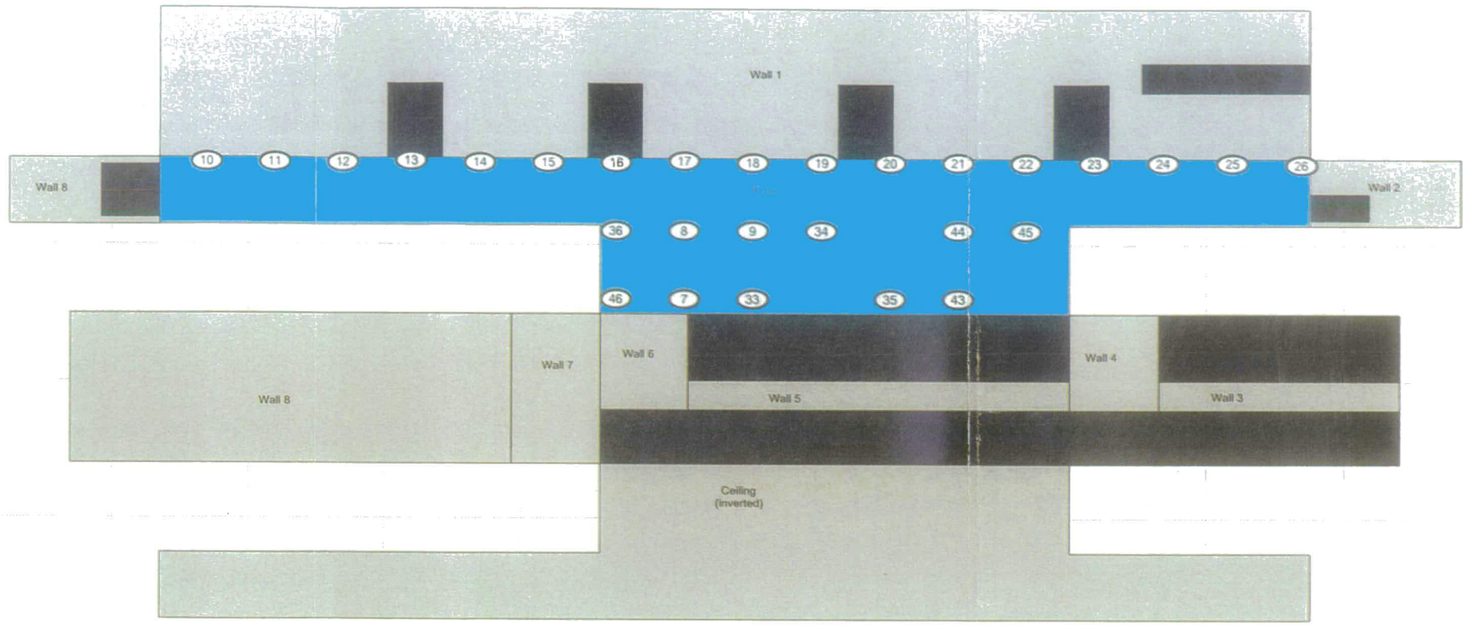
PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G07** **Classification: 1**
Building: 881
Survey Unit Description: Building 881 Management Unit G, Rooms 293 & 294 Floors
Total Area: 256 sq. m. **Total Floor Area: 256 sq. m.**
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

Room 294



Room 293



Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group

Prepared for:
KAISER-HILL COMPANY

MAP ID: 03-0568/881G07-SC
May 10, 2004

Survey Area: G	Survey Unit: 881G08	Building: 881

Description: Building 881, Management Unit G Rooms 293, 294 Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	51.3 dpm/100cm²
Minimum:	-16.0 dpm/100cm²
Mean:	11.1 dpm/100cm²
Standard Deviation:	16.5
QC Maximum:	40.3 dpm/100cm²
QC Minimum:	30.8 dpm/100cm²
QC Mean:	35.6 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	25.8 dpm/100cm²
Minimum:	4.5 dpm/100cm²
Mean:	12.2 dpm/100cm²
Standard Deviation:	4.7
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: G | **Survey Unit:** 881G08 | **Building:** 881

Description: Building 881, Management Unit G Rooms 293, 294 Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	03/20/04	Electra	666	DP-8	06/16/04	0.172	NA	93.0	NA	S
2	712452	03/20/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
3	702377	03/21/04	Electra	3105	DP-6	09/17/04	0.208	NA	93.0	NA	T
4	702377	03/21/04	SAC-4	1171	NA	08/19/04	0.330	NA	16.0	NA	R
6	712193	03/21/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	Q
7	712193	03/20/04	Electra	3105	DP-6	09/17/04	0.208	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

270

Survey Area: G	Survey Unit: 881G08	Building: 881
Description: Building 881, Management Unit G Rooms 293, 294 Walls and Ceiling		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G08PRP-N001	4	25.8	N/A	
881G08PRP-N002	4	4.5	N/A	
881G08PRP-N003	4	16.7	N/A	
881G08PRP-N004	4	10.6	N/A	
881G08PRP-N005	4	10.6	N/A	
881G08PRP-N006	4	7.6	N/A	
881G08PRP-N007	4	13.6	N/A	
881G08PRP-N008	4	10.6	N/A	
881G08PRP-N009	4	10.6	N/A	
881G08PRP-N010	4	4.5	N/A	
881G08PRP-N011	4	13.6	N/A	
881G08PRP-N012	4	13.6	N/A	
881G08PRP-N013	4	10.6	N/A	
881G08PRP-N014	4	13.6	N/A	
881G08PRP-N015	4	10.6	N/A	
881G08PRP-N016	4	16.7	N/A	
881G08PRP-N017	4	10.6	N/A	
881G08PRP-N018	4	13.6	N/A	
881G08PRP-N019	4	13.6	N/A	

Comments:

271

Survey Area: G	Survey Unit: 881G08	Building: 881

Description: Building 881, Management Unit G Rooms 293, 294 Walls and Ceiling

Random/QC Total Surface Activity Data Sheet

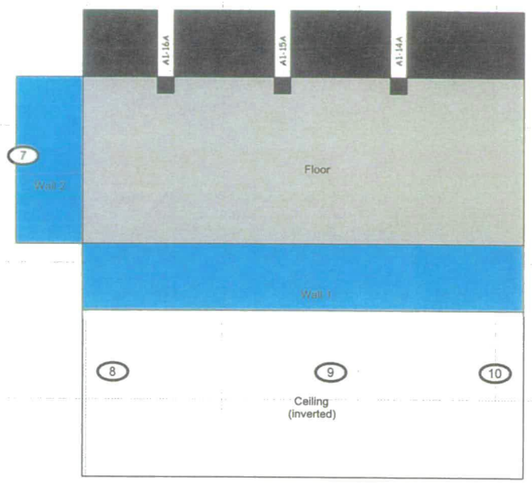
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G08PRP-N001	3	51.3	N/A	
881G08PRP-N002	3	8.1	N/A	
881G08PRP-N003	3	17.7	N/A	
881G08PRP-N004	3	-6.4	N/A	
881G08PRP-N005	3	-6.4	N/A	
881G08PRP-N006	3	3.2	N/A	
881G08PRP-N007	3	3.2	N/A	
881G08PRP-N008	3	17.7	N/A	
881G08QRP-N008	6	30.8	N/A	
881G08PRP-N009	3	-16.0	N/A	
881G08PRP-N010	3	8.1	N/A	
881G08PRP-N011	3	17.7	N/A	
881G08PRP-N012	3	27.3	N/A	
881G08PRP-N013	3	8.1	N/A	
881G08PRP-N014	3	8.1	N/A	
881G08PRP-N015	3	3.2	N/A	
881G08PRP-N016	3	46.5	N/A	
881G08QRP-N016	6	40.3	N/A	
881G08PRP-N017	3	3.2	N/A	
881G08PRP-N018	3	8.1	N/A	
881G08PRP-N019	3	8.1	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

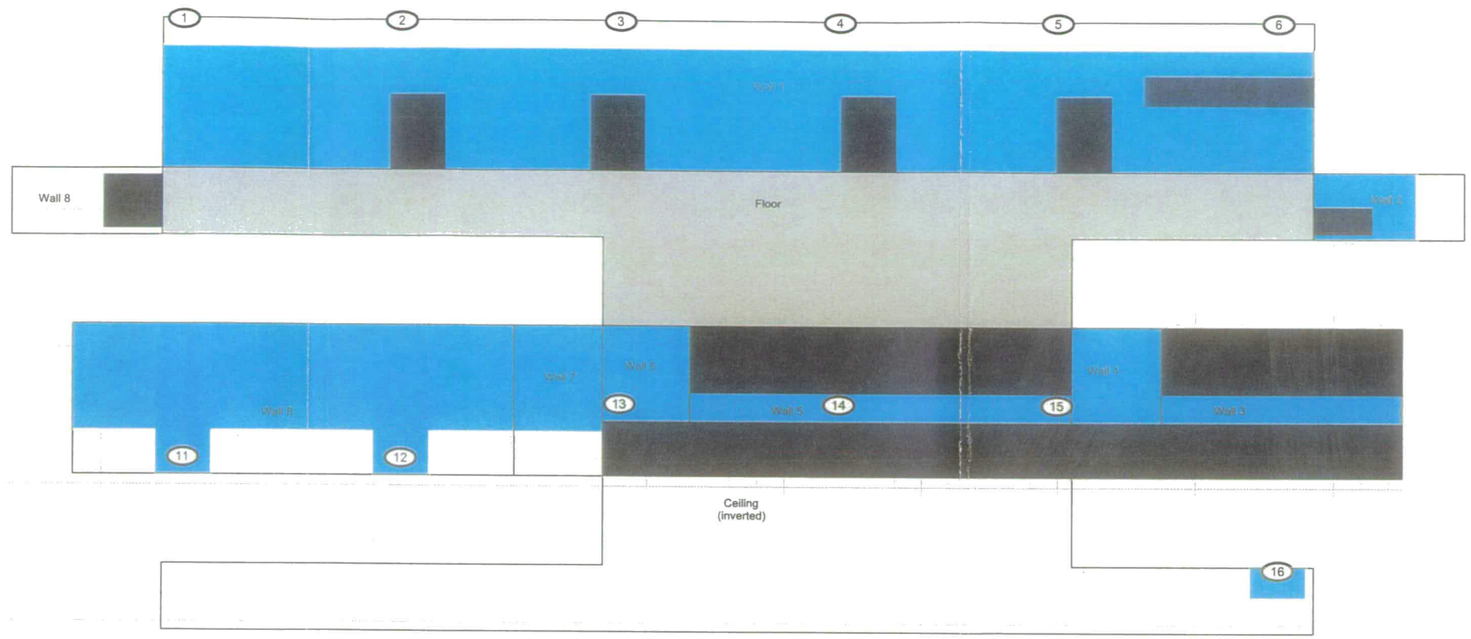
PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G08** **Classification: 2**
Building: 881
Survey Unit Description: Building 881 Management Unit G, Rooms 293 & 294, Walls & Ceiling
Total Area: 845 sq. m. **Total Floor Area: 256 sq. m.**
Grid Spacing for Survey Points: 8 m. X 8 m.

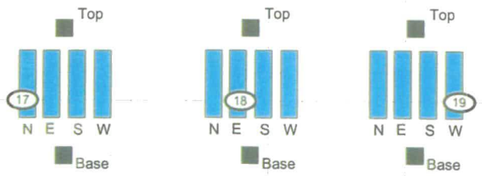
Room 294



Room 293



STARTING POINT FOR SQUARE SAMPLING GRID (X30, Y18)



Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 7

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881G08-SC **May 10, 2004**

273

Survey Area: G	Survey Unit: 881G09	Building: 881

Description: Building 881 Management Unit G Room 296, 297 Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 110
Nbr Random Measurements Performed: 113
Nbr Biased Measurements Required: 1
Nbr Biased Measurements Performed: 1
Nbr QC Required: 6
Nbr QC Performed: 6

Alpha

Maximum:	698.0 dpm/100cm²
Minimum:	-16.6 dpm/100cm²
Mean:	29.5 dpm/100cm²
Standard Deviation:	67.8
QC Maximum:	180.8 dpm/100cm²
QC Minimum:	37.9 dpm/100cm²
QC Mean:	92.2 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 110
Nbr Random Measurements Performed: 113
Nbr Biased Measurements Required: 1
Nbr Biased Measurements Performed: 1

Alpha

Maximum:	16.7 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	2.3 dpm/100cm²
Standard Deviation:	3.5
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

274

Survey Area: G	Survey Unit: 881G09	Building: 881

Description: Building 881 Management Unit G Room 296, 297 Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	512590	03/26/04	Electra	663	DP-6	09/18/04	0.216	NA	93.0	NA	T
2	711447	03/28/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	S
3	712193	03/28/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	S
4	711447	03/28/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	Q/S
5	712193	03/28/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T
6	712193	03/28/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
7	712193	04/12/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	S
8	711447	04/12/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
9	712193	04/12/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	T
10	712193	04/13/04	Electra	1290	DP-6	05/17/04	0.223	NA	93.0	NA	T
11	711447	04/13/04	Electra	1383	DP-6	04/30/04	0.196	NA	93.0	NA	Q
12	711447	04/13/04	Ludlum 292	147744	NA	08/12/04	0.341	NA	16.0	NA	R
13	712193	04/17/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
14	712193	04/17/04	Electra	1665	DP-6	08/11/04	0.213	NA	93.0	NA	I
15	712193	04/17/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

275

Survey Area: G	Survey Unit: 881G09	Building: 881
Description: Building 881 Management Unit G Room 296, 297 Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N001	6	1.5	N/A	
881G09PRP-N002	6	7.6	N/A	
881G09PRP-N003	6	1.5	N/A	
881G09PRP-N004	6	4.5	N/A	
881G09PRP-N005	6	1.5	N/A	
881G09PRP-N006	6	1.5	N/A	
881G09PRP-N007	6	4.5	N/A	
881G09PRP-N008	6	1.5	N/A	
881G09PRP-N009	6	4.5	N/A	
881G09PRP-N010	6	4.5	N/A	
881G09PRP-N011	15	1.7	N/A	
881G09PRP-N012	15	7.4	N/A	
881G09PRP-N013	12	-1.5	N/A	
881G09PRP-N014	12	-1.5	N/A	
881G09PRP-N015	12	1.5	N/A	
881G09PRP-N016	6	7.6	N/A	
881G09PRP-N017	6	4.5	N/A	
881G09PRP-N018	6	-1.5	N/A	
881G09PRP-N019	6	4.5	N/A	
881G09PRP-N020	6	7.6	N/A	
881G09PRP-N021	6	1.5	N/A	
881G09PRP-N022	6	4.5	N/A	
881G09PRP-N023	6	4.5	N/A	
881G09PRP-N024	6	4.5	N/A	
881G09PRP-N025	6	16.7	N/A	
881G09PRP-N026	15	4.6	N/A	
881G09PRP-N027	15	4.6	N/A	
881G09PRP-N028	12	1.5	N/A	
881G09PRP-N029	12	1.5	N/A	

Survey Area: G	Survey Unit: 881G09	Building: 881
Description: Building 881 Management Unit G Room 296, 297 Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N030	12	-1.5	N/A	
881G09PRP-N031	6	1.5	N/A	
881G09PRP-N032	6	4.5	N/A	
881G09PRP-N033	6	4.5	N/A	
881G09PRP-N034	6	4.5	N/A	
881G09PRP-N035	6	4.5	N/A	
881G09PRP-N036	6	4.5	N/A	
881G09PRP-N037	6	1.5	N/A	
881G09PRP-N038	6	1.5	N/A	
881G09PRP-N039	6	1.5	N/A	
881G09PRP-N040	6	4.5	N/A	
881G09PRP-N041	15	-1.1	N/A	
881G09PRP-N042	15	1.7	N/A	
881G09PRP-N043	12	1.5	N/A	
881G09PRP-N044	12	-1.5	N/A	
881G09PRP-N045	12	1.5	N/A	
881G09PRP-N046	12	1.5	N/A	
881G09PRP-N047	12	1.5	N/A	
881G09PRP-N048	6	4.5	N/A	
881G09PRP-N049	6	-1.5	N/A	
881G09PRP-N050	6	-1.5	N/A	
881G09PRP-N051	6	1.5	N/A	
881G09PRP-N052	6	-1.5	N/A	
881G09PRP-N053	6	-1.5	N/A	
881G09PRP-N054	6	-1.5	N/A	
881G09PRP-N055	6	1.5	N/A	
881G09PRP-N056	6	4.5	N/A	
881G09PRP-N057	6	4.5	N/A	
881G09PRP-N058	15	1.7	N/A	

277

Survey Area: G | **Survey Unit:** 881G09 | **Building:** 881

Description: Building 881 Management Unit G Room 296, 297 Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N059	15	-1.1	N/A	
881G09PRP-N060	12	1.5	N/A	
881G09PRP-N061	12	1.5	N/A	
881G09PRP-N062	12	4.4	N/A	
881G09PRP-N063	12	1.5	N/A	
881G09PRP-N064	12	10.3	N/A	
881G09PRP-N065	6	-1.5	N/A	
881G09PRP-N066	6	1.5	N/A	
881G09PRP-N067	6	-1.5	N/A	
881G09PRP-N068	6	7.6	N/A	
881G09PRP-N069	6	-1.5	N/A	
881G09PRP-N070	6	10.6	N/A	
881G09PRP-N071	6	1.5	N/A	
881G09PRP-N072	15	1.7	N/A	
881G09PRP-N073	15	1.7	N/A	
881G09PRP-N074	12	4.4	N/A	
881G09PRP-N075	12	-1.5	N/A	
881G09PRP-N076	12	7.3	N/A	
881G09PRP-N077	12	-1.5	N/A	
881G09PRP-N078	12	1.5	N/A	
881G09PRP-N079	6	1.5	N/A	
881G09PRP-N080	6	-1.5	N/A	
881G09PRP-N081	6	1.5	N/A	
881G09PRP-N082	6	1.5	N/A	
881G09PRP-N083	6	-1.5	N/A	
881G09PRP-N084	6	-1.5	N/A	
881G09PRP-N085	6	-1.5	N/A	
881G09PRP-N086	6	1.5	N/A	
881G09PRP-N087	6	1.5	N/A	

Survey Area: G	Survey Unit: 881G09	Building: 881
Description: Building 881 Management Unit G Room 296, 297 Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N088	15	4.6	N/A	
881G09PRP-N089	15	-1.1	N/A	
881G09PRP-N090	12	1.5	N/A	
881G09PRP-N091	12	1.5	N/A	
881G09PRP-N092	12	-1.5	N/A	
881G09PRP-N093	6	-1.5	N/A	
881G09PRP-N094	6	1.5	N/A	
881G09PRP-N095	6	-1.5	N/A	
881G09PRP-N096	6	-1.5	N/A	
881G09PRP-N097	6	-1.5	N/A	
881G09PRP-N098	6	1.5	N/A	
881G09PRP-N099	6	4.5	N/A	
881G09PRP-N100	6	7.6	N/A	
881G09PRP-N101	6	4.5	N/A	
881G09PRP-N102	6	-1.5	N/A	
881G09PRP-N103	15	1.7	N/A	
881G09PRP-N104	15	1.7	N/A	
881G09PRP-N105	12	4.4	N/A	
881G09PRP-N106	12	1.5	N/A	
881G09PRP-N107	12	-1.5	N/A	
881G09PRP-N108	12	7.3	N/A	
881G09PRP-N109	12	1.5	N/A	
881G09PRP-N110	12	-1.5	N/A	
881G09PRP-N111	12	4.4	N/A	
881G09PRP-N112	12	4.4	N/A	
881G09PRP-N113	12	-1.5	N/A	

Biased Removable Surface Activity Data Sheet

Comments:

Survey Area: G	Survey Unit: 881G09	Building: 881

Description: Building 881 Management Unit G Room 296, 297 Floor

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PBP-N114	12	16.1	N/A	

280

Survey Area: G	Survey Unit: 881G09	Building: 881
Description: Building 881 Management Unit G Room 296, 297 Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N001	1	-7.4	N/A	
881G09PRP-N002	1	1.8	N/A	
881G09PRP-N003	1	6.5	N/A	
881G09PRP-N004	1	11.1	N/A	
881G09PRP-N005	1	-12.0	N/A	
881G09PRP-N006	1	6.5	N/A	
881G09PRP-N007	1	-12.0	N/A	
881G09PRP-N008	1	-7.4	N/A	
881G09PRP-N009	1	-2.8	N/A	
881G09PRP-N010	1	-7.4	N/A	
881G09PRP-N011	14	-16.6	N/A	
881G09PRP-N012	14	11.6	N/A	
881G09PRP-N013	9	-6.1	N/A	
881G09PRP-N014	9	9.0	N/A	
881G09PRP-N015	9	14.1	N/A	
881G09PRP-N016	5	7.1	N/A	
881G09PRP-N017	5	26.1	N/A	
881G09PRP-N018	5	45.1	N/A	
881G09PRP-N019	5	35.6	N/A	
881G09PRP-N020	5	78.2	N/A	
881G09QRP-N020	11	104.3	N/A	
881G09PRP-N021	5	26.1	N/A	
881G09PRP-N022	5	16.6	N/A	
881G09PRP-N023	5	26.1	N/A	
881G09PRP-N024	5	26.1	N/A	
881G09PRP-N025	5	-7.1	N/A	
881G09PRP-N026	14	11.6	N/A	

281

Survey Area: G	Survey Unit: 881G09	Building: 881
Description: Building 881 Management Unit G Room 296, 297 Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N027	14	6.9	N/A	
881G09PRP-N028	9	4.0	N/A	
881G09PRP-N029	9	14.1	N/A	
881G09PRP-N030	9	14.1	N/A	
881G09PRP-N031	5	59.3	N/A	
881G09PRP-N032	5	40.3	N/A	
881G09PRP-N033	5	45.1	N/A	
881G09PRP-N034	5	92.4	N/A	
881G09QRP-N034	11	73.6	N/A	
881G09PRP-N035	5	30.8	N/A	
881G09PRP-N036	5	45.1	N/A	
881G09PRP-N037	5	30.8	N/A	
881G09PRP-N038	5	26.1	N/A	
881G09PRP-N039	5	45.1	N/A	
881G09PRP-N040	5	30.8	N/A	
881G09PRP-N041	14	-11.9	N/A	
881G09PRP-N042	14	30.3	N/A	
881G09PRP-N043	9	-1.1	N/A	
881G09PRP-N044	9	-1.1	N/A	
881G09PRP-N045	9	-11.2	N/A	
881G09PRP-N046	9	24.2	N/A	
881G09PRP-N047	9	-11.2	N/A	
881G09PRP-N048	5	21.4	N/A	
881G09PRP-N049	5	16.6	N/A	
881G09PRP-N050	5	64.0	N/A	
881G09PRP-N051	5	26.1	N/A	
881G09PRP-N052	5	83.0	N/A	

Survey Area: G | **Survey Unit:** 881G09 | **Building:** 881

Description: Building 881 Management Unit G Room 296, 297 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N053	5	40.3	N/A	
881G09PRP-N054	5	35.6	N/A	
881G09PRP-N055	5	7.1	N/A	
881G09QRP-N056	4	98.4	N/A	
881G09PRP-N056	5	92.4	N/A	
881G09PRP-N057	5	26.1	N/A	
881G09PRP-N058	14	-2.5	N/A	
881G09PRP-N059	14	30.3	N/A	
881G09PRP-N060	10	153.6	N/A	
881G09QRP-N060	11	180.8	N/A	
881G09PRP-N061	10	23.5	N/A	
881G09PRP-N062	10	14.6	N/A	
881G09PRP-N063	10	28.0	N/A	
881G09PRP-N064	10	19.1	N/A	
881G09PRP-N065	5	21.4	N/A	
881G09PRP-N066	5	59.3	N/A	
881G09QRP-N066	11	58.3	N/A	
881G09PRP-N067	5	16.6	N/A	
881G09PRP-N068	5	16.6	N/A	
881G09PRP-N069	5	11.9	N/A	
881G09PRP-N070	5	30.8	N/A	
881G09PRP-N071	5	16.6	N/A	
881G09PRP-N072	14	11.6	N/A	
881G09PRP-N073	14	-7.2	N/A	
881G09PRP-N074	10	32.5	N/A	
881G09PRP-N075	9	24.2	N/A	
881G09PRP-N076	10	23.5	N/A	

Survey Area: G	Survey Unit: 881G09	Building: 881

Description: Building 881 Management Unit G Room 296, 297 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N077	10	32.5	N/A	
881G09PRP-N078	5	7.1	N/A	
881G09PRP-N079	5	21.4	N/A	
881G09PRP-N080	5	54.5	N/A	
881G09PRP-N081	5	35.6	N/A	
881G09PRP-N082	5	49.8	N/A	
881G09PRP-N083	5	35.6	N/A	
881G09PRP-N084	5	26.1	N/A	
881G09PRP-N085	5	45.1	N/A	
881G09PRP-N086	5	64.0	N/A	
881G09PRP-N087	5	49.8	N/A	
881G09QRP-N088	11	37.9	N/A	
881G09PRP-N088	14	30.3	N/A	
881G09PRP-N089	14	21.0	N/A	
881G09PRP-N090	9	24.2	N/A	
881G09PRP-N091	9	34.3	N/A	
881G09PRP-N092	10	32.5	N/A	
881G09PRP-N093	5	11.9	N/A	
881G09PRP-N094	5	7.1	N/A	
881G09PRP-N095	5	2.4	N/A	
881G09PRP-N096	5	11.9	N/A	
881G09PRP-N097	5	16.6	N/A	
881G09PRP-N098	5	49.8	N/A	
881G09PRP-N099	5	26.1	N/A	
881G09PRP-N100	5	26.1	N/A	
881G09PRP-N101	5	30.8	N/A	
881G09PRP-N102	5	26.1	N/A	

Survey Area: G	Survey Unit: 881G09	Building: 881
Description: Building 881 Management Unit G Room 296, 297 Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09PRP-N103	14	6.9	N/A	
881G09PRP-N104	14	6.9	N/A	
881G09PRP-N105	9	9.0	N/A	
881G09PRP-N106	9	29.2	N/A	
881G09PRP-N107	9	-1.1	N/A	
881G09PRP-N108	9	14.1	N/A	
881G09PRP-N109	10	19.1	N/A	
881G09PRP-N110	10	10.1	N/A	
881G09PRP-N111	10	19.1	N/A	
881G09PRP-N112	10	37.0	N/A	
881G09PRP-N113	10	19.1	N/A	

Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G09SBP-N114	14	698.0	N/A	

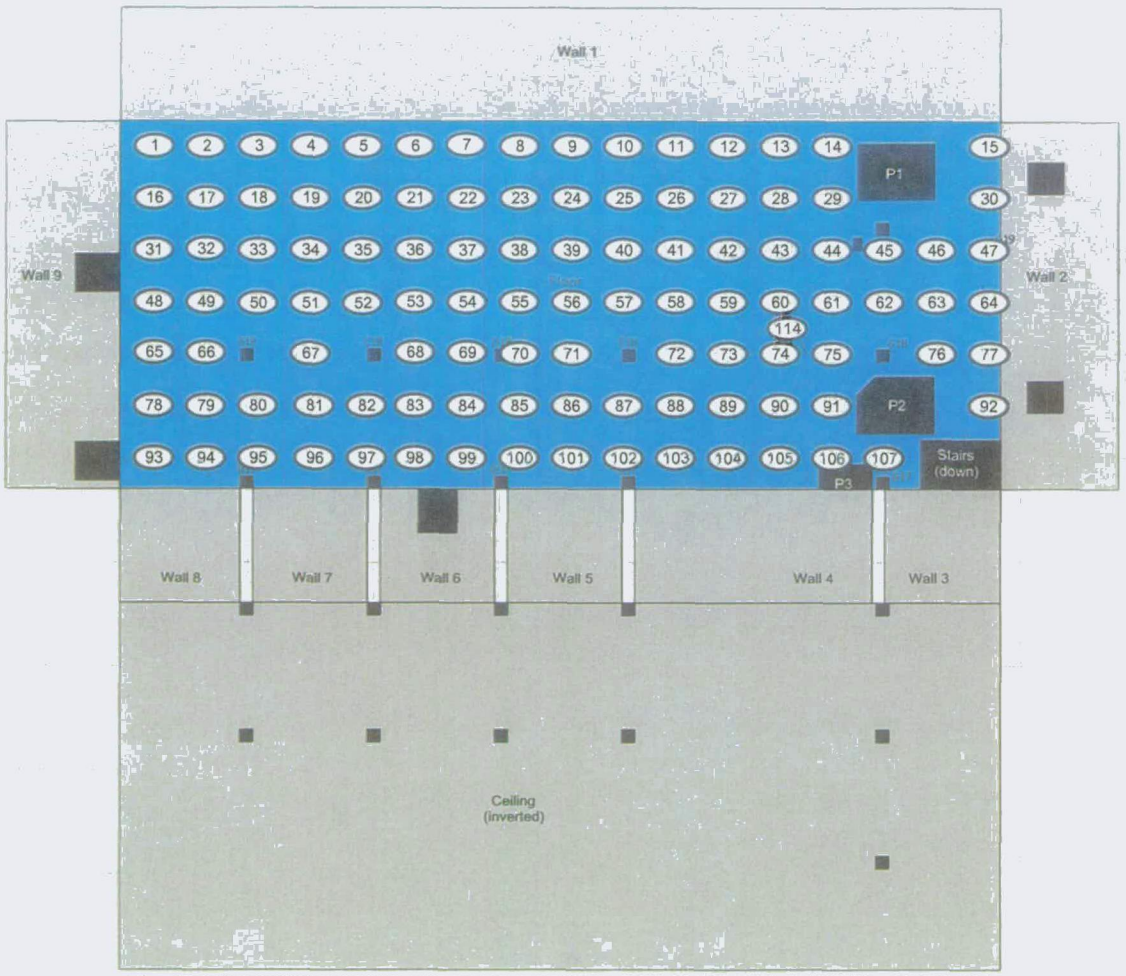
Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

Elevated activity of 5,712 dpm/100cm2 was detected during scan surveys at location #114. A square meter average investigation was conducted. The average of the original point and 8 additional points within the square meter is 698 dpm/100cm2. This location meets free release limits. No further investigation is required.
Investigation point #9 is the original elevated measurement point.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G09** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Rooms 296 & 297, Floor
Total Area: 735 sq. m. **Total Floor Area: 735 sq. m.**
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

Room 296/297



STARTING POINT FOR SQUARE SAMPLING GRID (X56, Y44)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 3, 4, 7, 8, 13

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER HILL COMPANY

MAP ID: 03-0568/881G09-SC **April 29, 2004**

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Survey Area: G	Survey Unit: 881G10	Building: 881

Description: Building 881 Management Unit G, Rooms 296, 297 Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 15 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	57.5 dpm/100cm²
Minimum:	-13.6 dpm/100cm²
Mean:	18.0 dpm/100cm²
Standard Deviation:	21.4
QC Maximum:	44.2 dpm/100cm²
QC Minimum:	27.6 dpm/100cm²
QC Mean:	35.9 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	16.4 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	8.1 dpm/100cm²
Standard Deviation:	5.3
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: G	Survey Unit: 881G10	Building: 881

Description: Building 881 Management Unit G, Rooms 296, 297 Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	03/29/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	S
2	712193	03/29/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T
3	711447	03/30/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	S
4	712193	03/30/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	S
5	712193	03/30/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
6	711447	04/12/04	Electra	1383	DP-6	04/30/04	0.196	NA	93.0	NA	S
7	712193	04/12/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	S
8	712193	04/13/04	Electra	1290	DP-6	05/17/04	0.223	NA	93.0	NA	S
9	711447	04/13/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	S
10	711447	04/13/04	Electra	1513	DP-6	09/17/04	0.181	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G	Survey Unit: 881G10	Building: 881

Description: Building 881 Management Unit G, Rooms 296, 297 Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G10PRP-N001	5	4.2	N/A	
881G10PRP-N002	5	10.3	N/A	
881G10PRP-N003	5	7.3	N/A	
881G10PRP-N004	5	4.2	N/A	
881G10PRP-N005	5	13.3	N/A	
881G10PRP-N006	5	16.4	N/A	
881G10PRP-N007	5	10.3	N/A	
881G10PRP-N008	5	4.2	N/A	
881G10PRP-N009	5	1.2	N/A	
881G10PRP-N010	5	-1.8	N/A	
881G10PRP-N011	5	4.2	N/A	
881G10PRP-N012	5	10.3	N/A	
881G10PRP-N013	5	16.4	N/A	
881G10PRP-N014	5	10.3	N/A	
881G10PRP-N015	5	10.3	N/A	

Comments:

Survey Area: G	Survey Unit: 881G10	Building: 881

Description: Building 881 Management Unit G, Rooms 296, 297 Walls and Ceiling

Random/QC Total Surface Activity Data Sheet

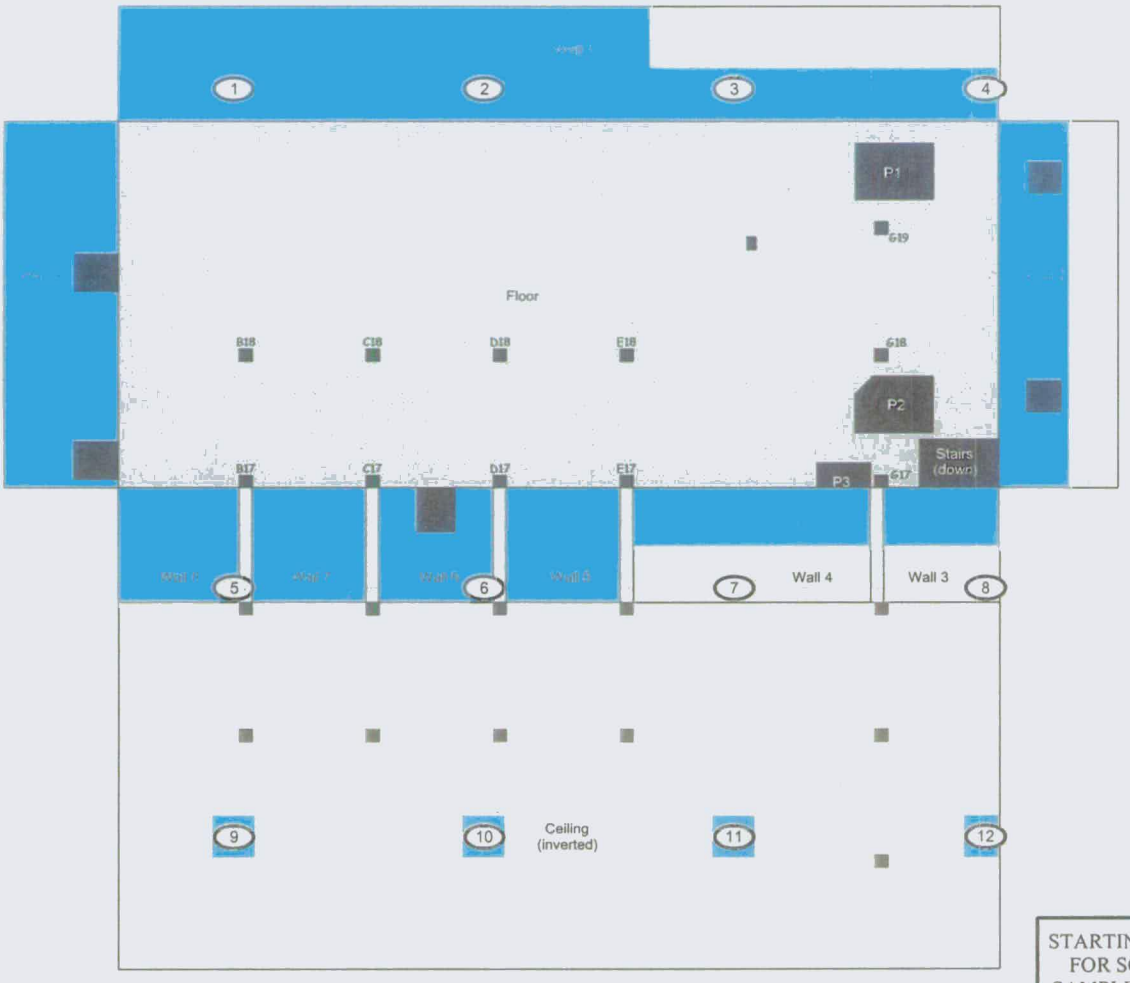
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G10PRP-N001	2	29.1	N/A	
881G10PRP-N002	2	57.5	N/A	
881G10QRP-N002	10	44.2	N/A	
881G10PRP-N003	2	5.4	N/A	
881G10PRP-N004	2	19.6	N/A	
881G10PRP-N005	2	0.6	N/A	
881G10PRP-N006	2	29.1	N/A	
881G10PRP-N007	2	-13.6	N/A	
881G10PRP-N008	2	0.6	N/A	
881G10PRP-N009	2	48.0	N/A	
881G10QRP-N009	10	27.6	N/A	
881G10PRP-N010	2	19.6	N/A	
881G10PRP-N011	2	0.6	N/A	
881G10PRP-N012	2	-4.1	N/A	
881G10PRP-N013	2	38.5	N/A	
881G10PRP-N014	2	38.5	N/A	
881G10PRP-N015	2	0.6	N/A	

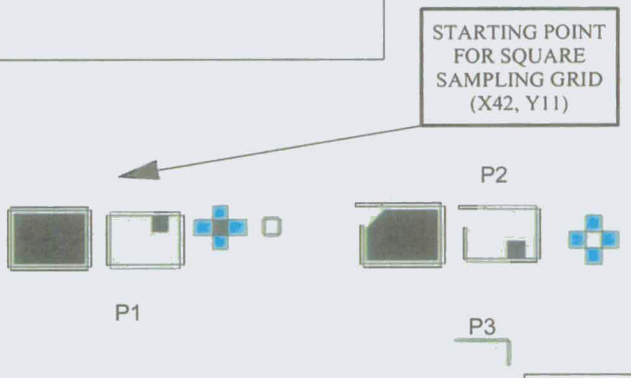
Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G10** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Rooms 296, 297
Walls & Ceiling
Total Area: 2,152 sq. m. **Total Floor Area: 735 sq. m.**
Grid Spacing for Survey Points: 11 m. X 11 m.

Room 296





Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER HILL COMPANY

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 3, 4, 6-9

MAP ID: 03-0568/881G10-SC **May 3, 2004**

Survey Area: G	Survey Unit: 881G11	Building: 881

Description: B881 MU-G, Rooms 244 & 245, Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 102 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 6

Nbr Random Measurements Performed: 110 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 6

Alpha

Maximum:	2,154.9 dpm/100cm²
Minimum:	-9.8 dpm/100cm²
Mean:	70.9 dpm/100cm²
Standard Deviation:	220.1
QC Maximum:	295.5 dpm/100cm²
QC Minimum:	45.5 dpm/100cm²
QC Mean:	129.6 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 102 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 110 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	18.2 dpm/100cm²
Minimum:	1.1 dpm/100cm²
Mean:	8.8 dpm/100cm²
Standard Deviation:	4.7
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: G	Survey Unit: 881G11	Building: 881

Description: B881 MU-G, Rooms 244 & 245, Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	04/18/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	T/S
2	712193	04/18/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
3	711447	04/18/04	Electra	2352	DP-6	05/11/04	0.225	NA	93.0	NA	T/S
4	512590	04/18/04	Electra	1665	DP-6	08/11/04	0.213	NA	93.0	NA	T/S
5	712193	04/18/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
6	711799	04/18/04	Electra	1136	DP-6	06/30/04	0.216	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G	Survey Unit: 881G11	Building: 881
Description: B881 MU-G, Rooms 244 & 245, Floors		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N001	5	4.0	N/A	
881G11PRP-N002	5	12.5	N/A	
881G11PRP-N003	5	9.7	N/A	
881G11PRP-N004	5	15.4	N/A	
881G11PRP-N005	5	4.0	N/A	
881G11PRP-N006	5	6.8	N/A	
881G11PRP-N007	5	6.8	N/A	
881G11PRP-N008	5	15.4	N/A	
881G11PRP-N009	5	18.2	N/A	
881G11PRP-N010	5	15.4	N/A	
881G11PRP-N011	5	9.7	N/A	
881G11PRP-N012	5	4.0	N/A	
881G11PRP-N013	5	9.7	N/A	
881G11PRP-N014	5	1.1	N/A	
881G11PRP-N015	5	1.1	N/A	
881G11PRP-N016	5	6.8	N/A	
881G11PRP-N017	5	9.7	N/A	
881G11PRP-N018	5	9.7	N/A	
881G11PRP-N019	5	4.0	N/A	
881G11PRP-N020	5	4.0	N/A	
881G11PRP-N021	5	15.4	N/A	
881G11PRP-N022	5	15.4	N/A	
881G11PRP-N023	5	12.5	N/A	
881G11PRP-N024	5	15.4	N/A	
881G11PRP-N025	5	9.7	N/A	
881G11PRP-N026	5	6.8	N/A	
881G11PRP-N027	5	6.8	N/A	
881G11PRP-N028	5	4.0	N/A	
881G11PRP-N029	5	1.1	N/A	

Survey Area: G	Survey Unit: 881G11	Building: 881
Description: B881 MU-G, Rooms 244 & 245, Floors		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N030	5	1.1	N/A	
881G11PRP-N031	5	4.0	N/A	
881G11PRP-N032	5	6.8	N/A	
881G11PRP-N033	5	6.8	N/A	
881G11PRP-N034	5	9.7	N/A	
881G11PRP-N035	5	9.7	N/A	
881G11PRP-N036	5	15.4	N/A	
881G11PRP-N037	5	12.5	N/A	
881G11PRP-N038	5	12.5	N/A	
881G11PRP-N039	5	4.0	N/A	
881G11PRP-N040	5	4.0	N/A	
881G11PRP-N041	5	6.8	N/A	
881G11PRP-N042	5	12.5	N/A	
881G11PRP-N043	5	12.5	N/A	
881G11PRP-N044	5	15.4	N/A	
881G11PRP-N045	5	9.7	N/A	
881G11PRP-N046	5	1.1	N/A	
881G11PRP-N047	5	1.1	N/A	
881G11PRP-N048	5	15.4	N/A	
881G11PRP-N049	5	9.7	N/A	
881G11PRP-N050	5	12.5	N/A	
881G11PRP-N051	5	6.8	N/A	
881G11PRP-N052	5	12.5	N/A	
881G11PRP-N053	5	4.0	N/A	
881G11PRP-N054	5	15.4	N/A	
881G11PRP-N055	5	12.5	N/A	
881G11PRP-N056	5	6.8	N/A	
881G11PRP-N057	5	9.7	N/A	
881G11PRP-N058	5	15.4	N/A	

Survey Area: G	Survey Unit: 881G11	Building: 881
Description: B881 MU-G, Rooms 244 & 245, Floors		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N059	5	12.5	N/A	
881G11PRP-N060	5	12.5	N/A	
881G11PRP-N061	5	9.7	N/A	
881G11PRP-N062	5	1.1	N/A	
881G11PRP-N063	5	6.8	N/A	
881G11PRP-N064	5	12.5	N/A	
881G11PRP-N065	5	4.0	N/A	
881G11PRP-N066	5	1.1	N/A	
881G11PRP-N067	5	15.4	N/A	
881G11PRP-N068	5	9.7	N/A	
881G11PRP-N069	5	1.1	N/A	
881G11PRP-N070	5	12.5	N/A	
881G11PRP-N071	5	12.5	N/A	
881G11PRP-N072	5	9.7	N/A	
881G11PRP-N073	5	15.4	N/A	
881G11PRP-N074	5	12.5	N/A	
881G11PRP-N075	5	9.7	N/A	
881G11PRP-N076	5	6.8	N/A	
881G11PRP-N077	5	6.8	N/A	
881G11PRP-N078	5	9.7	N/A	
881G11PRP-N079	5	4.0	N/A	
881G11PRP-N080	5	1.1	N/A	
881G11PRP-N081	5	15.4	N/A	
881G11PRP-N082	5	12.5	N/A	
881G11PRP-N083	5	12.5	N/A	
881G11PRP-N084	5	6.8	N/A	
881G11PRP-N085	5	6.8	N/A	
881G11PRP-N086	5	4.0	N/A	
881G11PRP-N087	5	9.7	N/A	

Survey Area: G	Survey Unit: 881G11	Building: 881

Description: B881 MU-G, Rooms 244 & 245, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N088	5	15.4	N/A	
881G11PRP-N089	5	9.7	N/A	
881G11PRP-N090	5	12.5	N/A	
881G11PRP-N091	5	1.1	N/A	
881G11PRP-N092	5	4.0	N/A	
881G11PRP-N093	5	12.5	N/A	
881G11PRP-N094	5	4.0	N/A	
881G11PRP-N095	5	9.7	N/A	
881G11PRP-N096	5	6.8	N/A	
881G11PRP-N097	5	15.4	N/A	
881G11PRP-N098	5	4.0	N/A	
881G11PRP-N099	5	9.7	N/A	
881G11PRP-N100	5	1.1	N/A	
881G11PRP-N101	5	12.5	N/A	
881G11PRP-N102	5	15.4	N/A	
881G11PRP-N103	5	6.8	N/A	
881G11PRP-N104	5	9.7	N/A	
881G11PRP-N105	5	4.0	N/A	
881G11PRP-N106	5	9.7	N/A	
881G11PRP-N107	5	1.1	N/A	
881G11PRP-N108	5	15.4	N/A	
881G11PRP-N109	5	9.7	N/A	
881G11PRP-N110	5	4.0	N/A	

Comments:

Survey Area: G	Survey Unit: 881G11	Building: 881
Description: B881 MU-G, Rooms 244 & 245, Floors		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N001	2	33.4	N/A	
881G11PRP-N002	2	94.5	N/A	
881G11PRP-N003	2	89.8	N/A	
881G11PRP-N004	2	33.4	N/A	
881G11PRP-N005	2	99.2	N/A	
881G11PRP-N006	2	66.3	N/A	
881G11PRP-N007	2	56.9	N/A	
881G11PRP-N008	2	66.3	N/A	
881G11PRP-N009	2	24.0	N/A	
881G11PRP-N010	2	52.2	N/A	
881G11PRP-N011	2	56.9	N/A	
881G11PRP-N012	2	47.5	N/A	
881G11PRP-N013	2	61.6	N/A	
881G11PRP-N014	2	52.2	N/A	
881G11PRP-N015	2	14.7	N/A	
881G11PRP-N016	2	66.3	N/A	
881G11PRP-N017	2	56.9	N/A	
881G11PRP-N018	2	71.0	N/A	
881G11PRP-N019	2	52.2	N/A	
881G11PRP-N020	2	33.4	N/A	
881G11PRP-N021	2	71.0	N/A	
881G11PRP-N022	2	146.1	N/A	
881G11QRP-N022	6	156.6	N/A	
881G11PRP-N023	3	8.0	N/A	
881G11PRP-N024	3	39.1	N/A	
881G11PRP-N025	3	48.0	N/A	
881G11PRP-N026	3	16.8	N/A	

Survey Area: G	Survey Unit: 881G11	Building: 881

Description: B881 MU-G, Rooms 244 & 245, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N027	3	61.3	N/A	
881G11PRP-N028	3	25.7	N/A	
881G11PRP-N029	3	39.1	N/A	
881G11PRP-N030	3	70.2	N/A	
881G11PRP-N031	3	48.0	N/A	
881G11PRP-N032	3	34.6	N/A	
881G11PRP-N033	3	52.4	N/A	
881G11PRP-N034	3	8.0	N/A	
881G11PRP-N035	3	-5.4	N/A	
881G11PRP-N036	3	30.2	N/A	
881G11PRP-N037	3	-9.8	N/A	
881G11PRP-N038	3	12.4	N/A	
881G11PRP-N039	3	21.3	N/A	
881G11PRP-N040	3	8.0	N/A	
881G11PRP-N041	3	65.7	N/A	
881G11PRP-N042	3	25.7	N/A	
881G11PRP-N043	3	-5.4	N/A	
881G11PRP-N044	3	248.0	N/A	
881G11QRP-N044	6	295.5	N/A	
881G11PRP-N045	3	3.5	N/A	
881G11PRP-N046	3	3.5	N/A	
881G11PRP-N047	3	8.0	N/A	
881G11PRP-N048	3	25.7	N/A	
881G11PRP-N049	3	34.6	N/A	
881G11PRP-N050	3	21.3	N/A	
881G11PRP-N051	3	43.5	N/A	
881G11PRP-N052	3	16.8	N/A	

Survey Area: G	Survey Unit: 881G11	Building: 881
Description: B881 MU-G, Rooms 244 & 245, Floors		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N053	3	16.8	N/A	
881G11PRP-N054	3	3.5	N/A	
881G11PRP-N055	3	39.1	N/A	
881G11PRP-N056	3	16.8	N/A	
881G11PRP-N057	3	3.5	N/A	
881G11PRP-N058	3	-5.4	N/A	
881G11PRP-N059	3	12.4	N/A	
881G11PRP-N060	3	25.7	N/A	
881G11PRP-N061	3	12.4	N/A	
881G11PRP-N062	3	12.4	N/A	
881G11PRP-N063	3	3.5	N/A	
881G11PRP-N064	3	21.3	N/A	
881G11PRP-N065	3	3.5	N/A	
881G11PRP-N066	3	39.1	N/A	
881G11PRP-N067	2	56.9	N/A	
881G11PRP-N068	2	71.0	N/A	
881G11PRP-N069	2	33.4	N/A	
881G11PRP-N070	2	19.3	N/A	
881G11PRP-N071	2	89.8	N/A	
881G11PRP-N072	2	47.5	N/A	
881G11PRP-N073	2	108.6	N/A	
881G11PRP-N074	2	47.5	N/A	
881G11PRP-N075	2	897.3	N/A	
881G11PRP-N076	2	24.0	N/A	
881G11PRP-N077	2	33.4	N/A	
881G11PRP-N078	2	61.6	N/A	
881G11PRP-N079	2	33.4	N/A	

300

Survey Area: G	Survey Unit: 881G11	Building: 881
Description: B881 MU-G, Rooms 244 & 245, Floors		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N080	2	56.9	N/A	
881G11PRP-N081	2	47.5	N/A	
881G11PRP-N082	2	61.6	N/A	
881G11PRP-N083	2	19.3	N/A	
881G11PRP-N084	2	56.9	N/A	
881G11PRP-N085	2	10.0	N/A	
881G11PRP-N086	2	28.7	N/A	
881G11PRP-N087	2	61.6	N/A	
881G11PRP-N088	2	99.2	N/A	
881G11QRP-N088	6	128.8	N/A	
881G11PRP-N089	4	10.0	N/A	
881G11PRP-N090	4	28.7	N/A	
881G11PRP-N091	4	28.7	N/A	
881G11PRP-N092	4	0.6	N/A	
881G11PRP-N093	4	71.0	N/A	
881G11PRP-N094	4	33.4	N/A	
881G11PRP-N095	4	113.2	N/A	
881G11QRP-N095	6	82.6	N/A	
881G11IRP-N096	2	2,154.9	N/A	
881G11PRP-N097	4	42.8	N/A	
881G11PRP-N098	4	221.2	N/A	
881G11PRP-N099	4	146.1	N/A	
881G11PRP-N100	4	66.3	N/A	
881G11PRP-N101	4	0.6	N/A	
881G11PRP-N102	4	42.8	N/A	
881G11PRP-N103	4	89.8	N/A	
881G11QRP-N103	6	68.7	N/A	

301

Survey Area: G	Survey Unit: 881G11	Building: 881

Description: B881 MU-G, Rooms 244 & 245, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G11PRP-N104	4	56.9	N/A	
881G11PRP-N105	4	33.4	N/A	
881G11PRP-N106	4	5.3	N/A	
881G11PRP-N107	4	80.4	N/A	
881G11PRP-N108	4	24.0	N/A	
881G11PRP-N109	4	10.0	N/A	
881G11PRP-N110	4	28.7	N/A	
881G11QRP-N110	6	45.5	N/A	

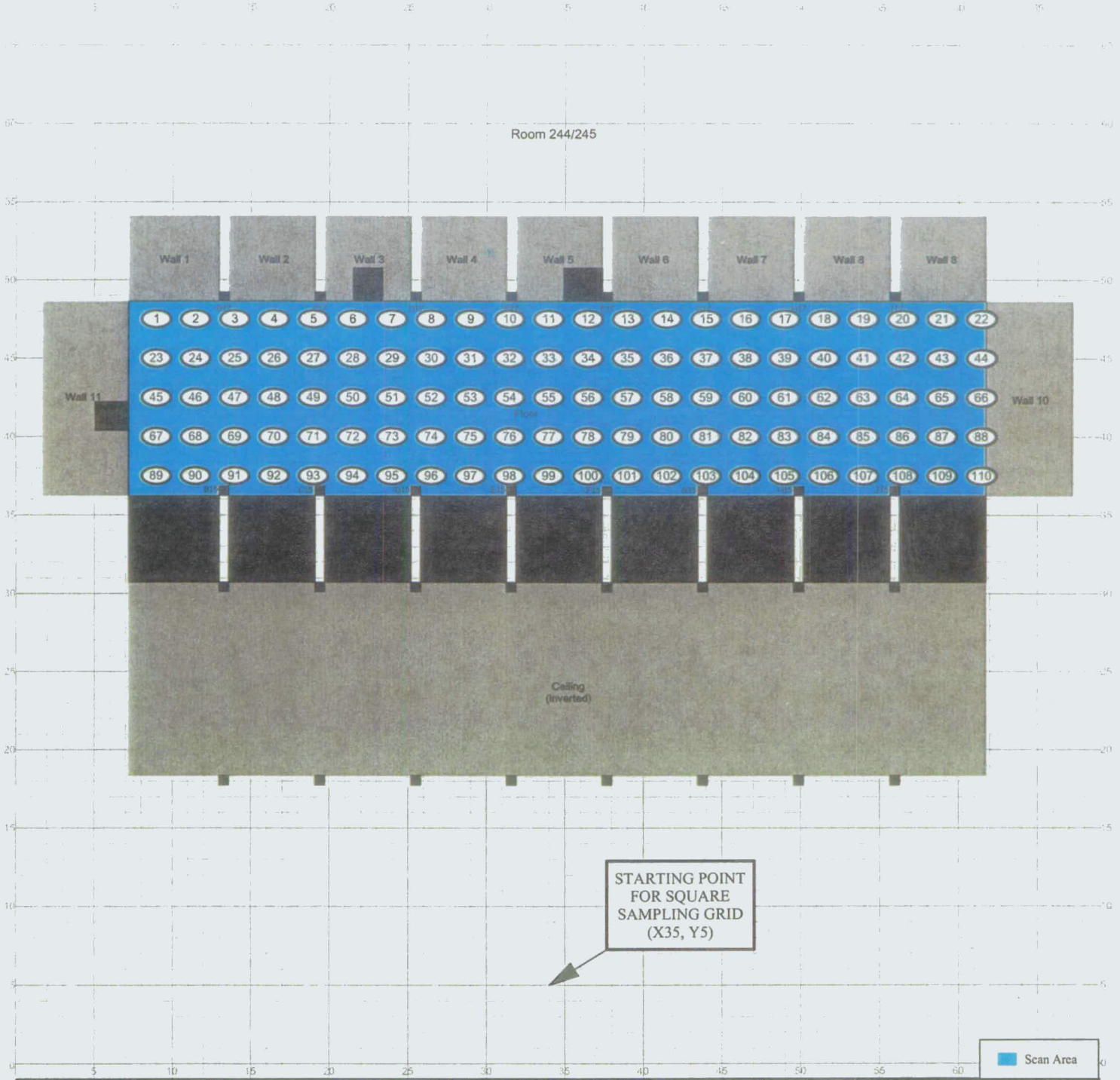
Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

The initial Alpha Net Activity for location 96 was 6,071.0 dpm/100cm2. The area was decontaminated and re-surveyed. Re-survey results are reported. No further investigation is required.

302

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G11** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Rooms 244 & 245, Floot
Total Area: 676 sq. m. **Total Floor Area: 676 sq. m.**
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3, 4

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881G11-SC April 29, 2004

Survey Area: G	Survey Unit: 881G12	Building: 881
Description: B881, MU-G, Rooms 244 & 245, Walls and Ceiling		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 18 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	52.1 dpm/100cm²
Minimum:	-1.2 dpm/100cm²
Mean:	19.5 dpm/100cm²
Standard Deviation:	17.5
QC Maximum:	37.6 dpm/100cm²
QC Minimum:	14.1 dpm/100cm²
QC Mean:	25.8 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 18 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	10.3 dpm/100cm²
Minimum:	-1.1 dpm/100cm²
Mean:	2.3 dpm/100cm²
Standard Deviation:	3.3
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

304

Survey Area: G	Survey Unit: 881G12	Building: 881

Description: B881, MU-G, Rooms 244 & 245, Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	512590	04/18/04	Electra	2352	DP-6	05/11/04	0.225	NA	93.0	NA	T/S
2	712193	04/18/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/Q
3	712193	04/19/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G | **Survey Unit:** 881G12 | **Building:** 881

Description: B881, MU-G, Rooms 244 & 245, Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G12PRP-N001	3	-1.1	N/A	
881G12PRP-N002	3	1.7	N/A	
881G12PRP-N003	3	1.7	N/A	
881G12PRP-N004	3	-1.1	N/A	
881G12PRP-N005	3	4.6	N/A	
881G12PRP-N006	3	-1.1	N/A	
881G12PRP-N007	3	1.7	N/A	
881G12PRP-N008	3	-1.1	N/A	
881G12PRP-N009	3	4.6	N/A	
881G12PRP-N010	3	4.6	N/A	
881G12PRP-N011	3	1.7	N/A	
881G12PRP-N012	3	-1.1	N/A	
881G12PRP-N013	3	4.6	N/A	
881G12PRP-N014	3	10.3	N/A	
881G12PRP-N015	3	1.7	N/A	
881G12PRP-N016	3	-1.1	N/A	
881G12PRP-N017	3	4.6	N/A	
881G12PRP-N018	3	7.4	N/A	

Comments:

Survey Area: G **Survey Unit:** 881G12 **Building:** 881

Description: B881, MU-G, Rooms 244 & 245, Walls and Ceiling

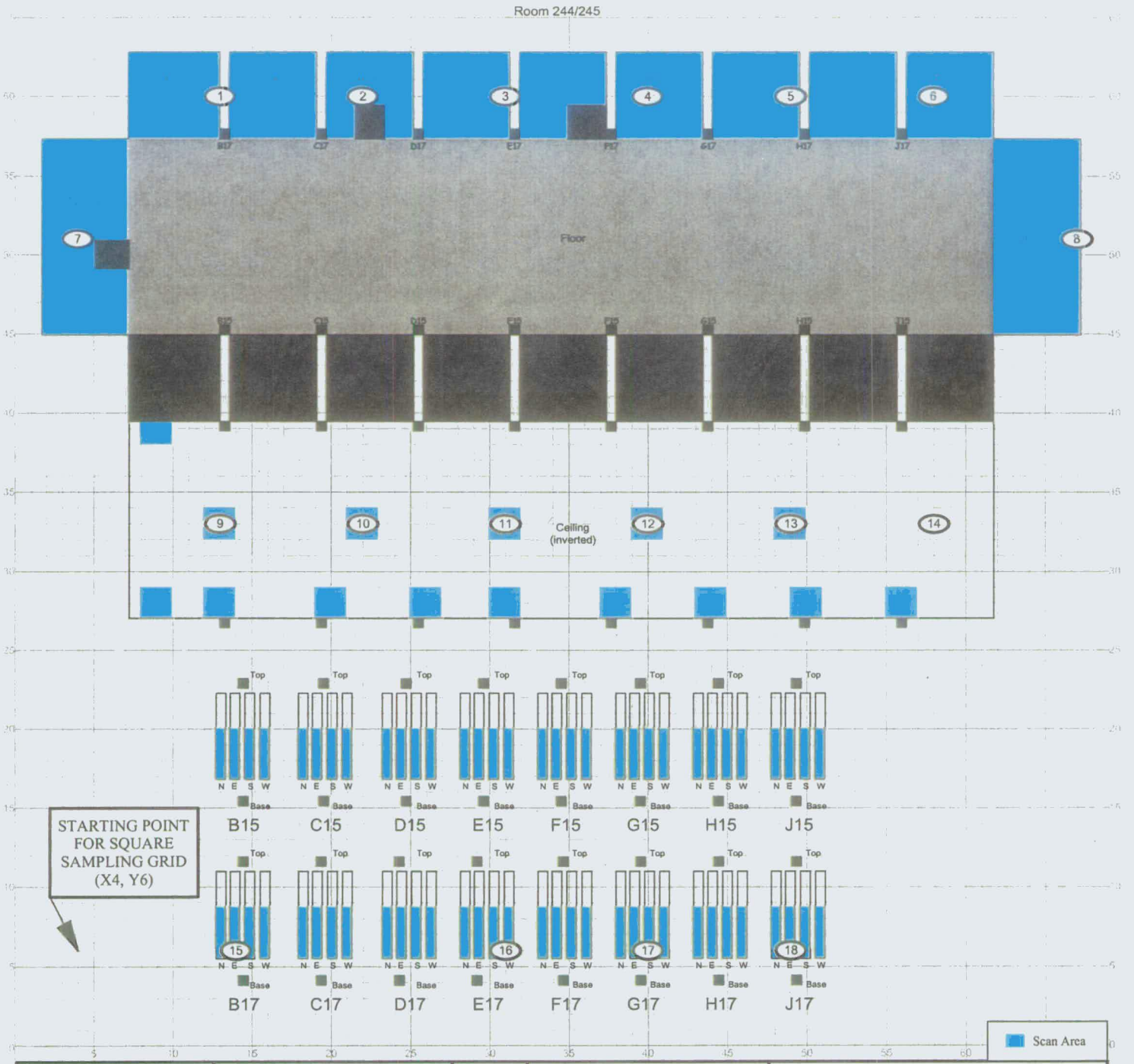
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G12PRP-N001	1	3.2	N/A	
881G12PRP-N002	1	-1.2	N/A	
881G12PRP-N003	1	16.5	N/A	
881G12PRP-N004	1	25.4	N/A	
881G12PRP-N005	1	47.7	N/A	
881G12PRP-N006	1	16.5	N/A	
881G12PRP-N007	1	7.7	N/A	
881G12PRP-N008	1	25.4	N/A	
881G12PRP-N009	1	3.2	N/A	
881G12PRP-N010	1	7.7	N/A	
881G12PRP-N011	1	-1.2	N/A	
881G12PRP-N012	1	43.2	N/A	
881G12PRP-N013	1	16.5	N/A	
881G12PRP-N014	1	52.1	N/A	
881G12PRP-N015	1	12.1	N/A	
881G12PRP-N016	1	21.0	N/A	
881G12QRP-N016	2	14.1	N/A	
881G12PRP-N017	1	47.7	N/A	
881G12QRP-N017	2	37.6	N/A	
881G12PRP-N018	1	7.7	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G12** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Rooms 244 & 245, Walls & Ceiling
Total Area: 1,314 sq. m. **Total Floor Area: 676 sq. m.**
Grid Spacing for Survey Points: 9 m. X 9 m.



SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER HILL COMPANY

MAP ID: 03-0568/881G12-SC **April 29, 2004**

308

Survey Area: G	Survey Unit: 881G13	Building: 881

Description: Building 881 Management Unit G, Rooms 247, 248, & 249 Walls and Ceilings

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 16 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	101.9 dpm/100cm²
Minimum:	21.9 dpm/100cm²
Mean:	49.2 dpm/100cm²
Standard Deviation:	25.6
QC Maximum:	84.5 dpm/100cm²
QC Minimum:	29.7 dpm/100cm²
QC Mean:	57.1 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 16 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	8.8 dpm/100cm²
Minimum:	-1.2 dpm/100cm²
Mean:	1.7 dpm/100cm²
Standard Deviation:	2.9
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

309

Survey Area: G	Survey Unit: 881G13	Building: 881

Description: Building 881 Management Unit G, Rooms 247, 248, & 249 Walls and Ceilings

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	04/03/04	Electra	2352	DP-6	05/11/04	0.225	NA	93.0	NA	T
2	512590	04/03/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/Q
3	711447	04/03/04	Electra	290	DP-6	09/16/04	0.215	NA	93.0	NA	T/S
4	512590	04/03/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
5	512590	04/03/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R
6	512590	04/04/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	T/S
7	712193	04/03/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	T/S
8	712193	04/03/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/S
9	711447	04/03/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/S
10	712193	04/04/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/S
11	711799	04/04/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	T/S
12	711447	04/04/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/S
13	712193	04/04/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

3/0

Survey Area: G	Survey Unit: 881G13	Building: 881
Description: Building 881 Management Unit G, Rooms 247, 248, & 249 Walls and Ceilings		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G13PRP-N001	13	-1.2	N/A	
881G13PRP-N002	5	2.7	N/A	
881G13PRP-N003	13	1.8	N/A	
881G13PRP-N004	5	2.7	N/A	
881G13PRP-N005	13	-1.2	N/A	
881G13PRP-N006	5	5.8	N/A	
881G13PRP-N007	13	-1.2	N/A	
881G13PRP-N008	5	8.8	N/A	
881G13PRP-N009	13	1.8	N/A	
881G13PRP-N010	5	-0.3	N/A	
881G13PRP-N011	13	4.9	N/A	
881G13PRP-N012	5	-0.3	N/A	
881G13PRP-N013	13	-1.2	N/A	
881G13PRP-N014	5	2.7	N/A	
881G13PRP-N015	13	1.8	N/A	
881G13PRP-N016	5	-0.3	N/A	

Comments:

Survey Area: G	Survey Unit: 881G13	Building: 881

Description: Building 881 Management Unit G, Rooms 247, 248, & 249 Walls and Ceilings

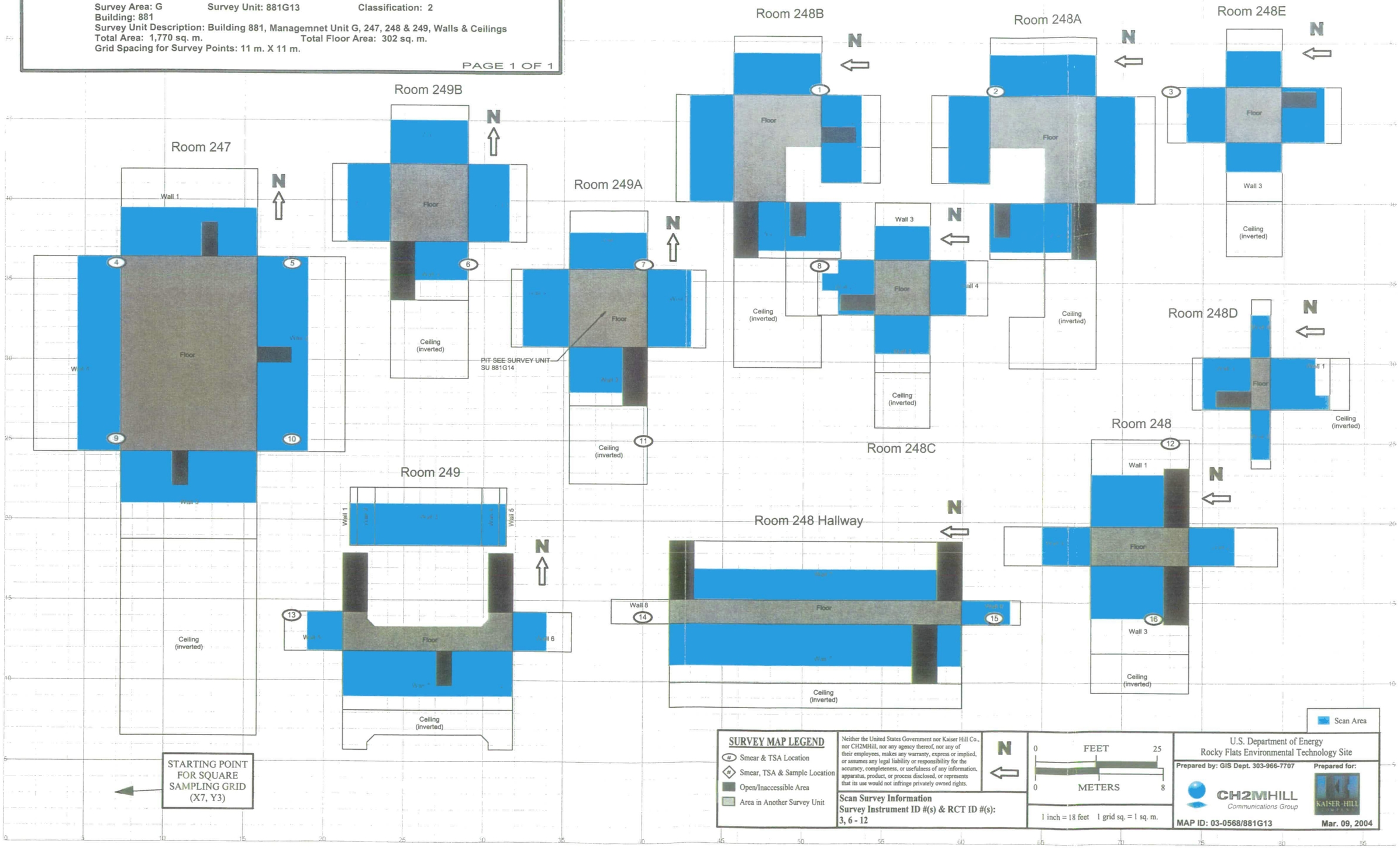
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G13PRP-N001	1	66.4	N/A	
881G13PRP-N002	1	39.7	N/A	
881G13PRP-N003	1	101.9	N/A	
881G13PRP-N004	1	70.8	N/A	
881G13QRP-N004	2	84.5	N/A	
881G13PRP-N005	1	53.1	N/A	
881G13PRP-N006	1	48.6	N/A	
881G13QRP-N006	2	29.7	N/A	
881G13PRP-N007	1	26.4	N/A	
881G13PRP-N008	1	30.8	N/A	
881G13PRP-N009	1	26.4	N/A	
881G13PRP-N010	1	35.3	N/A	
881G13PRP-N011	1	26.4	N/A	
881G13PRP-N012	1	26.4	N/A	
881G13PRP-N013	1	44.2	N/A	
881G13PRP-N014	1	97.5	N/A	
881G13PRP-N015	1	70.8	N/A	
881G13PRP-N016	1	21.9	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G Survey Unit: 881G13 Classification: 2
Building: 881
Survey Unit Description: Building 881, Managemnet Unit G, 247, 248 & 249, Walls & Ceilings
Total Area: 1,770 sq. m. Total Floor Area: 302 sq. m.
Grid Spacing for Survey Points: 11 m. X 11 m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
3, 6 - 12

Scan Area

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

MAP ID: 03-0568/881G13 Mar. 09, 2004

Survey Area: G	Survey Unit: 881G14	Building: 881
Description: Building 881, Management Unit G, Room 249A Pit		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 15
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0
Nbr QC Required: 2
Nbr QC Performed: 2

Alpha

Maximum:	526.7 dpm/100cm²
Minimum:	66.7 dpm/100cm²
Mean:	168.7 dpm/100cm²
Standard Deviation:	117.5
QC Maximum:	602.9 dpm/100cm²
QC Minimum:	325.4 dpm/100cm²
QC Mean:	464.1 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 15
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0

Alpha

Maximum:	5.1 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	1.9 dpm/100cm²
Standard Deviation:	2.4
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: G | **Survey Unit:** 881G14 | **Building:** 881

Description: Building 881, Management Unit G, Room 249A Pit

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	04/21/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T/S
2	712193	04/21/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
3	711447	04/21/04	Electra	3109	DP-6	06/23/04	0.209	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G | **Survey Unit:** 881G14 | **Building:** 881

Description: Building 881, Management Unit G, Room 249A Pit

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G14PRP-N001	2	-0.6	N/A	
881G14PRP-N002	2	-0.6	N/A	
881G14PRP-N003	2	-0.6	N/A	
881G14PRP-N004	2	2.3	N/A	
881G14PRP-N005	2	-0.6	N/A	
881G14PRP-N006	2	2.3	N/A	
881G14PRP-N007	2	5.1	N/A	
881G14PRP-N008	2	2.3	N/A	
881G14PRP-N009	2	-0.6	N/A	
881G14PRP-N010	2	2.3	N/A	
881G14PRP-N011	2	5.1	N/A	
881G14PRP-N012	2	5.1	N/A	
881G14PRP-N013	2	2.3	N/A	
881G14PRP-N014	2	-0.6	N/A	
881G14PRP-N015	2	5.1	N/A	

Comments:

316

Survey Area: G	Survey Unit: 881G14	Building: 881

Description: Building 881, Management Unit G, Room 249A Pit

Random/QC Total Surface Activity Data Sheet

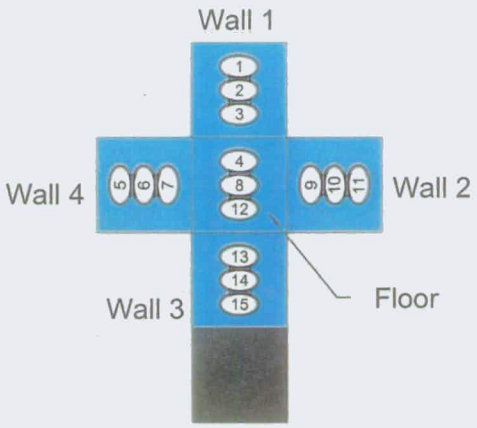
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G14PRP-N001	1	113.6	N/A	
881G14PRP-N002	1	127.7	N/A	
881G14PRP-N003	1	165.2	N/A	
881G14PRP-N004	1	526.7	N/A	
881G14QRP-N004	3	602.9	N/A	
881G14PRP-N005	1	66.7	N/A	
881G14PRP-N006	1	118.3	N/A	
881G14PRP-N007	1	169.9	N/A	
881G14PRP-N008	1	155.9	N/A	
881G14PRP-N009	1	184.0	N/A	
881G14PRP-N010	1	123.0	N/A	
881G14PRP-N011	1	132.4	N/A	
881G14PRP-N012	1	339.0	N/A	
881G14QRP-N012	3	325.4	N/A	
881G14PRP-N013	1	132.4	N/A	
881G14PRP-N014	1	80.7	N/A	
881G14PRP-N015	1	94.8	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G14** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Room 249A Pit
Total Area: 4 sq. m. **Total Floor Area: 1 sq. m.**
Grid Spacing for Survey Points: 22.86 cm. X 22.86 cm.

FLOOR PIT IN ROOM 248



STARTING POINT FOR SQUARE SAMPLING GRID (X17, Y2)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 15
0 METERS 5

1 inch = 6 feet 1 grid sq. = 0.5 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881G14-SC **April 29, 2004**

318

Survey Area: G	Survey Unit: 881G15	Building: 881

Description: Building 881 Management Unit G Room 246 Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 16 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	586.2 dpm/100cm²
Minimum:	47.4 dpm/100cm²
Mean:	157.5 dpm/100cm²
Standard Deviation:	133.4
QC Maximum:	393.4 dpm/100cm²
QC Minimum:	260.7 dpm/100cm²
QC Mean:	327.0 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 16 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	11.5 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	3.1 dpm/100cm²
Standard Deviation:	4.3
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

319

Survey Area: G	Survey Unit: 881G15	Building: 881

Description: Building 881 Management Unit G Room 246 Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	04/02/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/S
2	712193	04/02/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	T/S
3	712193	04/02/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/Q
4	711799	04/02/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R
5	711799	04/02/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
6	712193	04/02/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	T/S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

320

Survey Area: G	Survey Unit: 881G15	Building: 881
Description: Building 881 Management Unit G Room 246 Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G15PRP-N001	4	-0.3	N/A	
881G15PRP-N002	5	-0.6	N/A	
881G15PRP-N003	4	5.8	N/A	
881G15PRP-N004	5	-0.6	N/A	
881G15PRP-N005	4	5.8	N/A	
881G15PRP-N006	5	11.5	N/A	
881G15PRP-N007	4	-0.3	N/A	
881G15PRP-N008	5	2.4	N/A	
881G15PRP-N009	4	2.7	N/A	
881G15PRP-N010	5	-0.6	N/A	
881G15PRP-N011	4	-0.3	N/A	
881G15PRP-N012	5	11.5	N/A	
881G15PRP-N013	4	8.8	N/A	
881G15PRP-N014	5	-0.6	N/A	
881G15PRP-N015	4	2.7	N/A	
881G15PRP-N016	5	2.4	N/A	

Comments:

Survey Area: G	Survey Unit: 881G15	Building: 881

Description: Building 881 Management Unit G Room 246 Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G15PRP-N001	1	47.4	N/A	
881G15PRP-N002	1	179.8	N/A	
881G15PRP-N003	1	79.3	N/A	
881G15PRP-N004	1	138.7	N/A	
881G15PRP-N005	1	56.5	N/A	
881G15PRP-N006	1	220.9	N/A	
881G15PRP-N007	1	65.6	N/A	
881G15PRP-N008	1	157.0	N/A	
881G15PRP-N009	1	88.5	N/A	
881G15PRP-N010	1	303.1	N/A	
881G15QRP-N010	3	260.7	N/A	
881G15PRP-N011	1	47.4	N/A	
881G15PRP-N012	1	586.2	N/A	
881G15QRP-N012	3	393.4	N/A	
881G15PRP-N013	1	129.6	N/A	
881G15PRP-N014	1	166.1	N/A	
881G15PRP-N015	1	111.3	N/A	
881G15PRP-N016	1	143.3	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G15** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Room 246 Floor
Total Area: 36 sq. m. **Total Floor Area: 36 sq. m.**
Grid Spacing for Survey Points: 1.5 m. X 1.5 m.

Room 246

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 15
0 METERS 5

1 inch = 12 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 6

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881G15-SC April 19, 2004

Survey Area: G	Survey Unit: 881G16	Building: 881

Description: Building 881, Management Unit G, Room 246 Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 15 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	30.4	dpm/100cm²
Minimum:	-15.2	dpm/100cm²
Mean:	4.6	dpm/100cm²
Standard Deviation:	14.2	
QC Maximum:	30.8	dpm/100cm²
QC Minimum:	21.3	dpm/100cm²
QC Mean:	26.0	dpm/100cm²
Uranium DCGL$_W$:	5,000.0	dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0	dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	11.8	dpm/100cm²
Minimum:	-0.6	dpm/100cm²
Mean:	4.0	dpm/100cm²
Standard Deviation:	4.3	
Uranium DCGL$_W$:	1,000.0	

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

324

Survey Area: G | **Survey Unit:** 881G16 | **Building:** 881

Description: Building 881, Management Unit G, Room 246 Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	04/02/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/S
2	712193	04/02/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S
3	712193	04/02/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	Q
4	711799	04/02/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R
5	711799	04/02/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G	Survey Unit: 881G16	Building: 881
Description: Building 881, Management Unit G, Room 246 Walls and Ceiling		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G16PRP-N001	4	8.8	N/A	
881G16PRP-N002	5	2.4	N/A	
881G16PRP-N003	4	-0.3	N/A	
881G16PRP-N004	5	2.4	N/A	
881G16PRP-N005	4	-0.3	N/A	
881G16PRP-N006	5	-0.6	N/A	
881G16PRP-N007	4	11.8	N/A	
881G16PRP-N008	5	2.4	N/A	
881G16PRP-N009	4	2.7	N/A	
881G16PRP-N010	5	5.5	N/A	
881G16PRP-N011	4	-0.3	N/A	
881G16PRP-N012	5	2.4	N/A	
881G16PRP-N013	4	2.7	N/A	
881G16PRP-N014	5	11.5	N/A	
881G16PRP-N015	4	8.8	N/A	

Comments:

Survey Area: G	Survey Unit: 881G16	Building: 881
Description: Building 881, Management Unit G, Room 246 Walls and Ceiling		

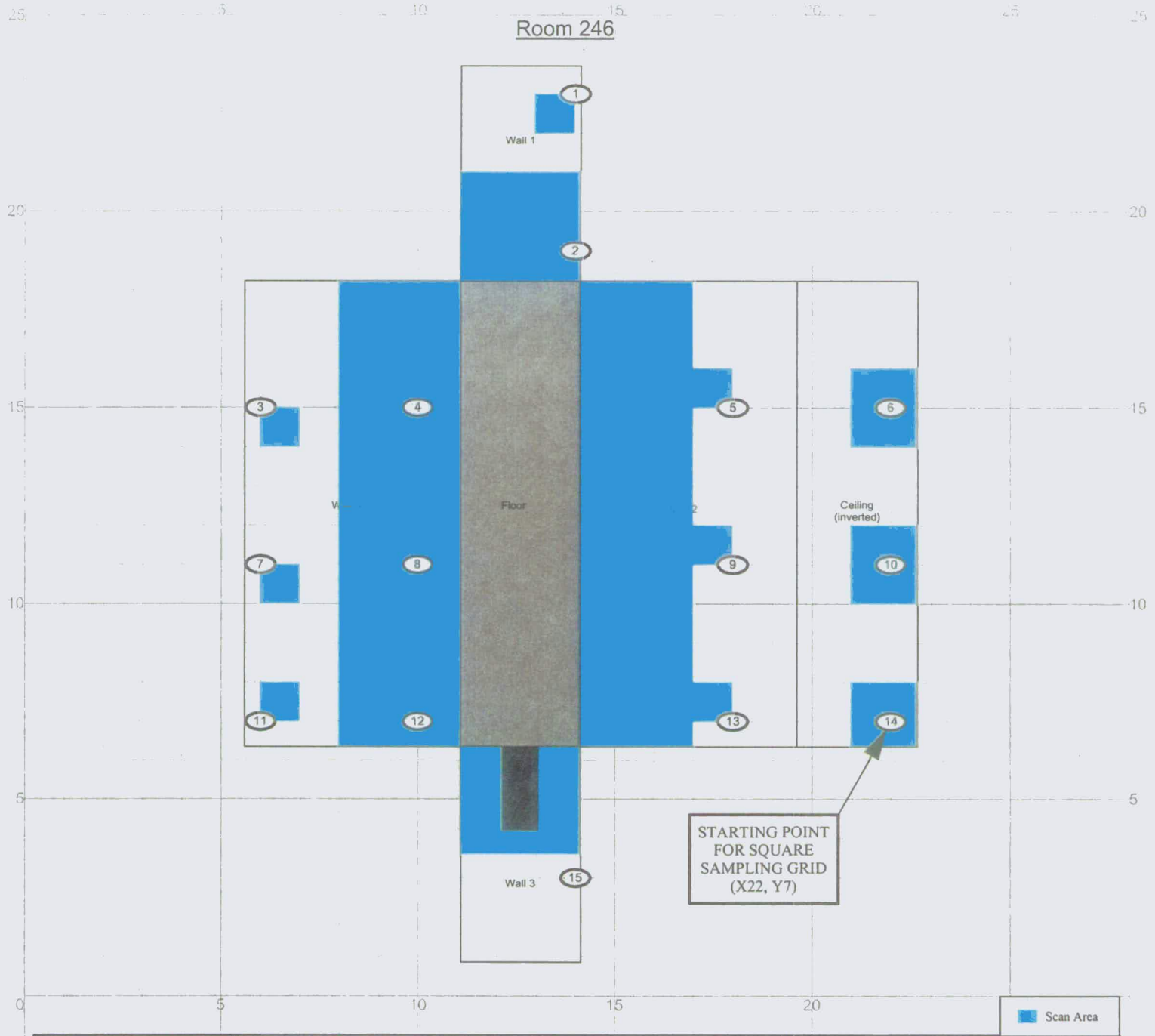
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G16PRP-N001	1	7.6	N/A	
881G16PRP-N002	1	-6.1	N/A	
881G16PRP-N003	1	16.7	N/A	
881G16QRP-N003	3	30.8	N/A	
881G16PRP-N004	1	-15.2	N/A	
881G16PRP-N005	1	7.6	N/A	
881G16PRP-N006	1	25.9	N/A	
881G16PRP-N007	1	-15.2	N/A	
881G16PRP-N008	1	-1.5	N/A	
881G16PRP-N009	1	-10.7	N/A	
881G16PRP-N010	1	-1.5	N/A	
881G16PRP-N011	1	-6.1	N/A	
881G16PRP-N012	1	16.7	N/A	
881G16PRP-N013	1	7.6	N/A	
881G16PRP-N014	1	12.2	N/A	
881G16QRP-N014	3	21.3	N/A	
881G16PRP-N015	1	30.4	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: G **Survey Unit: 881G16** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit G, Room 246, Walls & Ceiling
Total Area: 236 sq. m. **Total Floor Area: 36 sq. m.**
Grid Spacing for Survey Points: 4 m. X 4 m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 15
0 METERS 5

1 inch = 12 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER HILL

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2

MAP ID: 03-0568/881G16-SC **April 21, 2004**

328

Survey Area: G	Survey Unit: 881G17	Building: 881

Description: Building 881, Management Unit G, Rooms 247, 248 & 249 Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 46
Nbr Random Measurements Performed: 51
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0
Nbr QC Required: 3
Nbr QC Performed: 3

Alpha

Maximum:	162.1 dpm/100cm²
Minimum:	11.6 dpm/100cm²
Mean:	62.7 dpm/100cm²
Standard Deviation:	33.1
QC Maximum:	154.8 dpm/100cm²
QC Minimum:	145.3 dpm/100cm²
QC Mean:	151.6 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 46
Nbr Random Measurements Performed: 51
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0

Alpha

Maximum:	10.3 dpm/100cm²
Minimum:	-2.0 dpm/100cm²
Mean:	3.5 dpm/100cm²
Standard Deviation:	3.8
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: G | **Survey Unit:** 881G17 | **Building:** 881

Description: Building 881, Management Unit G, Rooms 247, 248 & 249 Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	04/03/04	Electra	1665	DP-6	08/11/04	0.213	NA	93.0	NA	T
2	512590	04/03/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
3	512590	04/03/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R
4	711799	04/03/04	Electra	2352	DP-6	05/11/04	0.225	NA	93.0	NA	T
5	512590	04/03/04	Ludlum 292	147742	NA	09/25/04	0.351	NA	16.0	NA	R
6	512590	04/03/04	Ludlum 292	147744	NA	08/12/04	0.341	NA	16.0	NA	R
7	512590	04/04/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S
8	712193	04/03/04	Electra	1513	AP-6	09/17/04	0.181	NA	93.0	NA	S
9	711447	04/03/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	S
10	712193	04/04/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	S
11	711447	04/04/04	Electra	681	DP-8	06/29/04	0.152	NA	93.0	NA	S
12	711799	04/04/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	S
13	711447	04/04/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	Q/S
14	712193	04/04/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: G | **Survey Unit:** 881G17 | **Building:** 881

Description: Building 881, Management Unit G, Rooms 247, 248 & 249 Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G17PRP-N001	14	4.9	N/A	
881G17PRP-N002	3	2.7	N/A	
881G17PRP-N003	14	1.8	N/A	
881G17PRP-N004	3	5.8	N/A	
881G17PRP-N005	14	1.8	N/A	
881G17PRP-N006	3	2.7	N/A	
881G17PRP-N007	14	1.8	N/A	
881G17PRP-N008	3	-0.3	N/A	
881G17PRP-N009	14	4.9	N/A	
881G17PRP-N010	3	8.8	N/A	
881G17PRP-N011	5	6.6	N/A	
881G17PRP-N012	6	10.3	N/A	
881G17PRP-N013	5	3.7	N/A	
881G17PRP-N014	6	10.3	N/A	
881G17PRP-N015	14	-1.2	N/A	
881G17PRP-N016	3	8.8	N/A	
881G17PRP-N017	5	6.6	N/A	
881G17PRP-N018	6	7.3	N/A	
881G17PRP-N019	5	6.6	N/A	
881G17PRP-N020	6	-1.5	N/A	
881G17PRP-N021	5	6.6	N/A	
881G17PRP-N022	6	-1.5	N/A	
881G17PRP-N023	14	4.9	N/A	
881G17PRP-N024	3	5.8	N/A	
881G17PRP-N025	5	6.6	N/A	
881G17PRP-N026	6	-1.5	N/A	
881G17PRP-N027	5	0.9	N/A	
881G17PRP-N028	6	10.3	N/A	
881G17PRP-N029	5	0.9	N/A	

Survey Area: G	Survey Unit: 881G17	Building: 881

Description: Building 881, Management Unit G, Rooms 247, 248 & 249 Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G17PRP-N030	6	4.4	N/A	
881G17PRP-N031	5	0.9	N/A	
881G17PRP-N032	6	-1.5	N/A	
881G17PRP-N033	14	1.8	N/A	
881G17PRP-N034	5	3.7	N/A	
881G17PRP-N035	6	1.5	N/A	
881G17PRP-N036	5	-2.0	N/A	
881G17PRP-N037	6	7.3	N/A	
881G17PRP-N038	14	1.8	N/A	
881G17PRP-N039	3	-0.3	N/A	
881G17PRP-N040	14	1.8	N/A	
881G17PRP-N041	3	2.7	N/A	
881G17PRP-N042	14	-1.2	N/A	
881G17PRP-N043	3	8.8	N/A	
881G17PRP-N044	14	-1.2	N/A	
881G17PRP-N045	3	8.8	N/A	
881G17PRP-N046	14	1.8	N/A	
881G17PRP-N047	3	5.8	N/A	
881G17PRP-N048	14	-1.2	N/A	
881G17PRP-N049	3	8.8	N/A	
881G17PRP-N050	14	-1.2	N/A	
881G17PRP-N051	3	-0.3	N/A	

Comments:

Survey Area: G	Survey Unit: 881G17	Building: 881

Description: Building 881, Management Unit G, Rooms 247, 248 & 249 Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G17PRP-N001	1	54.2	N/A	
881G17PRP-N002	4	60.5	N/A	
881G17PRP-N003	1	35.4	N/A	
881G17PRP-N004	4	42.7	N/A	
881G17PRP-N005	1	96.4	N/A	
881G17PRP-N006	4	11.6	N/A	
881G17PRP-N007	1	72.9	N/A	
881G17PRP-N008	4	42.7	N/A	
881G17PRP-N009	1	44.8	N/A	
881G17PRP-N010	4	47.1	N/A	
881G17PRP-N011	1	68.2	N/A	
881G17PRP-N012	4	64.9	N/A	
881G17PRP-N013	1	91.7	N/A	
881G17PRP-N014	4	69.4	N/A	
881G17PRP-N015	1	63.5	N/A	
881G17PRP-N016	4	73.8	N/A	
881G17PRP-N017	1	30.7	N/A	
881G17PRP-N018	4	73.8	N/A	
881G17PRP-N019	1	16.6	N/A	
881G17PRP-N020	4	87.1	N/A	
881G17PRP-N021	1	162.1	N/A	
881G17QRP-N021	13	145.3	N/A	
881G17PRP-N022	4	73.8	N/A	
881G17PRP-N023	1	21.3	N/A	
881G17PRP-N024	4	29.4	N/A	
881G17PRP-N025	1	58.9	N/A	
881G17PRP-N026	4	42.7	N/A	

Survey Area: G | **Survey Unit:** 881G17 | **Building:** 881

Description: Building 881, Management Unit G, Rooms 247, 248 & 249 Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881G17PRP-N027	1	129.3	N/A	
881G17PRP-N028	4	69.4	N/A	
881G17PRP-N029	1	54.2	N/A	
881G17PRP-N030	4	47.1	N/A	
881G17PRP-N031	1	72.9	N/A	
881G17PRP-N032	4	78.3	N/A	
881G17PRP-N033	1	105.8	N/A	
881G17PRP-N034	4	29.4	N/A	
881G17PRP-N035	1	21.3	N/A	
881G17PRP-N036	4	29.4	N/A	
881G17PRP-N037	1	87.0	N/A	
881G17PRP-N038	4	140.5	N/A	
881G17QRP-N038	13	154.8	N/A	
881G17PRP-N039	4	24.9	N/A	
881G17PRP-N040	1	58.9	N/A	
881G17PRP-N041	4	33.8	N/A	
881G17PRP-N042	1	49.5	N/A	
881G17PRP-N043	4	47.1	N/A	
881G17PRP-N044	1	63.5	N/A	
881G17PRP-N045	4	33.8	N/A	
881G17PRP-N046	1	40.1	N/A	
881G17PRP-N047	4	56.0	N/A	
881G17PRP-N048	1	58.9	N/A	
881G17PRP-N049	4	73.8	N/A	
881G17PRP-N050	1	115.2	N/A	
881G17PRP-N051	4	140.5	N/A	
881G17QRP-N051	13	154.8	N/A	

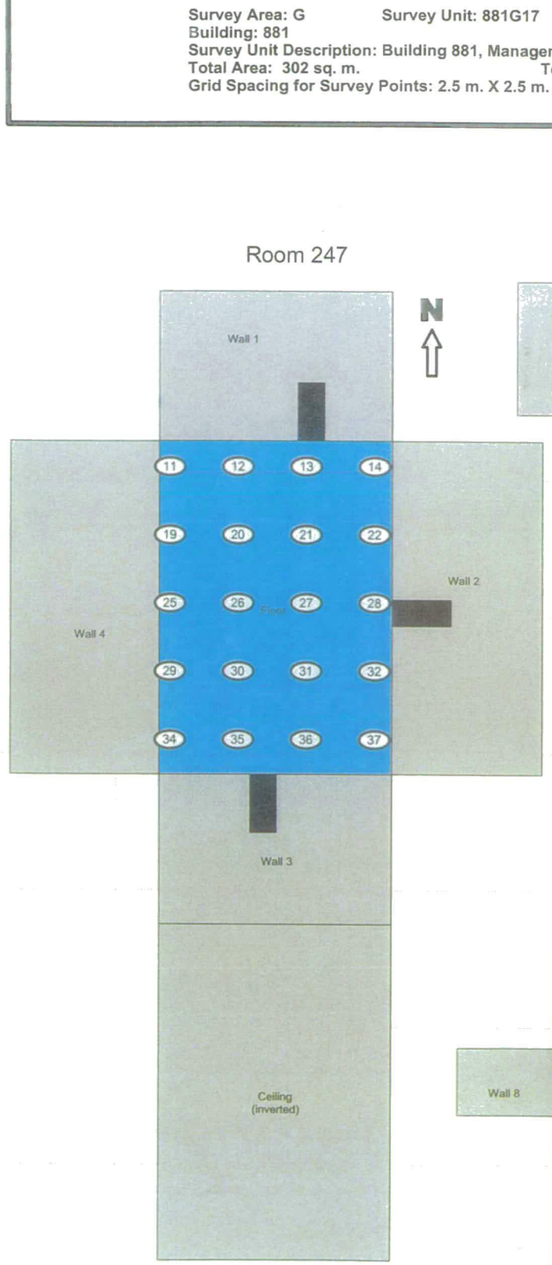
Survey Area: G	Survey Unit: 881G17	Building: 881

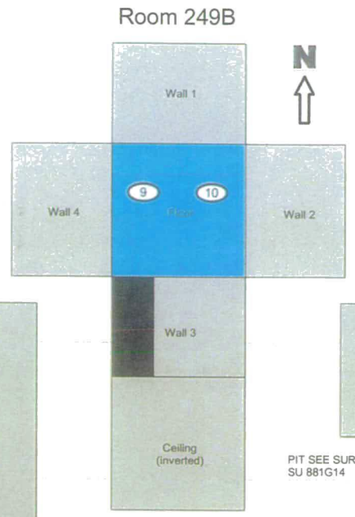
Description: Building 881, Management Unit G, Rooms 247, 248 & 249 Floors

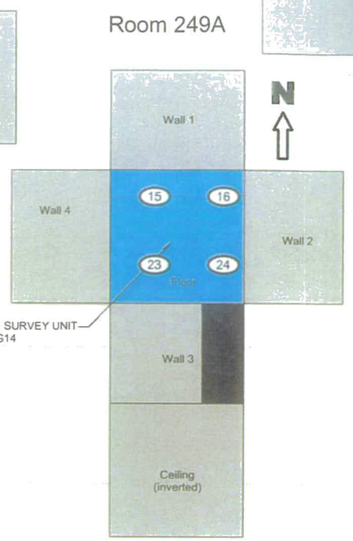
Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

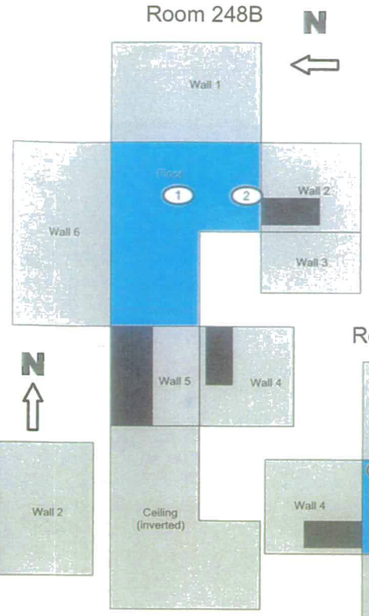
PRE-DEMOLITION SURVEY FOR B881

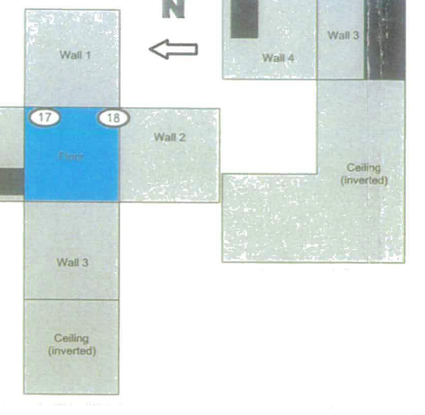
Survey Area: G **Survey Unit:** 881G17 **Classification:** 1
Building: 881
Survey Unit Description: Building 881, Managemnet Unit G, 247, 248 & 249, Floors
Total Area: 302 sq. m. **Total Floor Area:** 302 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

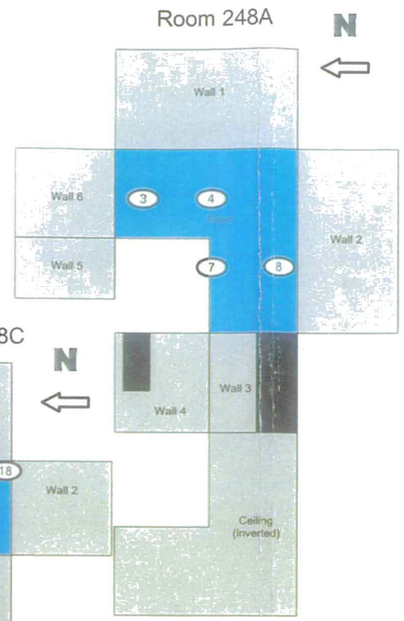


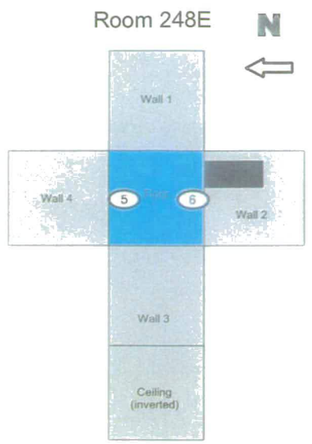


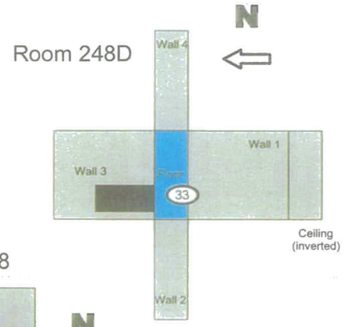


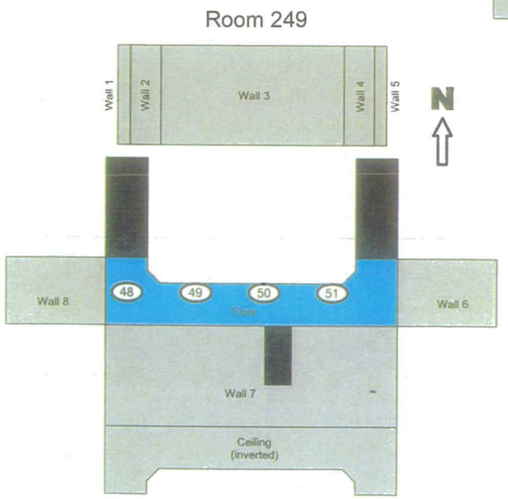


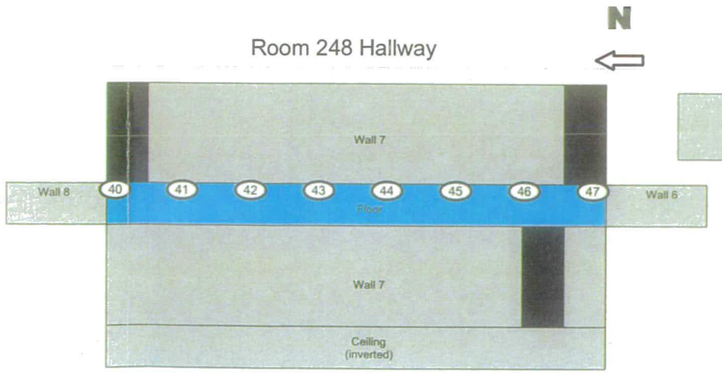


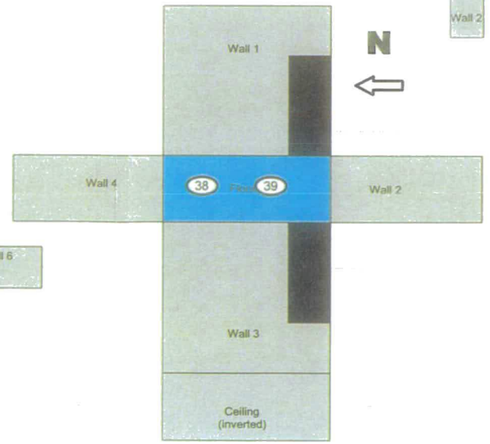












STARTING POINT FOR SQUARE SAMPLING GRID (X7, Y3)

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
7 - 13

Scan Area

0 FEET 25
0 METERS 8
1 inch = 8 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7707
Prepared for:
CH2MHILL Communications Group
KAISER-HILL COMPANY
MAP ID: 03-0568/881G17-SC
April 21, 2004

336

Survey Area: H	Survey Unit: 881H03	Building: 881
Description: Building 881Management Unit H, 159 Elevator		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 2 | Nbr QC Required: 2

Nbr Random Measurements Performed: 18 | Nbr Biased Measurements Performed: 2 | Nbr QC Performed: 2

Alpha

Maximum:	75.0 dpm/100cm²
Minimum:	19.2 dpm/100cm²
Mean:	45.8 dpm/100cm²
Standard Deviation:	15.6
QC Maximum:	59.2 dpm/100cm²
QC Minimum:	49.8 dpm/100cm²
QC Mean:	54.5 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 2

Nbr Random Measurements Performed: 18 | Nbr Biased Measurements Performed: 2

Alpha

Maximum:	8.5 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	2.3 dpm/100cm²
Standard Deviation:	2.8
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: H | **Survey Unit:** 881H03 | **Building:** 881

Description: Building 881Management Unit H, 159 Elevator

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	04/02/04	Electra	290	DP-6	09/16/04	0.215	NA	93.0	NA	T/S
2	711799	04/02/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/S
3	711447	04/02/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	Q
4	711799	04/02/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R
5	711799	04/02/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: H	Survey Unit: 881H03	Building: 881
Description: Building 881Management Unit H, 159 Elevator		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881H03PRP-N001	4	5.8	N/A	
881H03PRP-N002	5	-0.6	N/A	
881H03PRP-N003	4	2.7	N/A	
881H03PRP-N004	5	-0.6	N/A	
881H03PRP-N005	4	2.7	N/A	
881H03PRP-N006	5	2.4	N/A	
881H03PRP-N007	4	5.8	N/A	
881H03PRP-N008	5	-0.6	N/A	
881H03PRP-N009	4	-0.3	N/A	
881H03PRP-N010	5	-0.6	N/A	
881H03PRP-N011	4	5.8	N/A	
881H03PRP-N012	5	8.5	N/A	
881H03PRP-N013	4	2.7	N/A	
881H03PRP-N014	5	2.4	N/A	
881H03PRP-N015	4	-0.3	N/A	
881H03PRP-N016	5	-0.6	N/A	
881H03PRP-N017	4	2.7	N/A	
881H03PRP-N018	5	5.5	N/A	

Survey Area: H	Survey Unit: 881H03	Building: 881

Description: Building 881Management Unit H, 159 Elevator

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881H03PBP-N019	4	-0.3	N/A	
881H03PBP-N020	5	2.4	N/A	

Comments:

Survey Area: H	Survey Unit: 881H03	Building: 881
Description: Building 881Management Unit H, 159 Elevator		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881H03PRP-N001	1	70.4	N/A	
881H03PRP-N002	1	42.5	N/A	
881H03PRP-N003	1	51.8	N/A	
881H03PRP-N004	2	32.2	N/A	
881H03PRP-N005	1	23.9	N/A	
881H03PRP-N006	1	42.5	N/A	
881H03PRP-N007	1	23.9	N/A	
881H03PRP-N008	1	33.2	N/A	
881H03PRP-N009	2	41.4	N/A	
881H03PRP-N010	2	55.1	N/A	
881H03PRP-N011	1	19.2	N/A	
881H03PRP-N012	1	47.1	N/A	
881H03PRP-N013	1	37.8	N/A	
881H03PRP-N014	2	55.1	N/A	
881H03PRP-N015	1	61.1	N/A	
881H03QRP-N015	3	49.8	N/A	
881H03PRP-N016	1	37.8	N/A	
881H03PRP-N017	1	75.0	N/A	
881H03PRP-N018	1	65.7	N/A	
881H03QRP-N019	3	59.2	N/A	

341

Survey Area: H	Survey Unit: 881H03	Building: 881

Description: Building 881Management Unit H, 159 Elevator

Biased Total Surface Activity Data Sheet

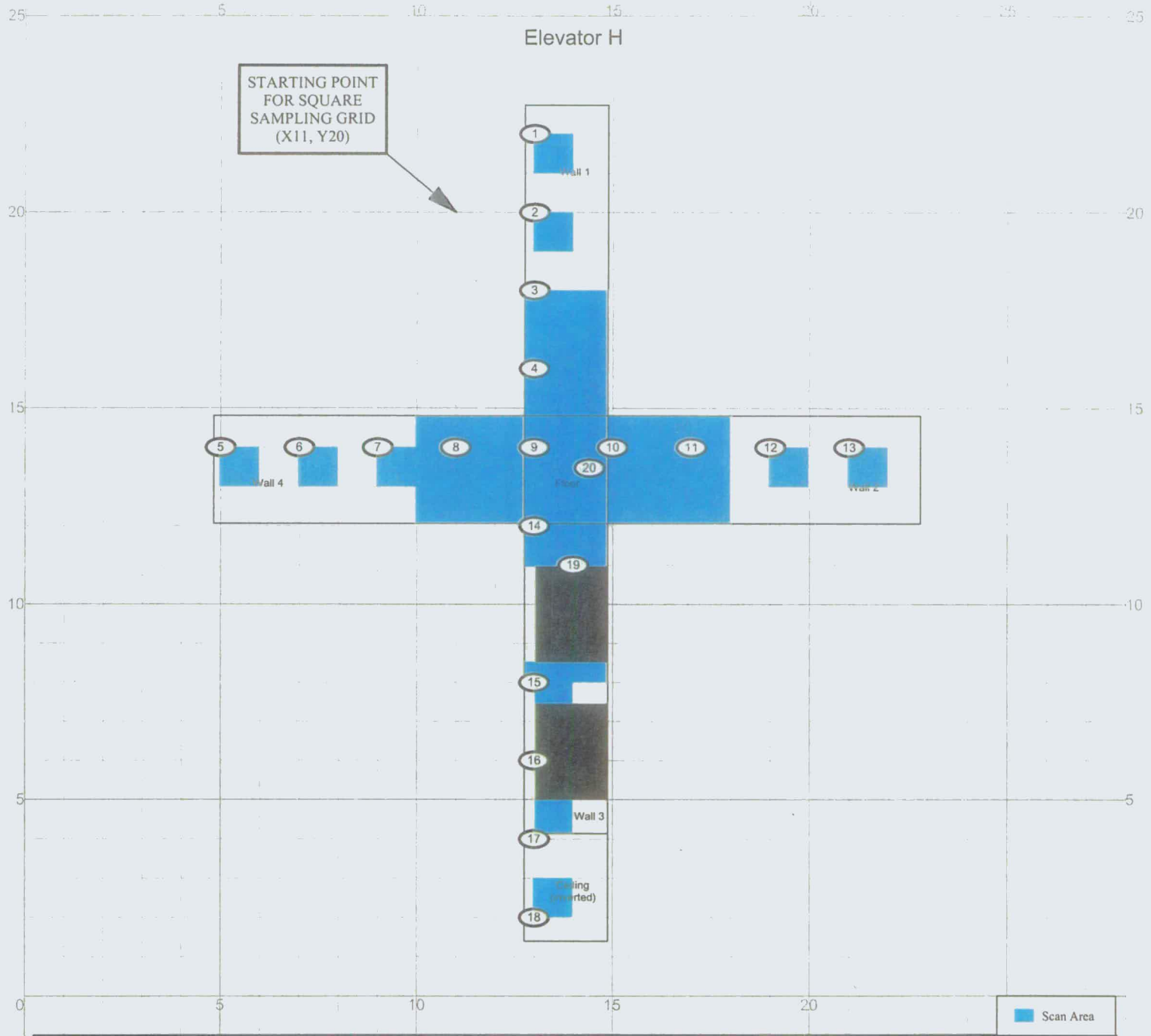
Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881H03PBP-N019	2	57.1	N/A	
881H03PBP-N020	2	43.4	N/A	

Comments:

342

PRE-DEMOLITION SURVEY FOR B881

Survey Area: H **Survey Unit: 881H03** **Classification: 2**
Building: 881
Survey Unit Description: Building 881 Management Unit H, 159 Elevator
Total Area: 89 sq. m. **Total Floor Area: 6 sq. m.**
Grid Spacing for Survey Points: 2m. X 2m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 15
0 METERS 5

1 inch = 12 feet 1 grid sq. = 1 sq. m.

Scan Area

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707

CH2MHILL Communications Group

Prepared for: KAISER-HILL

MAP ID: 03-0568/881H03-SC

April 14, 2004

Survey Area: J	Survey Unit: 881J01	Building: 881
Description: Building 881, MU-J, Rooms 201, Floors		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 140 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 8

Nbr Random Measurements Performed: 150 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 8

Alpha

Maximum:	1,018.1	dpm/100cm²
Minimum:	-9.6	dpm/100cm²
Mean:	29.9	dpm/100cm²
Standard Deviation:	90.0	
QC Maximum:	1,076.4	dpm/100cm²
QC Minimum:	24.3	dpm/100cm²
QC Mean:	188.4	dpm/100cm²
Uranium DCGL$_W$:	5,000.0	dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0	dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 140 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 150 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	14.9	dpm/100cm²
Minimum:	-1.8	dpm/100cm²
Mean:	1.7	dpm/100cm²
Standard Deviation:	3.1	
Uranium DCGL$_W$:	1,000.0	

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: J | **Survey Unit:** 881J01 | **Building:** 881

Description: Building 881, MU-J, Rooms 201, Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711799	02/23/04	Electra	662	DP-6	03/15/04	0.217	NA	93.0	NA	S
2	711799	02/23/04	Electra	661	DP-8	07/07/04	0.167	NA	93.0	NA	S
3	711447	02/23/04	Electra	666	DP-8	06/16/04	0.162	NA	93.0	NA	S
4	711447	02/23/04	Electra	3105	DP-6	07/14/04	0.201	NA	93.0	NA	T/S
5	712193	02/23/04	Electra	2404	DP-6	04/16/04	0.211	NA	93.0	NA	T/S
6	711799	02/24/04	Electra	662	DP-6	03/15/04	0.217	NA	93.0	NA	T
7	712193	02/24/04	Electra	2404	DP-6	04/16/04	0.211	NA	93.0	NA	T
8	512590	02/24/04	SAC-4	961	NA	03/30/04	0.330	NA	16.0	NA	R
9	512590	02/24/04	SAC-4	1171	NA	08/19/04	0.330	NA	16.0	NA	R
10	711447	02/24/04	Electra	3105	DP-6	07/14/04	0.201	NA	93.0	NA	T
11	712193	04/06/04	Electra	668	DP-6	06/22/04	0.157	NA	93.0	NA	S
12	712193	04/06/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	T/S
13	712193	04/06/04	Electra	1383	DP-6	04/30/04	0.196	NA	93.0	NA	T
14	712193	04/06/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R
15	711447	04/06/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: J	Survey Unit: 881J01	Building: 881

Description: Building 881, MU-J, Rooms 201, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N001	14	5.8	N/A	
881J01PRP-N002	14	-0.3	N/A	
881J01PRP-N003	14	2.7	N/A	
881J01PRP-N004	14	2.7	N/A	
881J01PRP-N005	14	5.8	N/A	
881J01PRP-N006	14	-0.3	N/A	
881J01PRP-N007	14	11.8	N/A	
881J01PRP-N008	14	-0.3	N/A	
881J01PRP-N009	14	2.7	N/A	
881J01PRP-N010	14	2.7	N/A	
881J01PRP-N011	14	-0.3	N/A	
881J01PRP-N012	14	2.7	N/A	
881J01PRP-N013	14	5.8	N/A	
881J01PRP-N014	14	2.7	N/A	
881J01PRP-N015	14	2.7	N/A	
881J01PRP-N016	14	-0.3	N/A	
881J01PRP-N017	14	2.7	N/A	
881J01PRP-N018	14	5.8	N/A	
881J01PRP-N019	14	-0.3	N/A	
881J01PRP-N020	14	5.8	N/A	
881J01PRP-N021	14	-0.3	N/A	
881J01PRP-N022	14	2.7	N/A	
881J01PRP-N023	14	2.7	N/A	
881J01PRP-N024	14	-0.3	N/A	
881J01PRP-N025	14	2.7	N/A	
881J01PRP-N026	14	8.8	N/A	
881J01PRP-N027	14	-0.3	N/A	
881J01PRP-N028	14	2.7	N/A	
881J01PRP-N029	14	-0.3	N/A	

Survey Area: J | **Survey Unit:** 881J01 | **Building:** 881

Description: Building 881, MU-J, Rooms 201, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N030	14	2.7	N/A	
881J01PRP-N031	14	-0.3	N/A	
881J01PRP-N032	14	-0.3	N/A	
881J01PRP-N033	14	2.7	N/A	
881J01PRP-N034	14	2.7	N/A	
881J01PRP-N035	14	2.7	N/A	
881J01PRP-N036	14	-0.3	N/A	
881J01PRP-N037	14	2.7	N/A	
881J01PRP-N038	14	-0.3	N/A	
881J01PRP-N039	14	8.8	N/A	
881J01PRP-N040	14	11.8	N/A	
881J01PRP-N041	14	5.8	N/A	
881J01PRP-N042	14	-0.3	N/A	
881J01PRP-N043	14	2.7	N/A	
881J01PRP-N044	14	2.7	N/A	
881J01PRP-N045	14	5.8	N/A	
881J01PRP-N046	14	5.8	N/A	
881J01PRP-N047	14	5.8	N/A	
881J01PRP-N048	14	2.7	N/A	
881J01PRP-N049	14	-0.3	N/A	
881J01PRP-N050	14	5.8	N/A	
881J01PRP-N051	14	8.8	N/A	
881J01PRP-N052	14	-0.3	N/A	
881J01PRP-N053	14	-0.3	N/A	
881J01PRP-N054	14	2.7	N/A	
881J01PRP-N055	14	-0.3	N/A	
881J01PRP-N056	14	5.8	N/A	
881J01PRP-N057	14	5.8	N/A	
881J01PRP-N058	14	2.7	N/A	

Survey Area: J	Survey Unit: 881J01	Building: 881

Description: Building 881, MU-J, Rooms 201, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N059	14	2.7	N/A	
881J01PRP-N060	14	-0.3	N/A	
881J01PRP-N061	14	2.7	N/A	
881J01PRP-N062	14	-0.3	N/A	
881J01PRP-N063	14	-0.3	N/A	
881J01PRP-N064	14	2.7	N/A	
881J01PRP-N065	14	8.8	N/A	
881J01PRP-N066	8	1.2	N/A	
881J01PRP-N067	9	2.7	N/A	
881J01PRP-N068	8	-1.8	N/A	
881J01PRP-N069	9	-0.3	N/A	
881J01PRP-N070	8	1.2	N/A	
881J01PRP-N071	9	5.8	N/A	
881J01PRP-N072	8	1.2	N/A	
881J01PRP-N073	9	-0.3	N/A	
881J01PRP-N074	8	-1.8	N/A	
881J01PRP-N075	9	2.7	N/A	
881J01PRP-N076	8	1.2	N/A	
881J01PRP-N077	9	2.7	N/A	
881J01PRP-N078	8	4.2	N/A	
881J01PRP-N079	9	2.7	N/A	
881J01PRP-N080	8	-1.8	N/A	
881J01PRP-N081	9	-0.3	N/A	
881J01PRP-N082	8	-1.8	N/A	
881J01PRP-N083	9	-0.3	N/A	
881J01PRP-N084	8	4.2	N/A	
881J01PRP-N085	9	2.7	N/A	
881J01PRP-N086	8	-1.8	N/A	
881J01PRP-N087	9	-0.3	N/A	

Survey Area: J | **Survey Unit:** 881J01 | **Building:** 881

Description: Building 881, MU-J, Rooms 201, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N088	8	4.2	N/A	
881J01PRP-N089	9	-0.3	N/A	
881J01PRP-N090	8	-1.8	N/A	
881J01PRP-N091	9	2.7	N/A	
881J01PRP-N092	8	-1.8	N/A	
881J01PRP-N093	9	-0.3	N/A	
881J01PRP-N094	8	1.2	N/A	
881J01PRP-N095	9	-0.3	N/A	
881J01PRP-N096	8	1.2	N/A	
881J01PRP-N097	9	-0.3	N/A	
881J01PRP-N098	8	-1.8	N/A	
881J01PRP-N099	9	-0.3	N/A	
881J01PRP-N100	8	-1.8	N/A	
881J01PRP-N101	9	-0.3	N/A	
881J01PRP-N102	8	1.2	N/A	
881J01PRP-N103	9	2.7	N/A	
881J01PRP-N104	8	-1.8	N/A	
881J01PRP-N105	9	-0.3	N/A	
881J01PRP-N106	8	1.2	N/A	
881J01PRP-N107	9	-0.3	N/A	
881J01PRP-N108	8	-1.8	N/A	
881J01PRP-N109	9	-0.3	N/A	
881J01PRP-N110	8	-1.8	N/A	
881J01PRP-N111	9	-0.3	N/A	
881J01PRP-N112	8	4.2	N/A	
881J01PRP-N113	9	-0.3	N/A	
881J01PRP-N114	8	4.2	N/A	
881J01PRP-N115	9	-0.3	N/A	
881J01PRP-N116	8	1.2	N/A	

Survey Area: J	Survey Unit: 881J01	Building: 881
Description: Building 881, MU-J, Rooms 201, Floors		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N117	9	-0.3	N/A	
881J01PRP-N118	8	1.2	N/A	
881J01PRP-N119	9	-0.3	N/A	
881J01PRP-N120	8	4.2	N/A	
881J01PRP-N121	9	14.9	N/A	
881J01PRP-N122	8	-1.8	N/A	
881J01PRP-N123	9	2.7	N/A	
881J01PRP-N124	8	-1.8	N/A	
881J01PRP-N125	9	-0.3	N/A	
881J01PRP-N126	8	-1.8	N/A	
881J01PRP-N127	9	-0.3	N/A	
881J01PRP-N128	8	4.2	N/A	
881J01PRP-N129	9	-0.3	N/A	
881J01PRP-N130	8	-1.8	N/A	
881J01PRP-N131	9	2.7	N/A	
881J01PRP-N132	8	-1.8	N/A	
881J01PRP-N133	9	-0.3	N/A	
881J01PRP-N134	8	-1.8	N/A	
881J01PRP-N135	9	2.7	N/A	
881J01PRP-N136	8	-1.8	N/A	
881J01PRP-N137	9	2.7	N/A	
881J01PRP-N138	8	-1.8	N/A	
881J01PRP-N139	9	2.7	N/A	
881J01PRP-N140	8	-1.8	N/A	
881J01PRP-N141	9	2.7	N/A	
881J01PRP-N142	8	1.2	N/A	
881J01PRP-N143	9	5.8	N/A	
881J01PRP-N144	8	-1.8	N/A	
881J01PRP-N145	9	5.8	N/A	

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Survey Area: J	Survey Unit: 881J01	Building: 881
Description: Building 881, MU-J, Rooms 201, Floors		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N146	8	-1.8	N/A	
881J01PRP-N147	9	-0.3	N/A	
881J01PRP-N148	8	-1.8	N/A	
881J01PRP-N149	9	-0.3	N/A	
881J01PRP-N150	8	1.2	N/A	

Comments:

Survey Area: J	Survey Unit: 881J01	Building: 881

Description: Building 881, MU-J, Rooms 201, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N001	12	6.0	N/A	
881J01PRP-N002	13	1.1	N/A	
881J01PRP-N003	12	26.2	N/A	
881J01PRP-N004	13	1.1	N/A	
881J01PRP-N005	12	-4.1	N/A	
881J01PRP-N006	13	11.3	N/A	
881J01PRP-N007	12	21.2	N/A	
881J01PRP-N008	13	47.0	N/A	
881J01PRP-N009	12	16.1	N/A	
881J01PRP-N010	13	36.8	N/A	
881J01PRP-N011	12	36.3	N/A	
881J01PRP-N012	13	26.6	N/A	
881J01PRP-N013	12	51.5	N/A	
881J01QRP-N013	15	29.0	N/A	
881J01PRP-N014	13	31.7	N/A	
881J01PRP-N015	12	-4.1	N/A	
881J01PRP-N016	13	36.8	N/A	
881J01PRP-N017	12	21.2	N/A	
881J01PRP-N018	13	11.3	N/A	
881J01PRP-N019	12	6.0	N/A	
881J01PRP-N020	13	16.4	N/A	
881J01PRP-N021	12	36.3	N/A	
881J01PRP-N022	13	11.3	N/A	
881J01PRP-N023	12	157.5	N/A	
881J01QRP-N023	15	157.0	N/A	
881J01PRP-N024	13	31.7	N/A	
881J01PRP-N025	12	31.3	N/A	

Survey Area: J	Survey Unit: 881J01	Building: 881
Description: Building 881, MU-J, Rooms 201, Floors		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N026	13	31.7	N/A	
881J01PRP-N027	12	1.0	N/A	
881J01PRP-N028	13	-9.1	N/A	
881J01PRP-N029	12	16.1	N/A	
881J01PRP-N030	13	6.2	N/A	
881J01PRP-N031	12	26.2	N/A	
881J01PRP-N032	13	52.1	N/A	
881J01PRP-N033	12	11.1	N/A	
881J01PRP-N034	13	26.6	N/A	
881J01PRP-N035	12	16.1	N/A	
881J01PRP-N036	13	36.8	N/A	
881J01PRP-N037	12	21.2	N/A	
881J01PRP-N038	13	26.6	N/A	
881J01PRP-N039	12	11.1	N/A	
881J01PRP-N040	13	1.1	N/A	
881J01PRP-N041	12	16.1	N/A	
881J01PRP-N042	13	26.6	N/A	
881J01PRP-N043	12	16.1	N/A	
881J01PRP-N044	13	1.1	N/A	
881J01PRP-N045	12	6.0	N/A	
881J01PRP-N046	13	31.7	N/A	
881J01PRP-N047	12	11.1	N/A	
881J01PRP-N048	13	16.4	N/A	
881J01PRP-N049	12	16.1	N/A	
881J01PRP-N050	13	1.1	N/A	
881J01PRP-N051	12	6.0	N/A	
881J01PRP-N052	13	21.5	N/A	

Survey Area: J	Survey Unit: 881J01	Building: 881

Description: Building 881, MU-J, Rooms 201, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N053	12	36.3	N/A	
881J01PRP-N054	13	26.6	N/A	
881J01PRP-N055	12	41.4	N/A	
881J01QRP-N055	15	43.2	N/A	
881J01PRP-N056	13	11.3	N/A	
881J01PRP-N057	12	11.1	N/A	
881J01PRP-N058	13	16.4	N/A	
881J01PRP-N059	12	6.0	N/A	
881J01PRP-N060	13	31.7	N/A	
881J01PRP-N061	12	16.1	N/A	
881J01PRP-N062	13	6.2	N/A	
881J01PRP-N063	12	11.1	N/A	
881J01PRP-N064	13	21.5	N/A	
881J01PRP-N065	13	1.1	N/A	
881J01PRP-N066	7	0.0	N/A	
881J01PRP-N067	6	8.8	N/A	
881J01PRP-N068	7	47.4	N/A	
881J01PRP-N069	6	4.2	N/A	
881J01PRP-N070	7	9.5	N/A	
881J01PRP-N071	6	18.1	N/A	
881J01PRP-N072	7	28.5	N/A	
881J01PRP-N073	6	18.1	N/A	
881J01PRP-N074	7	23.7	N/A	
881J01PRP-N075	6	1,018.1	N/A	
881J01QRP-N075	15	1,076.4	N/A	
881J01PRP-N076	7	14.2	N/A	
881J01PRP-N077	6	-5.0	N/A	

Survey Area: J	Survey Unit: 881J01	Building: 881

Description: Building 881, MU-J, Rooms 201, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N078	7	52.2	N/A	
881J01PRP-N079	7	23.7	N/A	
881J01PRP-N080	6	-0.4	N/A	
881J01PRP-N081	7	-4.7	N/A	
881J01PRP-N082	6	-0.4	N/A	
881J01PRP-N083	7	-4.7	N/A	
881J01PRP-N084	6	27.3	N/A	
881J01PRP-N085	7	19.0	N/A	
881J01PRP-N086	6	-5.0	N/A	
881J01PRP-N087	6	64.1	N/A	
881J01QRP-N087	15	71.6	N/A	
881J01PRP-N088	7	37.9	N/A	
881J01PRP-N089	7	14.2	N/A	
881J01PRP-N090	6	-0.4	N/A	
881J01PRP-N091	6	18.1	N/A	
881J01PRP-N092	7	23.7	N/A	
881J01PRP-N093	6	4.2	N/A	
881J01PRP-N094	7	14.2	N/A	
881J01PRP-N095	6	-5.0	N/A	
881J01PRP-N096	7	-4.7	N/A	
881J01PRP-N097	6	13.4	N/A	
881J01PRP-N098	7	23.7	N/A	
881J01PRP-N099	6	18.1	N/A	
881J01PRP-N100	7	4.8	N/A	
881J01PRP-N101	7	14.2	N/A	
881J01PRP-N102	6	-9.6	N/A	
881J01PRP-N103	6	31.9	N/A	

Survey Area: J	Survey Unit: 881J01	Building: 881

Description: Building 881, MU-J, Rooms 201, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N104	7	23.7	N/A	
881J01PRP-N105	6	8.8	N/A	
881J01PRP-N106	7	14.2	N/A	
881J01PRP-N107	6	22.7	N/A	
881J01PRP-N108	6	4.2	N/A	
881J01PRP-N109	7	9.5	N/A	
881J01QRP-N109	15	38.5	N/A	
881J01PRP-N110	10	30.6	N/A	
881J01PRP-N111	10	45.5	N/A	
881J01PRP-N112	10	35.6	N/A	
881J01PRP-N113	10	30.6	N/A	
881J01PRP-N114	10	40.5	N/A	
881J01PRP-N115	10	20.6	N/A	
881J01PRP-N116	10	75.4	N/A	
881J01PRP-N117	10	10.7	N/A	
881J01PRP-N118	10	15.7	N/A	
881J01PRP-N119	10	20.6	N/A	
881J01PRP-N120	10	35.6	N/A	
881J01PRP-N121	10	25.6	N/A	
881J01PRP-N122	10	0.7	N/A	
881J01PRP-N123	10	30.6	N/A	
881J01PRP-N124	10	20.6	N/A	
881J01PRP-N125	10	35.6	N/A	
881J01PRP-N126	10	20.6	N/A	
881J01PRP-N127	10	15.7	N/A	
881J01PRP-N128	10	5.7	N/A	
881J01PRP-N129	10	25.6	N/A	

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Survey Area: J	Survey Unit: 881J01	Building: 881
Description: Building 881, MU-J, Rooms 201, Floors		

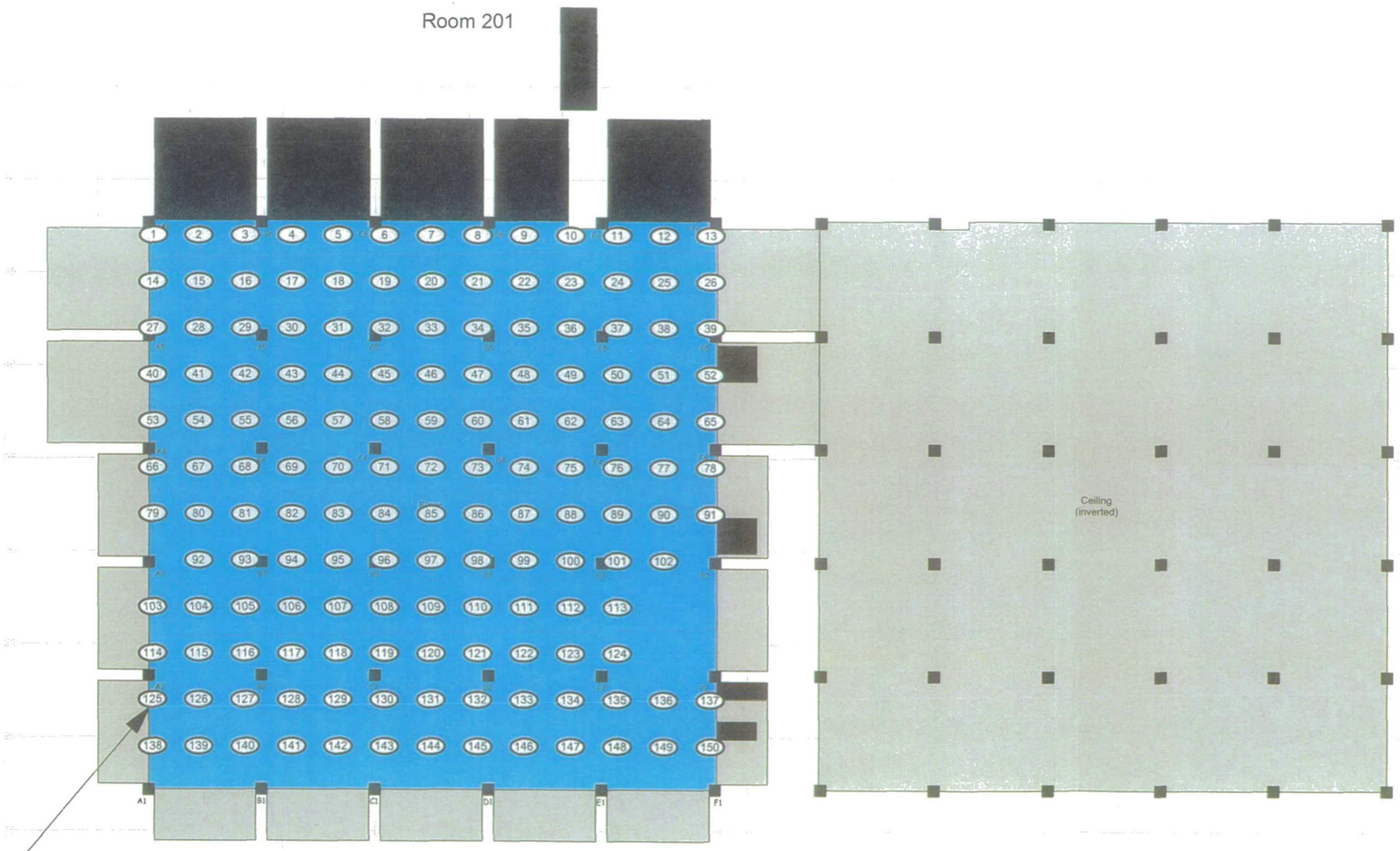
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J01PRP-N130	10	5.7	N/A	
881J01PRP-N131	10	15.7	N/A	
881J01PRP-N132	10	433.6	N/A	
881J01PRP-N133	10	30.6	N/A	
881J01PRP-N134	10	25.6	N/A	
881J01PRP-N135	10	20.6	N/A	
881J01PRP-N136	10	30.6	N/A	
881J01PRP-N137	10	45.5	N/A	
881J01PRP-N138	10	20.6	N/A	
881J01PRP-N139	10	20.6	N/A	
881J01PRP-N140	4	15.7	N/A	
881J01QRP-N140	15	24.3	N/A	
881J01PRP-N141	5	23.7	N/A	
881J01PRP-N142	4	25.6	N/A	
881J01PRP-N143	5	47.4	N/A	
881J01PRP-N144	4	25.6	N/A	
881J01PRP-N145	5	14.2	N/A	
881J01PRP-N146	4	20.6	N/A	
881J01PRP-N147	5	23.7	N/A	
881J01PRP-N148	4	20.6	N/A	
881J01PRP-N149	5	56.9	N/A	
881J01QRP-N149	15	66.9	N/A	
881J01PRP-N150	4	35.6	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: J **Survey Unit: 881J01** **Classification: 1**
Building: 881
Survey Unit Description: Building 881 Management Unit J, Room 201, Floor
Total Area: 934 sq. m. **Total Floor Area: 934 sq. m.**
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1-5, 11, 12

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Area

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881J01-SC **April 29, 2004**

Survey Area: J	Survey Unit: 881J02	Building: 881
Description: Management Unit J, Rooms 201, Walls and Ceiling		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 24
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0
Nbr QC Required: 2
Nbr QC Performed: 2

Alpha

Maximum:	33.6 dpm/100cm²
Minimum:	-7.4 dpm/100cm²
Mean:	16.8 dpm/100cm²
Standard Deviation:	11.2
QC Maximum:	37.9 dpm/100cm²
QC Minimum:	28.5 dpm/100cm²
QC Mean:	33.2 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 24
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0

Alpha

Maximum:	5.8 dpm/100cm²
Minimum:	-0.3 dpm/100cm²
Mean:	1.9 dpm/100cm²
Standard Deviation:	2.3
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: J	Survey Unit: 881J02	Building: 881

Description: Management Unit J, Rooms 201, Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	02/23/04	Electra	2404	DP-6	04/16/04	0.211	NA	93.0	NA	T
2	711799	02/23/04	Electra	662	DP-6	03/15/04	0.217	NA	93.0	NA	S
3	512590	02/24/04	SAC-4	1171	NA	08/19/04	0.330	NA	16.0	NA	R
7	712193	04/06/04	Electra	3105	DP-6	09/17/04	0.198	NA	93.0	NA	T/S
8	712193	04/06/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	Q
9	712193	04/06/04	SAC-4	1170	NA	09/24/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

360

Survey Area: J	Survey Unit: 881J02	Building: 881

Description: Management Unit J, Rooms 201, Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J02PRP-N001	9	2.7	N/A	
881J02PRP-N002	9	-0.3	N/A	
881J02PRP-N003	9	-0.3	N/A	
881J02PRP-N004	9	2.7	N/A	
881J02PRP-N005	9	2.7	N/A	
881J02PRP-N006	9	5.8	N/A	
881J02PRP-N007	9	2.7	N/A	
881J02PRP-N008	9	-0.3	N/A	
881J02PRP-N009	9	2.7	N/A	
881J02PRP-N010	9	2.7	N/A	
881J02PRP-N011	9	5.8	N/A	
881J02PRP-N012	9	-0.3	N/A	
881J02PRP-N013	9	2.7	N/A	
881J02PRP-N014	9	2.7	N/A	
881J02PRP-N015	9	2.7	N/A	
881J02PRP-N016	9	5.8	N/A	
881J02PRP-N017	3	-0.3	N/A	
881J02PRP-N018	3	-0.3	N/A	
881J02PRP-N019	3	-0.3	N/A	
881J02PRP-N020	3	5.8	N/A	
881J02PRP-N021	3	-0.3	N/A	
881J02PRP-N022	3	-0.3	N/A	
881J02PRP-N023	3	-0.3	N/A	
881J02PRP-N024	3	-0.3	N/A	

Comments:

3cl

Survey Area: J	Survey Unit: 881J02	Building: 881
Description: Management Unit J, Rooms 201, Walls and Ceiling		

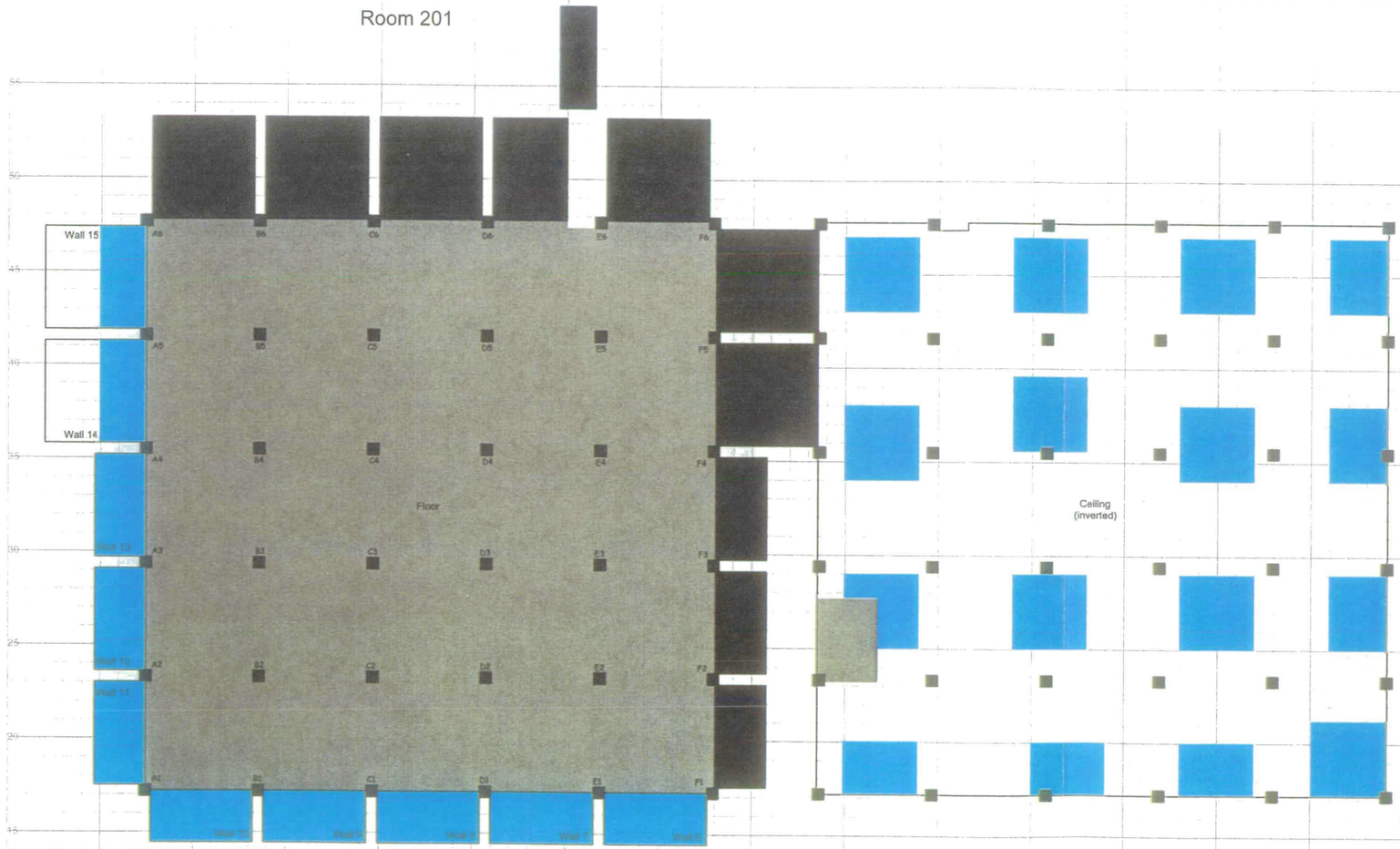
Random/QC Total Surface Activity Data Sheet

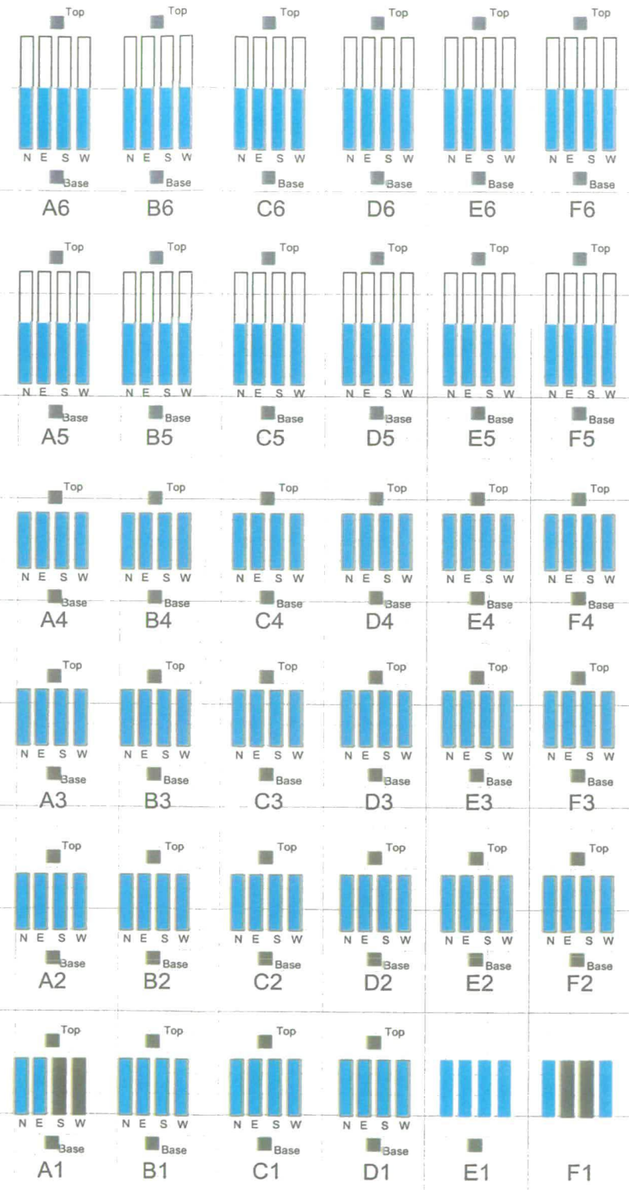
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J02PRP-N001	7	28.6	N/A	
881J02QRP-N001	8	28.5	N/A	
881J02PRP-N002	7	23.5	N/A	
881J02PRP-N003	7	23.5	N/A	
881J02PRP-N004	7	3.3	N/A	
881J02PRP-N005	7	23.5	N/A	
881J02PRP-N006	7	18.5	N/A	
881J02PRP-N007	7	18.5	N/A	
881J02PRP-N008	7	28.6	N/A	
881J02PRP-N009	7	3.3	N/A	
881J02PRP-N010	7	13.4	N/A	
881J02PRP-N011	7	13.4	N/A	
881J02PRP-N012	7	23.5	N/A	
881J02PRP-N013	7	13.4	N/A	
881J02PRP-N014	7	28.6	N/A	
881J02PRP-N015	7	23.5	N/A	
881J02PRP-N016	7	33.6	N/A	
881J02PRP-N017	1	21.0	N/A	
881J02PRP-N018	1	2.1	N/A	
881J02PRP-N019	1	-2.7	N/A	
881J02PRP-N020	1	-7.4	N/A	
881J02PRP-N021	1	6.8	N/A	
881J02PRP-N022	1	30.5	N/A	
881J02QRP-N022	8	37.9	N/A	
881J02PRP-N023	1	21.0	N/A	
881J02PRP-N024	1	11.5	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: J Survey Unit: 881J02 Classification: 2
Building: 881
Survey Unit Description: Building 881 Management Unit J, Room 201, Walls & Ceiling
Total Area: 1,296 sq. m. Total Floor Area: 934 sq. m.
Grid Spacing for Survey Points: 9 m. X 9 m.





Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 7

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group

Prepared for:
KAISER-HILL COMPANY

MAP ID: 03-0568/881J02-SC
April 29, 2004

363

Survey Area: J	Survey Unit: 881J10	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 and 111, Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 45 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 3

Nbr Random Measurements Performed: 49 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 3

Alpha

Maximum:	392.9 dpm/100cm²
Minimum:	-15.6 dpm/100cm²
Mean:	28.1 dpm/100cm²
Standard Deviation:	62.4
QC Maximum:	363.7 dpm/100cm²
QC Minimum:	98.9 dpm/100cm²
QC Mean:	193.3 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 45 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 49 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	8.5 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	1.7 dpm/100cm²
Standard Deviation:	2.4
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

364

Survey Area: J	Survey Unit: 881J10	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 and 111, Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	05/10/04	Electra	668	DP-8	06/22/04	0.166	NA	93.0	NA	S
2	711447	05/11/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T
3	711447	05/11/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	T/S
4	712193	05/11/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
5	712193	05/11/04	Electra	1260	DP-6	06/02/04	0.219	NA	93.0	NA	Q/S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

365

Survey Area: J	Survey Unit: 881J10	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 and 111, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J10PRP-N001	4	-0.6	N/A	
881J10PRP-N002	4	-0.6	N/A	
881J10PRP-N003	4	-0.6	N/A	
881J10PRP-N004	4	2.4	N/A	
881J10PRP-N005	4	5.5	N/A	
881J10PRP-N006	4	2.4	N/A	
881J10PRP-N007	4	-0.6	N/A	
881J10PRP-N008	4	2.4	N/A	
881J10PRP-N009	4	2.4	N/A	
881J10PRP-N010	4	5.5	N/A	
881J10PRP-N011	4	-0.6	N/A	
881J10PRP-N012	4	-0.6	N/A	
881J10PRP-N013	4	-0.6	N/A	
881J10PRP-N014	4	-0.6	N/A	
881J10PRP-N015	4	5.5	N/A	
881J10PRP-N016	4	2.4	N/A	
881J10PRP-N017	4	5.5	N/A	
881J10PRP-N018	4	-0.6	N/A	
881J10PRP-N019	4	-0.6	N/A	
881J10PRP-N020	4	-0.6	N/A	
881J10PRP-N021	4	2.4	N/A	
881J10PRP-N022	4	2.4	N/A	
881J10PRP-N023	4	8.5	N/A	
881J10PRP-N024	4	-0.6	N/A	
881J10PRP-N025	4	2.4	N/A	
881J10PRP-N026	4	-0.6	N/A	
881J10PRP-N027	4	-0.6	N/A	
881J10PRP-N028	4	2.4	N/A	
881J10PRP-N029	4	-0.6	N/A	

Survey Area: J	Survey Unit: 881J10	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 and 111, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J10PRP-N030	4	5.5	N/A	
881J10PRP-N031	4	-0.6	N/A	
881J10PRP-N032	4	-0.6	N/A	
881J10PRP-N033	4	-0.6	N/A	
881J10PRP-N034	4	-0.6	N/A	
881J10PRP-N035	4	5.5	N/A	
881J10PRP-N036	4	5.5	N/A	
881J10PRP-N037	4	-0.6	N/A	
881J10PRP-N038	4	2.4	N/A	
881J10PRP-N039	4	2.4	N/A	
881J10PRP-N040	4	2.4	N/A	
881J10PRP-N041	4	5.5	N/A	
881J10PRP-N042	4	2.4	N/A	
881J10PRP-N043	4	2.4	N/A	
881J10PRP-N044	4	2.4	N/A	
881J10PRP-N045	4	-0.6	N/A	
881J10PRP-N046	4	2.4	N/A	
881J10PRP-N047	4	2.4	N/A	
881J10PRP-N048	4	2.4	N/A	
881J10PRP-N049	4	-0.6	N/A	

Comments:

367

Survey Area: J	Survey Unit: 881J10	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 and 111, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J10PRP-N001	2	17.3	N/A	
881J10PRP-N002	3	-15.6	N/A	
881J10PRP-N003	2	50.1	N/A	
881J10PRP-N004	3	67.3	N/A	
881J10PRP-N005	2	31.3	N/A	
881J10PRP-N006	3	-11.0	N/A	
881J10PRP-N007	2	78.3	N/A	
881J10PRP-N008	3	104.2	N/A	
881J10PRP-N009	2	139.3	N/A	
881J10QRP-N009	5	117.2	N/A	
881J10PRP-N010	3	39.7	N/A	
881J10PRP-N011	2	17.3	N/A	
881J10PRP-N012	3	21.3	N/A	
881J10PRP-N013	2	31.3	N/A	
881J10PRP-N014	3	16.7	N/A	
881J10PRP-N015	2	36.0	N/A	
881J10PRP-N016	3	85.8	N/A	
881J10QRP-N016	5	98.9	N/A	
881J10PRP-N017	2	59.5	N/A	
881J10PRP-N018	3	-6.4	N/A	
881J10PRP-N019	2	22.0	N/A	
881J10PRP-N020	3	-6.4	N/A	
881J10PRP-N021	2	3.2	N/A	
881J10PRP-N022	3	-1.8	N/A	
881J10PRP-N023	2	3.2	N/A	
881J10PRP-N024	3	-11.0	N/A	
881J10PRP-N025	2	12.6	N/A	

Survey Area: J	Survey Unit: 881J10	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 and 111, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J10PRP-N026	3	-6.4	N/A	
881J10PRP-N027	2	17.3	N/A	
881J10PRP-N028	3	-1.8	N/A	
881J10PRP-N029	2	3.2	N/A	
881J10PRP-N030	2	392.9	N/A	
881J10QRP-N030	5	363.7	N/A	
881J10PRP-N031	2	-1.5	N/A	
881J10PRP-N032	2	-1.5	N/A	
881J10PRP-N033	3	2.8	N/A	
881J10PRP-N034	2	40.7	N/A	
881J10PRP-N035	3	-11.0	N/A	
881J10PRP-N036	2	26.7	N/A	
881J10PRP-N037	3	12.0	N/A	
881J10PRP-N038	2	26.7	N/A	
881J10PRP-N039	3	-11.0	N/A	
881J10PRP-N040	2	12.6	N/A	
881J10PRP-N041	3	25.9	N/A	
881J10PRP-N042	2	7.9	N/A	
881J10PRP-N043	3	-1.8	N/A	
881J10PRP-N044	2	17.3	N/A	
881J10PRP-N045	3	-1.8	N/A	
881J10PRP-N046	2	-6.2	N/A	
881J10PRP-N047	3	-15.6	N/A	
881J10PRP-N048	2	64.2	N/A	
881J10PRP-N049	3	2.8	N/A	

Comments:

Survey Area: J	Survey Unit: 881J03	Building: 881

Description: Building 881 Management Unit J Room 211Floor, Walls, and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 1 | Nbr QC Required: 2

Nbr Random Measurements Performed: 21 | Nbr Biased Measurements Performed: 1 | Nbr QC Performed: 2

Alpha

Maximum:	58.9 dpm/100cm²
Minimum:	-20.4 dpm/100cm²
Mean:	10.3 dpm/100cm²
Standard Deviation:	20.4
QC Maximum:	66.6 dpm/100cm²
QC Minimum:	32.9 dpm/100cm²
QC Mean:	49.8 dpm/100cm²
Transuranic $DCGL_W$:	100.0 dpm/100cm²
Transuranic $DCGL_{EMC}$:	300.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 1

Nbr Random Measurements Performed: 21 | Nbr Biased Measurements Performed: 1

Alpha

Maximum:	4.2 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	1.1 dpm/100cm²
Standard Deviation:	1.5
Transuranic $DCGL_W$:	20.0 dpm/100cm²

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

370

Survey Area: J	Survey Unit: 881J03	Building: 881

Description: Building 881 Management Unit J Room 211Floor, Walls, and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	03/20/04	Electra	290	DP-6	09/16/04	0.214	NA	48.0	NA	S
2	712454	03/20/04	Electra	1672	DP-6	08/20/04	0.218	NA	48.0	NA	T/S
3	712193	03/20/04	Electra	3105	DP-6	09/17/04	0.208	NA	48.0	NA	T/Q
4	711447	03/20/04	Electra	3109	DP-6	06/08/04	0.211	NA	48.0	NA	T
5	712193	03/20/04	SAC-4	1171	NA	08/19/04	0.330	NA	10.0	NA	R
6	712193	03/21/04	Electra	3109	DP-6	06/08/04	0.211	NA	48.0	NA	I

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

371

Survey Area: J	Survey Unit: 881J03	Building: 881
Description: Building 881 Management Unit J Room 211Floor, Walls, and Ceiling		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J03PRP-N001	5	1.2	N/A	
881J03PRP-N002	5	-0.3	N/A	
881J03PRP-N003	5	2.7	N/A	
881J03PRP-N004	5	2.7	N/A	
881J03PRP-N005	5	1.2	N/A	
881J03PRP-N006	5	1.2	N/A	
881J03PRP-N007	5	-1.8	N/A	
881J03PRP-N008	5	-0.3	N/A	
881J03PRP-N009	5	-0.3	N/A	
881J03PRP-N010	5	1.2	N/A	
881J03PRP-N011	5	2.7	N/A	
881J03PRP-N012	5	4.2	N/A	
881J03PRP-N013	5	1.2	N/A	
881J03PRP-N014	5	2.7	N/A	
881J03PRP-N015	5	1.2	N/A	
881J03PRP-N016	5	1.2	N/A	
881J03PRP-N017	5	-0.3	N/A	
881J03PRP-N018	5	-0.3	N/A	
881J03PRP-N019	5	1.2	N/A	
881J03PRP-N020	5	-0.3	N/A	
881J03PRP-N021	5	2.7	N/A	

Survey Area: J	Survey Unit: 881J03	Building: 881

Description: Building 881 Management Unit J Room 211Floor, Walls, and Ceiling

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J03PBP-N022	5	-0.3	N/A	

Comments:

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Survey Area: J	Survey Unit: 881J03	Building: 881
Description: Building 881 Management Unit J Room 211Floor, Walls, and Ceiling		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J03PRP-N001	2	28.1	N/A	
881J03PRP-N002	2	16.2	N/A	
881J03PRP-N003	4	-17.5	N/A	
881J03PRP-N004	4	-10.9	N/A	
881J03PRP-N005	4	-10.9	N/A	
881J03PRP-N006	2	22.2	N/A	
881J03PRP-N007	2	34.6	N/A	
881J03QRP-N007	3	32.9	N/A	
881J03PRP-N008	4	-10.9	N/A	
881J03PRP-N009	4	-10.9	N/A	
881J03PRP-N010	4	-4.7	N/A	
881J03PRP-N011	2	58.9	N/A	
881J03QRP-N011	3	66.6	N/A	
881J03PRP-N012	2	25.4	N/A	
881J03PRP-N013	4	-20.4	N/A	
881J03PRP-N014	4	-8.1	N/A	
881J03PRP-N015	4	4.7	N/A	
881J03PRP-N016	2	16.2	N/A	
881J03PRP-N017	2	19.0	N/A	
881J03PRP-N018	2	13.0	N/A	
881J03PRP-N019	2	16.2	N/A	
881J03PRP-N020	2	13.0	N/A	
881J03PRP-N021	2	16.2	N/A	

Survey Area: J | **Survey Unit:** 881J03 | **Building:** 881

Description: Building 881 Management Unit J Room 211Floor, Walls, and Ceiling

Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J03SBP-N022	6	38.4	N/A	

Comments: Scans performed at 2"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 100 dpm/100cm2. The initial Alpha Net activity for location 22 was 119.9 dpm/100cm2. A square meter average investigation was conducted at this location. Re-survey results are reported. No further investigation is required.

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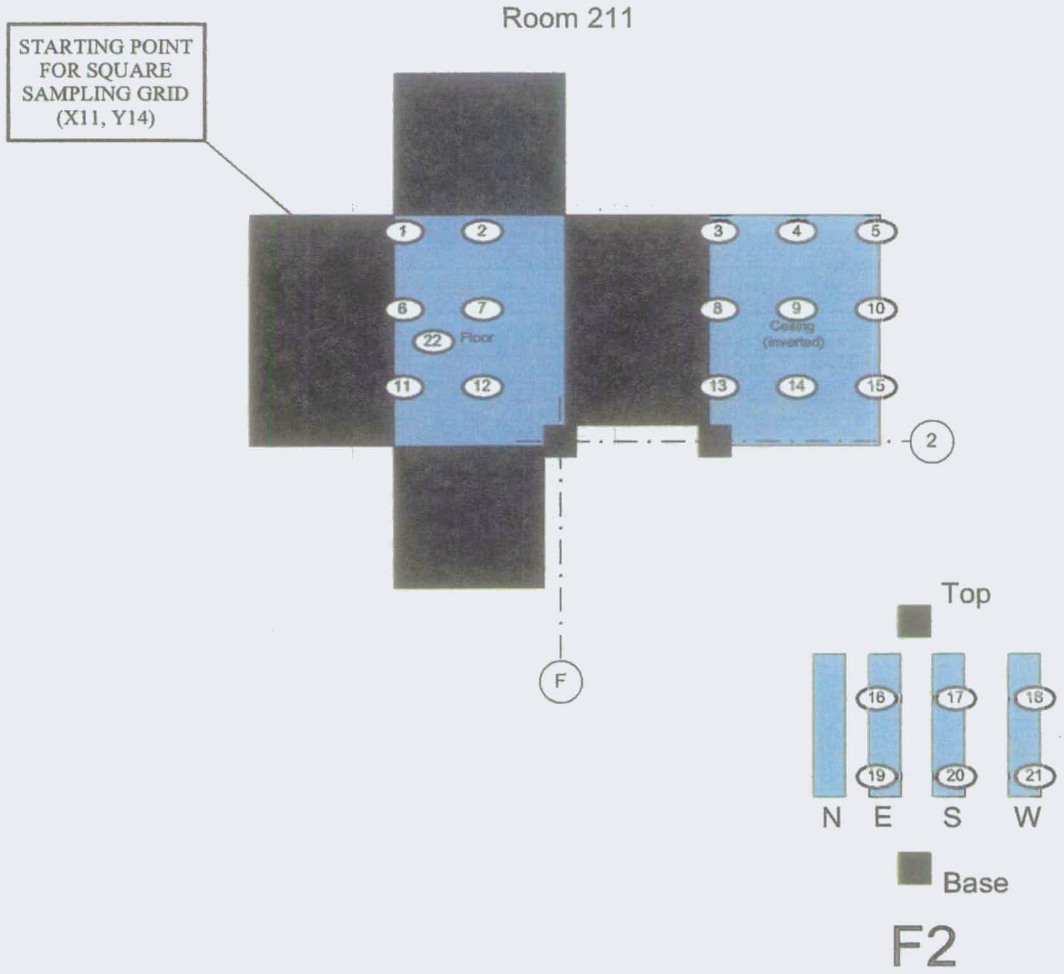
PRE-DEMOLITION SURVEY FOR B881

Survey Area: J **Survey Unit: 881J03** **Classification: 1**
Building: 881
Survey Unit Description: Building 881 Managememt Unit J, Room 211, Floor, Walls & Ceiling
Total Area: 28 sq. m. **Total Floor Area: 14 sq. m.**
Grid Spacing for Survey Points: 1.5 m. X 1.5 m.



Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 15
0 METERS 5

1 inch = 12 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s): 1, 2

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/Rm211-SC **Apr. 1, 2004**

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Survey Area: J	Survey Unit: 881J04	Building: 881

Description: Building 881, Management Unit J, Rooms 271 & 275, Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 89 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 6

Nbr Random Measurements Performed: 117 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 6

Alpha

Maximum:	335.2 dpm/100cm²
Minimum:	-18.7 dpm/100cm²
Mean:	21.5 dpm/100cm²
Standard Deviation:	43.3
QC Maximum:	318.4 dpm/100cm²
QC Minimum:	22.6 dpm/100cm²
QC Mean:	83.7 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 89 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 117 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	10.6 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	0.5 dpm/100cm²
Standard Deviation:	2.6
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

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Survey Area: J	Survey Unit: 881J04	Building: 881

Description: Building 881, Management Unit J, Rooms 271 & 275, Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711449	05/08/04	Electra	1235	DP-6	09/30/04	0.226	NA	93.0	NA	T
2	711449	05/08/04	Electra	2136	DP-6	08/02/04	0.221	NA	93.0	NA	T
3	711449	05/08/04	Electra	1363	DP-6	10/13/04	0.223	NA	93.0	NA	T
4	711449	05/08/04	Electra	1515	DP-6	07/12/04	0.216	NA	93.0	NA	T
5	711449	05/08/04	Electra	680	DP-8	06/03/04	0.177	NA	93.0	NA	S
6	711746	05/08/04	Electra	675	DP-8	06/22/04	0.164	NA	93.0	NA	S
7	711746	05/09/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
8	712193	05/09/04	Electra	290	DP-6	09/17/04	0.213	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: J	Survey Unit: 881J04	Building: 881
Description: Building 881, Management Unit J, Rooms 271 & 275, Floors		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N001	7	1.5	N/A	
881J04PRP-N002	7	1.5	N/A	
881J04PRP-N003	7	-1.5	N/A	
881J04PRP-N004	7	-1.5	N/A	
881J04PRP-N005	7	-1.5	N/A	
881J04PRP-N007	7	-1.5	N/A	
881J04PRP-N008	7	-1.5	N/A	
881J04PRP-N009	7	-1.5	N/A	
881J04PRP-N010	7	1.5	N/A	
881J04PRP-N011	7	-1.5	N/A	
881J04PRP-N012	7	-1.5	N/A	
881J04PRP-N013	7	1.5	N/A	
881J04PRP-N014	7	-1.5	N/A	
881J04PRP-N015	7	-1.5	N/A	
881J04PRP-N016	7	-1.5	N/A	
881J04PRP-N017	7	-1.5	N/A	
881J04PRP-N018	7	-1.5	N/A	
881J04PRP-N019	7	1.5	N/A	
881J04PRP-N020	7	-1.5	N/A	
881J04PRP-N021	7	-1.5	N/A	
881J04PRP-N022	7	-1.5	N/A	
881J04PRP-N023	7	-1.5	N/A	
881J04PRP-N024	7	-1.5	N/A	
881J04PRP-N025	7	-1.5	N/A	
881J04PRP-N026	7	-1.5	N/A	
881J04PRP-N027	7	-1.5	N/A	
881J04PRP-N028	7	1.5	N/A	
881J04PRP-N029	7	-1.5	N/A	
881J04PRP-N030	7	-1.5	N/A	

Survey Area: J	Survey Unit: 881J04	Building: 881
Description: Building 881, Management Unit J, Rooms 271 & 275, Floors		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N031	7	-1.5	N/A	
881J04PRP-N032	7	-1.5	N/A	
881J04PRP-N033	7	4.5	N/A	
881J04PRP-N034	7	-1.5	N/A	
881J04PRP-N035	7	-1.5	N/A	
881J04PRP-N036	7	-1.5	N/A	
881J04PRP-N037	7	-1.5	N/A	
881J04PRP-N038	7	-1.5	N/A	
881J04PRP-N039	7	-1.5	N/A	
881J04PRP-N040	7	-1.5	N/A	
881J04PRP-N041	7	-1.5	N/A	
881J04PRP-N042	7	-1.5	N/A	
881J04PRP-N043	7	-1.5	N/A	
881J04PRP-N044	7	-1.5	N/A	
881J04PRP-N045	7	-1.5	N/A	
881J04PRP-N046	7	1.5	N/A	
881J04PRP-N047	7	1.5	N/A	
881J04PRP-N048	7	-1.5	N/A	
881J04PRP-N049	7	-1.5	N/A	
881J04PRP-N050	7	-1.5	N/A	
881J04PRP-N051	7	1.5	N/A	
881J04PRP-N052	7	1.5	N/A	
881J04PRP-N053	7	1.5	N/A	
881J04PRP-N054	7	4.5	N/A	
881J04PRP-N055	7	-1.5	N/A	
881J04PRP-N056	7	-1.5	N/A	
881J04PRP-N057	7	-1.5	N/A	
881J04PRP-N058	7	4.5	N/A	
881J04PRP-N059	7	7.6	N/A	

Survey Area: J	Survey Unit: 881J04	Building: 881

Description: Building 881, Management Unit J, Rooms 271 & 275, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N060	7	4.5	N/A	
881J04PRP-N061	7	1.5	N/A	
881J04PRP-N062	7	-1.5	N/A	
881J04PRP-N063	7	-1.5	N/A	
881J04PRP-N064	7	-1.5	N/A	
881J04PRP-N065	7	1.5	N/A	
881J04PRP-N066	7	1.5	N/A	
881J04PRP-N067	7	1.5	N/A	
881J04PRP-N068	7	1.5	N/A	
881J04PRP-N069	7	4.5	N/A	
881J04PRP-N070	7	-1.5	N/A	
881J04PRP-N071	7	1.5	N/A	
881J04PRP-N072	7	1.5	N/A	
881J04PRP-N073	7	1.5	N/A	
881J04PRP-N074	7	4.5	N/A	
881J04PRP-N075	7	4.5	N/A	
881J04PRP-N076	7	4.5	N/A	
881J04PRP-N077	7	7.6	N/A	
881J04PRP-N078	7	1.5	N/A	
881J04PRP-N079	7	1.5	N/A	
881J04PRP-N080	7	-1.5	N/A	
881J04PRP-N081	7	1.5	N/A	
881J04PRP-N082	7	-1.5	N/A	
881J04PRP-N083	7	4.5	N/A	
881J04PRP-N084	7	1.5	N/A	
881J04PRP-N085	7	-1.5	N/A	
881J04PRP-N086	7	-1.5	N/A	
881J04PRP-N087	7	-1.5	N/A	
881J04PRP-N088	7	10.6	N/A	

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Survey Area: J	Survey Unit: 881J04	Building: 881
Description: Building 881, Management Unit J, Rooms 271 & 275, Floors		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N089	7	4.5	N/A	
881J04PRP-N090	7	7.6	N/A	
881J04PRP-N091	7	1.5	N/A	
881J04PRP-N092	7	4.5	N/A	
881J04PRP-N093	7	1.5	N/A	
881J04PRP-N094	7	1.5	N/A	
881J04PRP-N095	7	-1.5	N/A	
881J04PRP-N096	7	7.6	N/A	
881J04PRP-N097	7	1.5	N/A	
881J04PRP-N098	7	1.5	N/A	
881J04PRP-N099	7	1.5	N/A	
881J04PRP-N100	7	1.5	N/A	
881J04PRP-N101	7	1.5	N/A	
881J04PRP-N102	7	-1.5	N/A	
881J04PRP-N103	7	-1.5	N/A	
881J04PRP-N104	7	-1.5	N/A	
881J04PRP-N105	7	-1.5	N/A	
881J04PRP-N106	7	1.5	N/A	
881J04PRP-N107	7	-1.5	N/A	
881J04PRP-N108	7	1.5	N/A	
881J04PRP-N109	7	4.5	N/A	
881J04PRP-N110	7	-1.5	N/A	
881J04PRP-N111	7	-1.5	N/A	
881J04PRP-N112	7	-1.5	N/A	
881J04PRP-N113	7	1.5	N/A	
881J04PRP-N114	7	4.5	N/A	
881J04PRP-N115	7	1.5	N/A	
881J04PRP-N116	7	-1.5	N/A	
881J04PRP-N117	7	-1.5	N/A	

Survey Area: J	Survey Unit: 881J04	Building: 881

Description: Building 881, Management Unit J, Rooms 271 & 275, Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N118	7	-1.5	N/A	

Comments:

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Survey Area: J	Survey Unit: 881J04	Building: 881
Description: Building 881, Management Unit J, Rooms 271 & 275, Floors		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N001	1	21.0	N/A	
881J04PRP-N002	1	38.7	N/A	
881J04PRP-N003	1	25.5	N/A	
881J04PRP-N004	1	29.9	N/A	
881J04PRP-N005	1	12.2	N/A	
881J04PRP-N007	1	-1.1	N/A	
881J04PRP-N008	1	12.2	N/A	
881J04PRP-N009	1	29.9	N/A	
881J04QRP-N009	8	22.6	N/A	
881J04PRP-N010	1	21.0	N/A	
881J04PRP-N011	2	40.1	N/A	
881J04PRP-N012	2	40.1	N/A	
881J04PRP-N013	2	8.5	N/A	
881J04PRP-N014	2	13.0	N/A	
881J04PRP-N015	2	8.5	N/A	
881J04PRP-N016	2	8.5	N/A	
881J04PRP-N017	2	49.2	N/A	
881J04PRP-N018	2	-0.6	N/A	
881J04PRP-N019	2	22.0	N/A	
881J04PRP-N020	3	17.2	N/A	
881J04PRP-N021	3	8.2	N/A	
881J04PRP-N022	3	17.2	N/A	
881J04PRP-N023	3	21.6	N/A	
881J04PRP-N024	3	-5.3	N/A	
881J04PRP-N025	3	26.1	N/A	
881J04PRP-N026	3	26.1	N/A	
881J04PRP-N027	3	17.2	N/A	

Survey Area: J	Survey Unit: 881J04	Building: 881
Description: Building 881, Management Unit J, Rooms 271 & 275, Floors		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N028	3	3.7	N/A	
881J04PRP-N029	4	23.1	N/A	
881J04PRP-N030	4	23.1	N/A	
881J04PRP-N031	4	13.8	N/A	
881J04PRP-N032	4	13.8	N/A	
881J04PRP-N033	4	41.6	N/A	
881J04QRP-N033	8	32.0	N/A	
881J04PRP-N034	4	4.6	N/A	
881J04PRP-N035	4	18.5	N/A	
881J04PRP-N036	1	43.2	N/A	
881J04PRP-N037	1	3.3	N/A	
881J04PRP-N038	1	25.5	N/A	
881J04PRP-N039	1	25.5	N/A	
881J04PRP-N040	1	38.7	N/A	
881J04PRP-N041	1	34.3	N/A	
881J04PRP-N042	1	25.5	N/A	
881J04PRP-N043	1	7.8	N/A	
881J04PRP-N044	1	29.9	N/A	
881J04PRP-N045	2	26.6	N/A	
881J04PRP-N046	2	31.1	N/A	
881J04PRP-N047	2	13.0	N/A	
881J04PRP-N048	2	-0.6	N/A	
881J04PRP-N049	2	3.9	N/A	
881J04PRP-N050	2	22.0	N/A	
881J04PRP-N051	2	31.1	N/A	
881J04PRP-N052	2	-18.7	N/A	
881J04PRP-N053	2	-5.1	N/A	

Survey Area: J | **Survey Unit:** 881J04 | **Building:** 881

Description: Building 881, Management Unit J, Rooms 271 & 275, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N054	3	39.6	N/A	
881J04QRP-N054	8	55.5	N/A	
881J04PRP-N055	3	21.6	N/A	
881J04PRP-N056	3	17.2	N/A	
881J04PRP-N057	3	17.2	N/A	
881J04PRP-N058	3	30.6	N/A	
881J04PRP-N059	3	30.6	N/A	
881J04PRP-N060	3	-5.3	N/A	
881J04PRP-N061	3	26.1	N/A	
881J04PRP-N062	3	12.7	N/A	
881J04PRP-N063	4	13.8	N/A	
881J04PRP-N064	4	-9.3	N/A	
881J04PRP-N065	4	13.8	N/A	
881J04PRP-N066	4	-0.1	N/A	
881J04PRP-N067	4	-9.3	N/A	
881J04PRP-N068	4	-9.3	N/A	
881J04PRP-N069	4	-4.7	N/A	
881J04PRP-N070	4	4.6	N/A	
881J04PRP-N071	4	18.5	N/A	
881J04PRP-N072	1	21.0	N/A	
881J04PRP-N073	1	21.0	N/A	
881J04PRP-N074	1	12.2	N/A	
881J04PRP-N075	1	7.8	N/A	
881J04PRP-N076	1	12.2	N/A	
881J04PRP-N077	1	16.6	N/A	
881J04PRP-N078	1	47.6	N/A	
881J04QRP-N078	8	32.0	N/A	

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Survey Area: J	Survey Unit: 881J04	Building: 881

Description: Building 881, Management Unit J, Rooms 271 & 275, Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N079	1	16.6	N/A	
881J04PRP-N080	1	21.0	N/A	
881J04PRP-N081	2	3.9	N/A	
881J04PRP-N082	2	35.6	N/A	
881J04PRP-N083	2	3.9	N/A	
881J04PRP-N084	2	3.9	N/A	
881J04PRP-N085	2	-14.2	N/A	
881J04PRP-N086	2	17.5	N/A	
881J04PRP-N087	2	-9.6	N/A	
881J04PRP-N088	2	22.0	N/A	
881J04PRP-N089	2	8.5	N/A	
881J04PRP-N090	3	17.2	N/A	
881J04PRP-N091	3	-0.8	N/A	
881J04PRP-N092	3	30.6	N/A	
881J04PRP-N093	3	39.6	N/A	
881J04QRP-N093	8	41.4	N/A	
881J04PRP-N094	3	17.2	N/A	
881J04PRP-N095	4	18.5	N/A	
881J04PRP-N096	4	-4.7	N/A	
881J04PRP-N097	4	13.8	N/A	
881J04PRP-N098	4	18.5	N/A	
881J04PRP-N099	4	9.2	N/A	
881J04PRP-N100	4	13.8	N/A	
881J04PRP-N101	1	25.5	N/A	
881J04PRP-N102	1	47.6	N/A	
881J04PRP-N103	1	21.0	N/A	
881J04PRP-N104	1	-5.5	N/A	

Survey Area: J	Survey Unit: 881J04	Building: 881
Description: Building 881, Management Unit J, Rooms 271 & 275, Floors		

Random/QC Total Surface Activity Data Sheet

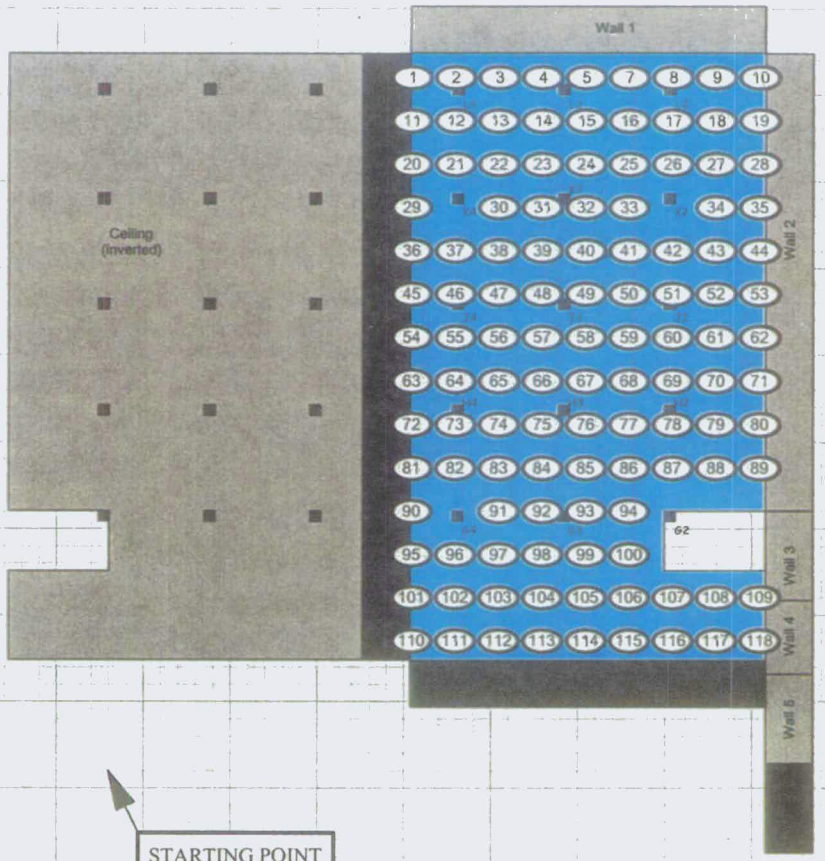
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J04PRP-N105	1	34.3	N/A	
881J04PRP-N106	1	16.6	N/A	
881J04PRP-N107	1	-5.5	N/A	
881J04PRP-N108	1	3.3	N/A	
881J04PRP-N109	1	335.2	N/A	
881J04QRP-N109	8	318.4	N/A	
881J04PRP-N110	2	8.5	N/A	
881J04PRP-N111	2	17.5	N/A	
881J04PRP-N112	2	8.5	N/A	
881J04PRP-N113	2	3.9	N/A	
881J04PRP-N114	2	17.5	N/A	
881J04PRP-N115	2	17.5	N/A	
881J04PRP-N116	2	3.9	N/A	
881J04PRP-N117	2	26.6	N/A	
881J04PRP-N118	2	325.2	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: J **Survey Unit: 881J04** **Classification: 1**
Building: 881
Survey Unit Description: Building 881 Management Unit J Rooms 275 & 271, Floors
Total Area: 589 sq. m. **Total Floor Area: 589 sq. m.**
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

Room 275



STARTING POINT FOR SQUARE SAMPLING GRID (X23, Y21)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 45
0 METERS 15

1 inch = 36 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
5, 6

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707

CH2MHILL Communications Group

Prepared for: KAISER-HILL COMPANY

MAP ID: 03-0568/881J04-SC June 1, 2004

Survey Area: J	Survey Unit: 881J05	Building: 881
Description: Building 881, Management Unit J, Rooms 271 & 275, Walls and Ceillings		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 17 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	47.4 dpm/100cm²
Minimum:	-5.7 dpm/100cm²
Mean:	18.7 dpm/100cm²
Standard Deviation:	16.2
QC Maximum:	16.4 dpm/100cm²
QC Minimum:	7.1 dpm/100cm²
QC Mean:	11.8 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 17 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	4.5 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	-0.1 dpm/100cm²
Standard Deviation:	1.9
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: J **Survey Unit:** 881J05 **Building:** 881

Description: Building 881, Management Unit J, Rooms 271 & 275, Walls and Ceillings

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711449	05/08/04	Electra	1235	DP-6	09/30/04	0.226	NA	93.0	NA	T
2	711449	05/08/04	Electra	2136	DP-6	08/02/04	0.221	NA	93.0	NA	T
3	711449	05/08/04	Electra	1363	DP-6	10/13/04	0.223	NA	93.0	NA	T
4	711449	05/08/04	Electra	1515	DP-6	07/12/04	0.216	NA	93.0	NA	T
5	711449	05/08/04	Electra	680	DP-8	06/03/04	0.177	NA	93.0	NA	S
6	711746	05/08/04	Electra	675	DP-8	06/22/04	0.164	NA	93.0	NA	S
7	711449	05/09/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
8	712193	05/09/04	Electra	290	DP-6	09/17/04	0.213	NA	93.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

391

Survey Area: J	Survey Unit: 881J05	Building: 881
Description: Building 881, Management Unit J, Rooms 271 & 275, Walls and Ceillings		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J05PRP-N001	7	-1.5	N/A	
881J05PRP-N002	7	-1.5	N/A	
881J05PRP-N003	7	1.5	N/A	
881J05PRP-N004	7	-1.5	N/A	
881J05PRP-N005	7	1.5	N/A	
881J05PRP-N006	7	1.5	N/A	
881J05PRP-N007	7	-1.5	N/A	
881J05PRP-N008	7	-1.5	N/A	
881J05PRP-N009	7	1.5	N/A	
881J05PRP-N010	7	-1.5	N/A	
881J05PRP-N011	7	-1.5	N/A	
881J05PRP-N012	7	-1.5	N/A	
881J05PRP-N013	7	1.5	N/A	
881J05PRP-N014	7	4.5	N/A	
881J05PRP-N015	7	1.5	N/A	
881J05PRP-N016	7	-1.5	N/A	
881J05PRP-N017	7	-1.5	N/A	

Comments:

Survey Area: J | **Survey Unit:** 881J05 | **Building:** 881

Description: Building 881, Management Unit J, Rooms 271 & 275, Walls and Ceillings

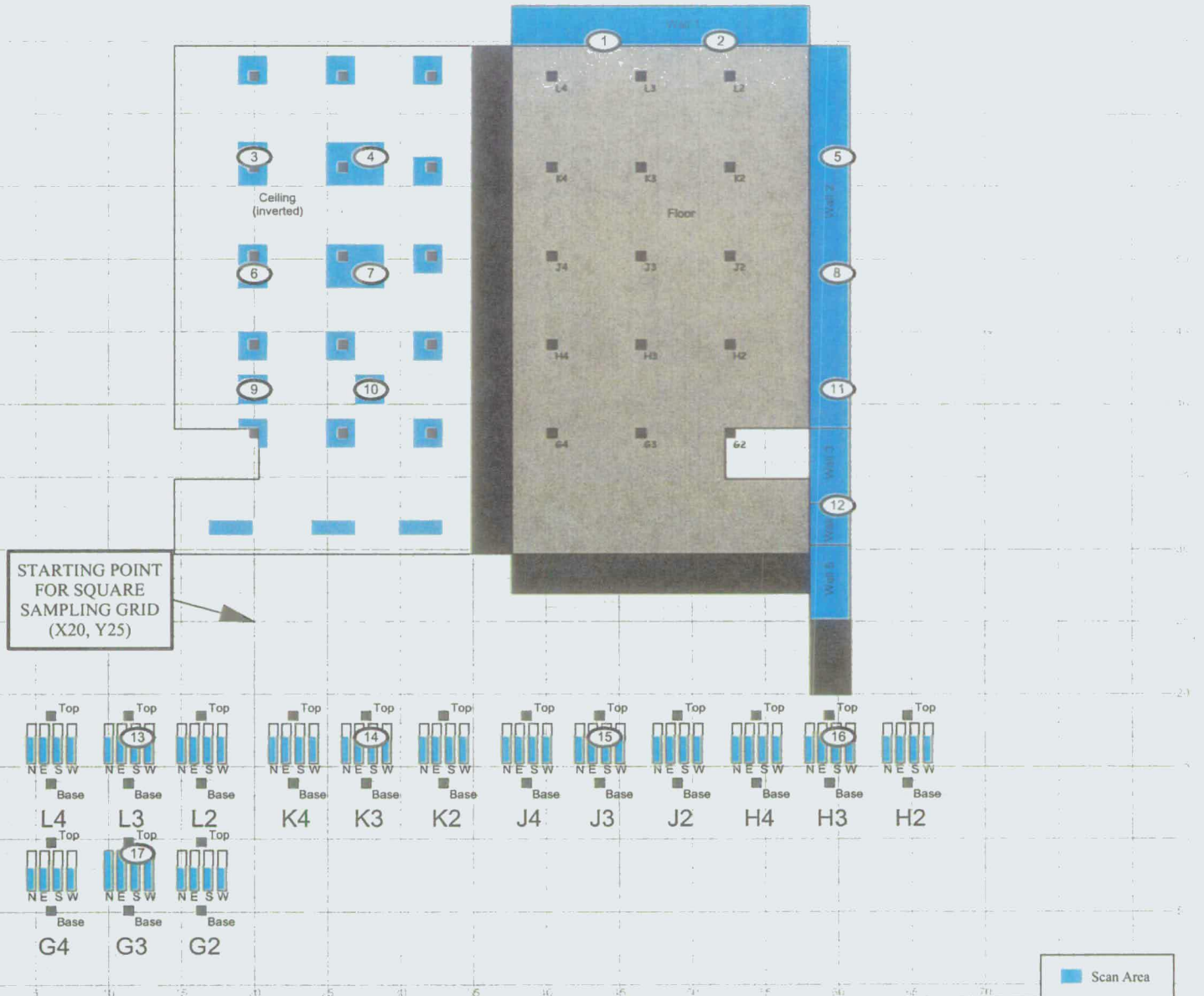
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J05PRP-N001	1	38.6	N/A	
881J05PRP-N002	1	47.4	N/A	
881J05PRP-N003	1	-5.7	N/A	
881J05PRP-N004	1	25.3	N/A	
881J05PRP-N005	2	12.9	N/A	
881J05PRP-N006	2	17.4	N/A	
881J05QRP-N006	8	7.1	N/A	
881J05PRP-N007	2	12.9	N/A	
881J05PRP-N008	2	44.6	N/A	
881J05PRP-N009	3	-0.9	N/A	
881J05PRP-N010	3	-5.4	N/A	
881J05PRP-N011	3	26.0	N/A	
881J05PRP-N012	3	12.6	N/A	
881J05PRP-N013	4	27.8	N/A	
881J05PRP-N014	4	27.8	N/A	
881J05QRP-N014	8	16.4	N/A	
881J05PRP-N015	4	-0.0	N/A	
881J05PRP-N016	4	13.9	N/A	
881J05PRP-N017	4	23.1	N/A	

Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: J Survey Unit: 881J05 Classification: 2
Building: 881
Survey Unit Description: Building 881 Management Unit J Rooms 275 & 271, Walls & Ceilings
Total Area: 859 sq. m. Total Floor Area: 589 sq. m.
Grid Spacing for Survey Points: 8 m. X 8 m.



SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 45
0 METERS 15

1 inch = 36 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
5, 6

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group
Prepared for: KAISER-HILL

MAP ID: 03-0568/881J05-SC June 1, 2004

394

Survey Area: J	Survey Unit: 881J06	Building: 881
Description: Building 881, Management Unit J, Room 288A Floor		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 1 | Nbr QC Required: 2

Nbr Random Measurements Performed: 30 | Nbr Biased Measurements Performed: 1 | Nbr QC Performed: 2

Alpha

Maximum:	109.8 dpm/100cm²
Minimum:	5.6 dpm/100cm²
Mean:	60.3 dpm/100cm²
Standard Deviation:	24.8
QC Maximum:	122.7 dpm/100cm²
QC Minimum:	99.5 dpm/100cm²
QC Mean:	111.1 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 30 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	14.9 dpm/100cm²
Minimum:	2.7 dpm/100cm²
Mean:	8.1 dpm/100cm²
Standard Deviation:	2.9
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

395

Survey Area: J	Survey Unit: 881J06	Building: 881

Description: Building 881, Management Unit J, Room 288A Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	03/24/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	T/S
2	711447	03/24/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	T/S
3	711447	03/24/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/S
4	711447	03/24/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T
5	712193	03/24/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
6	712193	03/24/04	Electra	663	DP-6	09/18/04	0.216	NA	93.0	NA	T/Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: J	Survey Unit: 881J06	Building: 881
Description: Building 881, Management Unit J, Room 288A Floor		

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J06PRP-N001	5	11.8	N/A	
881J06PRP-N002	5	8.8	N/A	
881J06PRP-N003	5	2.7	N/A	
881J06PRP-N004	5	8.8	N/A	
881J06PRP-N005	5	5.8	N/A	
881J06PRP-N006	5	14.9	N/A	
881J06PRP-N007	5	11.8	N/A	
881J06PRP-N008	5	5.8	N/A	
881J06PRP-N009	5	5.8	N/A	
881J06PRP-N010	5	8.8	N/A	
881J06PRP-N011	5	5.8	N/A	
881J06PRP-N012	5	11.8	N/A	
881J06PRP-N013	5	5.8	N/A	
881J06PRP-N014	5	8.8	N/A	
881J06PRP-N015	5	8.8	N/A	
881J06PRP-N016	5	5.8	N/A	
881J06PRP-N017	5	8.8	N/A	
881J06PRP-N018	5	2.7	N/A	
881J06PRP-N019	5	8.8	N/A	
881J06PRP-N020	5	11.8	N/A	
881J06PRP-N021	5	8.8	N/A	
881J06PRP-N022	5	5.8	N/A	
881J06PRP-N023	5	5.8	N/A	
881J06PRP-N024	5	8.8	N/A	
881J06PRP-N025	5	5.8	N/A	
881J06PRP-N026	5	5.8	N/A	
881J06PRP-N027	5	8.8	N/A	
881J06PRP-N028	5	11.8	N/A	
881J06PRP-N029	5	5.8	N/A	

Survey Area: J	Survey Unit: 881J06	Building: 881

Description: Building 881, Management Unit J, Room 288A Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J06PRP-N030	5	11.8	N/A	

Comments:

Survey Area: J	Survey Unit: 881J06	Building: 881
Description: Building 881, Management Unit J, Room 288A Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J06PRP-N001	4	76.7	N/A	
881J06PRP-N002	4	43.5	N/A	
881J06PRP-N003	4	43.5	N/A	
881J06PRP-N004	4	86.1	N/A	
881J06PRP-N005	4	81.4	N/A	
881J06PRP-N006	4	48.2	N/A	
881J06PRP-N007	4	109.8	N/A	
881J06QRP-N007	6	122.7	N/A	
881J06PRP-N008	4	90.9	N/A	
881J06PRP-N009	4	5.6	N/A	
881J06PRP-N010	4	57.7	N/A	
881J06PRP-N011	4	19.8	N/A	
881J06PRP-N012	4	81.4	N/A	
881J06PRP-N013	4	53.0	N/A	
881J06PRP-N014	4	29.3	N/A	
881J06PRP-N015	4	53.0	N/A	
881J06PRP-N016	4	86.1	N/A	
881J06PRP-N017	4	57.7	N/A	
881J06PRP-N018	4	38.8	N/A	
881J06PRP-N019	4	109.8	N/A	
881J06QRP-N019	6	99.5	N/A	
881J06PRP-N020	4	43.5	N/A	
881J06PRP-N021	4	53.0	N/A	
881J06PRP-N022	4	34.0	N/A	
881J06PRP-N023	4	48.2	N/A	
881J06PRP-N024	4	53.0	N/A	
881J06PRP-N025	4	81.4	N/A	

Survey Area: J	Survey Unit: 881J06	Building: 881

Description: Building 881, Management Unit J, Room 288A Floor

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J06PRP-N026	4	62.4	N/A	
881J06PRP-N027	4	90.9	N/A	
881J06PRP-N028	4	53.0	N/A	
881J06PRP-N029	4	76.7	N/A	
881J06PRP-N030	4	57.7	N/A	

Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J06IBP-N031	4	42.7	N/A	

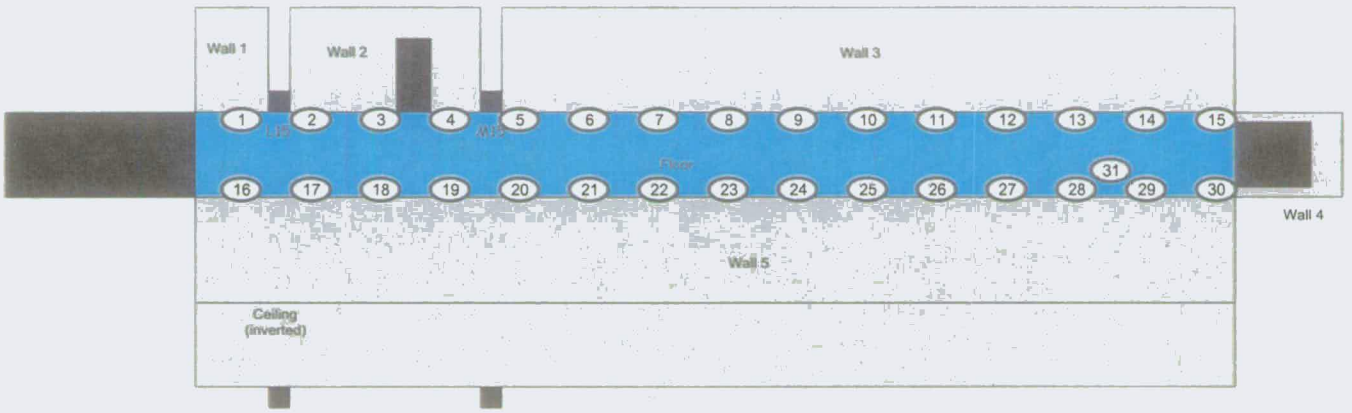
Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2. The initial Alpha Net Activity for location 31 was 8,014.2 dpm/100cm2. This location was decontaminated and re-surveyed. Re-survey results are reported. No further investigation is required.

400

PRE-DEMOLITION SURVEY FOR B881

Survey Area: J **Survey Unit: 881J06** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit J, Room 288A Floor
Total Area: 73 sq. m. **Total Floor Area: 73 sq. m.**
Grid Spacing for Survey Points: 2 m. X 2 m.

Room 288A



STARTING POINT FOR SQUARE SAMPLING GRID (X4, Y7)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER HILL COMPANY

MAP ID: 03-0568/881J06-SC **April 15, 2004**

4/01

Survey Area: J	Survey Unit: 881J07	Building: 881
Description: Building 881, Management Unit J, Room 288A Walls and Ceiling		

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	52.3 dpm/100cm²
Minimum:	-17.2 dpm/100cm²
Mean:	13.3 dpm/100cm²
Standard Deviation:	18.0
QC Maximum:	42.7 dpm/100cm²
QC Minimum:	-4.7 dpm/100cm²
QC Mean:	19.0 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	11.8 dpm/100cm²
Minimum:	2.7 dpm/100cm²
Mean:	6.6 dpm/100cm²
Standard Deviation:	2.4
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

402

Survey Area: J	Survey Unit: 881J07	Building: 881

Description: Building 881, Management Unit J, Room 288A Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	03/24/04	Electra	1513	DP-8	09/17/04	0.181	NA	93.0	NA	T/S
2	712193	03/24/04	Electra	668	DP-8	06/22/04	0.157	NA	93.0	NA	T/S
3	711447	03/24/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/S
4	712193	03/24/04	Electra	663	DP-6	09/18/04	0.216	NA	93.0	NA	T
5	712193	03/24/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
6	711447	03/24/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Printed On: 06/09/04 15:50

403

Survey Area: J	Survey Unit: 881J07	Building: 881

Description: Building 881, Management Unit J, Room 288A Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J07PRP-N001	5	8.8	N/A	
881J07PRP-N002	5	5.8	N/A	
881J07PRP-N003	5	5.8	N/A	
881J07PRP-N004	5	5.8	N/A	
881J07PRP-N005	5	2.7	N/A	
881J07PRP-N006	5	5.8	N/A	
881J07PRP-N007	5	5.8	N/A	
881J07PRP-N008	5	2.7	N/A	
881J07PRP-N009	5	8.8	N/A	
881J07PRP-N010	5	8.8	N/A	
881J07PRP-N011	5	11.8	N/A	
881J07PRP-N012	5	8.8	N/A	
881J07PRP-N013	5	5.8	N/A	
881J07PRP-N014	5	5.8	N/A	
881J07PRP-N015	5	11.8	N/A	
881J07PRP-N016	5	5.8	N/A	
881J07PRP-N017	5	5.8	N/A	
881J07PRP-N018	5	5.8	N/A	
881J07PRP-N019	5	5.8	N/A	
881J07PRP-N020	5	2.7	N/A	
881J07PRP-N021	5	8.8	N/A	
881J07PRP-N022	5	5.8	N/A	
881J07PRP-N023	5	5.8	N/A	
881J07PRP-N024	5	8.8	N/A	

Comments:

404

Survey Area: J | **Survey Unit:** 881J07 | **Building:** 881

Description: Building 881, Management Unit J, Room 288A Walls and Ceiling

Random/QC Total Surface Activity Data Sheet

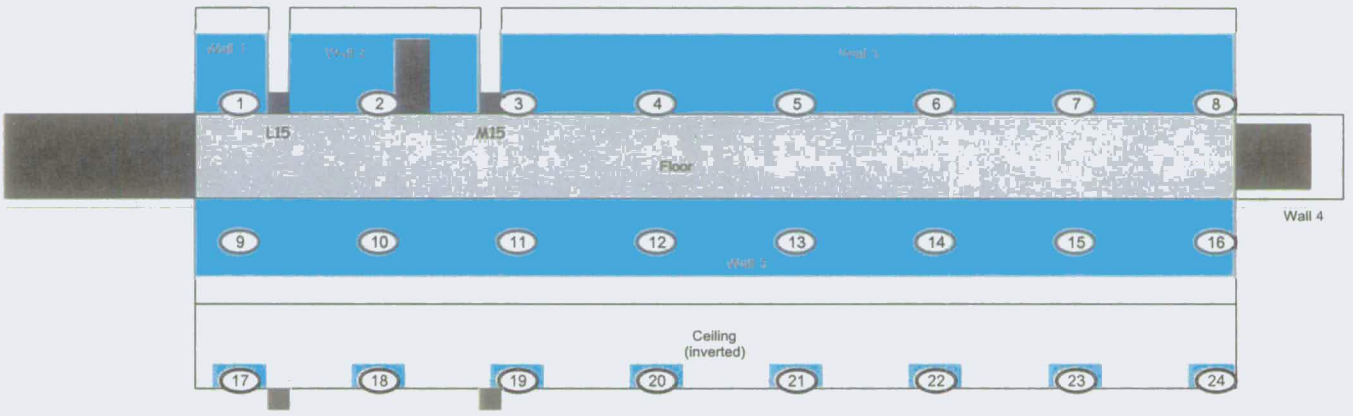
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J07PRP-N001	4	15.2	N/A	
881J07PRP-N002	4	47.6	N/A	
881J07PRP-N003	4	29.1	N/A	
881J07PRP-N004	4	10.6	N/A	
881J07PRP-N005	4	52.3	N/A	
881J07QRP-N005	6	42.7	N/A	
881J07PRP-N006	4	29.1	N/A	
881J07PRP-N007	4	43.0	N/A	
881J07PRP-N008	4	29.1	N/A	
881J07PRP-N009	4	6.0	N/A	
881J07PRP-N010	4	-3.3	N/A	
881J07PRP-N011	4	-7.9	N/A	
881J07PRP-N012	4	6.0	N/A	
881J07PRP-N013	4	15.2	N/A	
881J07QRP-N013	6	-4.7	N/A	
881J07PRP-N014	4	10.6	N/A	
881J07PRP-N015	4	15.2	N/A	
881J07PRP-N016	4	-12.5	N/A	
881J07PRP-N017	4	10.6	N/A	
881J07PRP-N018	4	15.2	N/A	
881J07PRP-N019	4	-17.2	N/A	
881J07PRP-N020	4	-3.3	N/A	
881J07PRP-N021	4	1.3	N/A	
881J07PRP-N022	4	19.9	N/A	
881J07PRP-N023	4	1.3	N/A	
881J07PRP-N024	4	6.0	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: J **Survey Unit: 881J07** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit J, Room 288A Walls & Ceiling
Total Area: 258 sq. m. **Total Floor Area: 73 sq. m.**
Grid Spacing for Survey Points: 4 m. X 4 m.

Room 288A



STARTING POINT FOR SQUARE SAMPLING GRID (X4, Y7)

Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881J07-SC **Mar. 23, 2004**

4106

Survey Area: J	Survey Unit: 881J08	Building: 881

Description: Building 881, Management Unit J, Room 288B Floor

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 24
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0
Nbr QC Required: 2
Nbr QC Performed: 2

Alpha

Maximum:	184.9 dpm/100cm²
Minimum:	7.3 dpm/100cm²
Mean:	47.1 dpm/100cm²
Standard Deviation:	35.7
QC Maximum:	137.8 dpm/100cm²
QC Minimum:	66.7 dpm/100cm²
QC Mean:	102.3 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 24
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0

Alpha

Maximum:	16.4 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	5.4 dpm/100cm²
Standard Deviation:	5.8
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

4/07

Survey Area: J **Survey Unit:** 881J08 **Building:** 881

Description: Building 881, Management Unit J, Room 288B Floor

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	512590	03/27/04	Electra	1833	DP-6	09/03/04	0.214	NA	93.0	NA	T
2	711799	03/27/04	Electra	1379	DP-6	08/03/04	0.208	NA	93.0	NA	T/S
3	711799	03/27/04	Electra	1261	DP-8	09/19/04	0.145	NA	93.0	NA	S
4	712193	03/27/04	Electra	2352	DP-6	05/11/04	0.225	NA	93.0	NA	Q
5	711447	03/27/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

4108

Survey Area: J	Survey Unit: 881J08	Building: 881

Description: Building 881, Management Unit J, Room 288B Floor

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J08PRP-N001	5	4.2	N/A	
881J08PRP-N002	5	1.2	N/A	
881J08PRP-N003	5	-1.8	N/A	
881J08PRP-N004	5	10.3	N/A	
881J08PRP-N005	5	4.2	N/A	
881J08PRP-N006	5	7.3	N/A	
881J08PRP-N007	5	-1.8	N/A	
881J08PRP-N008	5	1.2	N/A	
881J08PRP-N009	5	-1.8	N/A	
881J08PRP-N010	5	10.3	N/A	
881J08PRP-N011	5	10.3	N/A	
881J08PRP-N012	5	-1.8	N/A	
881J08PRP-N013	5	10.3	N/A	
881J08PRP-N014	5	10.3	N/A	
881J08PRP-N015	5	4.2	N/A	
881J08PRP-N016	5	16.4	N/A	
881J08PRP-N017	5	7.3	N/A	
881J08PRP-N018	5	4.2	N/A	
881J08PRP-N019	5	-1.8	N/A	
881J08PRP-N020	5	1.2	N/A	
881J08PRP-N021	5	13.3	N/A	
881J08PRP-N022	5	16.4	N/A	
881J08PRP-N023	5	1.2	N/A	
881J08PRP-N024	5	4.2	N/A	

Comments:

409

Survey Area: J	Survey Unit: 881J08	Building: 881
Description: Building 881, Management Unit J, Room 288B Floor		

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J08PRP-N001	1	54.0	N/A	
881J08PRP-N002	2	27.0	N/A	
881J08PRP-N003	1	35.4	N/A	
881J08PRP-N004	1	96.1	N/A	
881J08QRP-N004	4	66.7	N/A	
881J08PRP-N005	1	77.4	N/A	
881J08PRP-N006	1	58.7	N/A	
881J08PRP-N007	2	27.0	N/A	
881J08PRP-N008	2	55.8	N/A	
881J08PRP-N009	2	31.8	N/A	
881J08PRP-N010	2	41.4	N/A	
881J08PRP-N011	1	184.9	N/A	
881J08QRP-N011	4	137.8	N/A	
881J08PRP-N012	2	27.0	N/A	
881J08PRP-N013	1	54.0	N/A	
881J08PRP-N014	1	54.0	N/A	
881J08PRP-N015	1	26.0	N/A	
881J08PRP-N016	1	30.7	N/A	
881J08PRP-N017	1	68.1	N/A	
881J08PRP-N018	1	26.0	N/A	
881J08PRP-N019	1	21.3	N/A	
881J08PRP-N020	1	44.7	N/A	
881J08PRP-N021	1	21.3	N/A	
881J08PRP-N022	1	7.3	N/A	
881J08PRP-N023	1	26.0	N/A	
881J08PRP-N024	1	35.4	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

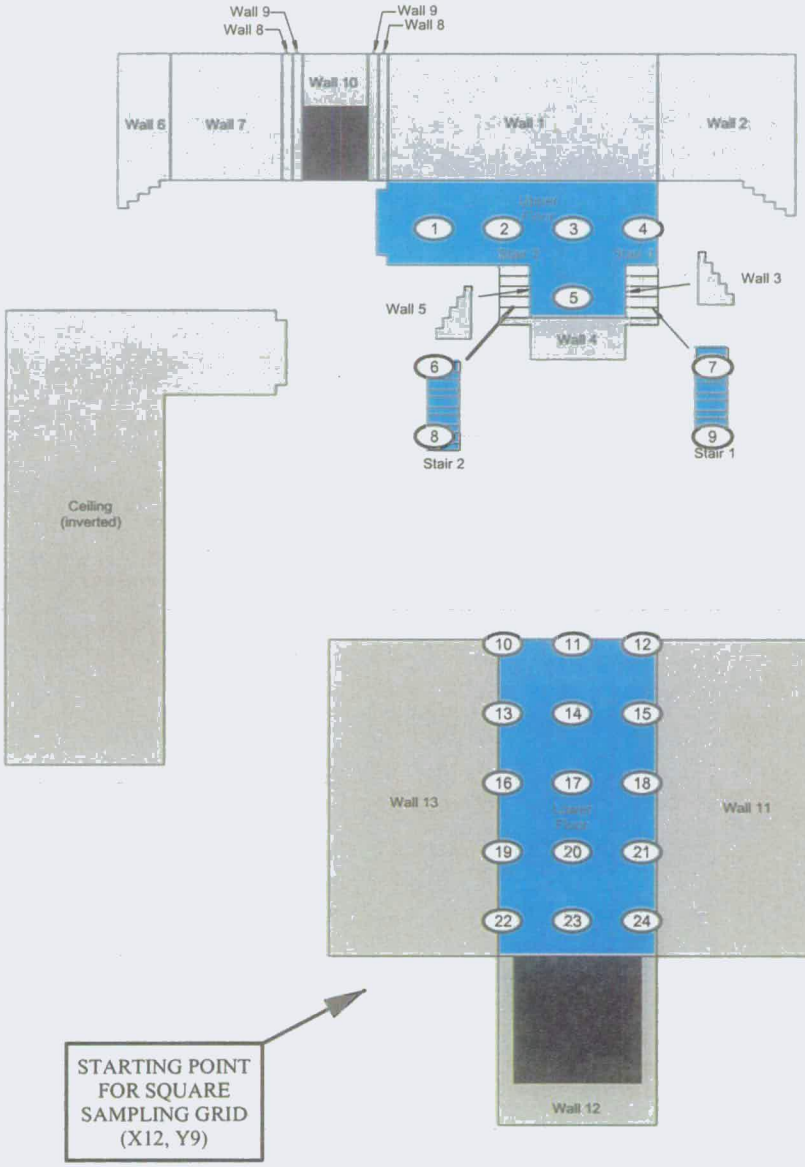
410

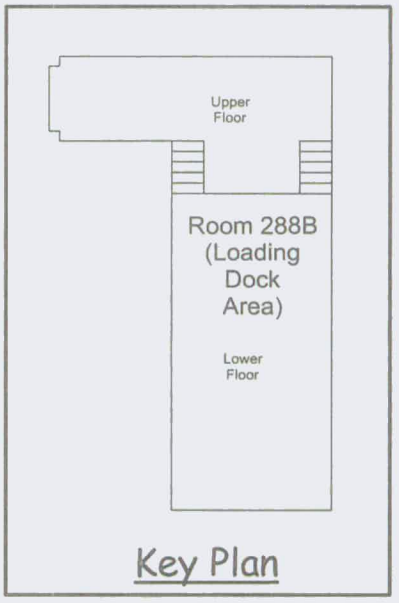
PRE-DEMOLITION SURVEY FOR B881

Survey Area: J **Survey Unit: 881J08** **Classification: 1**
Building: 881
Survey Unit Description: Building 881 Management Unit J, Room 288B, Floor
Total Area: 70 sq. m. **Total Floor Area: 70 sq. m.**
Grid Spacing for Survey Points: 2.0 m. X 2.0 m.

B881 Interior

Room 288B





Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
2, 3

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881J08-SC **Mar. 29, 2003**

211

Survey Area: J	Survey Unit: 881J09	Building: 881

Description: Building 881, Management Unit J, Room 288B, Walls and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 1 | Nbr QC Required: 2

Nbr Random Measurements Performed: 17 | Nbr Biased Measurements Performed: 1 | Nbr QC Performed: 2

Alpha

Maximum:	1,532.7 dpm/100cm²
Minimum:	-6.8 dpm/100cm²
Mean:	95.8 dpm/100cm²
Standard Deviation:	359.2
QC Maximum:	31.3 dpm/100cm²
QC Minimum:	12.0 dpm/100cm²
QC Mean:	21.6 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 1

Nbr Random Measurements Performed: 17 | Nbr Biased Measurements Performed: 1

Alpha

Maximum:	19.4 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	1.7 dpm/100cm²
Standard Deviation:	5.9
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

4/2

Survey Area: J | **Survey Unit:** 881J09 | **Building:** 881

Description: Building 881, Management Unit J, Room 288B, Walls and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	512590	03/27/04	Electra	2352	DP-6	05/11/04	0.225	NA	93.0	NA	T
2	712193	03/27/04	Electra	1379	DP-6	08/03/04	0.208	NA	93.0	NA	Q
3	711799	03/27/04	Electra	1261	DP-8	09/19/04	0.145	NA	93.0	NA	T/S
4	711799	03/27/04	Electra	1833	DP-6	09/03/04	0.214	NA	93.0	NA	T/I/S
5	711447	03/27/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

413

Survey Area: J	Survey Unit: 881J09	Building: 881

Description: Building 881, Management Unit J, Room 288B, Walls and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J09PRP-N001	5	-1.8	N/A	
881J09PRP-N002	5	-1.8	N/A	
881J09PRP-N003	5	1.2	N/A	
881J09PRP-N004	5	-1.8	N/A	
881J09PRP-N005	5	1.2	N/A	
881J09PRP-N006	5	-1.8	N/A	
881J09PRP-N007	5	-1.8	N/A	
881J09PRP-N008	5	-1.8	N/A	
881J09PRP-N009	5	-1.8	N/A	
881J09PRP-N010	5	-1.8	N/A	
881J09PRP-N011	5	1.2	N/A	
881J09PRP-N012	5	1.2	N/A	
881J09PRP-N013	5	13.3	N/A	
881J09PRP-N014	5	7.3	N/A	
881J09PRP-N015	5	1.2	N/A	
881J09PRP-N016	5	1.2	N/A	
881J09PRP-N017	5	-1.8	N/A	

414

Survey Area: J	Survey Unit: 881J09	Building: 881

Description: Building 881, Management Unit J, Room 288B, Walls and Ceiling

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J09PBP-N018	5	19.4	N/A	

Comments: The initial removable activity for location 18 was 1,291 dpm/100cm2. The area was decontaminated. Post decon survey results are reported. No further investigation is required.

415

Survey Area: J	Survey Unit: 881J09	Building: 881

Description: Building 881, Management Unit J, Room 288B, Walls and Ceiling

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J09PRP-N001	1	6.6	N/A	
881J09PRP-N002	1	19.9	N/A	
881J09PRP-N003	1	-2.3	N/A	
881J09PRP-N004	1	15.5	N/A	
881J09PRP-N005	1	2.1	N/A	
881J09PRP-N006	1	6.6	N/A	
881J09PRP-N007	1	2.1	N/A	
881J09PRP-N008	1	86.6	N/A	
881J09QRP-N008	2	12.0	N/A	
881J09PRP-N009	1	6.6	N/A	
881J09PRP-N010	1	19.9	N/A	
881J09PRP-N011	1	-2.3	N/A	
881J09PRP-N012	1	-2.3	N/A	
881J09PRP-N013	1	6.6	N/A	
881J09PRP-N014	1	-2.3	N/A	
881J09PRP-N015	1	-6.8	N/A	
881J09PRP-N016	1	28.8	N/A	
881J09QRP-N016	2	31.3	N/A	
881J09PRP-N017	1	6.6	N/A	

4116

Survey Area: J	Survey Unit: 881J09	Building: 881

Description: Building 881, Management Unit J, Room 288B, Walls and Ceiling

Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J09IBP-N018	4	1,532.7	N/A	

Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2. Location 18 was found to have an initial TSA value of 4,195 dpm/100cm2. This area was decontaminated and re-surveyed. Re-survey results are reported.

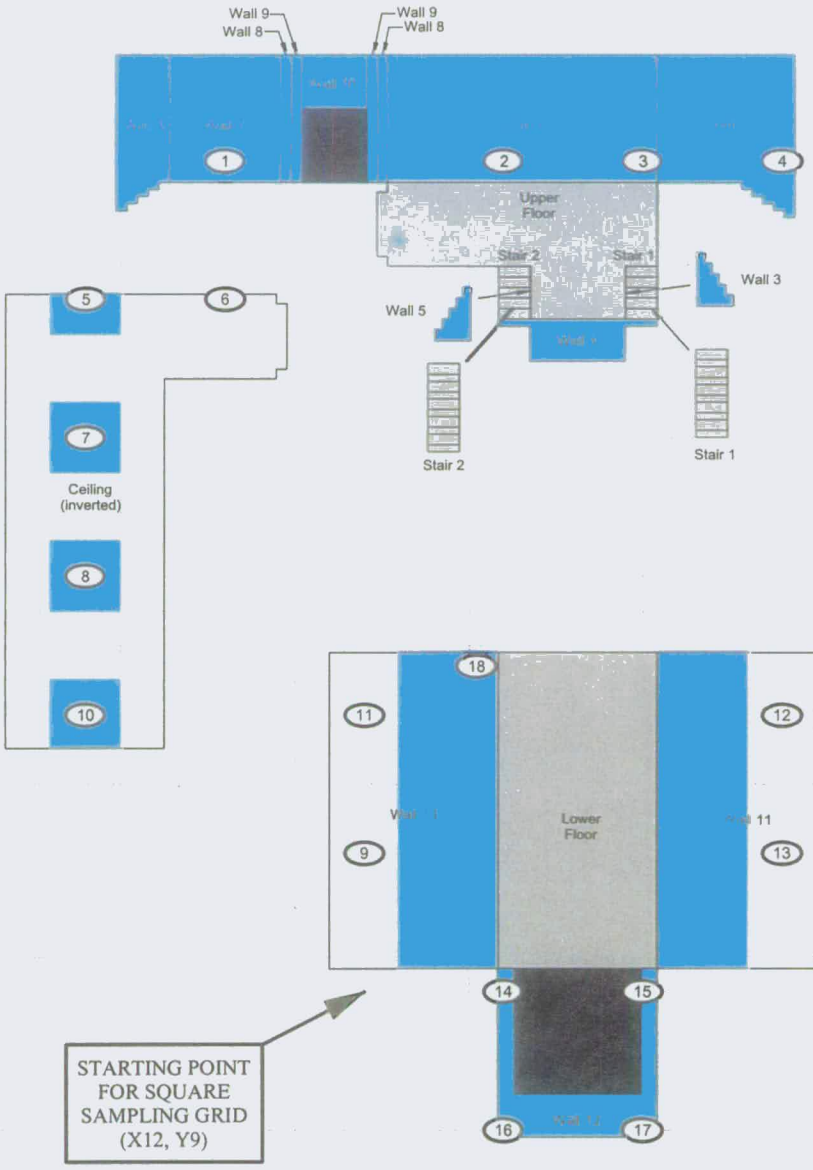
417

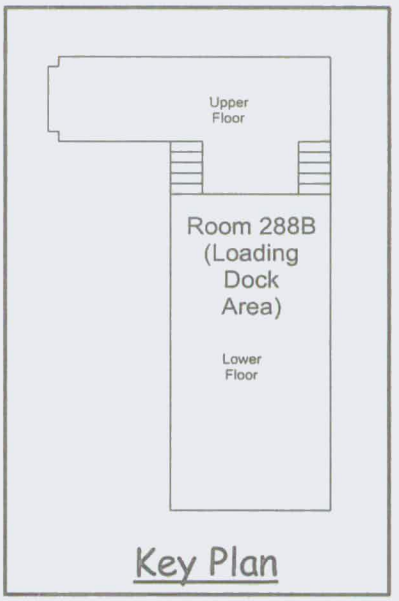
PRE-DEMOLITION SURVEY FOR B881

Survey Area: J **Survey Unit: 881J09** **Classification: 2**
Building: 881
Survey Unit Description: Building 881 Management Unit J, Room 288B, Walls & Ceiling
Total Area: 246 sq. m. **Total Floor Area: 70 sq. m.**
Grid Spacing for Survey Points: 4.0 m. X 4.0 m.

B881 Interior

Room 288B





SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Area

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
3, 4

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881J09-SC **Mar. 30, 2003**

4/18

Survey Area: J	Survey Unit: 881J10	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 and 111, Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 45 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 3

Nbr Random Measurements Performed: 49 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 3

Alpha

Maximum:	392.9 dpm/100cm²
Minimum:	-15.6 dpm/100cm²
Mean:	28.1 dpm/100cm²
Standard Deviation:	62.4
QC Maximum:	363.7 dpm/100cm²
QC Minimum:	98.9 dpm/100cm²
QC Mean:	193.3 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 45 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 49 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	8.5 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	1.7 dpm/100cm²
Standard Deviation:	2.4
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

419

Survey Area: J	Survey Unit: 881J10	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 and 111, Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	05/10/04	Electra	668	DP-8	06/22/04	0.166	NA	93.0	NA	S
2	711447	05/11/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T
3	711447	05/11/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	T/S
4	712193	05/11/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
5	712193	05/11/04	Electra	1260	DP-6	06/02/04	0.219	NA	93.0	NA	Q/S

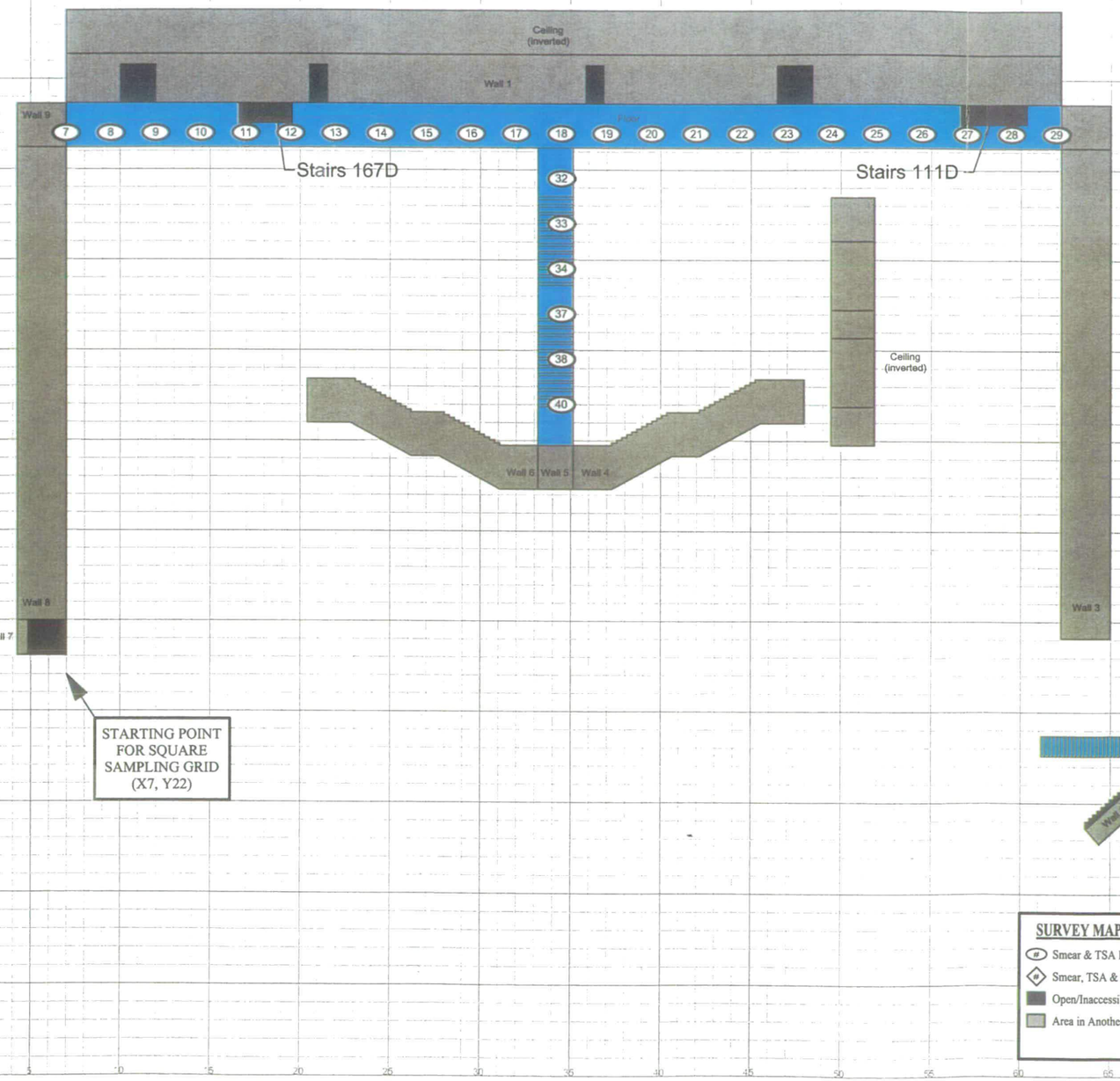
Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

420

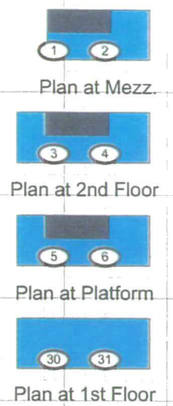
PRE-DEMOLITION SURVEY FOR B881

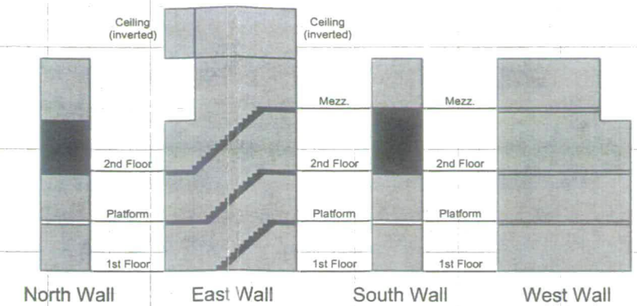
Survey Area: J **Survey Unit:** 881J10 **Classification:** 1
Building: 881
Survey Unit Description: Builiding 881, Management Unit J, Rooms 234, 237,291, Stairwells 111 & 167, Floor
Total Area: 295 sq. m. **Total Floor Area:** 295 sq. m.
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.

Rooms 234, 237 & 291

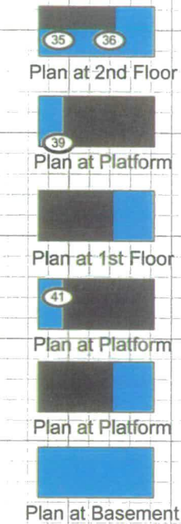


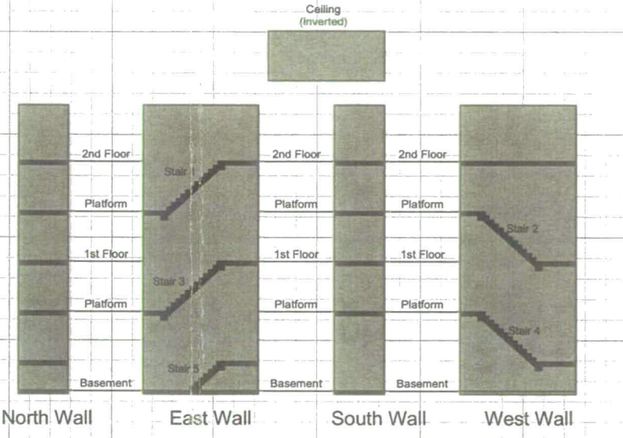
STARTING POINT FOR SQUARE SAMPLING GRID (X7, Y22)

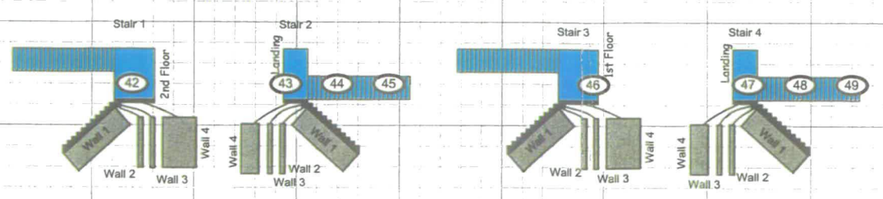




Stairs 167D







Stairs 111D

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 3, 5

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group

Prepared for:
KAISER-HILL COMPANY

MAP ID: 03-0568/881J10-SC
June 01, 2004

421

Survey Area: J	Survey Unit: 881J11	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 & 111, Walls and Ceilings

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 23 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	417.8 dpm/100cm²
Minimum:	-15.4 dpm/100cm²
Mean:	26.2 dpm/100cm²
Standard Deviation:	88.2
QC Maximum:	387.6 dpm/100cm²
QC Minimum:	75.6 dpm/100cm²
QC Mean:	231.6 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 23 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	8.5 dpm/100cm²
Minimum:	-0.6 dpm/100cm²
Mean:	1.2 dpm/100cm²
Standard Deviation:	2.5
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

422

Survey Area: J	Survey Unit: 881J11	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 & 111, Walls and Ceilings

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	05/11/04	Electra	668	DP-8	06/22/04	0.166	NA	93.0	NA	S
2	512590	05/11/04	Electra	290	DP-6	09/16/04	0.213	NA	93.0	NA	T
3	712193	05/11/04	Electra	3109	DP-6	06/08/04	0.217	NA	93.0	NA	S
4	711447	05/11/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
5	712193	05/11/04	Electra	663	DP-6	09/18/04	0.218	NA	93.0	NA	Q
6	711447	05/23/04	Electra	658	DP-8	06/04/04	0.168	NA	93.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

423

Survey Area: J	Survey Unit: 881J11	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 & 111, Walls and Ceilings

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J11PRP-N001	4	2.4	N/A	
881J11PRP-N002	4	2.4	N/A	
881J11PRP-N003	4	-0.6	N/A	
881J11PRP-N004	4	-0.6	N/A	
881J11PRP-N005	4	-0.6	N/A	
881J11PRP-N006	4	2.4	N/A	
881J11PRP-N007	4	-0.6	N/A	
881J11PRP-N008	4	8.5	N/A	
881J11PRP-N009	4	2.4	N/A	
881J11PRP-N010	4	5.5	N/A	
881J11PRP-N011	4	-0.6	N/A	
881J11PRP-N012	4	-0.6	N/A	
881J11PRP-N013	4	5.5	N/A	
881J11PRP-N014	4	-0.6	N/A	
881J11PRP-N015	4	2.4	N/A	
881J11PRP-N016	4	-0.6	N/A	
881J11PRP-N017	4	-0.6	N/A	
881J11PRP-N018	4	-0.6	N/A	
881J11PRP-N019	4	-0.6	N/A	
881J11PRP-N020	4	-0.6	N/A	
881J11PRP-N021	4	2.4	N/A	
881J11PRP-N022	4	2.4	N/A	
881J11PRP-N023	4	-0.6	N/A	

Comments:

Survey Area: J	Survey Unit: 881J11	Building: 881

Description: Building 881, Management Unit J, Rooms 234, 237, 291, Stairwells 167 & 111, Walls and Ceilings

Random/QC Total Surface Activity Data Sheet

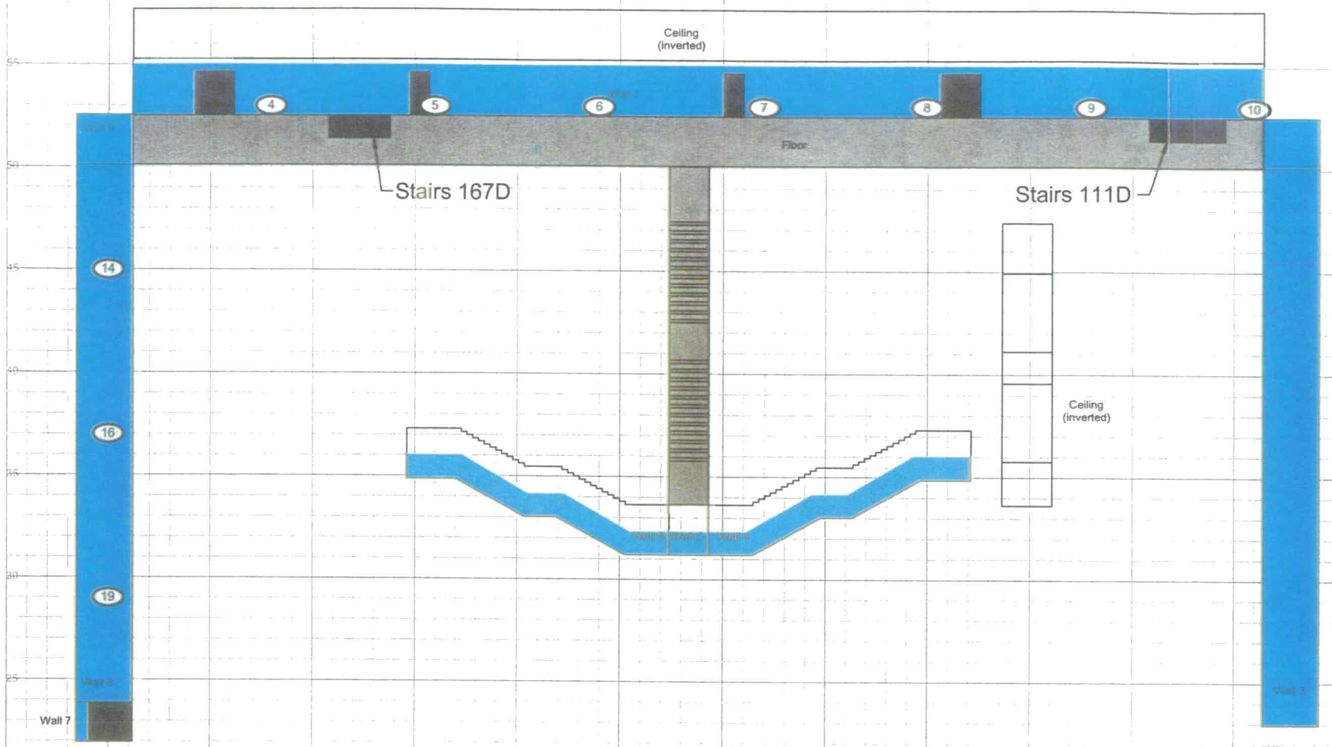
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J11PRP-N001	2	26.9	N/A	
881J11PRP-N002	3	-6.2	N/A	
881J11PRP-N003	3	-6.2	N/A	
881J11PRP-N004	3	417.8	N/A	
881J11QRP-N004	5	387.6	N/A	
881J11PRP-N005	2	87.9	N/A	
881J11QRP-N005	5	75.6	N/A	
881J11PRP-N006	3	7.6	N/A	
881J11PRP-N007	3	-1.6	N/A	
881J11PRP-N008	3	-10.8	N/A	
881J11PRP-N009	3	-10.8	N/A	
881J11PRP-N010	2	45.6	N/A	
881J11PRP-N011	3	3.0	N/A	
881J11PRP-N012	3	-6.2	N/A	
881J11PRP-N013	3	-1.6	N/A	
881J11PRP-N014	3	7.6	N/A	
881J11PRP-N015	3	-15.4	N/A	
881J11PRP-N016	3	-1.6	N/A	
881J11PRP-N017	2	17.5	N/A	
881J11PRP-N018	2	3.4	N/A	
881J11PRP-N019	3	12.2	N/A	
881J11PRP-N020	2	12.8	N/A	
881J11PRP-N021	2	3.4	N/A	
881J11PRP-N022	2	17.5	N/A	
881J11PRP-N023	2	-1.3	N/A	

Comments:

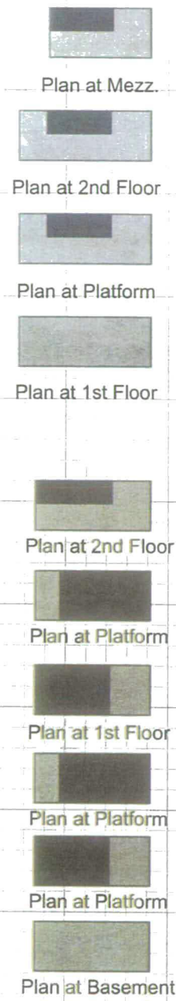
PRE-DEMOLITION SURVEY FOR B881

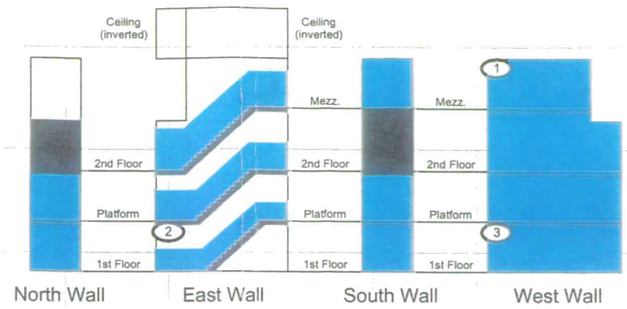
Survey Area: J Survey Unit: 881J11 Classification: 2
Building: 881
Survey Unit Description: Builiding 881, Management Unit J, Rooms 234, 237, 291, Stairwells 111 & 167, Walls & Ceilings
Total Area: 1,051 sq. m. Total Floor Area: 295 sq. m.
Grid Spacing for Survey Points: 8 m. X 8 m.

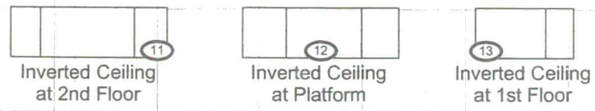
Rooms 234, 237 & 291



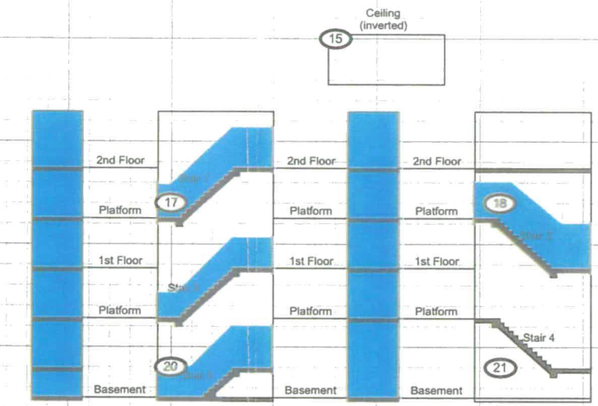
STARTING POINT FOR SQUARE SAMPLING GRID (X13, Y5)

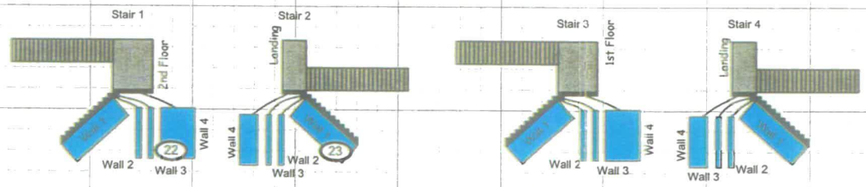






Stairs 167D





Stairs 111D

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 30
0 METERS 10

1 inch = 24 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 3, 6

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707
CH2MHILL Communications Group

Prepared for:
KAISER-HILL COMPANY

MAP ID: 03-0568/881J11-SC
June 2, 2004

4/26

Survey Area: J	Survey Unit: 881J12	Building: 881

Description: Building 881, Management Unit J, Stairwell 133, Floor, Walls, and Ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	33.4 dpm/100cm²
Minimum:	-26.5 dpm/100cm²
Mean:	-4.0 dpm/100cm²
Standard Deviation:	16.8
QC Maximum:	35.2 dpm/100cm²
QC Minimum:	30.1 dpm/100cm²
QC Mean:	32.6 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 24 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.6 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	0.6 dpm/100cm²
Standard Deviation:	2.3
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

427

Survey Area: J	Survey Unit: 881J12	Building: 881

Description: Building 881, Management Unit J, Stairwell 133, Floor, Walls, and Ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
3	712193	06/05/04	Electra	1241	DP-8	10/06/04	0.193	NA	93.0	NA	S
4	712467	06/05/04	Electra	1518	DP-6	12/02/04	0.217	NA	93.0	NA	T/S
5	712193	06/05/04	SAC-4	830	NA	10/30/04	0.330	NA	16.0	NA	R
6	712193	06/05/04	Electra	290	DP-6	09/16/04	0.199	NA	93.0	NA	Q/S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Printed On: 06/07/04 16:15

428

Survey Area: J	Survey Unit: 881J12	Building: 881

Description: Building 881, Management Unit J, Stairwell 133, Floor, Walls, and Ceiling

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J12PRP-N001	5	1.5	N/A	
881J12PRP-N002	5	1.5	N/A	
881J12PRP-N003	5	-1.5	N/A	
881J12PRP-N004	5	-1.5	N/A	
881J12PRP-N005	5	-1.5	N/A	
881J12PRP-N006	5	1.5	N/A	
881J12PRP-N007	5	-1.5	N/A	
881J12PRP-N008	5	1.5	N/A	
881J12PRP-N009	5	1.5	N/A	
881J12PRP-N010	5	-1.5	N/A	
881J12PRP-N011	5	-1.5	N/A	
881J12PRP-N012	5	7.6	N/A	
881J12PRP-N013	5	-1.5	N/A	
881J12PRP-N014	5	-1.5	N/A	
881J12PRP-N015	5	1.5	N/A	
881J12PRP-N016	5	1.5	N/A	
881J12PRP-N017	5	1.5	N/A	
881J12PRP-N018	5	1.5	N/A	
881J12PRP-N019	5	-1.5	N/A	
881J12PRP-N020	5	1.5	N/A	
881J12PRP-N021	5	-1.5	N/A	
881J12PRP-N022	5	4.5	N/A	
881J12PRP-N023	5	1.5	N/A	
881J12PRP-N024	5	1.5	N/A	

Comments:

429

Survey Area: J	Survey Unit: 881J12	Building: 881

Description: Building 881, Management Unit J, Stairwell 133, Floor, Walls, and Ceiling

Random/QC Total Surface Activity Data Sheet

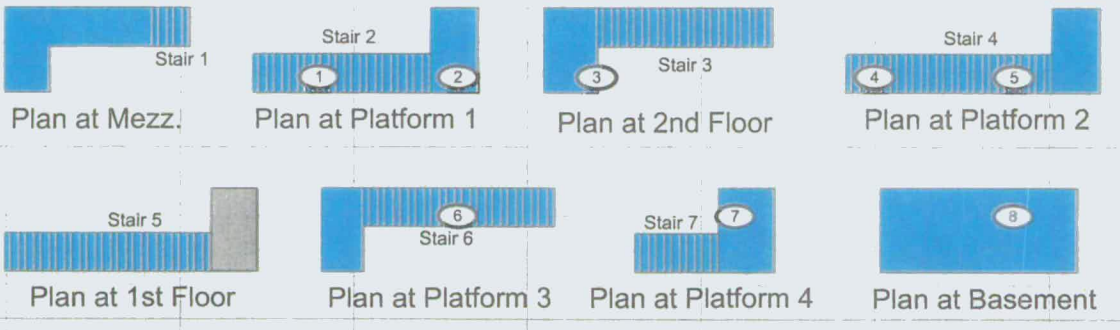
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881J12PRP-N001	4	15.0	N/A	
881J12PRP-N002	4	-12.6	N/A	
881J12PRP-N003	4	-17.3	N/A	
881J12PRP-N004	4	-26.5	N/A	
881J12PRP-N005	4	15.0	N/A	
881J12PRP-N006	4	-12.6	N/A	
881J12PRP-N007	4	1.2	N/A	
881J12PRP-N008	4	1.2	N/A	
881J12PRP-N009	4	33.4	N/A	
881J12QRP-N009	6	35.2	N/A	
881J12PRP-N010	4	-8.0	N/A	
881J12PRP-N011	4	10.4	N/A	
881J12PRP-N012	4	-3.4	N/A	
881J12PRP-N013	4	-17.3	N/A	
881J12PRP-N014	4	10.4	N/A	
881J12PRP-N015	4	10.4	N/A	
881J12QRP-N015	6	30.1	N/A	
881J12PRP-N016	4	15.0	N/A	
881J12PRP-N017	4	-26.5	N/A	
881J12PRP-N018	4	-26.5	N/A	
881J12PRP-N019	4	-12.6	N/A	
881J12PRP-N020	4	-26.5	N/A	
881J12PRP-N021	4	-3.4	N/A	
881J12PRP-N022	4	1.2	N/A	
881J12PRP-N023	4	-26.5	N/A	
881J12PRP-N024	4	10.4	N/A	

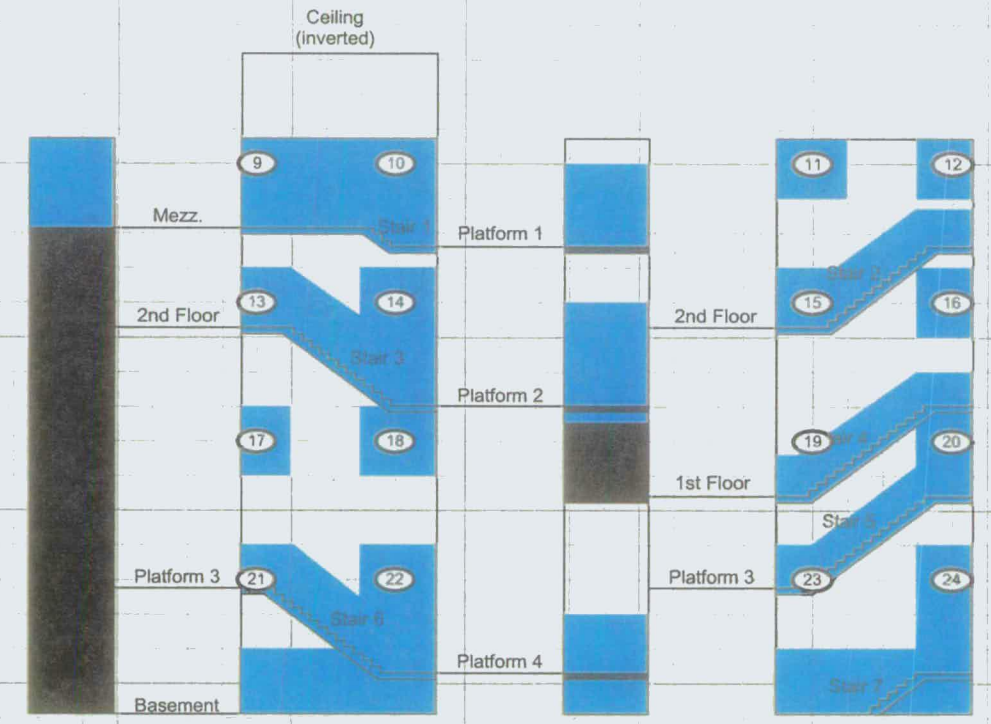
Comments:

PRE-DEMOLITION SURVEY FOR B881

Survey Area: J **Survey Unit: 881J12** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit J, Stairwell 133, Floor, Walls & Ceiling
Total Area: 241 sq. m. **Total Floor Area: 73 sq. m.**
Grid Spacing for Survey Points: 4 m. X 4 m.

Stairs 133D





STARTING POINT FOR SQUARE SAMPLING GRID (X10, Y1)

Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
3, 4, 6

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881J12A-SC **June 5, 2004**

431

Survey Area: L	Survey Unit: 881L01	Building: 881

Description: Building, Management Unit L, Rooms 301, 302, 302A, 303, 305, 306, 307, & 308 (Floor, Walls, Ceiling and Equipment)

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 17 | Nbr Biased Measurements Required: 20 | Nbr QC Required: 2

Nbr Random Measurements Performed: 17 | Nbr Biased Measurements Performed: 20 | Nbr QC Performed: 2

Alpha

Maximum:	60.6 dpm/100cm²
Minimum:	-16.5 dpm/100cm²
Mean:	10.1 dpm/100cm²
Standard Deviation:	15.3
QC Maximum:	-4.8 dpm/100cm²
QC Minimum:	-8.1 dpm/100cm²
QC Mean:	-6.4 dpm/100cm²
Transuranic $DCGL_W$:	100.0 dpm/100cm²
Transuranic $DCGL_{EMC}$:	300.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 17 | Nbr Biased Measurements Required: 20

Nbr Random Measurements Performed: 17 | Nbr Biased Measurements Performed: 20

Alpha

Maximum:	3.0 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	0.0 dpm/100cm²
Standard Deviation:	1.4
Transuranic $DCGL_W$:	20.0 dpm/100cm²

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

432

Survey Area: L	Survey Unit: 881L01	Building: 881

Description: Building, Management Unit L, Rooms 301, 302, 302A, 303, 305, 306, 307, & 308 (Floor, Walls, Ceiling and Equipment)

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712449	12/12/03	Electra	3110	DP-6	12/30/03	0.210	NA	48.0	NA	T/S
2	712448	12/12/03	Electra	1273	DP-6	01/09/04	0.209	NA	48.0	NA	T/S
4	600124	12/12/03	Electra	2343	DP-6	01/29/04	0.228	NA	48.0	NA	T
5	512592	12/12/03	Electra	1260	DP-6	01/08/04	0.227	NA	48.0	NA	T/S
6	512592	12/15/03	Electra	1273	DP-6	01/09/04	0.209	NA	48.0	NA	T/Q/S
7	511390	12/15/03	SAC-4	952	NA	01/10/04	0.333	NA	10.0	NA	R
8	511390	12/15/03	SAC-4	966	NA	04/23/04	0.333	NA	10.0	NA	R
9	511390	12/15/03	SAC-4	984	NA	01/01/04	0.333	NA	10.0	NA	R
10	511390	12/15/03	SAC-4	845	NA	01/15/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

433

Survey Area: L	Survey Unit: 881L01	Building: 881

Description: Building, Management Unit L, Rooms 301, 302, 302A, 303, 305, 306, 307, & 308 (Floor, Walls, Ceiling and Equipment)

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881L01PRP-N001	7	1.5	N/A	
881L01PRP-N002	8	-0.9	N/A	
881L01PRP-N003	9	-0.3	N/A	
881L01PRP-N004	10	-1.8	N/A	
881L01PRP-N005	7	3.0	N/A	
881L01PRP-N006	8	-0.9	N/A	
881L01PRP-N007	9	-0.3	N/A	
881L01PRP-N008	10	-1.8	N/A	
881L01PRP-N009	7	1.5	N/A	
881L01PRP-N010	8	0.6	N/A	
881L01PRP-N011	9	-0.3	N/A	
881L01PRP-N012	10	-1.8	N/A	
881L01PRP-N013	7	0.0	N/A	
881L01PRP-N014	8	-0.9	N/A	
881L01PRP-N015	9	1.2	N/A	
881L01PRP-N016	10	-1.8	N/A	
881L01PRP-N017	7	1.5	N/A	

4/324

Survey Area: L	Survey Unit: 881L01	Building: 881

Description: Building, Management Unit L, Rooms 301, 302, 302A, 303, 305, 306, 307, & 308 (Floor, Walls, Ceiling and Equipment)

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881L01PBP-N018	8	-0.9	N/A	
881L01PBP-N019	9	-0.3	N/A	
881L01PBP-N020	10	-0.3	N/A	
881L01PBP-N021	7	3.0	N/A	
881L01PBP-N022	8	-0.9	N/A	
881L01PBP-N023	9	1.2	N/A	
881L01PBP-N024	10	-1.8	N/A	
881L01PBP-N025	7	0.0	N/A	
881L01PBP-N026	8	-0.9	N/A	
881L01PBP-N027	9	1.2	N/A	
881L01PBP-N028	10	-0.3	N/A	
881L01PBP-N029	7	0.0	N/A	
881L01PBP-N030	8	2.1	N/A	
881L01PBP-N031	9	2.7	N/A	
881L01PBP-N032	10	-0.3	N/A	
881L01PBP-N033	7	0.0	N/A	
881L01PBP-N034	8	0.6	N/A	
881L01PBP-N035	9	-0.3	N/A	
881L01PBP-N036	10	-1.8	N/A	
881L01PBP-N037	7	0.0	N/A	

Comments:

4135

Survey Area: L	Survey Unit: 881L01	Building: 881

Description: Building, Management Unit L, Rooms 301, 302, 302A, 303, 305, 306, 307, & 308 (Floor, Walls, Ceiling and Equipment)

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881L01PRP-N001	1	45.9	N/A	
881L01PRP-N002	4	28.7	N/A	
881L01QRP-N002	6	-8.1	N/A	
881L01PRP-N003	5	2.5	N/A	
881L01PRP-N004	5	11.3	N/A	
881L01PRP-N005	4	5.0	N/A	
881L01PRP-N006	6	60.6	N/A	
881L01PRP-N007	5	14.0	N/A	
881L01PRP-N008	6	14.6	N/A	
881L01PRP-N009	5	5.2	N/A	
881L01PRP-N010	6	1.7	N/A	
881L01PRP-N011	5	-6.3	N/A	
881L01PRP-N012	6	1.7	N/A	
881L01PRP-N013	6	5.1	N/A	
881L01PRP-N014	5	-3.7	N/A	
881L01PRP-N015	6	30.4	N/A	
881L01PRP-N016	2	14.6	N/A	
881L01PRP-N017	5	8.2	N/A	
881L01QRP-N025	6	-4.8	N/A	

Survey Area: L	Survey Unit: 881L01	Building: 881

Description: Building, Management Unit L, Rooms 301, 302, 302A, 303, 305, 306, 307, & 308 (Floor, Walls, Ceiling and Equipment)

Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881L01PBP-N018	2	6.0	N/A	
881L01PBP-N019	2	18.9	N/A	
881L01PBP-N020	1	2.5	N/A	
881L01PBP-N021	6	12.2	N/A	
881L01PBP-N022	2	-16.5	N/A	
881L01PBP-N023	4	15.5	N/A	
881L01PBP-N024	6	21.8	N/A	
881L01PBP-N025	2	25.1	N/A	
881L01PBP-N026	4	6.7	N/A	
881L01PBP-N027	4	-2.1	N/A	
881L01PBP-N028	2	-6.9	N/A	
881L01PBP-N029	4	-10.9	N/A	
881L01PBP-N030	6	6.0	N/A	
881L01PBP-N031	6	-13.1	N/A	
881L01PBP-N032	2	18.9	N/A	
881L01PBP-N033	5	6.8	N/A	
881L01PBP-N034	5	21.4	N/A	
881L01PBP-N035	2	2.7	N/A	
881L01PBP-N036	4	18.1	N/A	
881L01PBP-N037	1	2.5	N/A	

Comments:

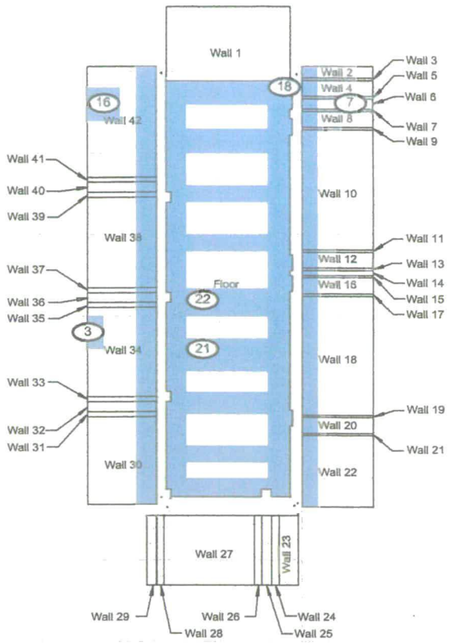
437

PRE-DEMOLITION SURVEY FOR B881

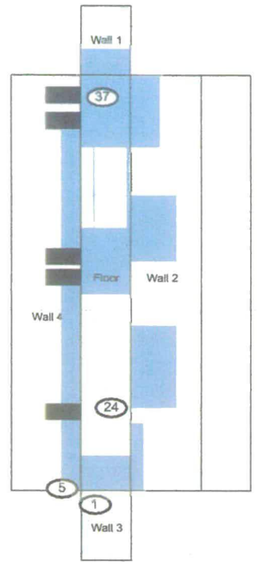
Survey Area: L **Survey Unit: 881L01** **Classification: 3**
Building: 881
Survey Unit Description: Bldg 881 Management Unit L 2 nd Floor Mezzanine, Interior South End
Total Area: 3,717 sq. m. **Total Floor Area: 1,069 sq. m.**

Building 881 Second Floor Mezzanine Management Unit L

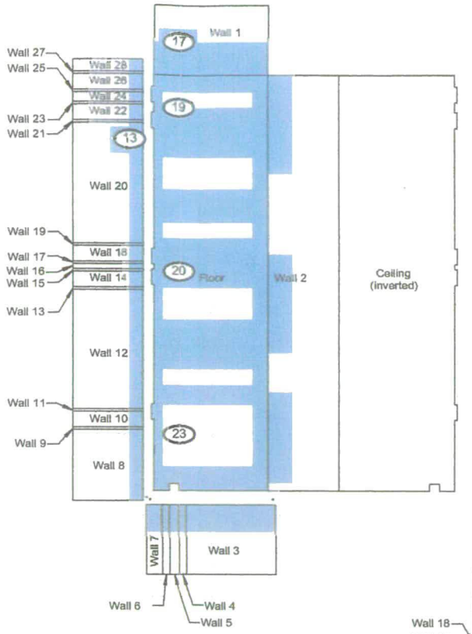
Room 305



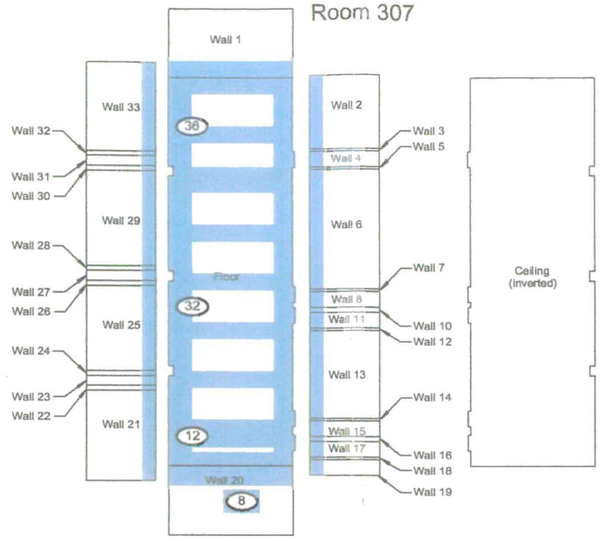
Room 301



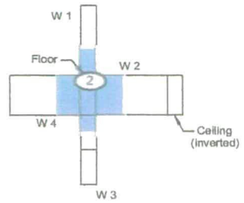
Room 306



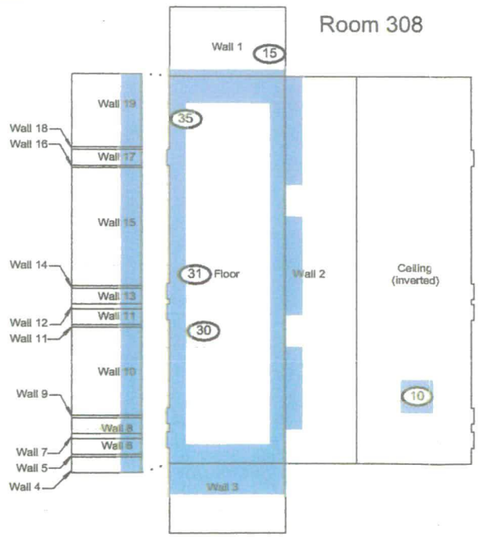
Room 307



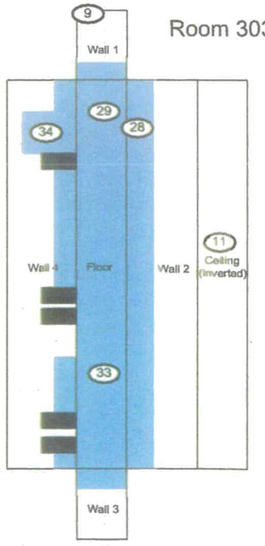
Room 302A



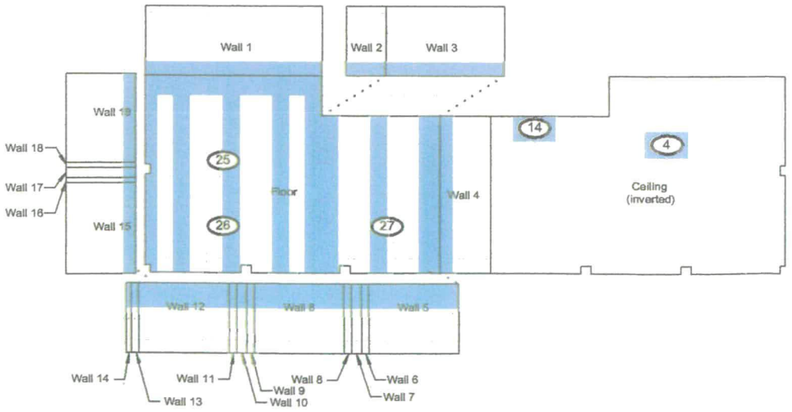
Room 308



Room 303



Room 302



CK3 CK2 CJ3 CJ2 CH3 CH2

CG3 CG2 CF3 CF2 CE3 CE2

CD3 CD2 CC3 CC2 CB3 CB2

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 4, 5

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

MAP ID: 03-0568/881L01-SC **Feb. 10, 2004**

438

Survey Area: L	Survey Unit: 881L02	Building: 881

Description: B881 Management Unit L, North Supply Plenum, Rooms 311, 311A, 311B

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 10 | Nbr QC Required: 2

Nbr Random Measurements Performed: 15 | Nbr Biased Measurements Performed: 10 | Nbr QC Performed: 2

Alpha

Maximum:	69.6 dpm/100cm²
Minimum:	-4.0 dpm/100cm²
Mean:	31.2 dpm/100cm²
Standard Deviation:	20.8
QC Maximum:	63.2 dpm/100cm²
QC Minimum:	55.2 dpm/100cm²
QC Mean:	59.2 dpm/100cm²
Transuranic $DCGL_W$:	100.0 dpm/100cm²
Transuranic $DCGL_{EMC}$:	300.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 10

Nbr Random Measurements Performed: 15 | Nbr Biased Measurements Performed: 10

Alpha

Maximum:	7.6 dpm/100cm²
Minimum:	-1.5 dpm/100cm²
Mean:	1.0 dpm/100cm²
Standard Deviation:	2.0
Transuranic $DCGL_W$:	20.0 dpm/100cm²

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

439

Survey Area: L	Survey Unit: 881L02	Building: 881

Description: B881 Management Unit L, North Supply Plenum, Rooms 311, 311A, 311B

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	03/08/04	Electra	663	DP-6	06/04/04	0.147	NA	48.0	NA	T/S
2	711447	03/08/04	Electra	668	DP-6	06/22/04	0.157	NA	48.0	NA	T/S
3	711447	03/08/04	Electra	662	DP-6	03/15/04	0.217	NA	48.0	NA	T/S
4	712193	03/08/04	Electra	2404	DP-6	04/16/04	0.211	NA	48.0	NA	T/S
5	712193	03/09/04	Electra	3552	DP-6	04/16/04	0.217	NA	48.0	NA	T
6	711447	03/09/04	Electra	2404	DP-6	04/16/04	0.211	NA	48.0	NA	T/Q
7	712193	03/09/04	SAC-4	961	NA	03/30/04	0.330	NA	10.0	10.0	R
8	712193	03/11/04	Electra	1261	DP-6	08/24/04	0.210	NA	48.0	NA	I
9	712193	03/11/04	Electra	1261	DP-6	08/24/04	0.210	NA	48.0	NA	I

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

4140

Survey Area: L	Survey Unit: 881L02	Building: 881

Description: B881 Management Unit L, North Supply Plenum, Rooms 311, 311A, 311B

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881L02PRP-N001	7	3.0	N/A	
881L02PRP-N002	7	-0.0	N/A	
881L02PRP-N003	7	-0.0	N/A	
881L02PRP-N004	7	1.5	N/A	
881L02PRP-N005	7	-0.0	N/A	
881L02PRP-N006	7	-1.5	N/A	
881L02PRP-N007	7	1.5	N/A	
881L02PRP-N008	7	1.5	N/A	
881L02PRP-N009	7	-0.0	N/A	
881L02PRP-N010	7	-0.0	N/A	
881L02PRP-N011	7	3.0	N/A	
881L02PRP-N012	7	-1.5	N/A	
881L02PRP-N013	7	-0.0	N/A	
881L02PRP-N014	7	1.5	N/A	
881L02PRP-N015	7	1.5	N/A	

Survey Area: L	Survey Unit: 881L02	Building: 881

Description: B881 Management Unit L, North Supply Plenum, Rooms 311, 311A, 311B

Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881L02PBP-N016	7	-1.5	N/A	
881L02PBP-N017	7	4.5	N/A	
881L02PBP-N018	7	7.6	N/A	
881L02PBP-N019	7	1.5	N/A	
881L02PBP-N020	7	-0.0	N/A	
881L02PBP-N021	7	-0.0	N/A	
881L02PBP-N022	7	-1.5	N/A	
881L02PBP-N023	7	-0.0	N/A	
881L02PBP-N024	7	1.5	N/A	
881L02PBP-N025	7	1.5	N/A	

Comments:

442

Survey Area: L	Survey Unit: 881L02	Building: 881

Description: B881 Management Unit L, North Supply Plenum, Rooms 311, 311A, 311B

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881L02PRP-N001	5	-4.0	N/A	
881L02PRP-N002	5	-1.2	N/A	
881L02PRP-N003	5	44.9	N/A	
881L02PRP-N004	5	20.5	N/A	
881L02PRP-N005	5	66.5	N/A	
881L02QRP-N005	6	55.2	N/A	
881L02PRP-N006	5	11.2	N/A	
881L02PRP-N007	5	17.2	N/A	
881L02PRP-N008	5	19.1	N/A	
881L02PRP-N009	5	5.3	N/A	
881L02PRP-N010	5	38.9	N/A	
881L02PRP-N011	5	21.8	N/A	
881L02PRP-N012	5	35.7	N/A	
881L02PRP-N013	5	44.9	N/A	
881L02PRP-N014	5	14.5	N/A	
881L02PRP-N015	5	51.3	N/A	
881L02QRP-N024	6	63.2	N/A	

Survey Area: L	Survey Unit: 881L02	Building: 881

Description: B881 Management Unit L, North Supply Plenum, Rooms 311, 311A, 311B

Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881L02PBP-N016	5	44.7	N/A	
881L02SBP-N017	9	53.6	N/A	
881L02IBP-N018	8	66.7	N/A	
881L02PBP-N019	5	20.3	N/A	
881L02PBP-N020	5	41.9	N/A	
881L02PBP-N021	5	17.1	N/A	
881L02PBP-N022	5	51.2	N/A	
881L02PBP-N023	5	26.3	N/A	
881L02PBP-N024	5	41.9	N/A	
881L02PBP-N025	5	14.3	N/A	

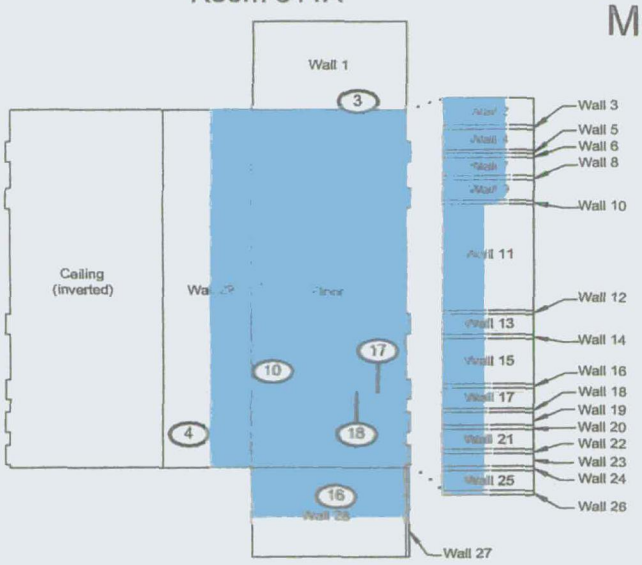
Comments: Scans performed at 2"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 100 dpm/100cm2. The initial Net Sample Activity for location 17 was 110.3 dpm/100cm2. Eight additional TSA measurements were collected within the surrounding square meter and averaged. The average survey results are reported. The initial Net Sample Activity for Location 18 was 107.1 dpm/100cm2. This location was sealed and re-surveyed. Re-survey results are reported. No further investigation is required for these locations. The reported Alpha Net Activity differs slightly from the investigation Alpha Net Activity because the average background is used to calculate the reported value, while the actual sample background is used to calculate the investigation value.

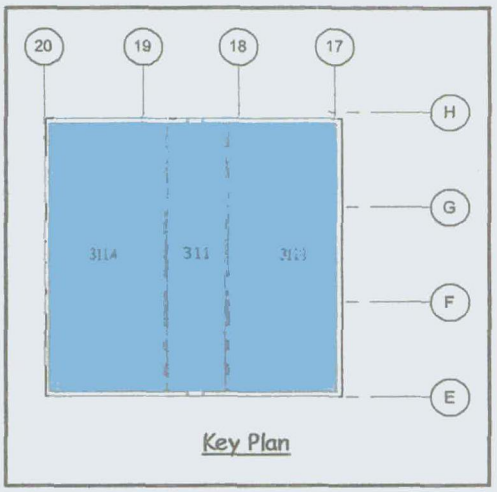
PRE-DEMOLITION SURVEY FOR B881

Survey Area: L **Survey Unit: 881L02** **Classification: 3**
Building: 881
Survey Unit Description: Bldg 881 Management Unit L 2nd Floor Mezzanine, Interior North End
Total Area: 1,113 sq. m. **Total Floor Area: 310 sq. m.**

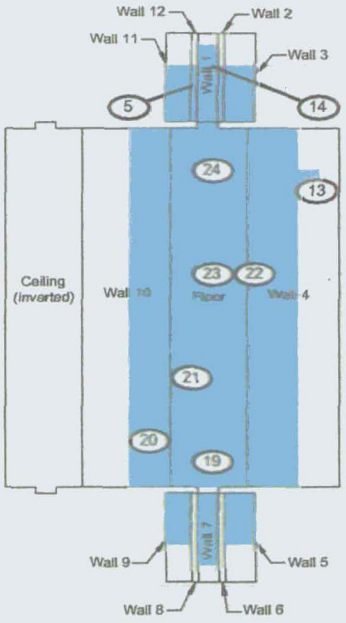
Building 881 Second Floor Mezzanine

Room 311A

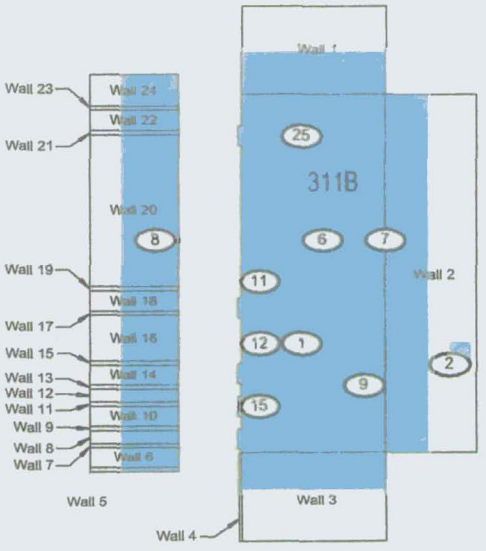




Room 311



Room 311B



Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 40
0 METERS 10

1 inch = 30 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3, 4

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER-HILL

MAP ID: 03-0568/2M_881L02-SC Mar. 30, 2003

445

Survey Area: R	Survey Unit: 881R01	Building: 881

Description: B881Management Unit R, South Loading Dock Area Floors

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 16 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 25 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	115.8 dpm/100cm²
Minimum:	-12.1 dpm/100cm²
Mean:	31.9 dpm/100cm²
Standard Deviation:	28.5
QC Maximum:	104.1 dpm/100cm²
QC Minimum:	59.4 dpm/100cm²
QC Mean:	81.7 dpm/100cm²
Uranium DCGL$_W$:	5,000.0 dpm/100cm²
Uranium DCGL$_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 16 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 25 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.3 dpm/100cm²
Minimum:	-1.8 dpm/100cm²
Mean:	2.5 dpm/100cm²
Standard Deviation:	2.9
Uranium DCGL$_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

446

Survey Area: R	Survey Unit: 881R01	Building: 881

Description: B881Management Unit R, South Loading Dock Area Floors

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	711447	03/25/04	Electra	668	DP-6	06/22/04	0.157	NA	93.0	NA	T/S
2	712193	03/25/04	Electra	1513	DP-6	09/17/04	0.181	NA	93.0	NA	T/S
3	712193	03/25/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/S
4	711447	03/25/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
5	711447	03/25/04	Electra	663	DP-6	09/18/04	0.216	NA	93.0	NA	T/Q
6	712193	03/27/04	Electra	668	DP-6	06/22/04	0.157	NA	93.0	NA	T/S
7	711447	03/27/04	Electra	1513	DP-6	09/17/04	0.181	NA	93.0	NA	T/S
8	712193	03/27/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T/S
9	711447	03/27/04	SAC-4	823	NA	08/19/04	0.330	NA	16.0	NA	R
10	711447	03/27/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

447

Survey Area: R	Survey Unit: 881R01	Building: 881

Description: B881Management Unit R, South Loading Dock Area Floors

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881R01PRP-N001	4	7.3	N/A	
881R01PRP-N002	4	4.2	N/A	
881R01PRP-N003	4	1.2	N/A	
881R01PRP-N004	4	1.2	N/A	
881R01PRP-N005	4	-1.8	N/A	
881R01PRP-N006	4	1.2	N/A	
881R01PRP-N007	4	4.2	N/A	
881R01PRP-N008	4	4.2	N/A	
881R01PRP-N009	4	1.2	N/A	
881R01PRP-N010	4	7.3	N/A	
881R01PRP-N011	9	1.2	N/A	
881R01PRP-N012	9	4.2	N/A	
881R01PRP-N013	9	1.2	N/A	
881R01PRP-N014	9	-1.8	N/A	
881R01PRP-N015	9	-1.8	N/A	
881R01PRP-N016	9	4.2	N/A	
881R01PRP-N017	9	4.2	N/A	
881R01PRP-N018	9	7.3	N/A	
881R01PRP-N019	9	1.2	N/A	
881R01PRP-N020	9	1.2	N/A	
881R01PRP-N021	9	7.3	N/A	
881R01PRP-N022	9	4.2	N/A	
881R01PRP-N023	9	-1.8	N/A	
881R01PRP-N024	9	1.2	N/A	
881R01PRP-N025	9	1.2	N/A	

Comments: None.

448

Survey Area: R	Survey Unit: 881R01	Building: 881

Description: B881Management Unit R, South Loading Dock Area Floors

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881R01PRP-N001	3	115.8	N/A	
881R01PRP-N002	3	11.6	N/A	
881R01PRP-N003	3	30.5	N/A	
881R01PRP-N004	3	6.8	N/A	
881R01PRP-N005	3	-7.4	N/A	
881R01PRP-N006	3	82.6	N/A	
881R01QRP-N006	5	104.1	N/A	
881R01PRP-N007	3	40.0	N/A	
881R01PRP-N008	3	25.8	N/A	
881R01PRP-N009	3	-12.1	N/A	
881R01PRP-N010	3	11.6	N/A	
881R01PRP-N011	8	42.5	N/A	
881R01PRP-N012	8	24.2	N/A	
881R01PRP-N013	8	10.5	N/A	
881R01PRP-N014	8	28.8	N/A	
881R01PRP-N015	8	42.5	N/A	
881R01PRP-N016	8	24.2	N/A	
881R01PRP-N017	8	51.6	N/A	
881R01PRP-N018	8	1.4	N/A	
881R01PRP-N019	8	24.2	N/A	
881R01PRP-N020	8	56.2	N/A	
881R01PRP-N021	8	28.8	N/A	
881R01PRP-N022	8	51.6	N/A	
881R01PRP-N023	8	65.3	N/A	
881R01QRP-N023	10	59.4	N/A	
881R01PRP-N024	8	10.5	N/A	
881R01PRP-N025	8	28.8	N/A	

449

Survey Area: R	Survey Unit: 881R01	Building: 881

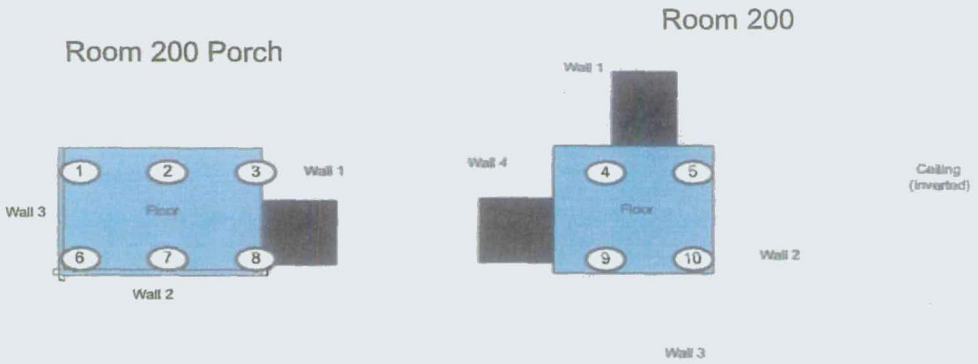
Description: B881Management Unit R, South Loading Dock Area Floors

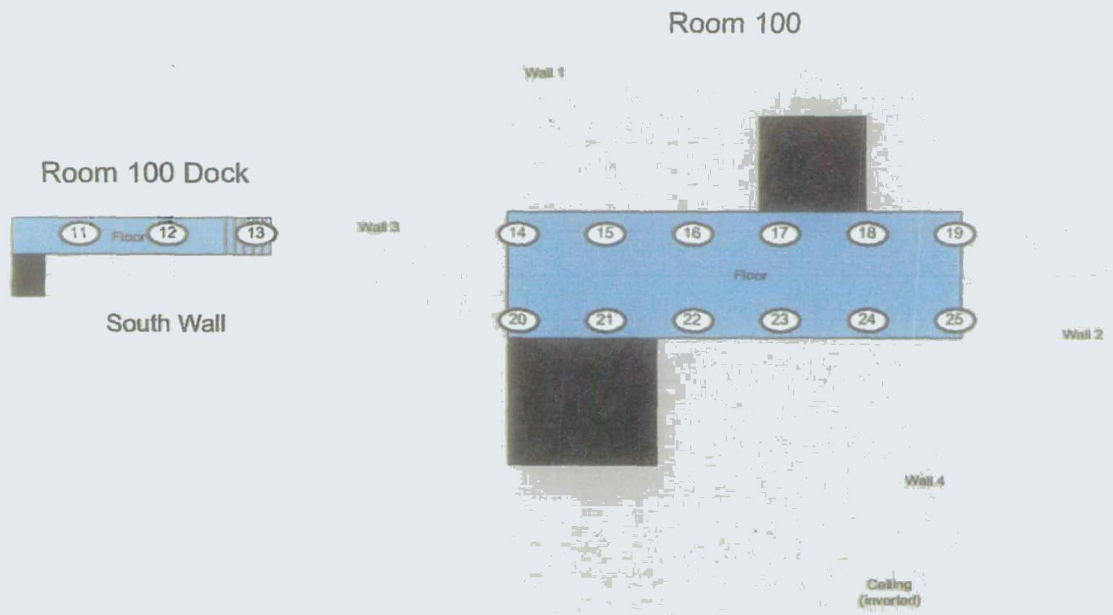
Comments: Scans performed at 4"/second at shaded areas indicated on map. All detected alpha count rates verified to be less than 5,000 dpm/100cm2.

450

PRE-DEMOLITION SURVEY FOR B881

Survey Area: R **Survey Unit: 881R01** **Classification: 1**
Building: 881
Survey Unit Description: Building 881, Management Unit R, South Loading Dock Area, Floors
Total Area: 452 sq. m. **Total Floor Area: 103 sq. m.**
Grid Spacing for Survey Points: 2.5 m. X 2.5 m.





STARTING POINT FOR SQUARE SAMPLING GRID (X13, Y7)

Scan Area

SURVEY MAP LEGEND

- Smear & TSA Location
- Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3, 6, 7, 8

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 **Prepared for:**

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881R01-SC **Mar. 30, 2004**

451

Survey Area: R	Survey Unit: 881R02	Building: 881

Description: Building 881, Management Unit R, South Loading Dock, walls and ceiling

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 22
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0
Nbr QC Required: 2
Nbr QC Performed: 2

Alpha

Maximum:	133.3	$dpm/100cm^2$
Minimum:	-10.3	$dpm/100cm^2$
Mean:	43.0	$dpm/100cm^2$
Standard Deviation:	30.4	
QC Maximum:	128.0	$dpm/100cm^2$
QC Minimum:	80.6	$dpm/100cm^2$
QC Mean:	104.3	$dpm/100cm^2$
Uranium $DCGL_W$:	5,000.0	$dpm/100cm^2$
Uranium $DCGL_{EMC}$:	15,000.0	$dpm/100cm^2$

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15
Nbr Random Measurements Performed: 22
Nbr Biased Measurements Required: 0
Nbr Biased Measurements Performed: 0

Alpha

Maximum:	7.3	$dpm/100cm^2$
Minimum:	-1.8	$dpm/100cm^2$
Mean:	2.6	$dpm/100cm^2$
Standard Deviation:	2.9	
Uranium $DCGL_W$:	1,000.0	

Media Sample Results

Nbr Random Required: 0
Nbr Random Collected: 0
Nbr Biased Required: 0
Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: R	Survey Unit: 881R02	Building: 881

Description: Building 881, Management Unit R, South Loading Dock, walls and ceiling

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	03/25/04	Electra	668	DP-6	06/22/04	0.157	NA	93.0	NA	T/S
2	711447	03/25/04	Electra	1513	DP-6	09/17/04	0.181	NA	93.0	NA	T/S
3	711447	03/25/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/S
4	712193	03/25/04	Electra	663	DP-6	09/18/04	0.216	NA	93.0	NA	T
5	711447	03/25/04	SAC-4	823	NA	08/19/04	0.330	NA	48.0	NA	R
6	711447	03/25/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/Q
7	711447	03/27/04	Electra	668	DP-6	06/22/04	0.157	NA	93.0	NA	T/S
8	712193	03/27/04	Electra	1513	DP-6	09/17/04	0.181	NA	93.0	NA	T/S
9	711447	03/27/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/S
10	712193	03/27/04	Electra	667	DP-6	09/19/04	0.219	NA	93.0	NA	T
11	711447	03/27/04	SAC-4	823	NA	08/19/04	0.330	NA	48.0	NA	R
12	711447	03/27/04	Electra	3109	DP-6	06/08/04	0.211	NA	93.0	NA	T/Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

453

Survey Area: R	Survey Unit: 881R02	Building: 881

Description: Building 881, Management Unit R, South Loading Dock, WALLS AND CEILING

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881R02PRP-N001	5	4.2	N/A	
881R02PRP-N002	5	1.2	N/A	
881R02PRP-N003	5	7.3	N/A	
881R02PRP-N004	5	-1.8	N/A	
881R02PRP-N005	11	4.2	N/A	
881R02PRP-N006	11	4.2	N/A	
881R02PRP-N007	11	7.3	N/A	
881R02PRP-N008	11	1.2	N/A	
881R02PRP-N009	11	1.2	N/A	
881R02PRP-N010	11	-1.8	N/A	
881R02PRP-N011	11	1.2	N/A	
881R02PRP-N012	11	4.2	N/A	
881R02PRP-N013	5	4.2	N/A	
881R02PRP-N014	5	4.2	N/A	
881R02PRP-N015	11	1.2	N/A	
881R02PRP-N016	11	1.2	N/A	
881R02PRP-N017	11	4.2	N/A	
881R02PRP-N018	5	-1.8	N/A	
881R02PRP-N019	11	1.2	N/A	
881R02PRP-N020	11	7.3	N/A	
881R02PRP-N021	11	-1.8	N/A	
881R02PRP-N022	11	4.2	N/A	

Comments: None.

Survey Area: R	Survey Unit: 881R02	Building: 881

Description: Building 881, Management Unit R, South Loading Dock, walls and ceiling

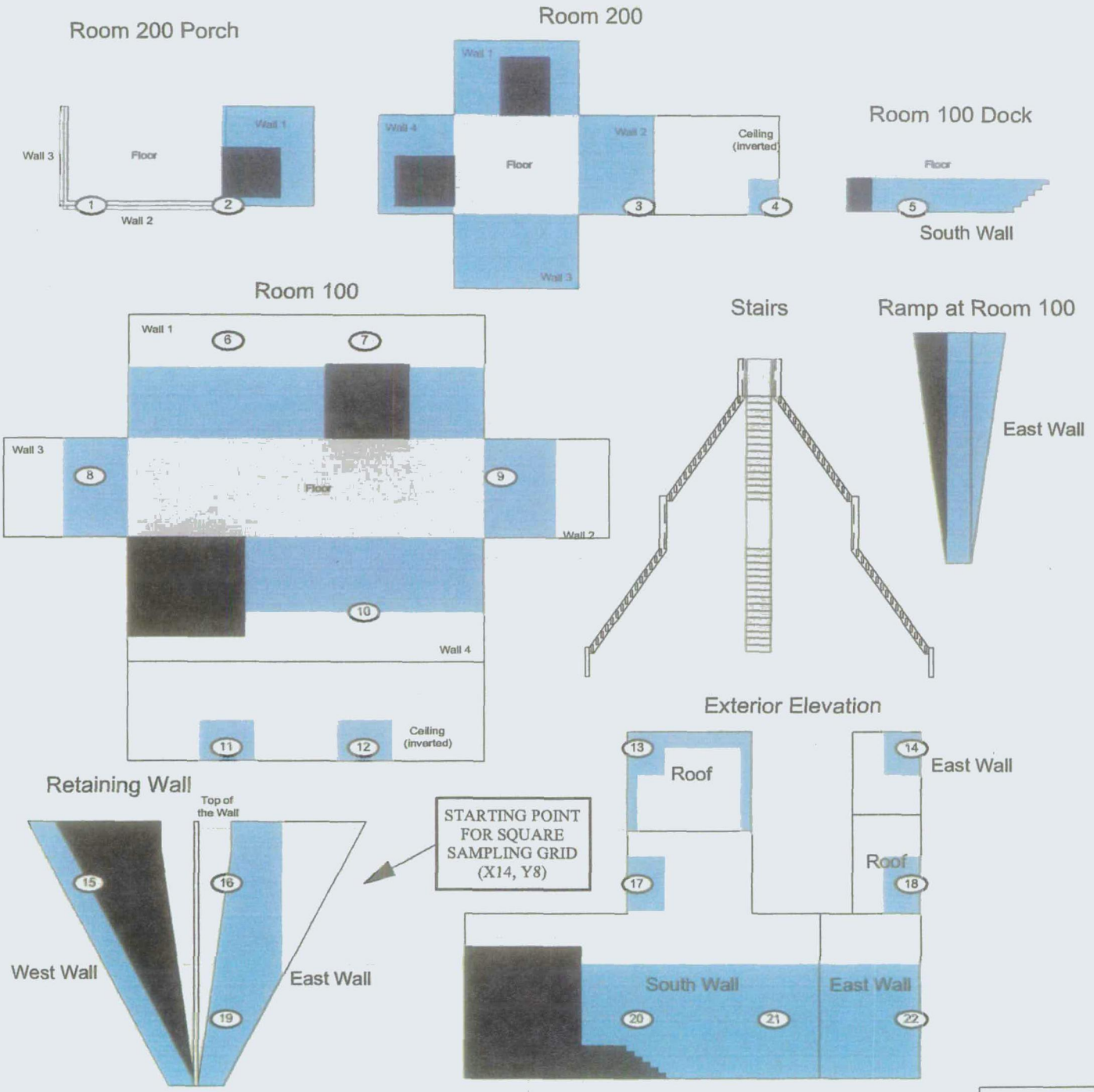
Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881R02PRP-N001	4	40.7	N/A	
881R02PRP-N002	4	59.2	N/A	
881R02PRP-N003	4	12.9	N/A	
881R02PRP-N004	4	-10.3	N/A	
881R02PRP-N005	10	67.2	N/A	
881R02QRP-N005	12	80.6	N/A	
881R02PRP-N006	10	30.6	N/A	
881R02PRP-N007	10	16.9	N/A	
881R02PRP-N008	10	44.3	N/A	
881R02PRP-N009	10	35.2	N/A	
881R02PRP-N010	10	21.5	N/A	
881R02PRP-N011	10	16.9	N/A	
881R02PRP-N012	10	39.8	N/A	
881R02PRP-N013	4	133.3	N/A	
881R02QRP-N013	6	128.0	N/A	
881R02PRP-N014	4	59.2	N/A	
881R02PRP-N015	10	30.6	N/A	
881R02PRP-N016	10	58.0	N/A	
881R02PRP-N017	10	53.5	N/A	
881R02PRP-N018	4	100.9	N/A	
881R02PRP-N019	10	39.8	N/A	
881R02PRP-N020	10	21.5	N/A	
881R02PRP-N021	10	39.8	N/A	
881R02PRP-N022	10	35.2	N/A	

Comments: None.

PRE-DEMOLITION SURVEY FOR B881

Survey Area: R **Survey Unit: 881R02** **Classification: 2**
Building: 881
Survey Unit Description: Building 881, Management Unit R, South Loading Dock Area, Walls & Ceilings
Total Area: 452 sq. m. **Total Floor Area: 103 sq. m.**
Grid Spacing for Survey Points: 5 m. X 5 m.



SURVEY MAP LEGEND

- (#) Smear & TSA Location
- ◇(#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2, 3, 7, 8, 9

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881R02-SC Mar. 30, 2004

458

Survey Area: S	Survey Unit: 881S02	Building: 881

Description: Building 881, Management Unit S, ST2 Exhaust Tunnel

Rocky Flats Environmental Technology Site
Final Radiological Survey Summary Results

Total Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0 | Nbr QC Required: 2

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 0 | Nbr QC Performed: 2

Alpha

Maximum:	398.4 dpm/100cm²
Minimum:	47.7 dpm/100cm²
Mean:	220.6 dpm/100cm²
Standard Deviation:	100.1
QC Maximum:	393.1 dpm/100cm²
QC Minimum:	333.4 dpm/100cm²
QC Mean:	363.2 dpm/100cm²
Uranium $DCGL_W$:	5,000.0 dpm/100cm²
Uranium $DCGL_{EMC}$:	15,000.0 dpm/100cm²

Removable Surface Activity Measurements

Nbr Random Measurements Required: 15 | Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 19 | Nbr Biased Measurements Performed: 0

Alpha

Maximum:	8.2 dpm/100cm²
Minimum:	-0.9 dpm/100cm²
Mean:	3.4 dpm/100cm²
Standard Deviation:	2.7
Uranium $DCGL_W$:	1,000.0

Media Sample Results

Nbr Random Required: 0 | Nbr Biased Required: 0

Nbr Random Collected: 0 | Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

457

Survey Area: S	Survey Unit: 881S02	Building: 881

Description: Building 881, Management Unit S, ST2 Exhaust Tunnel

Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm²)		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712193	02/25/04	Electra	661	DP-6	07/07/04	0.167	NA	93.0	NA	S
2	711447	02/25/04	Electra	2404	DP-6	04/16/04	0.211	NA	93.0	NA	S
3	711447	03/01/04	Electra	2404	DP-6	04/16/04	0.211	NA	93.0	NA	T
4	712193	03/01/04	Electra	3105	DP-6	07/14/04	0.201	NA	93.0	NA	Q
5	712193	03/01/04	SAC-4	961	NA	03/30/04	0.330	NA	16.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

457

Survey Area: S	Survey Unit: 881S02	Building: 881

Description: Building 881, Management Unit S, ST2 Exhaust Tunnel

Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)	
881S02PRP-N001	5	-0.9	N/A	
881S02PRP-N002	5	5.2	N/A	
881S02PRP-N003	5	5.2	N/A	
881S02PRP-N004	5	2.1	N/A	
881S02PRP-N005	5	5.2	N/A	
881S02PRP-N006	5	-0.9	N/A	
881S02PRP-N007	5	8.2	N/A	
881S02PRP-N008	5	2.1	N/A	
881S02PRP-N009	5	2.1	N/A	
881S02PRP-N010	5	2.1	N/A	
881S02PRP-N011	5	5.2	N/A	
881S02PRP-N012	5	2.1	N/A	
881S02PRP-N013	5	8.2	N/A	
881S02PRP-N014	5	2.1	N/A	
881S02PRP-N015	5	2.1	N/A	
881S02PRP-N016	5	5.2	N/A	
881S02PRP-N017	5	5.2	N/A	
881S02PRP-N018	5	-0.9	N/A	
881S02PRP-N019	5	5.2	N/A	

Comments:

459

Survey Area: S	Survey Unit: 881S02	Building: 881

Description: Building 881, Management Unit S, ST2 Exhaust Tunnel

Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm²)	Net Beta (dpm/100cm²)
881S02PRP-N001	3	398.4	N/A
881S02QRP-N001	4	333.4	N/A
881S02PRP-N002	3	123.5	N/A
881S02PRP-N003	3	303.6	N/A
881S02PRP-N004	3	180.4	N/A
881S02PRP-N005	3	265.7	N/A
881S02PRP-N006	3	322.6	N/A
881S02PRP-N007	3	242.0	N/A
881S02PRP-N008	3	156.7	N/A
881S02PRP-N009	3	256.2	N/A
881S02PRP-N010	3	284.7	N/A
881S02PRP-N011	3	256.2	N/A
881S02PRP-N012	3	370.0	N/A
881S02PRP-N013	3	213.6	N/A
881S02PRP-N014	3	298.9	N/A
881S02QRP-N014	4	393.1	N/A
881S02PRP-N015	3	156.7	N/A
881S02PRP-N016	3	90.3	N/A
881S02PRP-N017	3	66.6	N/A
881S02PRP-N018	3	47.7	N/A
881S02PRP-N019	3	156.7	N/A

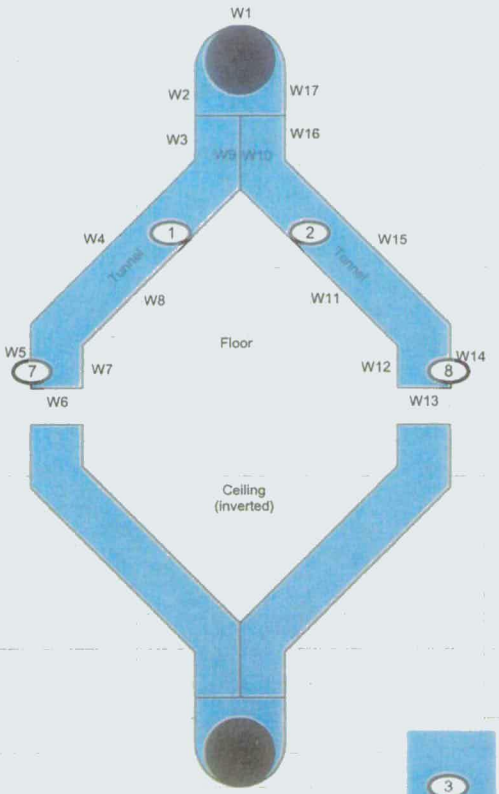
Comments:

460

PRE-DEMOLITION SURVEY FOR B881

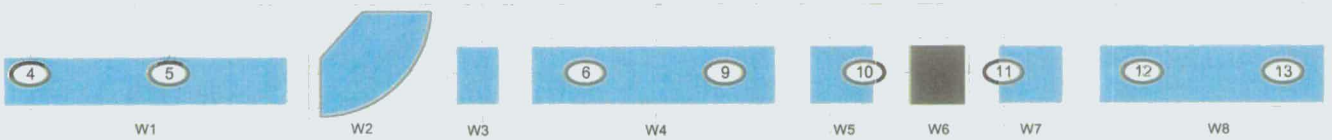
Survey Area: S Survey Unit: 881S02 Classification: 1
Building: 881
Survey Unit Description: B881 Northeast Stack (S-2)
Total Area: 273 sq. m. Total Floor Area: 41 sq. m.
Grid Spacing for Survey Points: 4 m. X 4 m.

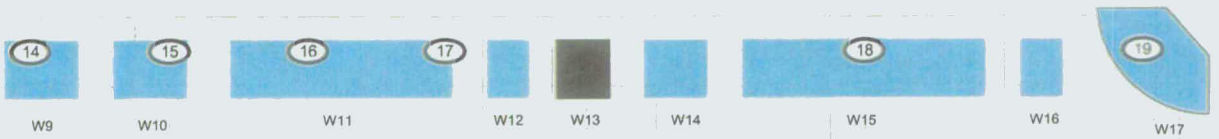
881 - Stack 2



Curved Floor
(expanded)

STARTING POINT
FOR SQUARE
SAMPLING GRID
(X22, Y12)





Scan Area

SURVEY MAP LEGEND

- (#) Smear & TSA Location
- (#) Smear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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N

0 FEET 25
0 METERS 8

1 inch = 18 feet 1 grid sq. = 1 sq. m.

Scan Survey Information
Survey Instrument ID #(s) & RCT ID #(s):
1, 2

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707 Prepared for:

CH2MHILL Communications Group

KAISER-HILL COMPANY

MAP ID: 03-0568/881S02-SC Mar. 11, 2004

461

ATTACHMENT C-1

PDS Beryllium Data Summary and Sample Maps

Table C-1 Beryllium Data Summary

Sample Map Location #	Sample Map Page #	Room	RIN	Sample Number	Sample Location	Result (ug/100 cm2)
1	1 of 5	311B	04Z1443	881-03182004-313-001	On concrete floor, biased	< 0.1
1	1 of 5	300	04Z1718	881-04232004-26-004	On concrete floor, random	< 0.1
2	1 of 5	311	04Z1443	881-03182004-313-002	On concrete floor, biased	< 0.1
2	1 of 5	312A	04Z1868	881-05212004-26-001	On concrete floor, random	< 0.1
3	1 of 5	311A	04Z1443	881-03182004-313-003	On concrete floor, biased	< 0.1
4	1 of 5	311B	04Z1443	881-03182004-313-004	On concrete floor, biased	< 0.1
5	1 of 5	311	04Z1443	881-03182004-313-005	On concrete floor, biased	< 0.1
6	1 of 5	301	04Z1444	881-03182004-313-011	On concrete floor, biased	< 0.1
6	1 of 5	309	04Z1718	881-04232004-26-014	On concrete floor, random	< 0.1
7	1 of 5	305	04Z1444	881-03182004-313-012	On concrete floor, biased	< 0.1
7	1 of 5	309	04Z1718	881-04232004-26-011	On concrete floor, random	< 0.1
8	1 of 5	302	04Z1444	881-03182004-313-013	On concrete floor, biased	< 0.1
9	1 of 5	303	04Z1444	881-03182004-313-014	On concrete floor, biased	< 0.1
9	1 of 5	322	04Z1868	881-05212004-26-020	On stainless steel floor, random	< 0.1
10	1 of 5	308	04Z1444	881-03182004-313-015	On concrete floor, biased	< 0.1
11	1 of 5	309	04Z1718	881-04232004-26-010	On concrete floor, random	< 0.1
13	1 of 5	309	04Z1718	881-04232004-26-014	On concrete floor, random	< 0.1
16	1 of 5	317	04Z1868	881-05212004-26-007	On concrete floor, random	< 0.1
17	1 of 5	313	04Z1868	881-05212004-26-019	On stainless steel floor, random	< 0.1
19	1 of 5	313	04Z1868	881-05212004-26-008	On stainless steel floor, random	< 0.1
20	1 of 5	317	04Z1868	881-05212004-26-002	On concrete floor, random	< 0.1
21	1 of 5	316	04Z1868	881-05212004-26-024	On stainless steel floor, random	< 0.1
22	1 of 5	313	04Z1868	881-05212004-26-017	On stainless steel floor, random	< 0.1
23	1 of 5	313	04Z1868	881-05212004-26-011	On stainless steel floor, random	< 0.1
24	1 of 5	309	04Z1718	881-04232004-26-009	On concrete floor, random	< 0.1
27	1 of 5	313	04Z1868	881-05212004-26-015	On stainless steel floor, random	< 0.1
33	1 of 5	309	04Z1718	881-04232004-26-012	On concrete floor, random	< 0.1
37	1 of 5	324	04Z1868	881-05212004-26-012	On stainless steel floor, random	< 0.1
38	1 of 5	309	04Z1718	881-04232004-26-013	On concrete floor, random	< 0.1
39	1 of 5	313	04Z1868	881-05212004-26-014	On stainless steel floor, random	< 0.1
46	1 of 5	316	04Z1868	881-05212004-26-025	On stainless steel floor, random	< 0.1
48	1 of 5	309	04Z1718	881-04232004-26-007	On concrete floor, random	< 0.1
49	1 of 5	318	04Z1868	881-05212004-26-016	On stainless steel floor, random	< 0.1
50	1 of 5	313	04Z1868	881-05212004-26-009	On stainless steel floor, random	< 0.1
52	1 of 5	321	04Z1868	881-05212004-26-021	On stainless steel floor, random	< 0.1
53	1 of 5	317	04Z1868	881-05212004-26-004	On concrete floor, random	< 0.1
54	1 of 5	316	04Z1868	881-05212004-26-026	On stainless steel floor, random	< 0.1
55	1 of 5	313	04Z1868	881-05212004-26-013	On stainless steel floor, random	< 0.1
56	1 of 5	316	04Z1868	881-05212004-26-023	On stainless steel floor, random	< 0.1
61	1 of 5	309	04Z1718	881-04232004-26-008	On concrete floor, random	< 0.1
62	1 of 5	313	04Z1868	881-05212004-26-022	On stainless steel floor, random	< 0.1
63	1 of 5	317	04Z1868	881-05212004-26-005	On concrete floor, random	< 0.1
66	1 of 5	313	04Z1868	881-05212004-26-010	On stainless steel floor, random	< 0.1
67	1 of 5	300B	04Z1718	881-04232004-26-006	On concrete floor, random	< 0.1
68	1 of 5	317	04Z1868	881-05212004-26-003	On concrete floor, random	< 0.1
72	1 of 5	317	04Z1868	881-05212004-26-006	On concrete floor, random	< 0.1
73	1 of 5	300	04Z1718	881-04232004-26-005	On concrete floor, random	< 0.1
75	1 of 5	313	04Z1868	881-05212004-26-018	On stainless steel floor, random	< 0.1
1	2 of 5	296	04Z1712	881-04222004-26-018	On concrete floor, random	< 0.1
2	2 of 5	224	04D0704	881-05112004-26-008	On concrete floor, random	< 0.1
3	2 of 5	222	04D0704	881-05112004-26-019	On concrete floor, random	< 0.1
4	2 of 5	238	04D0704	881-05112004-26-006	On stainless steel floor, random	< 0.1
5	2 of 5	288A	04Z1712	881-04222004-26-011	On concrete floor, random	< 0.1
6	2 of 5	237	04D0704	881-05112004-26-052	On concrete floor, random	< 0.1
7	2 of 5	248A	04Z1712	881-04222004-26-010	On concrete floor, random	< 0.1

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Table C-1 Beryllium Data Summary

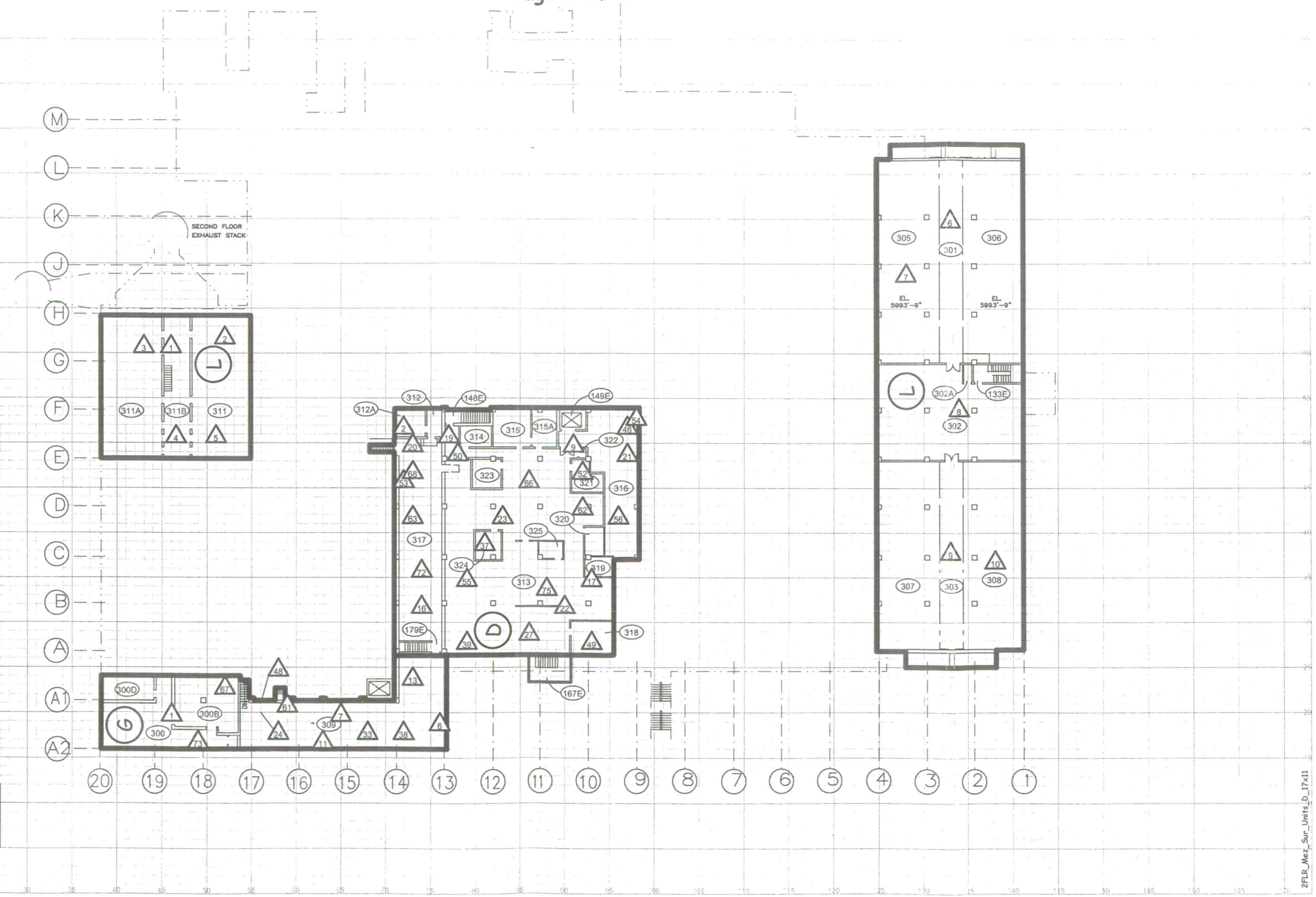
Sample Map Location #	Sample Map Page #	Room	RIN	Sample Number	Sample Location	Result (ug/100 cm2)
8	2 of 5	201	04D0704	881-05112004-26-020	On concrete floor, random	< 0.1
9	2 of 5	214B	04D0704	881-05112004-26-022	On concrete floor, random	< 0.1
10	2 of 5	288B	04Z1712	881-04222004-26-041	On concrete floor, random	< 0.1
11	2 of 5	276	04D0704	881-05112004-26-041	On concrete floor, random	< 0.1
12	2 of 5	292	04Z1718	881-04232004-26-003	On concrete floor, random	< 0.1
13	2 of 5	275	04D0704	881-05112004-26-030	On concrete floor, random	< 0.1
14	2 of 5	245G	04Z1712	881-04222004-26-004	On concrete floor, random	< 0.1
15	2 of 5	245	04Z1712	881-04222004-26-012	On stainless steel floor, random	< 0.1
16	2 of 5	280A	04D0704	881-05112004-26-048	On concrete floor, random	< 0.1
17	2 of 5	296	04Z1712	881-04222004-26-016	On concrete floor, random	< 0.1
18	2 of 5	214B	04D0704	881-05112004-26-023	On concrete floor, random	< 0.1
19	2 of 5	248B	04Z1712	881-04222004-26-009	On concrete floor, random	< 0.1
20	2 of 5	286	04D0704	881-05112004-26-050	On concrete floor, random	< 0.1
21	2 of 5	222	04D0704	881-05112004-26-018	On concrete floor, random	< 0.1
22	2 of 5	227	04D0704	881-05112004-26-015	On concrete floor, random	< 0.1
23	2 of 5	266	04D0704	881-05112004-26-038	On concrete floor, random	< 0.1
24	2 of 5	245E	04Z1712	881-04222004-26-005	On concrete floor, random	< 0.1
25	2 of 5	265B	04D0704	881-05112004-26-035	On stainless steel floor, random	< 0.1
26	2 of 5	269	04D0704	881-05112004-26-033	On concrete floor, random	< 0.1
27	2 of 5	296	04Z1712	881-04222004-26-015	On concrete floor, random	< 0.1
28	2 of 5	275	04D0704	881-05112004-26-029	On concrete floor, random	< 0.1
29	2 of 5	237	04D0704	881-05112004-26-051	On concrete floor, random	< 0.1
30	2 of 5	293A	04Z1718	881-04232004-26-002	On concrete floor, random	< 0.1
31	2 of 5	231B	04D0704	881-05112004-26-003	On stainless steel floor, random	< 0.1
32	2 of 5	219	04D0704	881-05112004-26-024	On concrete floor, random	< 0.1
33	2 of 5	275	04D0704	881-05112004-26-026	On concrete floor, random	< 0.1
34	2 of 5	235F	04D0704	881-05112004-26-007	On stainless steel floor, random	< 0.1
35	2 of 5	255	04D0704	881-05112004-26-042	On concrete floor, random	< 0.1
36	2 of 5	279	04D0704	881-05112004-26-025	On concrete floor, random	< 0.1
37	2 of 5	280	04D0704	881-05112004-26-045	On concrete floor, random	< 0.1
38	2 of 5	201	04D0704	881-05112004-26-017	On concrete floor, random	< 0.1
39	2 of 5	281	04D0704	881-05112004-26-046	On concrete floor, random	< 0.1
40	2 of 5	249B	04Z1712	881-04222004-26-007	On concrete floor, random	< 0.1
41	2 of 5	288	04Z1712	881-04222004-26-003	On concrete floor, random	< 0.1
42	2 of 5	266	04D0704	881-05112004-26-037	On concrete floor, random	< 0.1
43	2 of 5	245	04Z1712	881-04222004-26-013	On stainless steel floor, random	< 0.1
44	2 of 5	288	04Z1712	881-04222004-26-002	On concrete floor, random	< 0.1
45	2 of 5	280	04D0704	881-05112004-26-047	On concrete floor, random	< 0.1
46	2 of 5	297	04Z1712	881-04222004-26-014	On concrete floor, random	< 0.1
47	2 of 5	278A	04D0704	881-05112004-26-031	On concrete floor, random	< 0.1
48	2 of 5	285	04D0704	881-05112004-26-043	On concrete floor, random	< 0.1
49	2 of 5	245	04Z1712	881-04222004-26-019	On stainless steel floor, random	< 0.1
50	2 of 5	242	04D0704	881-05112004-26-001	On concrete floor, random	< 0.1
51	2 of 5	238	04D0704	881-05112004-26-005	On stainless steel floor, random	< 0.1
52	2 of 5	225	04D0704	881-05112004-26-009	On concrete floor, random	< 0.1
53	2 of 5	247A	04Z1712	881-04222004-26-006	On concrete floor, random	< 0.1
54	2 of 5	284	04D0704	881-05112004-26-044	On concrete floor, random	< 0.1
55	2 of 5	276	04D0704	881-05112004-26-040	On concrete floor, random	< 0.1
56	2 of 5	265	04D0704	881-05112004-26-034	On stainless steel floor, random	< 0.1
57	2 of 5	133D	04D0704	881-05112004-26-032	On concrete floor, random	< 0.1
58	2 of 5	231	04D0704	881-05112004-26-004	On stainless steel floor, random	< 0.1
59	2 of 5	225	04D0704	881-05112004-26-010	On concrete floor, random	< 0.1
60	2 of 5	293	04Z1718	881-04232004-26-001	On concrete floor, random	< 0.1
61	2 of 5	214C	04D0704	881-05112004-26-021	On concrete floor, random	< 0.1
62	2 of 5	276	04D0704	881-05112004-26-039	On concrete floor, random	< 0.1

Table C-1 Beryllium Data Summary

Sample Map Location #	Sample Map Page #	Room	RIN	Sample Number	Sample Location	Result (ug/100 cm2)
63	2 of 5	275	04D0704	881-05112004-26-028	On concrete floor, random	< 0.1
64	2 of 5	223	04D0704	881-05112004-26-013	On concrete floor, random	< 0.1
65	2 of 5	296	04Z1712	881-04222004-26-017	On concrete floor, random	< 0.1
66	2 of 5	275	04D0704	881-05112004-26-027	On concrete floor, random	< 0.1
67	2 of 5	242	04D0704	881-05112004-26-002	On concrete floor, random	< 0.1
68	2 of 5	245	04Z1712	881-04222004-26-020	On stainless steel floor, random	< 0.1
69	2 of 5	286	04D0704	881-05112004-26-049	On concrete floor, random	< 0.1
70	2 of 5	229	04D0704	881-05112004-26-016	On concrete floor, random	< 0.1
71	2 of 5	266C	04D0704	881-05112004-26-036	On concrete floor, random	< 0.1
72	2 of 5	224	04D0704	881-05112004-26-011	On concrete floor, random	< 0.1
73	2 of 5	224	04D0704	881-05112004-26-012	On concrete floor, random	< 0.1
74	2 of 5	249A	04Z1712	881-04222004-26-008	On concrete floor, random	< 0.1
75	2 of 5	225	04D0704	881-05112004-26-014	On concrete floor, random	< 0.1
76	2 of 5	883 Tun	04Z1712	881-04222004-26-040	On concrete floor, random	< 0.1
77	2 of 5	883 Tun	04Z1712	881-04222004-26-038	On concrete floor, random	< 0.1
78	2 of 5	883 Tun	04Z1712	881-04222004-26-037	On concrete floor, random	< 0.1
79	2 of 5	883 Tun	04Z1712	881-04222004-26-039	On concrete floor, random	< 0.1
80	2 of 5	883 Tun	04Z1712	881-04222004-26-036	On concrete floor, random	< 0.1
81	2 of 5	883 Tun	04Z1712	881-04222004-26-035	On concrete floor, random	< 0.1
82	2 of 5	883 Tun	04Z1712	881-04222004-26-034	On concrete floor, random	< 0.1
83	2 of 5	883 Tun	04Z1712	881-04222004-26-033	On concrete floor, random	< 0.1
84	2 of 5	883 Tun	04Z1712	881-04222004-26-031	On concrete floor, random	< 0.1
85	2 of 5	883 Tun	04Z1712	881-04222004-26-032	On concrete floor, random	< 0.1
86	2 of 5	883 Tun	04Z1712	881-04222004-26-030	On concrete floor, random	< 0.1
87	2 of 5	883 Tun	04Z1712	881-04222004-26-029	On concrete floor, random	< 0.1
88	2 of 5	883 Tun	04Z1712	881-04222004-26-028	On concrete floor, random	< 0.1
89	2 of 5	883 Tun	04Z1712	881-04222004-26-027	On concrete floor, random	< 0.1
90	2 of 5	883 Tun	04Z1712	881-04222004-26-026	On concrete floor, random	< 0.1
91	2 of 5	883 Tun	04Z1712	881-04222004-26-025	On concrete floor, random	< 0.1
92	2 of 5	883 Tun	04Z1712	881-04222004-26-024	On concrete floor, random	< 0.1
93	2 of 5	883 Tun	04Z1712	881-04222004-26-023	On concrete floor, random	< 0.1
94	2 of 5	883 Tun	04Z1712	881-04222004-26-022	On concrete floor, random	< 0.1
95	2 of 5	883 Tun	04Z1712	881-04222004-26-021	On concrete floor, random	< 0.1
201	2 of 5	159	03Z094	881-02142003-EC6-455	On floor, random	< 0.1
202	2 of 5	159	03Z094	881-02142003-EC6-458	On wall, biased	< 0.1
203	2 of 5	159	03Z094	881-02142003-EC6-459	On wall, biased	< 0.1
204	2 of 5	159	01D0539	881-02262001-213-102	On equipment, biased	< 0.1

Building 881 Second Floor Mezzanine
Beryllium Sample Location Map

N ⇦



4 of 4

Building 881 Second Floor
Beryllium Sample Location Map

N

Un-Excavated

Beryllium Sample Location

881 - 883 Tunnel

PIPE CHASE

MEZZ. ABV.

MEZZ ABOVE

MEZZ ABOVE

Map ID 2FLR_BE

ATTACHMENT C-2

In-Process Biased Beryllium Data

Note: Data that has been lined out was in locations not applicable to this report.

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IHISR_Ad_Hoc_Report2
Date: 06/15/2004

Industrial Hygiene Information System
Ad Hoc Sample Report
SURFACE

Room Sample Number	Sample	Work Pkg	Comp Building	Location	Analyte Name	Concentration
STAC						
881-09212001-213-241	WIPE	RTG 881		INSIDE BOTTOM OF STACK 2, ON INSIDE OF D	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-09212001-213-242	WIPE	RTG 881		INSIDE BOTTOM OF STACK 2, ON STEEL FRAME	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-09212001-213-243	WIPE	RTG 881		INSIDE BOTTOM OF STACK 2, ON STEEL FRAME	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-09212001-213-244	WIPE	RTG 881		INSIDE BOTTOM OF STACK 2, ON STEEL FRAME	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-09212001-213-245	WIPE	RTG 881		INSIDE BOTTOM OF STACK 2, ON CEMENT FRAM	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-09212001-213-246	WIPE	RTG 881		INSIDE BOTTOM OF STACK 2, ON LIP OF DOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM

TOTAL SAMPLES: 6

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[redacted]

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Industrial Hygiene Information System
Ad Hoc Sample Report
SURFACE

Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
[redacted]	Sample Work Pkg	Comp	Room Location		
881-01162004-26-001	WIPE	KH	243 MU-D 243/E-MEZZ/HF TANK/OUTSIDE TOP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-01162004-26-002	WIPE	KH	243 MU-D 243/E-MEZZ/HF TANK/OUTSIDE NEAR PLA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-01162004-26-003	WIPE	KH	243 MU-D 243/E-MEZZ/HF TANK/OUTSIDE NEAR BOT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-01162004-26-004	WIPE	KH	243 MU-D 243/E-MEZZ/HF TANK/OUTSIDE NEAR AIR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
[redacted]					
[redacted]	Sample Work Pkg	Comp	Room Location		
[redacted]			TANK/INSIDE		
[redacted]	Sample Work Pkg	Comp	Room Location		
[redacted]	Sample Work Pkg	Comp	Room Location		
[redacted]	Sample Work Pkg	Comp	Room Location		
881-01242004-313-001	WIPE	FE	255 INTERIOR SIDES OF DUCT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-01242004-313-002	WIPE	FE	255 CONCRETE WALLS BEHIND DUCT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-01242004-313-003	WIPE	FE			

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Ad Hoc Sample Report
SURFACE

Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
[redacted]					
[redacted]					
881-02282004-313-012	WIPE	FE	234 FLOOR NORTH OF MAIN STAIRS	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-02282004-313-013	WIPE	FE	237 FLOOR SOUTH OF MAIN STAIRS	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-02282004-313-014	WIPE	FE	232 FLOOR WEST SIDE OF ELEVATOR DOORWAY	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-02282004-313-015	WIPE	FE	236 FLOOR EAST SIDE OF ELEVATOR DOORWAY	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03042004-26-001	WIPE	KH	254 DUCT SAMPLES	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03042004-26-003	WIPE	KH	254 DUCT SAMPLES	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03042004-26-004	WIPE	KH	254 DUCT SAMPLES	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03042004-26-005	WIPE	KH	254 DUCT SAMPLES	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03042004-26-006	WIPE	KH	254 DUCT SAMPLES	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03082004-313-001	WIPE	FE	OUTS FLR/HALLWAY (279) OUTSIDE T-19 CONTAINME	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03082004-313-002	WIPE	FE			

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Building No

Sample Number	Sample	Work Pkg	Comp	Room Location	Analyte Name	Concentration
881						
881-03082004-313-002	WIPE		FE	OUTS FLOOR (232) OUTSIDE W OF T-19 CONTAINMEN	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03082004-313-003	WIPE		FE	OUTS FLOOR (232) OUTSIDE SW OF T-19 CONTAINME	BERYLLIUM AND B	< 0.1000 _ UG/100CM
[redacted]	WIPE		UNK	115 MU-E/BACK OF PEAT [redacted]		
[redacted]	WIPE		UNK	115 MU-E/EXTENSION PART OF [redacted]		
[redacted]	WIPE		UNK	[redacted]		
[redacted]	WIPE		UNK	[redacted]		
[redacted]	WIPE		UNK	[redacted]		
[redacted]	WIPE		UNK	[redacted]		
[redacted]	WIPE		UNK	[redacted]		
[redacted]	WIPE		UNK	[redacted]		
[redacted]	WIPE		UNK	[redacted]		
881-03102004-313-001	WIPE		FE			

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Industrial Hygiene Information System
Ad Hoc Sample Report
SURFACE

Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
881-03182004-313-002	WIPE	FE	MEZZ L MEZZ - N/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-003	WIPE	FE	MEZZ L MEZZ - N/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-004	WIPE	FE	MEZZ L MEZZ - N/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-005	WIPE	FE	MEZZ L MEZZ - N/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-011	WIPE	FE	MEZZ L MEZZ - S/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-012	WIPE	FE	MEZZ L MEZZ - S/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-013	WIPE	FE	MEZZ L MEZZ - S/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-014	WIPE	FE	MEZZ L MEZZ - S/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-015	WIPE	FE	MEZZ L MEZZ - S/FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-021	WIPE	FE	SOUT FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-022	WIPE	FE	SOUT FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-023	WIPE	FE	SOUT FLOOR/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-03182004-313-024	WIPE	FE			

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Industrial Hygiene Information System
Ad Hoc Sample Report
SURFACE

Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
[redacted]					
[redacted]					
881-04232004-26-001	WIPE	KH	293 MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-002	WIPE	KH	293A MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-003	WIPE	KH	292 MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-004	WIPE	KH	300 MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-005	WIPE	KH	300 MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-006	WIPE	KH	300B MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-007	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-008	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-009	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-010	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-04232004-26-011	WIPE	KH			

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Industrial Hygiene Information System
Ad Hoc Sample Report
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Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
881-04232004-26-011	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-04232004-26-012	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-04232004-26-013	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-04232004-26-014	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-04232004-26-015	WIPE	KH	309 MU-G/SEE MAP	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-020	WIPE	ECC	268 TOP OF LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-021	WIPE	ECC	268 TOP OF FIRE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-022	WIPE	ECC	268 TOP OF SHELVES	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-024	WIPE	ECC	270 TOP OF DROPPED DOWN LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-025	WIPE	ECC	270 TOP OF RECESSED LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-026	WIPE	ECC	270 TOP OF SPRINKLER LINE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-027	WIPE	ECC	269 TOP OF TILE AREA 1	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-028	WIPE	ECC			

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Building No

Sample Number	Sample	Work Pkg	Comp	Room Location	Analyte Name	Concentration
881						
881-12032003-EC1-028	WIPE		ECC	269 TOP OF TILE AREA 2	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-029	WIPE		ECC	269 TOP OF SPRINKLER LINE AREA 1	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-030	WIPE		ECC	269 TOP OF SPRINKLER LINE AREA 2	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-031	WIPE		ECC	269 TOP OF DROPPED DOWN LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-032	WIPE		ECC	269 TOP OF DROPPED DOWN LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-033	WIPE		ECC	269 TOP OF DROPPED DOWN LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-034	WIPE		ECC	269 TOP OF DROPPED DOWN LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-035	WIPE		ECC	269B TOP OF DROPPED DOWN LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-036	WIPE		ECC	269B TOP OF DROPPED DOWN LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-037	WIPE		ECC	269B TOP OF FIRE LINE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-038	WIPE		ECC	269B TOP OF FIRE LINE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-039	WIPE		ECC	269B TOP OF TILES	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-040	WIPE		ECC			

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Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-040	WIPE	ECC	269B TOP OF TILES	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-041	WIPE	ECC	268A TOP OF FIRE LINE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-042	WIPE	ECC	268A TOP OF FIRE LINE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-043	WIPE	ECC	268A TOP OF TILE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-044	WIPE	ECC	268A TOP OF TILE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-045	WIPE	ECC	268A TOP OF LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-046	WIPE	ECC	268A TOP OF LIGHT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-068	WIPE	ECC	282 TOP OF LIGHT MIDDLE ROW NORTH	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-069	WIPE	ECC	282 TOP OF LIGHT MIDDLE ROW SOUTH	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-070	WIPE	ECC	282 TOP OF LIGHT SOUTH ROW	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-071	WIPE	ECC	282 CEILING TILES MIDDLE ROW NORTH	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-072	WIPE	ECC	282 CEILING TILES MIDDLE ROW SOUTH	BERYLLIUM AND B	< 0.1000 _ UG/100CM
Sample Number	Sample Work Pkg	Comp	Room Location		
881-12032003-EC1-073	WIPE	ECC			

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Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
881-12032003-EC1-073	WIPE	ECC	282 CEILING TILES SOUTH ROW	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-074	WIPE	ECC	282 SPRINKLER LINE MIDDLE ROW NORTH	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-075	WIPE	ECC	282 SPRINKLER LINE MIDDLE ROW SOUTH	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-076	WIPE	ECC	282 SPRINKLER LINE SOUTH ROW	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-077	WIPE	ECC	282 TOP CEILING TILE AREA 1	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-078	WIPE	ECC	282 TOP CEILING TILE AREA 2	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-081	WIPE	ECC	282 TOP LIGHT AREA 1	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-082	WIPE	ECC	282 TOP LIGHT AREA 2	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-085	WIPE	ECC	282 TOP SPRINKLER LINE AREA 1	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-086	WIPE	ECC	282 TOP SPRINKLER LINE AREA 2	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-091	WIPE	ECC	267 STEAM CONDENSATE LINE WEST	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-092	WIPE	ECC	267 STEAM CONDENSATE LINE MIDDLE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-093	WIPE	ECC			

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Industrial Hygiene Information System
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Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
881-12032003-EC1-093	WIPE	ECC	267 STEAM CONDENSATE LINE EAST	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-094	WIPE	ECC	267 SOUTH WALL HOOD	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-095	WIPE	ECC	267 SOUTH WALL HOOD	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-096	WIPE	ECC	267 CEILING TILES NORTH ROW	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-097	WIPE	ECC	267 CEILING TILES MIDDLE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-098	WIPE	ECC	267 CEILING TILES SOUTH ROW	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-099	WIPE	ECC	267 TOP OF LIGHT NORTH ROW	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-100	WIPE	ECC	267 TOP OF CABLE HOUSING NORTH ROW	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-101	WIPE	ECC	267 TOP OF LIGHT SOUTH ROW	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-102	WIPE	ECC	267A TOP OF TILE WHERE OPEN	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-103	WIPE	ECC	267A TOP OF CONDUIT WHERE TILE OPEN	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-221	WIPE	ECC	259 TOP OF FIRE LINE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-222	WIPE	ECC			

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Industrial Hygiene Information System
Ad Hoc Sample Report
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Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
881-12032003-EC1-222	WIPE	ECC	259 TOP OF LIGHT SIDE 1	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-223	WIPE	ECC	259 TOP OF TILE SIDE 2	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-224	WIPE	ECC	259 TOP OF TILE SIDE 1	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12032003-EC1-225	WIPE	ECC	259 TOP OF LIGHT SIDE 2	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-001	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-002	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-003	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-004	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-005	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-006	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-007	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-008	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12102003-613-009	WIPE	BART			

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Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
881-12102003-613-009	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-010	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-011	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-012	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-013	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-014	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-015	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-016	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-017	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-018	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-019	WIPE	BART	242 CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12102003-613-020	WIPE	BART	MEZZ MEZZANINE/CLEARING AREA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12152003-313-001	WIPE	FE			

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Building No
881

Sample Number	Sample	Work Pkg	Comp	Room Location	Analyte Name	Concentration
[redacted]						
[redacted]						
[redacted]						
[redacted]						
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881-12152003-313-551	WIPE		FE	212 MU-J SOUTH FLOOR	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12152003-313-552	WIPE		FE	212 MU-J EAST FLOOR	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12152003-313-553	WIPE		FE	212 MU-J WEST FLOOR	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12152003-313-554	WIPE		FE	212 MU-J NORTH FLOOR	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12152003-313-555	WIPE		FE	212A MU-J FLOOR	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12152003-313-556	WIPE		FE	212B MU-J FLOOR	BERYLLIUM AND B < 0.1000 _ UG/100CM	
881-12152003-313-557	WIPE		FE			

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Building No

Sample Number	Sample	Work Pkg	Comp	Room Location	Analyte Name	Concentration
881						
881-12152003-313-557	WIPE	FE		212C MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-558	WIPE	FE		214A MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-559	WIPE	FE		214D MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-560	WIPE	FE		214E MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-561	WIPE	FE		201 MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-562	WIPE	FE		201 MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-563	WIPE	FE		201 MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-564	WIPE	FE		201 MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-565	WIPE	FE		201 MU-J FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-566	WIPE	FE		217 MU-J N FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-567	WIPE	FE		217 MU-J S FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-568	WIPE	FE		220 MU-J CENTER FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-569	WIPE	FE				

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Building No

Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
881-12152003-313-569	WIPE	FE	221 MU-J N FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12152003-313-570	WIPE	FE	221 MU-J S FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-001	WIPE	BART	266 FLOOR INSIDE EAST DOOR STEP-OFF PAD	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-002	WIPE	BART	282 FLOOR INSIDE EAST DOOR OLD STEP-OFF PAD	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-003	WIPE	BART	267 WALL NEXT TO REMOVED FLOOR DUCT 10' EAST	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-004	WIPE	BART	267 FLOOR INSIDE SOUTH DOOR OLD WASTE LOAD-O	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-005	WIPE	BART	282 FLOOR NEXT TO FLOOR PENETRATION NW OF CO	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-006	WIPE	BART	266C FLOOR AT REMOVED STAINLESS STEEL, WEST E	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-007	WIPE	BART	264 FLOOR NE OF WEST DOOR OLD WASTE LOAD-OUT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-008	WIPE	BART	265 FLOOR IN FRONT OF NORTH FLOOR PAD W/ FIX	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-009	WIPE	BART	265A FLOOR STAINLESS STEEL ALONG WEST WALL	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-010	WIPE	BART	269 ON TOP OF SMALL EXHAUST DUCT NEAR FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-011	WIPE	BART			

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Sample Number	Sample Work Pkg	Comp	Room Location	Analyte Name	Concentration
881					
881-12222003-613-011	WIPE	BART	265 PORTABLE LIFT TABLE SIDE RAIL W/ WRAPPED	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-012	WIPE	BART	266 FLOOR IN WEST HALL 10' EAST OF 236 HALL	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-013	WIPE	BART	250 WALL EAST SIDE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-014	WIPE	BART	266A FLOOR BY NORTH WALL	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-015	WIPE	BART	257B WALL BY SW COLUMN	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-016	WIPE	BART	251 FLOOR NEXT TO SE FLOOR PENETRATION	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-017	WIPE	BART	258 FLOOR IN FRONT OF WEST DOORS	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-018	WIPE	BART	256A SURFACE OF REMOVED EXHAUST DUCT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-019	WIPE	BART	256 WALL NEXT TO SW FLOOR PENETRATION	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-020	WIPE	BART	272 FLOOR NW OF COLUMN J12	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-021	WIPE	BART	276 WALL NEXT TO NW DOOR NORTH OF J13	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-022	WIPE	BART	254 WEST DOOR INSIDE FACE	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-023	WIPE	BART			

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Industrial Hygiene Information System
Ad Hoc Sample Report
SURFACE

Building No

Sample Number	Sample	Work Pkg	Comp	Room Location	Analyte Name	Concentration
881						
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-023	WIPE	BART		276 OLD FLOOR PENETRATION PLATE AT EAST WALL	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-024	WIPE	BART		277 WALL EAST SIDE TOWARD SOUTH CORNER	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-025	WIPE	BART		255 FLOOR IN SW CORNER	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-026	WIPE	BART		255 DOOR JAMB IN NE CORNER WASTE LOAD-OUT DO	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-027	WIPE	BART		255 STAIRS BOTTOM OF EAST STRINGER	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-028	WIPE	BART		255 FAN HOUSING SOUTH INNER FACE	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-029	WIPE	BART		255 MEZZANINE CONCRETE PAD BY WALL PENETRATI	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-030	WIPE	BART		255 MEZZANINE WALL NEXT TO SHAFT PENETRATION	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-031	WIPE	BART		255 FAN HOUSING CUT OFF PIECE EXTERNAL BASE	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-032	WIPE	BART		255 FAN HOUSING CUT OFF PIECE INTERNAL SURFA	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-033	WIPE	BART		255 MEZZANINE CONCRETE UNDER NORTH SIDE OF F	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-034	WIPE	BART		266 TURTLE ELECTRICAL BOX TOP SURFACE	BERYLLIUM AND B < 0.1000 _ UG/100CM	
Sample Number	Sample	Work Pkg	Comp	Room Location		
881-12222003-613-035	WIPE	BART				

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Industrial Hygiene Information System
Ad Hoc Sample Report
SURFACE

Building No

Sample Number	Sample	Work Pkg	Comp	Room Location	Analyte Name	Concentration
881						
881-12222003-613-035	WIPE	BART		266 SCISSOR LIFT PLATFORM FLOOR	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-036	WIPE	BART		280 FLOOR OUTSIDE 284 DOOR NEXT TO 266 STEP-	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-037	WIPE	BART		280 FLOOR OUTSIDE 282 DOOR OLD STEP-OFF PAD	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-038	WIPE	BART		236 FLOOR OUTSIDE 264 DOOR OLD WASTE LOAD-OU	BERYLLIUM AND B	< 0.1000 _ UG/100CM
881-12222003-613-039	WIPE	BART		288 FLOOR WEST OF 255 DOOR WASTE LOAD-OUT	BERYLLIUM AND B	< 0.1000 _ UG/100CM
[redacted]						
881-12232003-613-010	WIPE	BART				

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ATTACHMENT D

Data Quality Assessment (DQA) Detail

DATA QUALITY ASSESSMENT (DQA)

VERIFICATION & VALIDATION (V&V) OF RESULTS

V&V of the data confirm that appropriate quality controls are implemented throughout the sampling and analysis process, and that any substandard controls result in qualification or rejection of the data in question. The required quality controls and their implementation are summarized in a tabular, checklist format for each category of data – radiological surveys and chemical analyses (specifically beryllium).

DQA criteria and results are provided in a tabular format for each suite of surveys or chemical analyses performed. The radiological survey assessment is provided in Table D-1 and Beryllium in Table D-2. A data completeness summary for all results is given in Table D-3.

All relevant Quality records supporting this report are maintained in the RISS Characterization Project File. The report will be submitted to the CERCLA Administrative Record for permanent storage within 30 days of approval by the Regulators. All radiological data are organized into Survey Packages, which correlate to unique (MARSSIM) Survey Units. Chemical data are organized by RIN (Report Identification Number) and are traceable to the sample number and corresponding sample location.

Media samples were taken and analyzed by ISOCS Canberra gamma spectroscopy. Transuranic isotope activity and Uranium and/or other naturally occurring isotope activity were evaluated against, and were less than the Transuranic $DCGL_w$ (100 dpm/100cm^2) and the Uranium $DCGL_w$ (5,000 dpm/100cm^2) unrestricted release limits. Media results were converted to dpm/100cm^2 using media conversion tables, evaluated against the transuranic and uranium DCGL limits, and are the values reported in Attachment B-1. Survey designs were implemented for Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel based on the transuranic or uranium limits (DCGLs), as applicable, in the unrestricted release decision process. Survey results were evaluated against, and were less than the Transuranic $DCGL_w$ (100 dpm/100cm^2) (i.e., SU 881C17 and 881J03) or the Uranium $DCGL_w$ (5,000 dpm/100cm^2) unrestricted release limits (all other survey units), as applicable. On this basis, all PDS results were less than the PDSP unrestricted release limits.

Consistent with EPA's G-4 DQO process, the radiological survey design for each survey unit performed per PDS requirements was optimized by checking actual measurement results acquired during pre-demolition surveys against the model output with original estimates. Use of actual sample/survey (result) variances in the MARSSIM DQO model confirms that an adequate number of surveys were acquired.

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DQA SUMMARY

In summary, the data presented in this report have been verified and validated relative to the quality requirements and project decisions as stated in the original DQOs. All data are useable based on qualifications stated herein and are considered satisfactory without qualification. All media surveyed and sampled yielded results less than their associated action levels and with acceptable certainties, except for the following anomalous conditions and areas:

- Elevated activity identified at core sample locations 1A, 7A, 8A and 8B greater than the transuranic $DCGL_w$ (100 dpm/100cm^2) in Survey Unit 881C17. These areas were remediated (top 1 inch of floor removed) and re-surveyed. All re-survey results were less than the transuranic $DCGL_w$. No further investigation is required. Refer to Section 3 for a detailed discussion and Attachment B-5 for the PDS Data Summary and maps.
- Initial elevated alpha net activity was identified in Survey Unit 881G02 at location 19 (5,109.6 dpm/100cm^2). The area was decontaminated and resurveyed. The re-survey result was less than the Uranium DCGL (5,000 dpm/100cm^2) and is the value reported in the PDS Data Summary. No further investigation required. Refer to Section 3 for a detailed discussion and Attachment B-5 for the PDS Data Summary and maps.
- Elevated activity was identified in Survey Unit 881G09 at biased location #114 (5,712 dpm/100cm^2) greater than the Uranium DCGL (5,000 dpm/100cm^2). A one square meter investigation was performed. The average of the original point and the eight (8) additional points within the square meter was 698 dpm/100cm^2, which is less than the unrestricted release limits, therefore, no further investigation is required. Refer to Section 3 for a detailed discussion and Attachment B-5 for the PDS Data Summary and maps.
- Initial alpha net activity identified in Survey Unit 881G11 at location 96 (6,071 dpm/100cm^2) greater than the Uranium $DCGL_w$ (5,000 dpm/100cm^2). The area was decontaminated and re-surveyed. The re-survey result (2,154.9 dpm/100cm^2) was less than the Uranium DCGL and is the value reported in the PDS data summary. On this basis, no further investigation required. Refer to Section 3 for a detailed discussion and Attachment B-5 for the PDS Data Summary and maps.
- The initial Alpha net activity in Survey Unit 881J03 at location #22 (119.9 dpm/100cm^2) was greater than the Transuranic $DCGL_w$ (100 dpm/100cm^2). A one square meter investigation was performed in accordance with RSP 16.01. The average of the original point and the eight (8) additional points within the square meter was 38.4 dpm/100cm^2. The result is less than the unrestricted release limits, therefore, no further investigation is required. The square meter investigation results are reported in the PDS Data Summary.
- Initial net activity in Survey Unit 881J06 at survey location 31 (8,014.2 dpm/100cm^2) greater than the uranium $DCGL_w$ (5,000 dpm/100cm^2). The location was decontaminated and re-surveyed. The re-survey result (42.7 dpm/100cm^2) was less than the uranium $DCGL_w$ and is the value reported in the PDS Data Summary. No further investigation is required. Refer to Section 3 for a detailed discussion and Attachment B-5 for the PDS Data Summary and maps.

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- Initial net activity in Survey Unit 881J09 at biased survey location 18 (RSA-1,291 dpm/100cm^2 and TSA - 4,195 dpm/100cm^2) was greater than the uranium RSA DCGL (1,000 dpm/100cm^2). The location was decontaminated and re-surveyed. The re-survey results (RSA-19.4 dpm/100cm^2 and TSA-1,532.7 dpm/100cm^2) were less than the uranium DCGLs and are the values reported in the PDS Data Summary. No further investigation is required. Refer to Section 3 for a detailed discussion and Attachment B-5 for the PDS Data Summary and maps.

Stainless steel and media samples and surveys were collected in accordance with the Pre-Demolition Survey Plan for D&D Facilities (MAN-127-PDSP) requirements. The stainless steel and media sample results and survey maps are located in Attachments B-1 and B-2, and the RISS Characterization Project files. All final "as left" results for both the stainless steel samples/surveys and media samples were below the Transuranic and/or Uranium unrestricted release limits as applicable. Although these survey units are not included in Table D, *Data Completeness Summary,* the packages were reviewed as part of the DQA process and verified that the original project DQOs satisfied MARSSIM guidance and DQO objectives were met.

The second floor Stack S2 (survey unit 881S02) and stack S2 foundation were included in this PDSR and will left in place after demolition. The two supply plenums located on the south and north ends of the 881 roof were also included in this PDSR (survey units 881L01 and 881 L02) and the concrete from these areas will be used as recycle material. Transuranic DCGLs were used for 881L01 and 881L02 for convenience sake only. These areas were not suspect transuranic or uranium areas, and the radiological surveys met both the uranium DCGLs and the more conservative transuranic DCGLs.

The 881/883 Tunnel meets unrestricted release limits and in accordance with the engineering provided with the Facility Disposition RSOP Notification for the Building 881 demolition the tunnel can be left in place.

Based upon an independent review of the radiological data, it was determined that the original project DQOs satisfied MARSSIM guidance. Except as noted above, facility contamination levels were below applicable DCGL unrestricted release levels confirming a Type 2 facility classification. Minimum survey requirements were met, sampling/survey protocol was performed in accordance with applicable RSPs, survey units were properly designed and bounded, and instrument performance and calibration were within acceptable limits. All final "as left" results meet the PDS unrestricted release.

Chain of Custody was intact; documentation was complete, hold times were acceptable (where applicable,) and packaging integrity/custody seals were maintained throughout the sampling/analysis process. Level 1 Isolation Controls have been posted to prevent the inadvertent introduction of further contamination into the 881. On this basis, Building 881 2nd Floor, 2nd floor Mezzanine and 881/883 Tunnel meets the unrestricted release criteria with the confidences stated herein.

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Table D-1 V&V of Radiological Results - Building 881, 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

V&V CRITERIA, RADIOLGICAL SURVEYS		K-H RSP 16.00 Series MARSSIM (NUREG-1575)		
QUALITY REQUIREMENTS				
	Parameters	**Measure**	**Frequency**	**COMMENTS**
ACCURACY	Initial calibrations	90%<x<110%	≥1	Multi-point calibration through the measurement range encountered in the field; programmatic records.
	Daily source checks	80%<x<120%	≥1/day	Performed daily/within range.
	Local area background: Field	typically < 10 dpm	≥1/day	All local area backgrounds were within expected ranges (i.e., no elevated anomalies.)
PRECISION	Field duplicate measurements for TSA	≥5% of real survey points	≥10% of reals	N/A
REPRESENTATIVENESS	MARSSIM methodology: Multiple Survey Units – Refer to Table D-3 below.	statistical and biased	NA	Random w/ statistical confidence.
	Survey Maps	NA	NA	Random and biased measurement locations controlled/mapped to ±1m.
	Controlling Documents (Characterization Pkg; RSPs)	qualitative	NA	Refer to the Characterization Package (planning document) for field/sampling procedures (located in Project files); thorough documentation of the planning, sampling/analysis process, and data reduction into formats.
COMPARABILITY	Units of measure	dpm/100cm^2	NA	Use of standardized engineering units in the reporting of measurement results.
COMPLETENESS	Plan vs. Actual surveys Usable results vs. unusable	>95% >95%	NA	See Table D-3 for details.
SENSITIVITY	Detection limits	Transuranic: TSA: ≤50 dpm/100cm^2 RA: ≤10 dpm/100cm^2 Uranium: TSA: ≤2,500 dpm/100cm^2 RA: ≤10 dpm/500cm^2	all measures	MDAs ≤ 50% $DCGL_w$ per MARSSIM guidelines.

Table D-2 V&V of Beryllium Results - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		
BERYLLIUM	Prep: NMAM 7300 METHOD: OSHA ID-125G	LAB ---->	Reservoirs, Denver, Co. Johns Manville	
		RIN ---->	Multiple RINs – see table D-3	
				COMMENTS
QUALITY	REQUIREMENTS	Measure	Frequency	All results were below the unrestricted release criteria.
ACCURACY	Calibrations Initial	linear calibration	≥1	
	Continuing	80%<%R<120%	≥1	
	LCS/MS	80%<%R<120%	≥1	
	Blanks - lab & field	<MDL	≥1	
	Interference check std (ICP)	NA	NA	
PRECISION	LCSD	80%<%R<120% (RPD<20%)	≥1	
	Field duplicate	all results < RL	≥1	
REPRESENTATIVENESS	COC	Qualitative	NA	
	Hold times/preservation	Qualitative	NA	
	Controlling Documents (Plans, Procedures, maps, etc.)	Qualitative	NA	
COMPARABILITY	Measurement units	ug/100cm^2	NA	
COMPLETENESS	Plan vs. Actual samples Usable results vs. unusable	>95% >95%	NA	
SENSITIVITY	Detection limits	MDL of 0.00084 ug/swipe	All measures	

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Beryllium	Building 881 (2nd floor - interior)	75 samples (75 random-interior)	78 samples (75 random/3 biased) Interior	No Be contamination found at any locations, all results were below associated action levels	10CFR850; OSHA ID-125G • RIN04Z1712: sample #'s 1, 5, 7, 10, 14, 15, 17, 19, 24, 27, 40, 41, 43, 44, 46, 49, 53, 65, 65, 68 and 74 • RIN04D0704: sample #'s 2, 3, 4, 6, 8, 9, 11, 13, 16, 18, 20, 21, 22, 23, 25, 26, 28, 29, 31, 32, 33, 34, 35, 36, 37, 38, 39, 42, 45, 47, 48, 50, 51, 52, 54, 55, 56, 57, 58, 59, 61, 62, 63, 64, 66, 67, 69, 70, 71, 72, 73 and 75 • RIN04Z1718: sample #'3 12, 30 and 60 • RIN03Z094: sample #'s 201, 202 and 203 • RIN01D0539: sample 204 Refer to table C-1 for sample locations All results were below the action level (0.2 ug/100cm^2) and investigative level (0.1 ug/100cm^2).
Beryllium	Building 881 2nd floor mezzanine and 881/883 tunnel (interior)	67 samples (57 random/10 biased) interior	69 samples (59 random/10 biased) interior	No Be contamination found at any locations, all results were below associated action levels	10CFR850; OSHA ID-125G • RIN04Z1443: sample #'s 1, 2, 3, 4 and 5 • RIN04Z1718: sample #'s 1, 6, 7, 11, 13, 24, 33, 38, 48, 61, 67 and 73 • RIN04Z1868: sample #'s 2, 9, 16, 17, 19, 20, 21, 22, 23, 27, 37, 39, 46, 49, 50, 52, 53, 54, 55, 56, 62, 63, 66, 68, 72 and 75 • RIN04Z1444: sample #'s 6, 7, 8, 9 and 10 • RIN04Z1712: sample #'s 76 through 95 Refer to table C-1 for sample locations All results were below the action level (0.2 ug/100cm^2) and investigative level (0.1 ug/100cm^2).

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel					
ANALYTE	**Building/Area/Unit**	**Sample Number Planned (Real & QC)**	**Sample Number Taken (Real & QC)**	**Project Decisions (Conclusions) & Uncertainty**	**Comments (RIN, Analytical Method, Qualifications, etc.)**
Radiological	Survey Area (MU) B Survey Unit 881B01 Building 881 – (MU-B) Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A and 233, floors	97 α TSA (systematic) 97 α Smears (systematic) 5 QC TSA 100% scan	97 α TSA (systematic) 97 α Smears (systematic) 5 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) B Survey Unit 881B02 Building 881 – (MU-B) Rooms 201, 223, 224, 225, 226, 227, 229, 229A, 230, 230A and 233, walls and ceilings	23 α TSA (systematic) 23 α Smears (systematic) 2 QC TSA 25% scan	23 α TSA (systematic) 23 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C01 Building 881 – MU-C, Rooms 280A and 280B - floor	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 100% scan	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) C Survey Unit 881C02 Building 881 – MU-C, Rooms 280A and 280B - walls and ceilings	15 α TSA (systematic) 15 α Smears (systematic) 2 QC TSA 50% scan	17 α TSA (15 systematic/2 biased) 17 α Smears (15 systematic/2 biased) 2 QC TSA 50% scan of wall and ceiling surfaces, 25% scan of equipment	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C03 Building 881 – MU-C, Rooms 267 and 282 - floors	54 α TSA (systematic) 54 α Smears (systematic) 3 QC TSA 100% scan	54 α TSA (systematic) 54 α Smears (systematic) 3 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Sample locations 1, 2, 3, 10, 11, 12 and 13 were deleted from this survey unit as these areas were surveyed as part of 881C05.
Radiological	Survey Area (MU) C Survey Unit 881C04 Building 881 – MU-C, Rooms 267 and 282 - walls and ceilings	21 α TSA (systematic) 21 α Smears (systematic) 2 QC TSA 25% scan	21 α TSA (systematic) 21 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Sample location #5 was deleted from this survey unit as this area was surveyed as part of 881C06.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) C Survey Unit 881C05 Building 881 – MU-C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A and 269 Floors	51 α TSA (systematic) 51 α Smears (systematic) 2 QC TSA 100% scan	57 α TSA (systematic) 57 α Smears (systematic) 3 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C06 Building 881 – MU-C, Rooms 260, 264, 264A, 265, 265A, 265B, 268A and 269 Walls and Ceilings	18 α TSA (systematic) 18 α Smears (systematic) 2 QC TSA 25% scan	18 α TSA (systematic) 18 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C07 Building 881 – MU-C, Room 286	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 25% scan	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C08 Building 881 – MU-C, Room 254 floor	20 α TSA (systematic) 20 α Smears (systematic) 2 QC TSA 100% scan	20 α TSA (systematic) 20 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) C Survey Unit 881C09 Building 881 – MU-C, Room 254 walls and ceiling	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 50% scan	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C10 Building 881 – MU-C, Rooms 266E, 280, 281, 283 and 283A Floors	51 α TSA (systematic) 51 α Smears (systematic) 3 QC TSA 100% scan	51 α TSA (systematic) 51 α Smears (systematic) 3 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C11 Building 881 – MU-C, Rooms 266E, 280, 281, 283 and 283A walls and ceilings	21 α TSA (systematic) 21 α Smears (systematic) 2 QC TSA 25% scan	21 α TSA (systematic) 21 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C12 Building 881 – MU-C, Stairwells 134 and 156	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 25% scan	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel					
ANALYTE	**Building/Area/Unit**	**Sample Number Planned (Real & QC)**	**Sample Number Taken (Real & QC)**	**Project Decisions (Conclusions) & Uncertainty**	**Comments (RIN, Analytical Method, Qualifications, etc.)**
Radiological	Survey Area (MU) C Survey Unit 881C13 Building 881 – MU-C, Room 239, 240, 241, 252, 253, 255 and 288 Floors	59 α TSA (systematic) 59 α Smears (systematic) 3 QC TSA 100% scan	59 α TSA (systematic) 59 α Smears (systematic) 3 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C14 Building 881 – MU-C, Rooms 239, 240, 241, 252, 253, 255 and 288 (walls and ceiling)	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 25% scan	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 30% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C15 Building 881 – MU-C, Rooms 250, 251, 256, 258, 259, 272 and 276 Floors	98 α TSA (systematic) 98 α Smears (systematic) 5 QC TSA 100% scan	98 α TSA (systematic) 98 α Smears (systematic) 5 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) C Survey Unit 881C16 Building 881 – MU-C, Rooms 250, 251, 256, 258, 259, 272 and 276 Walls and Ceilings	20 α TSA (systematic) 20 α Smears (systematic) 2 QC TSA 30% scan	20 α TSA (systematic) 20 α Smears (systematic) 2 QC TSA 30% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) C Survey Unit 881C17 Building 881 – MU-C, Room 266 Floor, Walls and Ceilings	62 α TSA (systematic) 62 α Smears (systematic) 4 QC TSA 10 core samples 100% scan	62 α TSA (systematic) 62 α Smears (systematic) 4 QC TSA 10 core samples (floor-concrete) 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Transuranic DCGLs used. Survey location #8 and #9 were deleted as the wall that these locations were on has been removed. Elevated activity identified at core sample locations 1A, 7A, 8A and 8B greater than the transuranic $DCGL_w$ (100 dpm/100cm^2). These areas were remediated (top 1 inch of floor removed) and resurveyed. All resurvey results were less than the transuranic $DCGL_w$. Refer to Survey Unit 881C17 for the follow up PDS survey results.
Radiological	Survey Area (MU) D Survey Unit 881D01 Building 881 – MU-D, Rooms 232 and 242 floors	165 α TSA (systematic) 165 α Smears (systematic) 9 QC TSA 100% scan	159 α TSA (systematic) 159 α Smears (systematic) 9 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) D Survey Unit 881D02 Building 881 – MU-D, Rooms 232 and 242 walls and ceilings	19 α TSA (systematic) 19 α Smears (systematic) 2 QC TSA 25% scan	19 α TSA (systematic) 19 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) D Survey Unit 881D03 Building 881 – MU-D, mezzanine floor	130 α TSA (systematic) 130 α Smears (systematic) 7 QC TSA 100% scan	126 α TSA (systematic) 126 α Smears (systematic) 7 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Survey locations 83, 84, 94 and 95 not performed as floor was removed in these areas. Due to floor removal, floor size reduced from 859m^2 to 823m^2 therefore, minimum number of samples required was reduced from 129 to 124 – refer Survey Package Calculation Worksheet and Survey Correction/Change Form in the RISS Characterization files.
Radiological	Survey Area (MU) D Survey Unit 881D04 Building 881 – MU-D, mezzanine – Rooms 312, 312A, 313 and 317 (walls and ceilings)	17 α TSA (systematic) 17 α Smears (systematic) 2 QC TSA 50% scan	17 α TSA (systematic) 17 α Smears (systematic) 2 QC TSA 50% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) D Survey Unit 881D05 Building 881 – MU-D, 149 Elevator	21 α TSA (systematic) 21 α Smears (systematic) 2 QC TSA 100% scan	21 α TSA (systematic) 21 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) G Survey Unit 881G01 Building 881 – Rooms 293A and 295 – all surfaces	29 α TSA (19 systematic/10 biased) 29 α Smears (19 systematic/10 biased) 2 QC TSA 100% scan of floor, 25% scan of walls and ceiling	29 α TSA (19 systematic/10 biased) 29 α Smears (19 systematic/10 biased) 2 QC TSA 100% scan of floor, 25% scan of walls and ceiling	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G02 Building 881 – MU-G, mezzanine all surfaces	28 α TSA (18 systematic/10 biased) 28 α Smears (18 systematic/10 biased) 2 QC TSA 100% scan of floor, 20% scan of walls and ceiling	28 α TSA (18 systematic/10 biased) 28 α Smears (18 systematic/10 biased) 2 QC TSA 100% scan of floor, 20% scan of walls and ceiling	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Initial elevated alpha net activity identified at location 19 (5,109.6 dpm/100cm^2). The are was decontaminated and resurveyed. The re-survey result was less than the Uranium DCGL and is the value reported in the PDS Data Summary. No further investigation required.
Radiological	Survey Area (MU) G Survey Unit 881G03 Building 881 – MU-G, 881/883 tunnel floor	23 α TSA (systematic) 23 α Smears (systematic) 2 QC TSA 100% scan	23 α TSA (systematic) 23 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) G Survey Unit 881G04 Building 881 – MU-G, 881/883 Tunnel walls and ceiling	22 α TSA (systematic) 22 α Smears (systematic) 2 QC TSA 50% scan of walls and ceiling	22 α TSA (systematic) 22 α Smears (systematic) 2 QC TSA 50% scan of walls and ceiling; 100% scan of wall surfaces < 2m.	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G05 Building 881 – MU-G, Room 292 floor	19 α TSA (systematic) 19 α Smears (systematic) 2 QC TSA 100% scan	19 α TSA (systematic) 19 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G06 Building 881 – MU-G, Room 292 walls and ceiling	20 α TSA (systematic) 20 α Smears (systematic) 2 QC TSA 50% scan of walls and ceiling; 100% scan of walls < 2m.	17 α TSA (systematic) 17 α Smears (systematic) 2 QC TSA 50% scan of walls and ceiling; 100% scan of walls < 2m.	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) G Survey Unit 881G07 Building 881 – MU-G, Rooms 293 and 294 floors	45 α TSA (systematic) 45 α Smears (systematic) 3 QC TSA 100% scan	46 α TSA (systematic) 46 α Smears (systematic) 3 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G08 Building 881 - MU-G, Rooms 293 and 294 walls and ceilings	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 25% scan	19 α TSA (systematic) 19 α Smears (systematic) 2 QC TSA 25% scan of walls and ceiling; 100% scan of walls < 2 m.	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G09 Building 881 – MU-G, Room 296 and 297 floors	113 α TSA (systematic) 113 α Smears (systematic) 6 QC TSA 100% scan	114 α TSA (113 systematic/1 biased) 114 α Smears (113 systematic/1 biased) 6 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Elevated activity identified at biased location #114 (5,712 dpm/100cm^2) greater than the Uranium DCGL (5,000 dpm/100cm^2). A one square meter investigation was performed. The average of the original point and the eight (8) additional points within the square meter was 698 dpm/100cm^2, which is less than the free release limits, therefore, no further investigation is required. The square meter investigation results are reported in the PDS Data Summary.

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Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) G Survey Unit 881G10 Building 881 – MU-G, Room 296 walls and ceilings	15 α TSA (systematic) 15 α Smears (systematic) 2 QC TSA 50% scan	15 α TSA (systematic) 15 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G11 Building 881 – MU-G, Rooms 244 and 245 floors	110 α TSA (systematic) 110 α Smears (systematic) 6 QC TSA 100% scan	110 α TSA (systematic) 110 α Smears (systematic) 6 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Initial alpha net activity at location 96 (6,071.0 dpm/100cm^2) greater than the Uranium DCGL$_w$ (5,000 dpm/100cm^2). The area was decontaminated and re-surveyed. The re-survey result (2,154.9 dpm/100cm^2) was less than the Uranium DCGL and is the value reported in the PDS data summary. On this basis, no further investigation required.
Radiological	Survey Area (MU) G Survey Unit 881G12 Building 881 – MU-G, Rooms 244 and 245 walls and ceilings	18 α TSA (systematic) 18 α Smears (systematic) 2 QC TSA 50% scan	18 α TSA (systematic) 18 α Smears (systematic) 2 QC TSA 50% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) G Survey Unit 881G13 Building 881 – MU-G, Rooms 247, 248 and 249 – walls and ceilings	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 50% scan	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 50% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G14 Building 881 – MU-G, Room 249A Pit – floor	15 α TSA (systematic) 15 α Smears (systematic) 2 QC TSA 100% scan	15 α TSA (systematic) 15 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G15 Building 881 (MU-G) Room 246 - floor	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 100% scan	16 α TSA (systematic) 16 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) G Survey Unit 881G16 Building 881 – MU-G, Room 246 – walls and ceiling	15 α TSA (systematic) 15 α Smears (systematic) 2 QC TSA 50% scan	15 α TSA (systematic) 15 α Smears (systematic) 2 QC TSA 50% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) G Survey Unit 881G17 Building 881 – MU-G, Rooms 247, 248 and 249 - floors	51 α TSA (systematic) 51 α Smears (systematic) 3 QC TSA 100% scan	51 α TSA (systematic) 51 α Smears (systematic) 3 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) H Survey Unit 881H03 Building 881 – MU-H, 159 elevator – all surfaces	18 α TSA (systematic) 18 α Smears (systematic) 2 QC TSA 100% scan of floor, 50% scan of walls and ceiling	20 α TSA (18 systematic/2 biased) 20 α Smears (18 systematic/2 biased) 2 QC TSA 50% scan of accessible surfaces including 100% scan of floor and wall surfaces < 2m.	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) J Survey Unit 881J01 Building 881 – MU-J West, Room 201 floor	150 α TSA (systematic) 150 α Smears (systematic) 8 QC TSA 100% scan	150 α TSA (systematic) 150 α Smears (systematic) 8 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Transuranic and/or Uranium DCGLs as applicable.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) J Survey Unit 881J02 Building 881 – MU-J West, Room 201 walls and ceiling	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 50% scan	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 50% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
	Survey Area (MU) J Survey Unit 881J03 Building 881 – MU-J West, Room 211 Floor, Walls and Ceiling	21 α TSA (systematic) 21 α Smears (systematic) 2 QC TSA 100% scan	22 α TSA systematic (21 random/1 biased) 22 α Smears systematic (21 random/1 biased) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Transuranic DCGLs used. The initial Alpha net activity for survey location #22 (119.9 dpm/100cm^2) was greater than the Transuranic $DCGL_w$ (100 dpm/100cm^2). A one square meter investigation was performed in accordance with RSP 16.01. The average of the original point and the eight (8) additional points within the square meter was 38.4 dpm/100cm^2, which is less than the free release limits, therefore, no further investigation is required. The square meter investigation results are reported in the PDS Data Summary.
Radiological	Survey Area (MU) J Survey Unit 881J04 Building 881 – MU-J, Rooms 271 and 275 floors	117 α TSA (systematic) 117 α Smears (systematic) 5 QC TSA 100% scan	117 α TSA (systematic) 117 α Smears (systematic) 6 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Survey location #6 omitted was not mapped, therefore, this location is not identified on the map.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) J Survey Unit 881J05 Building 881 – MU-J, Rooms 271 and 275 walls and ceilings	17 α TSA (systematic) 17 α Smears (systematic) 2 QC TSA 25% scan	17 α TSA (systematic) 17 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) J Survey Unit 881J06 Building 881 – MU-J, Room 288A floor	15 α TSA (systematic) 15 α Smears (systematic) 2 QC TSA 100% scan	31 α TSA (30 systematic/ 1 biased) 31 α Smears (30 systematic/ 1 biased) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Initial net activity at survey location 31 (8,014.2 dpm/100cm^2) greater than the uranium DCGL$_w$ (5,000 dpm/100cm^2). The location was decontaminated and re-surveyed. The re-survey result (42.7 dpm/100cm^2) was less than the uranium DCGL$_w$ and is the value reported in the PDS Data Summary. No further investigation is required.
Radiological	Survey Area (MU) J Survey Unit 881J07 Building 881 – MU-J, Room 288A walls and ceiling	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 50% scan	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 50% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) J Survey Unit 881J08 Building 881 – MU-J, Room 288B floor	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 100% scan	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) J Survey Unit 881J09 Building 881 – MU-J, Room 288B walls and ceiling	17 α TSA (systematic) 17 α Smears (systematic) 2 QC TSA 50% scan	18 α TSA (17 systematic/1 biased) 18 α Smears (17 systematic/1 biased) 2 QC TSA 50% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used. Initial net activity at biased survey location 18 (RSA - 1,291.0 dpm/100cm^2 and TSA - 4,195.0 dpm/100cm^2) were greater than the uranium RSA DCGL (RSA -1,000 dpm/100cm^2). The location was decontaminated and re-surveyed. The re-survey results (RSA-19.4 dpm/100cm^2 and TSA-1,532.7 dpm/100cm^2) were less than the uranium DCGLs and are the values reported in the PDS Data Summary. No further investigation is required.
Radiological	Survey Area (MU) J Survey Unit 881J10 Building 881 – MU-J, Rooms 234, 237, 291 and Stairwells 111 and 167, Floors	49 α TSA (systematic) 49 α Smears (systematic) 3 QC TSA 100% scan	49 α TSA (systematic) 49 α Smears (systematic) 3 QC TSA 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area (MU) J Survey Unit 881J11 Building 881 – MU-J, Rooms 234, 237, 291 and Stairwells 111 and 167, Walls and Ceilings	23 α TSA (systematic) 23 α Smears (systematic) 2 QC TSA 25% scan	23 α TSA (systematic) 23 α Smears (systematic) 2 QC TSA 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) J Survey Unit 881J12 Building 881 – MU-J, Stairwell 133 Floor, Walls and Ceiling	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 50% scan	24 α TSA (systematic) 24 α Smears (systematic) 2 QC TSA 50% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area (MU) L Survey Unit 881L01 Building 881 – South supply plenum – rooms 301, 302, 302A, 303, 305, 306, 307, 308 – floors, walls and ceilings	35 α TSA (15 systematic/20 biased) 35 α Smears (15 systematic/20 biased) 2 QC TSA 10% scan	37 α TSA (17 random/20 biased) 37 α Smears (17 random/20 biased) 2 QC TSA 10% scan	No contamination at any location; all locations below PDS unrestricted release levels	Transuranic DCGLs used – for convenience sake only. Area was not a suspect transuranic area. Area met both Transuranic and Uranium DCGLs.

Table D-3 Data Completeness Summary - Building 881 2nd Floor, 2nd Floor Mezzanine and 881/883 Tunnel

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area L Survey Unit 881L02 Building 881 – North supply plenum - rooms 311, 311A and 311B – floors, walls, ceilings and equipment	25 α TSA (15 systematic/10 biased) 25 α Smears (15 systematic/10 biased) 2 QC TSA 10% scan	25 α TSA (15 random/10 biased) 25 α Smears (15 random/10 biased) 2 QC TSA 20% scan	No contamination at any location; all locations below PDS unrestricted release levels	Transuranic DCGLs used – for convenience sake only. Area was not a suspect transuranic area. Area met both Transuranic and Uranium DCGLs.
Radiological	Survey Area R Survey Unit 881R01 Building 881 – MU-R, South loading dock - floors	16 α TSA and 16 α Smears (systematically gridded) 2 TSA QC 100% scan	25 α TSA and 25 α Smears (systematically gridded) 2 TSA QC 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area R Survey Unit 881R02 Building 881 – MU-R, South Loading Dock – walls and ceilings	22 α TSA and 22 α Smears (systematically gridded) 2 TSA QC 25% scan	22 α TSA and 22 α Smears (systematically gridded) 2 TSA QC 25% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.
Radiological	Survey Area S Survey Unit 881S02 Building 881 – MU-S, ST2, Exhaust tunnel and base – floors, walls and ceiling	28 α TSA and 28 α Smears (systematically gridded) 2 TSA QC 100% scan	19 α TSA and 19 α Smears (systematically gridded) 2 TSA QC 100% scan	No contamination at any location; all locations below PDS unrestricted release levels	Uranium DCGLs used.