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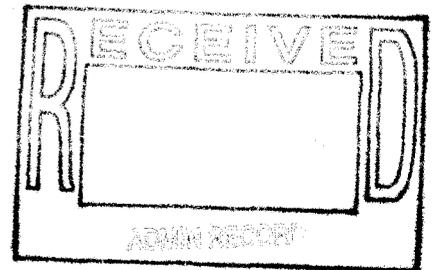
Rocky Flats Environmental Technology Site

PRE-DEMOLITION SURVEY REPORT (PDSR)

Building 991, 991 East Tunnel and 998 Vault Closure Project

REVISION 0

February 4, 2004



**CLASSIFICATION REVIEW NOT REQUIRED PER
EXEMPTION NUMBER CEX-005-02**

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Building 991, 991 East Tunnel and 998 Vault Closure Project

REVISION 0

February 4, 2004

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TABLE OF CONTENTS

ABBREVIATIONS/ACRONYMS	IV
EXECUTIVE SUMMARY	V
1 INTRODUCTION	1
1.1 PURPOSE.....	1
1.2 SCOPE.....	1
1.3 DATA QUALITY OBJECTIVES	2
2 HISTORICAL SITE ASSESSMENT	2
3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS	2
4 CHEMICAL CHARACTERIZATION AND HAZARDS	4
4.1 ASBESTOS	4
4.2 BERYLLIUM (BE).....	4
4.3 RCRA/CERCLA CONSTITUENTS [INCLUDING METALS AND VOLATILE ORGANIC COMPOUNDS (VOCS)].....	5
4.4 POLYCHLORINATED BIPHENYLS (PCBS)	5
5 PHYSICAL HAZARDS	6
6 DATA QUALITY ASSESSMENT	6
7 DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES	6
8 FACILITY CLASSIFICATION AND CONCLUSIONS.....	7
9 REFERENCES	8

ATTACHMENTS

- A Facility Location Map
- B Radiological Data Summaries and Survey Maps
- C Chemical Data Summaries and Sample Maps
- D Data Quality Assessment (DQA) Detail

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
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 991, 991 East Tunnel and 998 Vault. Because these Type 2 facilities will be decommissioned, the characterization was performed in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP) to supplement the Reconnaissance Level Characterization of these Type 2 facilities. Building surfaces characterized as part of this PDS included the floors, walls, ceilings, and roofs. Environmental media beneath and surrounding the facilities were not within the scope of this PDS and will be addressed using the Soil Disturbance Permit process and in compliance with RFCA.

This PDS encompassed both radiological and chemical characterization to enable the 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.

Results indicate that no radiological or chemical contamination exists in excess of the PDSP unrestricted release limits. Friable asbestos, leaking PCB ballasts (and those greater than 9 pounds), and 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. Based on the age of the building, paints are assumed to contain PCBs, and painted surfaces will be managed as PCB Bulk Product Waste. Non-friable asbestos floor tile and mastic remains in portions of the 991 building.

Based upon this PDSR, Building 991, 991 East Tunnel and 998 Vault can be decommissioned and the waste managed as PCB Bulk Product or sanitary waste. None of the demolition concrete rubble will be used for backfill on-site per the RFCA Recycling Concrete RSOP. Appropriate approvals have been obtained for leaving Room 402, Corridor B, 998 Vault, and portions of the 991 East Tunnel in-place underground. To ensure the facility remains free of contamination and PDS data remain valid, Level 2 Isolation Controls have been established and the area posted accordingly.

1 INTRODUCTION

A Pre-Demolition Survey (PDS) was performed to enable compliant disposition and waste management of Building 991, 991 East Tunnel and 998 Vault. Because these Type 2 facilities will be decommissioned, the characterization was performed in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP) to supplement the Reconnaissance Level Characterization of these Type 2 facilities. Building surfaces characterized as a part of this PDS included floors, walls, ceilings and roofs. Environmental media beneath and surrounding the facilities were not within the scope of this PDS and will be addressed using 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 are Building 991, 991 East Tunnel and 998 Vault. The location of these facilities is shown in Attachment A, *Facility Location Map*. These facilities no longer support the RFETS mission and will be decommissioned to reduce Site infrastructure, risks and/or operating costs.

Before these Type 2 facilities can be decommissioned, the Data Quality Objectives (DQOs) for a Pre-Demolition Survey (PDS) must be satisfied; this document presents the PDS results for Building 991, 991 East Tunnel and 998 Vault. 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 is built upon physical, chemical and radiological hazards identified in the facility-specific Historical Site Assessment Report and Reconnaissance Level Characterization Report.

1.1 Purpose

The purpose of this report is to communicate and document the results of Building 991, 991 East Tunnel and 998 Vault PDS effort. A PDS is performed prior to building demolition to define the final radiological and chemical conditions of a facility. Final 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.

1.2 Scope

This report presents the final radiological and chemical conditions of Building 991, 991 East Tunnel and 998 Vault. The PDS of the 991 West Tunnel, 996 Vault, 997 Vault and 999 Vault has already been performed, documented, and approved in a stand-alone PDSR (Area 2-Group 2a Closure Project PDSR, dated August 21, 2003, Revision 0). Environmental media beneath and surrounding the facilities are not within the scope of this PDSR and will be addressed using 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 a Reconnaissance Level Characterization (RLC) was conducted to understand the facility history and related hazards. The HSA consisted of facility walkdowns, interviews, and document review, including review of the Historical Release Report, and were used to design the RLC. Building 991, 991 East Tunnel and 998 Vault RLC was performed in FY 2002 as part of Area 2-Group 2 RLCR (Refer to *Reconnaissance Level Characterization Report for Area 2-Group 2 Facilities*, Dated January 14, 2003, Revision 1). Based on the RLC results, Building 991, 991 East Tunnel and 998 Vault were classified as Type 2 facilities, therefore, PDS characterization was required before decommissioning of the facilities. This report documents the results of that PDS. The HSA and RLC 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

Building 991, 991 East Tunnel and 998 Vault were 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 historical and process knowledge, building walk-downs, 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 Building 991, 991 East Tunnel and 998 Vault Radiological Characterization Plan). Building 991, 991 East Tunnel and 998 Vault exteriors were surveyed per PDS requirements as part of the Area 2-Group 2 RLCR, dated January 14, 2003, and met all PDS unrestricted release levels. Individual radiological survey unit packages are maintained in the RISS Characterization Project files.

Nine radiological survey unit packages were developed for Building 991, 991 East Tunnel and 998 Vault: 991-2-001, 991-2-002, 991-2-003, 991-2-004, 991-2-005, 991-2-006, 991-2-007, 991-2-008, and 991-2-EXH. The survey unit packages were developed in accordance with Radiological Safety Practices (RSP) 16.01, *Radiological Survey/Sampling Package Design, Preparation, Control, Implementation and Closure*. 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*.

Contamination identified during the RLC (i.e., the transuranic contamination in the Corridor B floor trench), as well contamination identified during the in-process stripout, was decontaminated prior to the PDS. The table below summarizes the PDS radiological survey data:

PDS Radiological Summary Survey Table

Survey Unit	Description	MARSSIM Class	Number of TSA Surveys	Number of RSA Surveys	Percent Scanned (alpha)	Survey Results
991-2-001	B991 Interior North Rooms	2	26 – systematically grid, 2 – QC	26 – systematically grid	50% of floors (603 m ² minimum), 25% of remaining surfaces (1066 m ² minimum) at biased locations	All surveys and scans were less than the PDS unrestricted release levels.
991-2-002	B991 Interior Center Rooms	2	20 – systematically grid, 2 – QC	20 – systematically grid	50% of floors (485 m ² minimum), 25% of remaining surfaces (652 m ² minimum) at biased locations	All surveys and scans were less than the PDS unrestricted release levels.
991-2-003	B991 Interior South Rooms	2	15 – systematically grid, 2 – QC	15 – systematically grid	50% of floors (457 m ² minimum), 25% of remaining surfaces (535 m ² minimum) at biased locations	All surveys and scans were less than the PDS unrestricted release levels.
991-2-004	B991 East Tunnel and 998 Vault	2	16 – systematically grid, 2 – QC	16 – systematically grid	50% of floors (78 m ² minimum), 25% of remaining surfaces (155 m ² minimum) at biased locations	All surveys and scans were less than the PDS unrestricted release levels.
991-2-005	B991, Room 402 & 402A	2	21 – systematically grid, 2 – QC	21 – systematically grid	50% of floors (38 m ² minimum), 10% of remaining surfaces (27 m ² minimum) at biased locations	All surveys and scans were less than the PDS unrestricted release levels.
991-2-006	B991 Basement	2	26 – systematically grid, 2 – QC	26 – systematically grid	50% of floors (181 m ² minimum), 25% of remaining surfaces (314 m ² minimum) at biased locations	All surveys and scans were less than the PDS unrestricted release levels.
991-2-007	B991 Media Sample Area	2	40 –biased	40 - biased	1m ² at each sample location	Paint samples were collected throughout the 991 building. All surveys, scans and media samples were less than the PDS unrestricted release levels.
991-2-EXH	B991 Exhaust Ventilation System	2	93 Biased (26 inside Plenum) (68 in the Ventilation) QC –5	93 Biased (25 inside Plenum) (68 in the Ventilation)	1m ² at each sample location	All surveys and scans were less than the PDS unrestricted release levels.
991-2-008	B991 Corridor B	2	18 – systematically grid, 2 – QC	18 – systematically grid	50% of floors (111 m ² minimum), 25% walls (54 m ² minimum), 10% ceiling (28 m ² minimum) at biased locations	All surveys and scans were less than the PDS unrestricted release levels.

Radiological survey data, statistical analysis results, survey locations and radiological scan maps are presented in Attachment B, Radiological Data Summary and Survey Maps.

4 CHEMICAL CHARACTERIZATION AND HAZARDS

Building 991, the 991 East Tunnel and 998 Vault were 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 the facility. 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 sample numbers. The contaminants of concern were asbestos, beryllium, and RCRA constituents. Refer to Attachment C, Chemical Summary Data and Sample Maps, for details on sample results and sample locations. 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 during the RLC for the Area 2-Group 2 Facilities, dated January 14, 2003, Revision 1. 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*. Some non-friable asbestos floor tile and mastic remains in portions of the 991 building. On this basis, no additional asbestos sampling was required or performed as part of this PDS.

4.2 Beryllium (Be)

Random and biased beryllium samples were collected during the RLC of the Area 2-Group 2 Facilities and all results were less than the investigative limit of $0.1 \mu\text{g}/100\text{cm}^2$, except for overhead areas of the 991 basement. Refer to the Area 2-Group 2 RLCR, dated January 14, 2003, Revision 1, for RLC beryllium laboratory sample data and location maps. During in-process electrical, mechanical and asbestos stripout, loose beryllium contamination was also discovered in portions of Room 150, the 991 north hallway, the return ventilation system ducting leading from Room 150 to the 991 roof plenum, and the 991 roof plenum. All of the areas and equipment that contained beryllium contamination, including the 991 basement, were either decontaminated or removed prior to the PDS. The final post-decontamination conditions of these areas as well as the rest of the building are reported in this PDSR. In-process beryllium sample results are included in Attachment C-2 "*In-Process Beryllium Sample Results*."

Additional random and biased beryllium samples were collected in Building 991, 991 East Tunnel and 998 Vault as part of this PDSR to supplement the RLCR and in-process data. Random and biased sampling was performed and all final PDS beryllium smear results were less than the investigative limit of $0.1 \mu\text{g}/100\text{cm}^2$. Smear samples were collected on all facility surfaces, including on the inside and outside systems and equipment, in accordance with the PDSP and the *Beryllium Characterization Procedure, PRO-536-BCPR, Revision 0, September 9, 1999*. PDS beryllium sample results and location maps are contained in Attachment C-1, "*PDSR Beryllium Data Summaries and Sample Maps*."

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

Based on a review of the HSAR, RLCR, interviews, facility walkdowns, and a review of waste storage area inspection forms, there is no indication that Building 991, 991 East Tunnel and 998 Vault have been contaminated by RCRA/CERCLA constituents. Chemicals have been used within most of the facilities, and RCRA/CERCLA wastes have been stored or moved throughout, but there are no records or visible signs of chemical releases. However, there were stains on asbestos floor tile in two rooms (Room 109 and Room 140) that were sampled for RCRA metals. The stains were underneath roof leaks and appeared to be from rainwater, but a sample from each area was analyzed to ensure that contamination had not occurred. Results from both samples demonstrated that RCRA TCLP regulatory limits had not been exceeded. Both sample results were below regulatory limits and are presented in Attachment C-3, *RCRA/CERCLA (Metals) Chemical Data Summaries and Sample Maps*.

Sampling for lead in paint in Building 991, 991 East Tunnel and 998 Vault was not performed. Environmental Waste Compliance Guidance #27, *Lead-based Paint (LBP) and Lead-based Paint Debris Disposal*, states that LBP debris generated outside of currently identified high contamination areas shall be managed as non-hazardous (solid) wastes, and additional analysis for characteristics of hazardous waste derived from LBP is not a requirement for disposal. There were no high contamination areas identified in Building 991, 991 East Tunnel or the 998 Vault.

The facilities 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, RLCR, interviews, and facility walkdowns of Building 991, 991 East Tunnel and 998 Vault, no PCB-containing equipment was ever used or stored in the buildings, making the potential for PCB contamination resulting from spills highly unlikely. Therefore, PCB sampling was not performed as part of the PDS.

Based on the age of the facilities (constructed prior to 1980), paints used may contain PCBs, and painted surfaces will need to be disposed of as PCB Bulk Product Waste.

The facilities contained PCB fluorescent light ballasts, however, all ballasts have been checked and leaking PCB ballasts and those weighing more than 9 lbs, have been removed from the facility and managed in accordance with the Colorado Hazardous Waste Act. Non-leaking PCB ballasts of less than 9 lbs. may remain in the facility and will be disposed of as PCB Bulk Product Waste. None of the demolition concrete rubble will be used for backfill on-site per the RFCA Recycling Concrete RSOP.

5 PHYSICAL HAZARDS

Physical hazards associated with Building 991, 991 East Tunnel and 998 Vault are those common to standard industrial environments, and include hazards associated with energized systems, utilities, and trips and falls. The 991 East Tunnel and the 998 Vault are underground. Building 991 has a horseshoe shape basement that heavy equipment operators should be aware of during demolition debris load-out. There are no other unique hazards associated with the facilities. The facilities have been relatively well maintained and are in good physical condition, and therefore, do 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 the decommissioning of Building 991, 991 East Tunnel and 998 Vault, and consequent waste management, are 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 991, 991 East Tunnel and 998 Vault will generate a variety of wastes. Estimated waste types and waste volumes are presented below. All wastes can be disposed of as sanitary waste, except PCB Bulk Product Waste. Leaking PCB ballasts (and those weighing more than 9 pounds), and hazardous waste items have been removed and managed pursuant to Site PCB and waste management procedures. None of the demolition concrete rubble will be used for backfill on-site per the RFCA Recycling Concrete RSOP. Some non-friable asbestos floor tile and mastic remains in portions of the 991 building. This non-friable asbestos floor tile and mastic will not be removed during demolition and will remain in place with the concrete slab and buried at least three feet deep under the final grade soil contour.

WASTE TYPES AND VOLUME ESTIMATES							
Facility	Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM (cu ft)	Other Waste (cu ft)
991	83,320	0	6,000	2,500	3,500	0	None
991 East Tunnel	12,333	0	833	0	0	0	None
998 Vault	31,200	0	20	0	0	0	None

8 FACILITY CLASSIFICATION AND CONCLUSIONS

Based on the analysis of radiological, chemical and physical hazards, Building 991, 991 East Tunnel and 998 Vault are classified as RFCA Type 2 facility pursuant to the RFETS Decommissioning Program Plan (DPP; K-H, 1999) and are ready for demolition.

Appropriate approvals have been obtained for leaving Room 402, Corridor B, 998 Vault and portions of the 991 East Tunnel in-place underground. Building 991, 991 East Tunnel and 998 Vault possess no radiological or chemical contamination in excess of the PDSP unrestricted release limits. Friable asbestos, leaking PCB ballast (and those weighing more than 9 pounds), and 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. Some non-friable asbestos floor tile and mastic remains in portions of the 991 building.

The PDS for Building 991, 991 East Tunnel and 998 Vault 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 using the Soil Disturbance Permit process and in compliance with RFCA. To ensure that Building 991, 991 East Tunnel and 998 Vault remain free of contamination and that PDS data remain valid, Level 2 Isolation Controls have been established and the facilities 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 Area 2-Group 2 Facilities*, Dated January 14, 2003, Revision 1

ATTACHMENT A

Facility Location Map

Area 2, Group 2 Building 991, Vault & East Tunnel

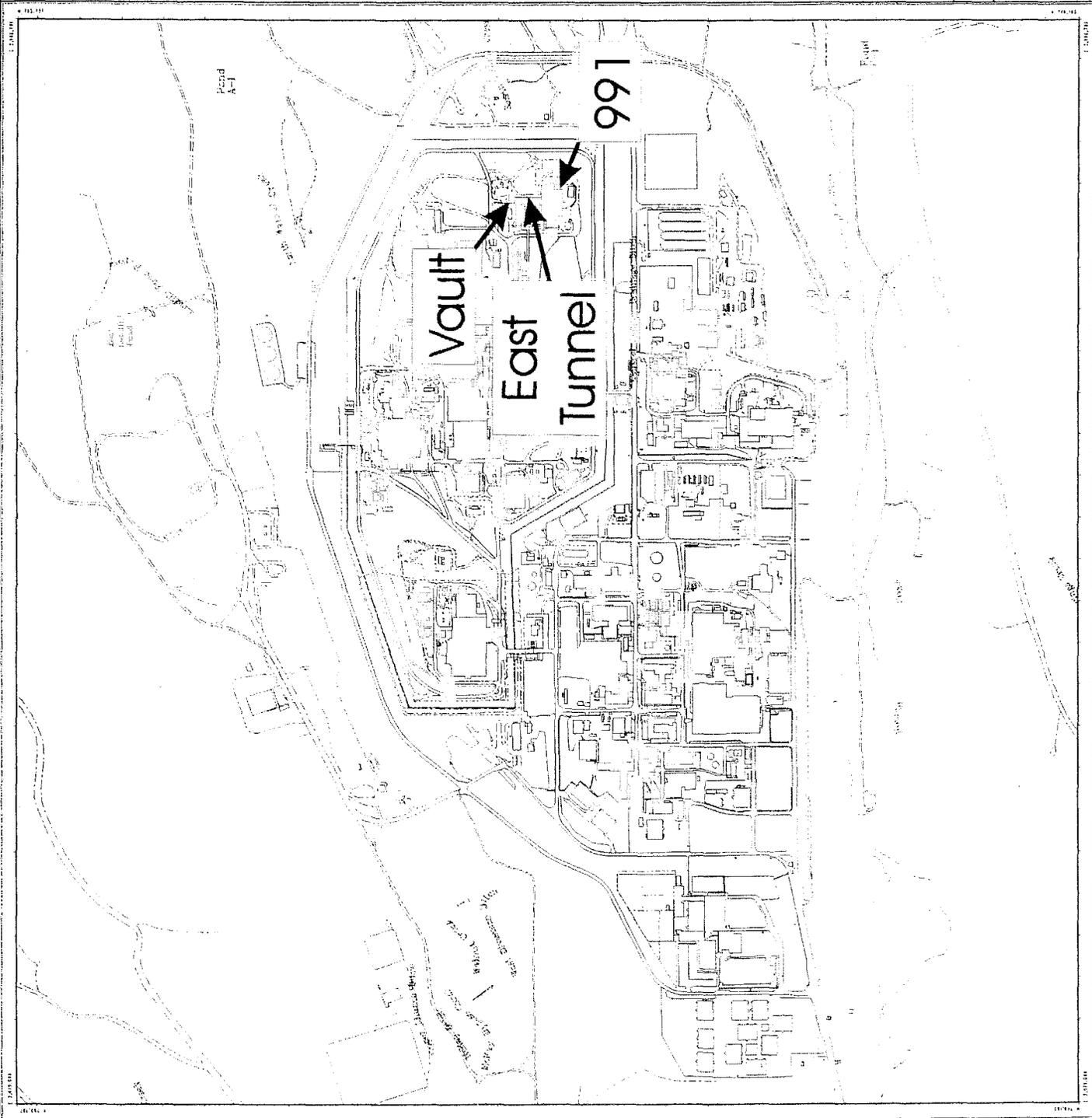
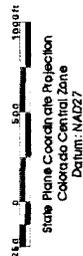
Standard Map Features

-  Buildings and other structures
-  Demolished buildings and other structures
-  Lakes and ponds
-  Streams, ditches, or other drainage features
-  Fences and other barriers
-  Paved roads
-  Dirt roads

DATA SOURCE BASE FEATURES:
Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by ES&G RSL, Las Vegas. Digitized from the orthophotographs. 1/95



Scale = 1 : 12450
1 inch represents approximately 1036 feet



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

Prepared by:  Kaiser Engineers
303-966-7700
Feb. 2, 2004

MAP ID: FY 2003

ATTACHMENT B

Radiological Data Summaries and Survey Maps

SURVEY UNIT 991-2-001
RADIOLOGICAL DATA SUMMARY - PDS

Survey Unit Description: B991 Interior North Rooms

17

991-2-001
PDS Data Summary

<u>Total Surface Activity Measurements</u>			<u>Removable Activity Measurements</u>		
	19	26		19	26
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-19.4	dpm/100 cm ²	MIN	-1.8	dpm/100 cm ²
MAX	52.4	dpm/100 cm ²	MAX	3.6	dpm/100 cm ²
MEAN	13.6	dpm/100 cm ²	MEAN	0.0	dpm/100 cm ²
STD DEV	20.3	dpm/100 cm ²	STD DEV	1.2	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²	TRANSURANIC DCGL _w	20	dpm/100 cm ²

18

**SURVEY UNIT 991-2-001
TSA - DATA SUMMARY**

Manufacturer:	NE Tech	NE Tech	NE Tech	NE Tech
Model:	DP-6	DP-6	AP-6	AP-6
Instrument ID#:	10	11	13	26
Serial #:	665	1260	665	3125
Cal Due Date:	3/16/04	6/2/04	3/16/04	3/24/04
Analysis Date:	1/13/04	1/13/04	1/14/04	1/26/04
Alpha Eff. (c/d):	0.213	0.223	0.213	0.221
Alpha Bkgd (cpm)	2.0	4.0	2.0	2.0
Sample Time (min)	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5
MDC (dpm/100cm²)	48.0	48.0	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
1	11	12.7	57.0	6.7	30.0	34.3
2	11	12.0	53.8	8.0	35.9	31.1
3	10	16.0	75.1	4.7	22.1	52.4
4	11	12.0	53.8	6.7	30.0	31.1
5	10	8.0	37.6	6.0	28.2	14.9
6	10	4.0	18.8	0.7	3.3	-3.9
7	10	6.7	31.5	3.3	15.5	8.8
8	10	12.7	59.6	7.3	34.3	36.9
9	10	8.0	37.6	5.3	24.9	14.9
10	11	12.0	53.8	8.0	35.9	31.1
11	10	2.7	12.7	4.7	22.1	-10.0
12	11	13.7	61.4	2.7	12.1	38.8
13	10	12.7	59.6	2.7	12.7	36.9
14	10	6.7	31.5	3.3	15.5	8.8
15	10	5.3	24.9	8.0	37.6	2.2
16	26	8.7	39.4	6.0	27.1	16.7
17	26	8.0	36.2	6.7	30.3	13.5
18	13	3.3	15.5	3.3	15.5	-7.2
19	13	4.7	22.1	5.3	24.9	-0.6
20	13	2.7	12.7	6.7	31.5	-10.0
21	13	2.7	12.7	5.3	24.9	-10.0
22	13	4.7	22.1	0.7	3.3	-0.6
23	13	4.7	22.1	4.7	22.1	-0.6
24	13	0.7	3.3	3.3	15.5	-19.4
25	13	4.0	18.8	4.7	22.1	-3.9
26	13	14.7	69.0	2.7	12.7	46.3

1 - Average LAB used to subtract from Gross Sample Activity

2 - The initial Sample Net Activity for location 26 was 318.8 dpm/100cm². This was detected during scan surveys.

The area was deconned and resurveyed. Re-survey values are reported.

All survey results are less than the applicable DCGLs, therefore no further investigation is required.

22.7	Sample LAB Average
MIN	-19.4
MAX	52.4
MEAN	13.6
SD	20.3
Transuranic DCGL _w	100

19

**SURVEY UNIT 991-2-001
TSA - DATA SUMMARY**

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
------------------------	-----------------	---------------------------	---	------------------------	--	--

QC Measurements

3 QC	13	4.0	18.8	4.7	22.1	-8.0
7 QC	13	10.0	46.9	6.7	31.5	20.2

1 - Average QC LAB used to subtract from Gross Sample Activity

26.8	QC LAB Average
MIN	-8.0
MAX	20.2
MEAN	6.1
Transuranic DCGL _w	100

**SURVEY UNIT 991-2-001
RSC - DATA SUMMARY**

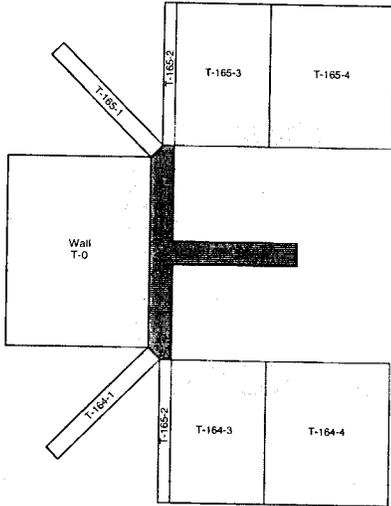
Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	2	3	4	5
Serial #:	1158	1164	984	845
Cal Due Date:	1/1/04	11/30/03	1/1/04	1/15/04
Analysis Date:	11/19/03	11/19/03	11/19/03	11/19/03
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.3	0.6	0.2	0.1
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	9.0	9.0	9.0	9.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	2	0	-0.9
2	3	1	-0.3
3	4	1	0.9
4	5	0	-0.3
5	2	3	3.6
6	3	1	-0.3
7	4	2	2.4
8	14	0	0.0
9	5	0	-0.3
10	14	0	0.0
11	2	0	-0.9
12	3	0	-1.8
13	4	0	-0.6
14	5	1	1.2
15	2	0	-0.9
16	3	1	-0.3
17	4	1	0.9
18	5	0	-0.3
19	2	0	-0.9
20	3	1	-0.3
21	4	0	-0.6
22	5	0	-0.3
23	2	1	0.6
24	3	0	-1.8
25	4	1	0.9
26	14	1	1.5
		MIN	-1.8
		MAX	3.6
		MEAN	0.0
		SD	1.2
		Transuranic DCGL_w	20

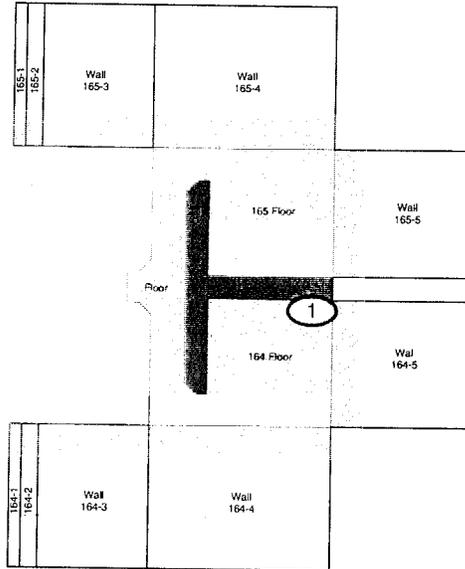
PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-001 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, North Rooms
 Total Area: 5,466 sq. m. Floor Area: 1,205 sq. m.
 Grid Spacing for Survey Points: 18m x 18m

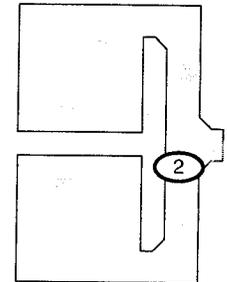
Rooms 164 and 165
Center "T" Wall Surfaces



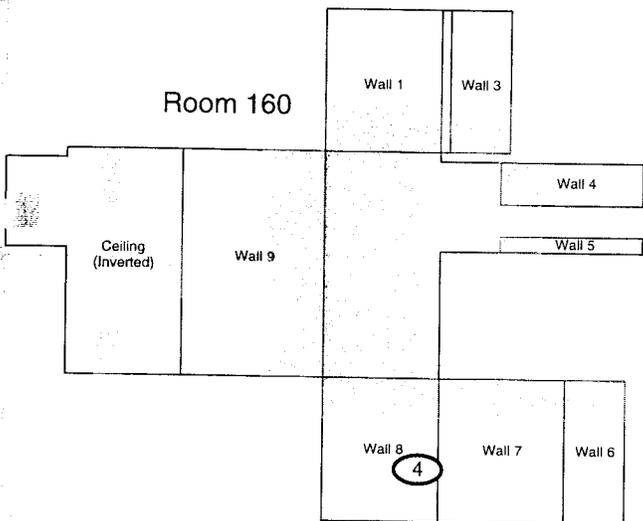
Rooms 164 and 165
Floor & Perimeter Walls



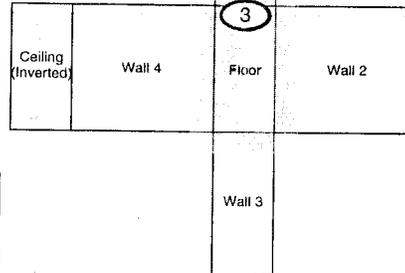
Rooms 164 & 165
Ceiling (Inverted)



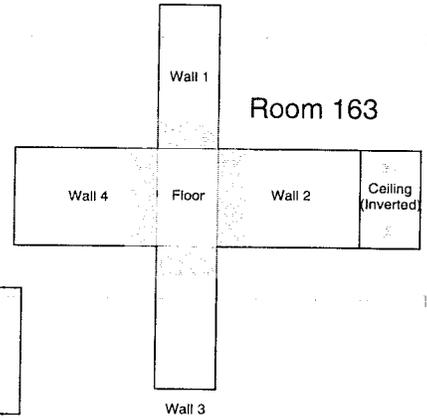
B991 Interior
Survey Unit 001



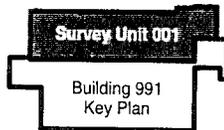
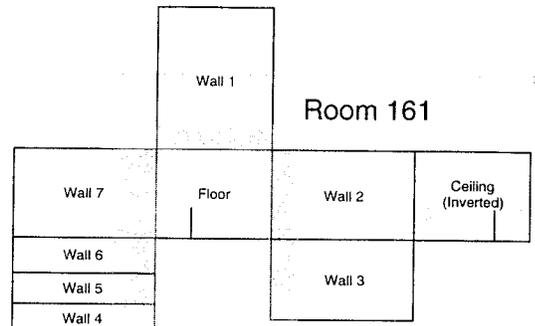
Room 162



Room 163



Room 161



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Smear & TSA Location Smear, TSA & Sample Location Open/Inaccessible Area 	<p>Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p> <p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s) 1, 7, 8, 9, 15 - 25, 27 - 30</p>	<p align="center">N</p>	<p align="center">0 FEET 30</p> <p align="center">0 METERS 10</p> <p align="center">1 inch = 24 feet 1 grid sq. = 4 sq. m.</p>	<p align="center">U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p> <p align="center">CH2MHILL Communications Group</p> <p align="right">KAISER HILL</p> <p>MAP ID: 03-JS-SU1-SC Jan. 29, 2004</p>
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PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-001 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, North Rooms
 Total Area: 5,466 sq. m. Floor Area: 1,205 sq. m.
 Grid Spacing for Survey Points: 18m x 18m

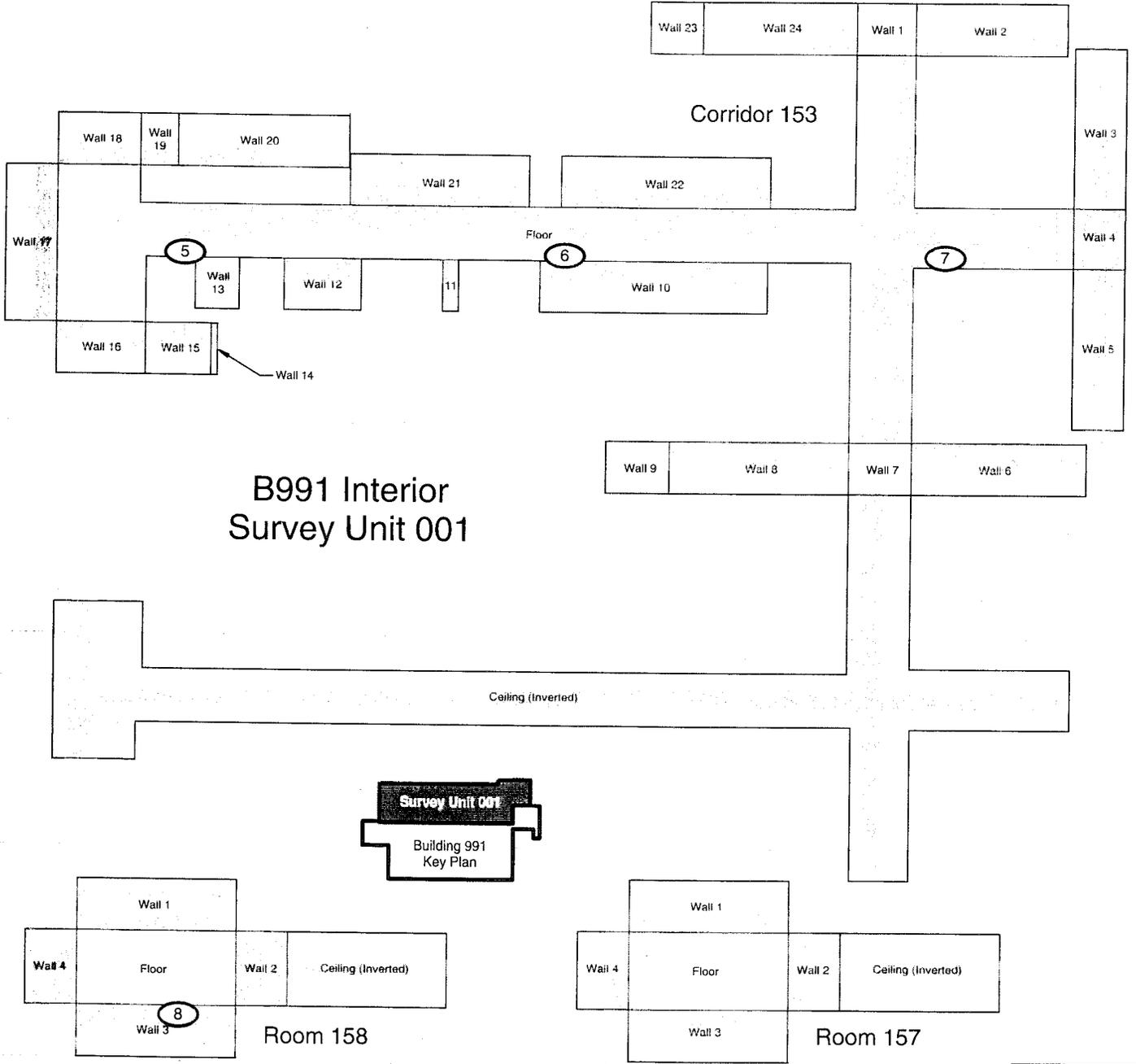
25

20

15

10

5

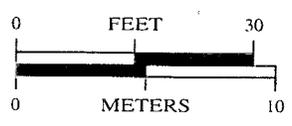


Scan Area

SURVEY MAP LEGEND

- ⊕ Smear & TSA Location
- ⊠ Smear, TSA & Sample Location

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1 inch = 24 feet 1 grid sq. = 4 sq. m.

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

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

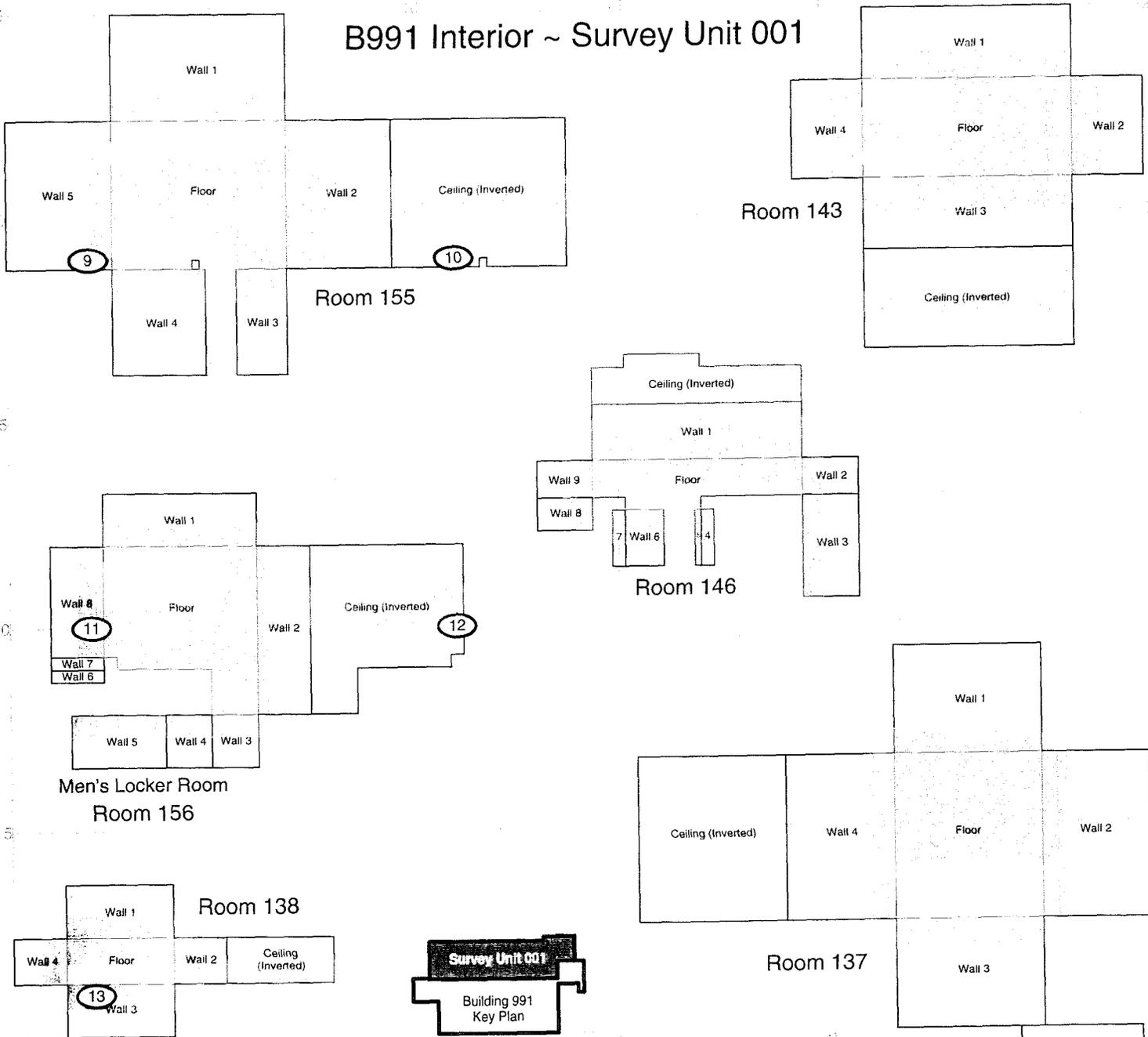


MAP ID: 03-JS-SU1-2-SC Jan 29, 2004

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-001 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, North Rooms
 Total Area: 5,466 sq. m. Floor Area: 1,205 sq. m.
 Grid Spacing for Survey Points: 18m x 18m

B991 Interior ~ Survey Unit 001



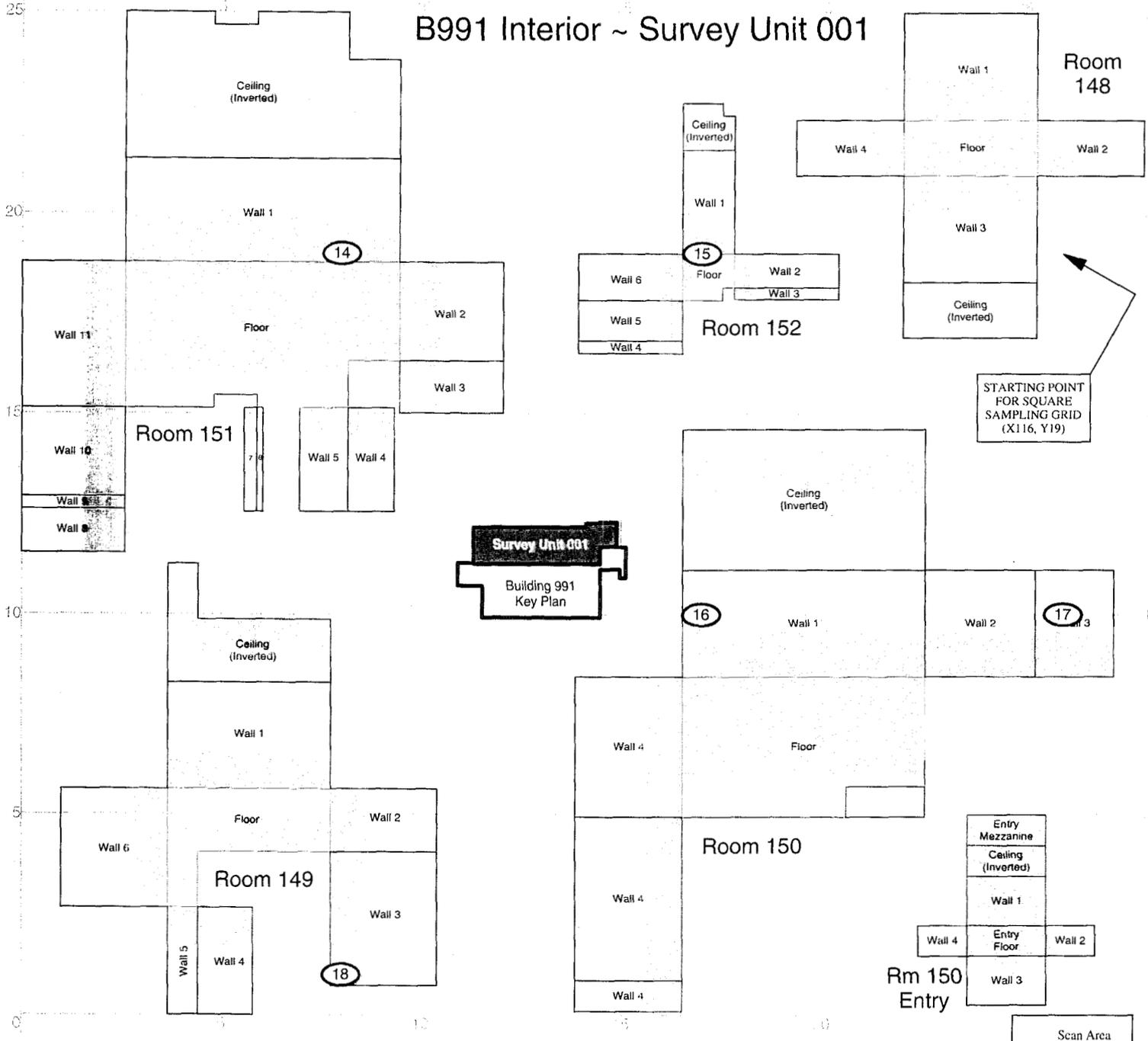
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> ⊙ Smear & TSA Location ⬠ Smear, TSA & Sample Location 	<p>Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>	<p align="center">N ↑</p>	<p align="center">0 FEET 30</p>	<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p>
			<p align="center">0 METERS 10</p>	<p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p> <p align="center"> </p>
<p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s) 1, 7, 8, 9, 15 - 25, 27 - 30</p>			<p>1 inch = 24 feet 1 grid sq. = 4 sq. m.</p>	<p>MAP ID: 03-JS-SU1-3-SC Jan 29, 2004</p>

24

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-001 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, North Rooms
 Total Area: 5,466 sq. m. Floor Area: 1,205 sq. m.
 Grid Spacing for Survey Points: 18m x 18m

B991 Interior ~ Survey Unit 001

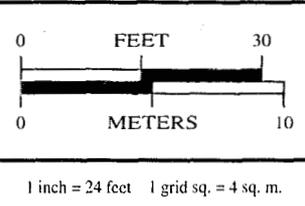
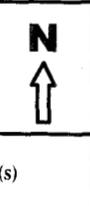


SURVEY MAP LEGEND

- 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, 7, 8, 9, 15 - 25, 27 - 30



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 Rocky Flats Environmental Technology Site

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

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 Communications Group

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 COMPANY

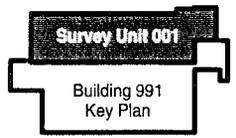
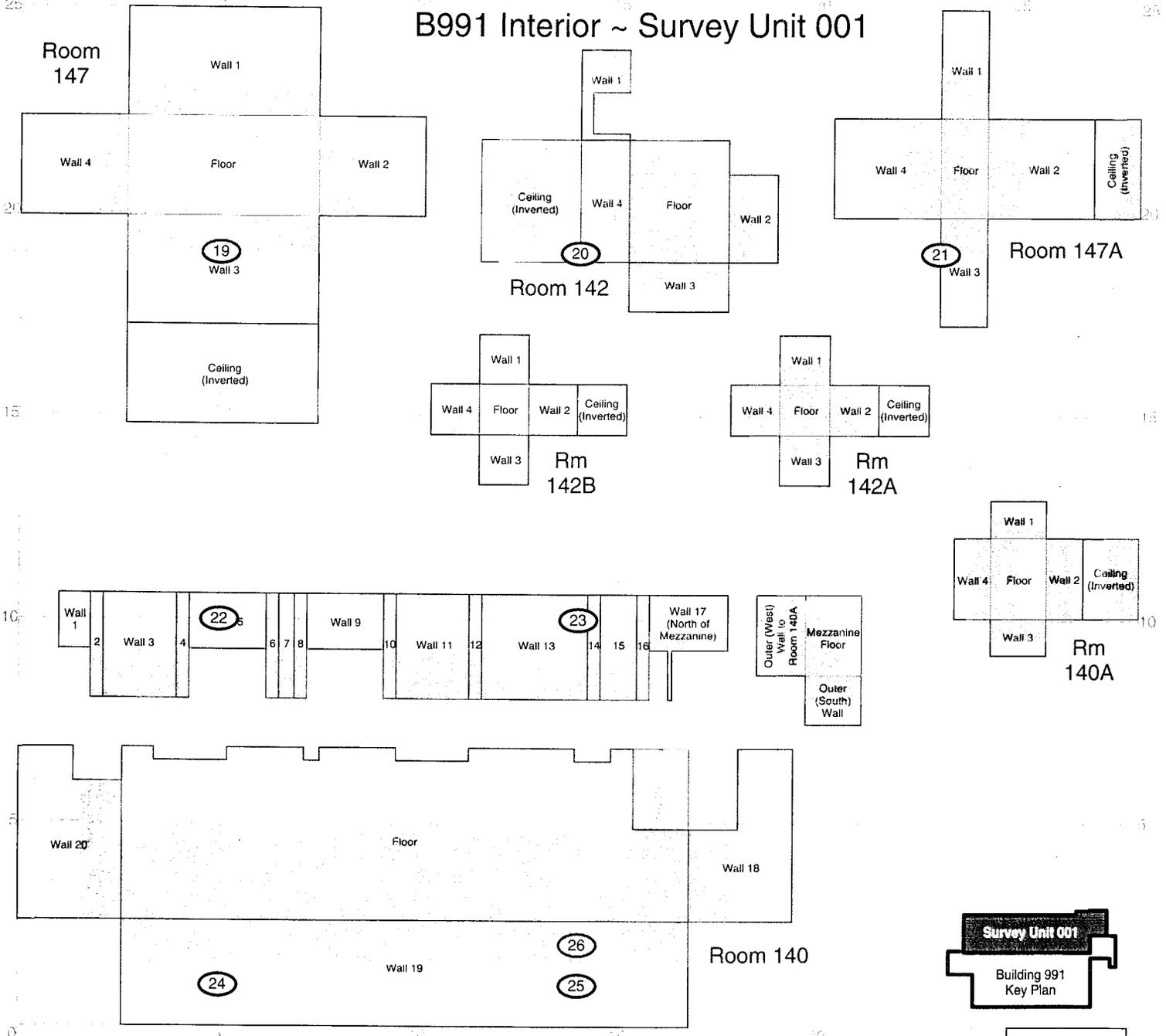
MAP ID: 03-JS-SU1-4-SC Jan 29, 2004

25

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-001 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, North Rooms
 Total Area: 5,466 sq. m. Floor Area: 1,205 sq. m.
 Grid Spacing for Survey Points: 18m x 18m

B991 Interior ~ Survey Unit 001

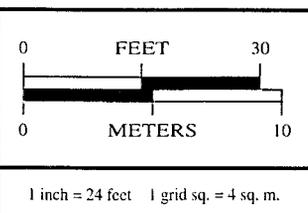


SURVEY MAP LEGEND

- 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, 7, 8, 9, 15 - 25, 27 - 30



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

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

CH2MHILL
 Communications Group

KAISER HILL
 CONSULTANTS

MAP ID: 03-JS-SU1-5 Jan 29, 2004

91

SURVEY UNIT 991-2-002
RADIOLOGICAL DATA SUMMARY - PDS

Survey Unit Description: B991 Interior Center Rooms

991-2-002
PDS Data Summary

<u>Total Surface Activity Measurements</u>			<u>Removable Activity Measurements</u>		
	15	20		15	20
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-13.2	dpm/100 cm ²	MIN	-1.5	dpm/100 cm ²
MAX	82.8	dpm/100 cm ²	MAX	3.0	dpm/100 cm ²
MEAN	7.7	dpm/100 cm ²	MEAN	0.2	dpm/100 cm ²
STD DEV	20.1	dpm/100 cm ²	STD DEV	1.1	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²	TRANSURANIC DCGL _w	20	dpm/100 cm ²

**SURVEY UNIT 991-2-002
TSA DATA SUMMARY**

Manufacturer:	NE Tech				
Model:	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	1	3	9	12	13
Serial #:	2352	1589	2352	1249	2391
Cal Due Date:	5/11/04	7/19/04	5/11/04	4/2/04	7/26/04
Analysis Date:	1/27/04	1.27/04	1/28/04	1/29/04	1/29/04
Alpha Eff. (c/d):	0.222	0.215	0.222	0.203	0.219
Alpha Bkgd (cpm)	0.7	2.0	1.0	1.0	1.0
Sample Time (min)	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm²)	48.0	48.0	48.0	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
1	1	7.3	32.9	2.0	9.0	16.6
2	1	2.7	12.2	5.3	23.9	-4.2
3	12	6.7	33.0	1.0	4.9	16.7
4	12	3.3	16.3	3.3	16.3	-0.1
5	1	22.0	99.1	4.7	21.2	82.8
6	1	7.3	32.9	2.0	9.0	16.6
7	1	4.7	21.2	6.0	27.0	4.9
8	1	2.0	9.0	5.0	22.5	-7.3
9	3	3.0	14.0	7.3	34.0	-2.4
10	12	4.0	19.7	4.0	19.7	3.4
11	12	4.7	23.2	2.0	9.9	6.8
12	3	4.0	18.6	2.0	9.3	2.3
13	1	2.0	9.0	7.0	31.5	-7.3
14	3	3.3	15.3	6.7	31.2	-1.0
15	12	4.0	19.7	3.3	16.3	3.4
16	1	9.7	43.7	4.3	19.4	27.4
17	9	5.3	23.9	0.7	3.2	7.6
18	9	0.7	3.2	2.0	9.0	-13.2
19	9	3.3	14.9	1.3	5.9	-1.5
20	12	4.0	19.7	0.7	3.4	3.4

1 - Average LAB used to subtract from Gross Sample Activity

2 - The initial sample net activity for location 21 was 18,287.7 dpm/100cm². This was detected during scan surveys.

A coupon sample was collected from location 21 and analyzed using the OASIS system. No transuranic isotopes were detected above the transuranic DCGLs. Therefore, the area was decontaminated and resurveyed to the uranium DCGLs. All follow up post-decon survey results were less than the uranium DCGLs.

Refer to TSA location results 22-30 below for post-decon survey results of location 21.

16.3	Sample LAB Average
MIN	-13.2
MAX	82.8
MEAN	7.7
SD	20.1
Transuranic DCGL_w	100

**SURVEY UNIT 991-2-002
TSA DATA SUMMARY**

Location 21 Post-Decon TSA Survey Results

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2) ¹	
22	13	15.3	69.9	6.7	30.6	53.5	
23	13	18.0	82.2	3.3	15.1	65.9	
24	13	20.0	91.3	4.7	21.5	75.0	
25	13	175.3	800.5	6.7	30.6	784.1	
26	13	37.3	170.3	4.7	21.5	154.0	
27	13	55.3	252.5	6.7	30.6	236.2	
28	13	33.6	153.4	4.7	21.5	137.1	
29	13	23.0	105.0	6.7	30.6	88.7	
30	13	25.6	116.9	1.7	7.8	100.6	
						23.3	Sample LAB Average
						MIN	53.5
						MAX	784.1
						MEAN	188.3
						SD	230.4
						Uranium DCGL _w	5000

QC Measurements

16 QC	12	7.3	36.0	3.3	16.3	22.9	
5 QC	12	16.7	82.3	2.0	9.9	69.2	
						13.1	QC LAB Average
						MIN	22.9
						MAX	69.2
						MEAN	46.1
						Transuranic DCGL _w	100

1 - Average QC LAB used to subtract from Gross Sample Activity

20

**SURVEY UNIT 991-2-002
RSC - DATA SUMMARY**

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	2	6	7	11
Serial #:	924	966	770	924
Cal Due Date:	4/27/04	4/23/04	3/17/04	4/27/04
Analysis Date:	1/27/04	1/27/04	1/27/04	1/28/04
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.0	0.3	0.5	0.0
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	9.0	9.0	9.0	9.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	2	1	1.5
2	2	0	0.0
3	14	0	0.0
4	15	0	-0.3
5	2	1	1.5
6	2	0	0.0
7	2	0	0.0
8	7	3	3.0
9	6	2	2.1
10	14	0	0.0
11	15	1	1.2
12	6	0	-0.9
13	2	0	0.0
14	8	0	0.0
15	14	0	0.0
16	7	0	-1.5
17	11	0	-0.9
18	11	0	-0.9
19	11	0	-0.9
20	15	0	-0.3
		MIN	-1.5
		MAX	3.0
		MEAN	0.2
		SD	1.1
		Transuranic DCGL_w	20

21

 RFETS B903 ALPHA SPECTROMETER ANALYSIS RESULTS *****

Sample ID: 10 MIN SMEAR Type: BLDG 991 RM 170 N. WALL

Batch Id: 0401270e
 Acquisition Start: 1/27/04 4:13:45 PM
 Analysis Date: 1/27/2004 4:24:28 PM
 Detector Name: A 1 1A
 Spectrum File: C:\AANALYST\USED BIFS\0401270e\0.CNF
 Acquisition Live Time: 600.0 seconds

Calibrations:
 Energy = 2468.593 keV + 1.6055E+000*ch
 FWHM = 4.4951E+001 keV
 Low Tail = 1.3097E+001 keV

Sample Size: 1.000 100 Cm2

*991-2-002
 Oasis Results
 Location #21*

----- ROI DATA -----

Peak No.	Associated Nuclide	ROI Start	ROI End	Energy (keV)	FWHM (keV)
1	Pu+Am	19-	1887	3849.500	2.007
2	Bi-212	1923-	2263	5828.990	0.000
3	PO-214	2566-	3368	7498.752	1.606
4	PO-212	3689-	3911	8569.648	0.000

----- ROI ANALYSIS RESULTS -----

Nuclide	Net Counts +/- %1s	BKG counts	CPM
Pu+Am	180.389 +/- 7.458	0.611	18.039
Bi-212	-0.028 +/- 70.711	0.028	-0.003
PO-214	0.986 +/- 101.418	0.014	0.099
PO-212	-0.014 +/- 100.000	0.014	-0.001

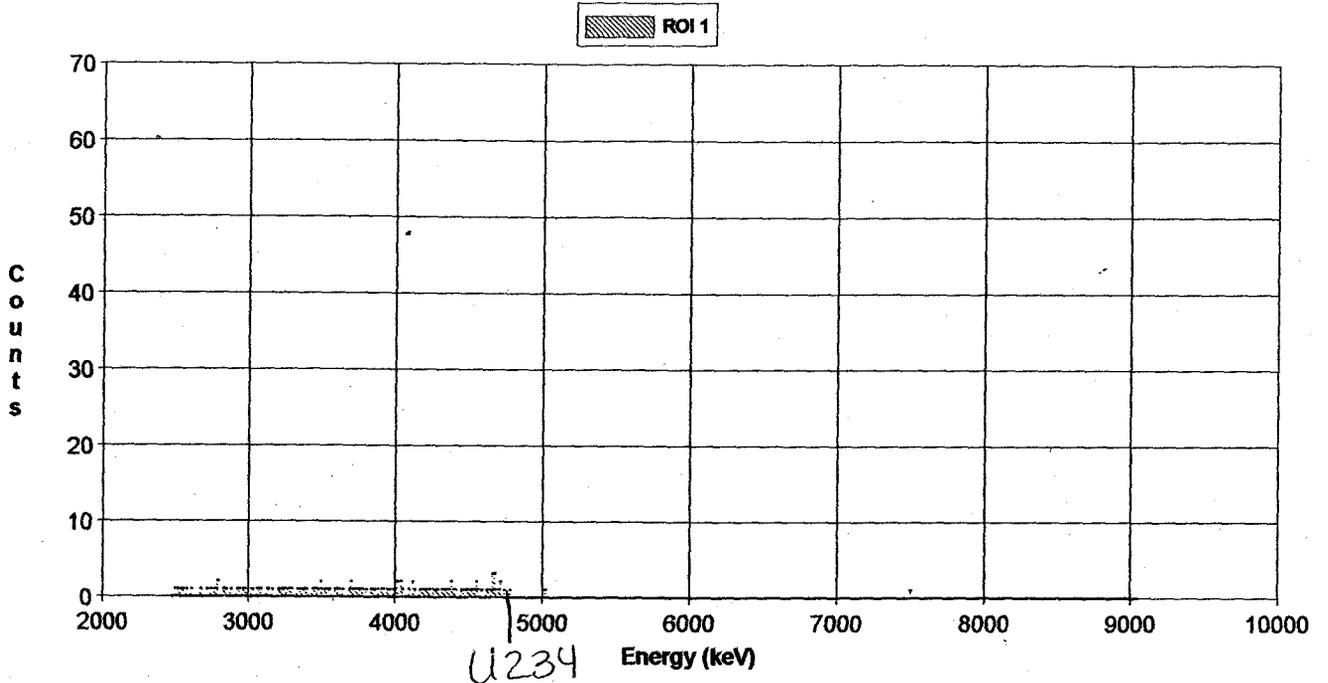
----- NUCLIDE ANALYSIS RESULTS -----

Nuclide Name	Id Conf.	ROI Midpt (keV)	Activity +/- 2s dpm/100 Cm	MDA dpm/100 Cm
Pu+Am	0.999	4000.00*	7.691E+001 +/- 1.387E+001	2.260E+000
Bi-212	1.000	5830.00*	-3.289E-002 +/- 4.663E-002	3.862E+000
PO-212	1.000	8572.00*	-5.922E-003 +/- 1.186E-002	1.322E+000
PO-214	0.997	7234.00*	4.205E-001 +/- 8.540E-001	1.322E+000

Analysis Reviewed by: *Spil K Conley* 

Approved by: *[Signature]* 

Spectral Data Plot



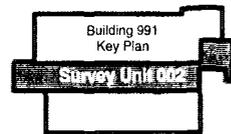
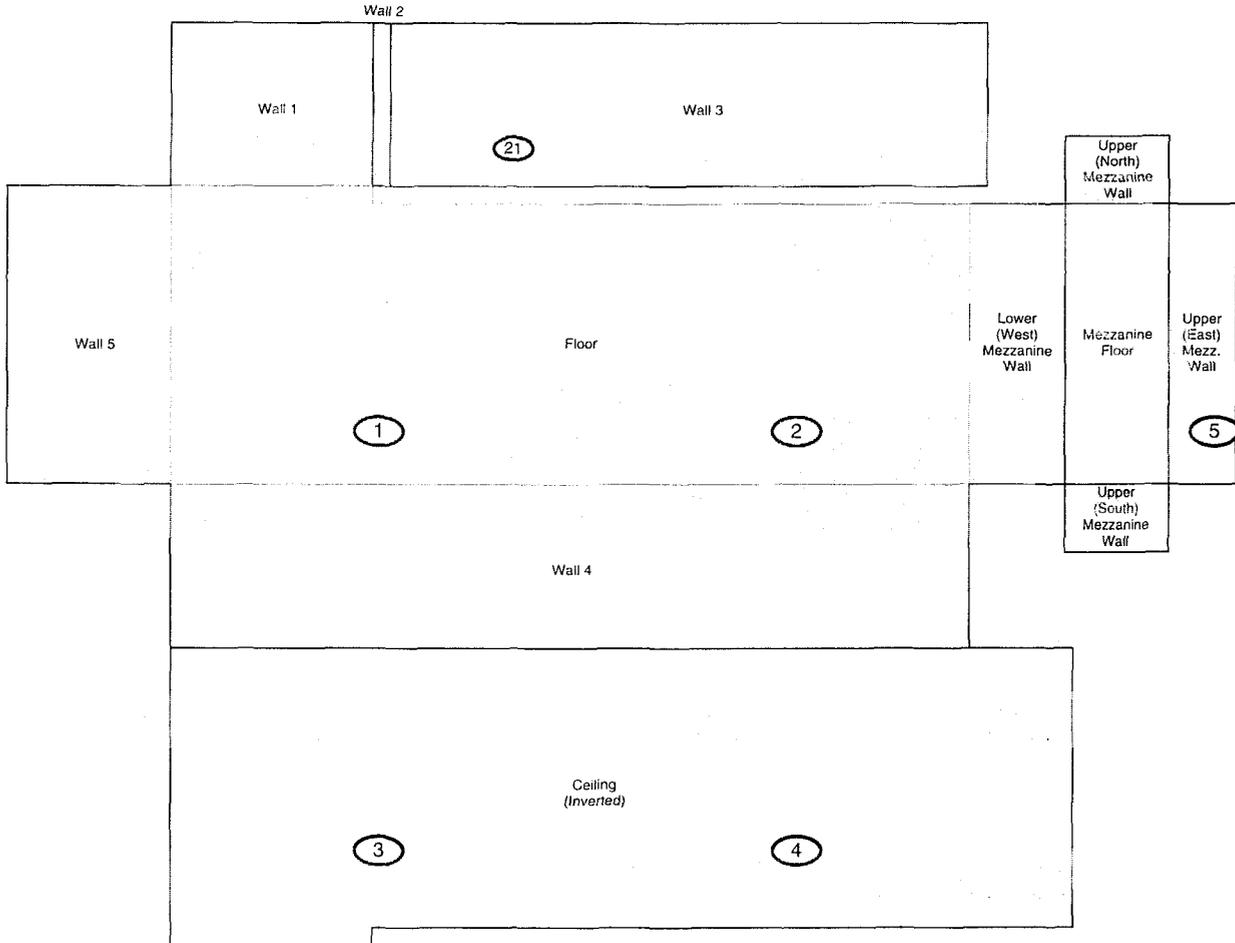
Datasource: 0.CNF
Live Time: 600 sec
Real Time: 600 sec
Acq. Start: 1/27/2004 4:13:45 PM
Start: 1 : 2470.20 (keV)
Stop: 4096 : 9044.89 (keV)

991-2-002
Oasis Results
Location # 21

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-002 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, Center Rooms
 Total Area: 3,578 sq. m. Floor Area: 970 sq. m.
 Grid Spacing for Survey Points: 16m x 16m

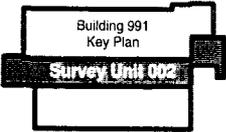
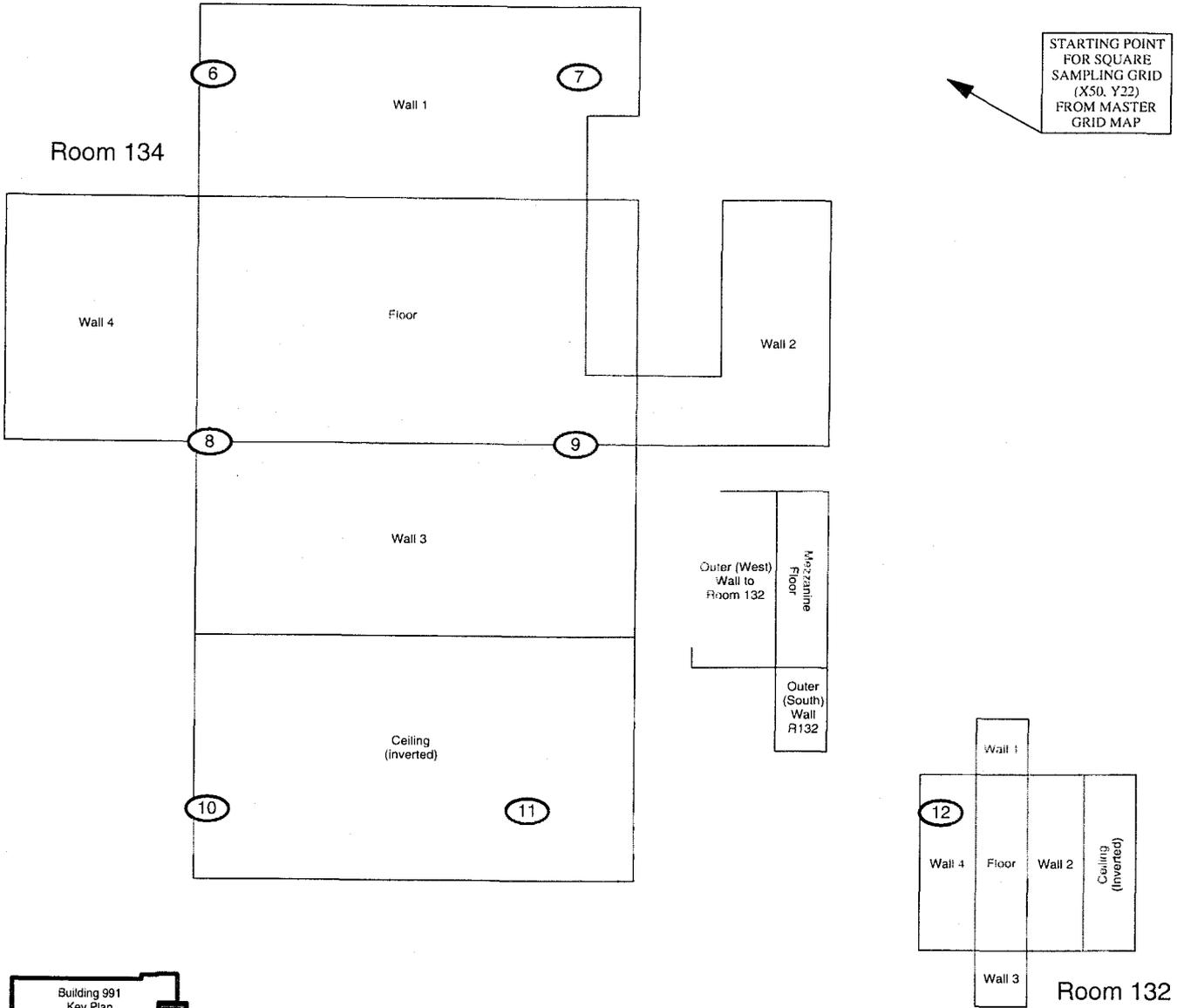
Room 170



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Smear & TSA Location Smear, TSA & Sample Location Open/Inaccessible Area Area in Another Survey Unit 		<p>Neither the United States Government, nor Kaiser Hill Co. nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>		<p>N</p>	<p>0 FEET 30</p> <p>0 METERS 10</p>	<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p>
<p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 1, 3, 5, 9, 10</p>		<p>1 inch = 24 feet 1 grid sq. = 4 sq. m.</p>		<p>CH2MHILL Communications Group</p>	<p>KAISER HILL CORPORATION</p>	<p>MAP ID: 03-JS/991-2-1-SC Feb. 02, 2004</p>

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-002 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, Center Rooms
 Total Area: 3,578 sq. m. Floor Area: 970 sq. m.
 Grid Spacing for Survey Points: 16m x 16m

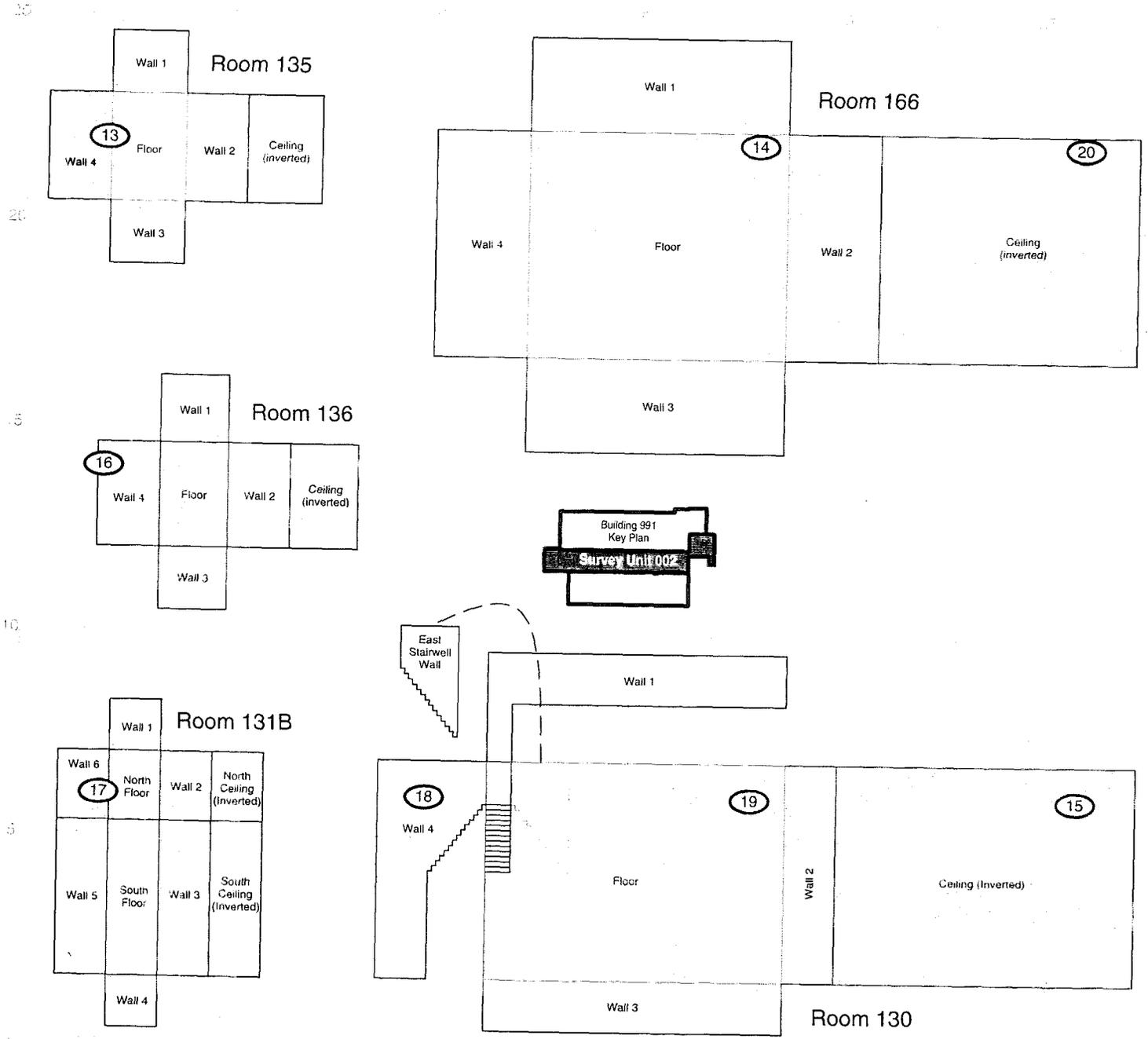


<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Smear & TSA Location Smear, TSA & Sample Location Open/Inaccessible Area Area in Another Survey Unit 	<p>Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>	<p style="text-align: center;">N ↑</p>	<p style="text-align: center;">0 FEET 30 0 METERS 10</p>	<p style="text-align: center;">Scan Area</p>
				<p style="text-align: center;">U.S. Department of Energy Rocky Flats Environmental Technology Site</p>
<p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 1, 3, 5, 9, 10</p>		<p style="text-align: center;">1 inch = 24 feet 1 grid sq. = 4 sq. m.</p>		<p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p>
		<p style="text-align: center;">CH2MHILL Communications Group</p>		<p style="text-align: center;"> KAISER HILL CONSULTANTS</p>
		<p>MAP ID: 03-JS/991-2-2-SC</p>		<p style="text-align: right;">Feb. 02, 2004</p>

35

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-002 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, Center Rooms
 Total Area: 3,578 sq. m. Floor Area: 970 sq. m.
 Grid Spacing for Survey Points: 16m x 16m



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> # Smear & TSA Location Smear, TSA & Sample Location Open/Inaccessible Area Area in Another Survey Unit 		<p>Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>	<p style="text-align: center;">N</p> <p style="text-align: center;">↑</p>	<p style="text-align: center;">0 FEET 30</p> <hr style="width: 100%; border: 1px solid black;"/> <p style="text-align: center;">0 METERS 10</p>	<p style="text-align: center;">U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p>
<p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 1, 3, 5, 9, 10</p>		<p>1 inch = 24 feet 1 grid sq. = 4 sq. m.</p>		<p style="text-align: center;">CH2MHILL Communications Group</p>	<p style="text-align: center;">KAISER HILL CORPORATION</p>
				<p>MAP ID: 03-JS/991-2-3-SC</p>	<p>Feb. 02, 2004</p>

SURVEY UNIT 991-2-003
RADIOLOGICAL DATA SUMMARY - PDS

Survey Unit Description: B991 Interior South Rooms

37

991-2-003
PDS Data Summary

<u>Total Surface Activity Measurements</u>			<u>Removable Activity Measurements</u>		
	15	15		15	15
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-12.4	dpm/100 cm ²	MIN	-0.9	dpm/100 cm ²
MAX	30.5	dpm/100 cm ²	MAX	2.1	dpm/100 cm ²
MEAN	7.4	dpm/100 cm ²	MEAN	-0.1	dpm/100 cm ²
STD DEV	12.4	dpm/100 cm ²	STD DEV	1.1	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²	TRANSURANIC DCGL _w	20	dpm/100 cm ²

38

**SURVEY UNIT 991-2-003
TSA - DATA SUMMARY**

Manufacturer:	NE Tech	NE Tech	NE Tech	NE Tech
Model:	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	1	2	3	4
Serial #:	3109	1379	1273	3125
Cal Due Date:	6/8/04	6/9/04	1/9/04	3/24/04
Analysis Date:	12/17/03	12/17/03	12/17/03	1/23/04
Alpha Eff. (c/d):	0.217	0.214	0.209	0.221
Alpha Bkgd (cpm)	1.0	0.0	4.0	3.0
Sample Time (min)	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5
MDC (dpm/100cm²)	48.0	48.0	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
1	4	6.7	30.3	3.3	14.9	17.9
2	2	0.7	3.3	0.0	0.0	-9.1
3	4	6.0	27.1	5.3	24.0	14.8
4	1	2.0	9.2	1.3	6.0	-3.2
5	1	1.3	6.0	2.0	9.2	-6.4
6	1	3.3	15.2	1.3	6.0	2.8
7	1	4.0	18.4	1.3	6.0	6.0
8	1	9.3	42.9	4.0	18.4	30.5
9	1	6.7	30.9	2.7	12.4	18.5
10	1	2.7	12.4	3.3	15.2	0.0
11	1	4.7	21.7	2.7	12.4	9.3
12	4	8.0	36.2	6.0	27.1	23.8
13	2	5.3	24.8	3.3	15.4	12.4
14	2	4.0	18.7	2.0	9.3	6.3
15	2	0.0	0.0	2.0	9.3	-12.4

1 - Average LAB used to subtract from Gross Sample Activity

12.4	Sample LAB Average
MIN	-12.4
MAX	30.5
MEAN	7.4
SD	12.4
Transuranic DCGL _w	100

QC Measurements

8 QC	3	10.0	47.8	1.3	6.2	30.4
9 QC	3	6.0	28.7	6.0	28.7	11.2

1 - Average QC LAB used to subtract from Gross Sample Activity

17.5	QC LAB Average
MIN	11.2
MAX	30.4
MEAN	20.8
Transuranic DCGL _w	100

39

**SURVEY UNIT 991-2-003
RSC - DATA SUMMARY**

Manufacturer:	Eberline	Eberline
Model:	SAC-4	SAC-4
Instrument ID#:	10	11
Serial #:	924	966
Cal Due Date:	4/27/04	4/23/04
Analysis Date:	1/27/04	1/27/04
Alpha Eff. (c/d):	0.33	0.33
Alpha Bkgd (cpm)	0.3	0.3
Sample Time (min)	2	2
Bkgd Time (min)	10	10
MDC (dpm/100cm²)	9.0	9.0

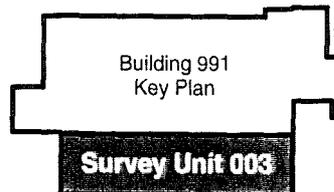
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	10	0	-0.9
2	11	1	0.6
3	10	1	0.6
4	11	0	-0.9
5	10	0	-0.9
6	11	0	-0.9
7	10	0	-0.9
8	11	0	-0.9
9	10	0	-0.9
10	11	2	2.1
11	10	2	2.1
12	11	1	0.6
13	10	1	0.6
14	11	0	-0.9
15	10	0	-0.9
		MIN	-0.9
		MAX	2.1
		MEAN	-0.1
		SD	1.1
		Transuranic DCGL_w	20

410

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-003 Classification: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, South Rooms
 Total Area: 3,054 sq. m. Floor Area: 914 sq. m.
 Grid Spacing for Survey Points:

B991 Interior
 SU 003, Room 101



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Smear & TSA Location Smear, TSA & Sample Location Open/Inaccessible Area Area in Another Survey Unit 	<p>Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>	<p>N</p>	<p>0 FEET 15</p> <p>0 METERS 5</p>	<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p>
	<p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 5, 6, 7, 8, 9, 12, 13</p>	<p>1 inch = 12 feet 1 grid sq. = 1 sq. m.</p>	<p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p>	<p>CH2MHILL Communications Group</p>
			<p>MAP ID: 03-JS/991-003-2-SC</p>	<p>Jan 29, 2004</p>

SURVEY UNIT 991-2-004
RADIOLOGICAL DATA SUMMARY - PDS

Survey Unit Description: B991 East Tunnel and B998 Vault

43

991-2-004
PDS Data Summary

<u>Total Surface Activity Measurements</u>			<u>Removable Activity Measurements</u>		
	15	16		15	16
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-10.4	dpm/100 cm ²	MIN	-1.6	dpm/100 cm ²
MAX	22.5	dpm/100 cm ²	MAX	3.2	dpm/100 cm ²
MEAN	5.2	dpm/100 cm ²	MEAN	-0.5	dpm/100 cm ²
STD DEV	9.7	dpm/100 cm ²	STD DEV	1.6	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²	TRANSURANIC DCGL _w	20	dpm/100 cm ²

421

991-2-004
TSA Data Summary

Manufacturer:	NE Tech	NE Tech	NE Tech	NE Tech
Model:	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	1	2	3	4
Serial #:	3113	2352	1249	1420
Cal Due Date:	2/22/04	5/11/04	4/02/04	5/19/04
Analysis Date:	12/9/03	12/9/03	12/9/03	12/9/03
Alpha Eff. (c/d):	0.224	0.230	0.199	0.222
Alpha Bkgd (cpm)	0.0	1.0	3.0	0.0
Sample Time (min)	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5
MDC (dpm/100cm²)	0.0	31.6	63.2	0.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
1	2	6.7	29.1	4.7	20.4	18.8
2	2	2.7	11.7	2.0	8.7	1.4
3	4	0.7	3.2	0.7	3.2	-7.2
4	4	7.3	32.9	1.3	5.9	22.5
5	4	2.7	12.2	1.3	5.9	1.8
6	2	3.3	14.3	2.0	8.7	4.0
7	2	5.3	23.0	3.3	14.3	12.7
8	2	3.3	14.3	3.3	14.3	4.0
9	4	3.3	14.9	1.3	5.9	4.5
10	4	5.3	23.9	3.3	14.9	13.5
11	4	0.7	3.2	2.0	9.0	-7.2
12	4	4.0	18.0	1.3	5.9	7.7
13	4	1.3	5.9	3.4	15.3	-4.5
14	4	6.0	27.0	2.7	12.2	16.7
15	4	3.3	14.9	0.7	3.2	4.5
16	4	0.0	0.0	4.0	18.0	-10.4

1 - Average LAB used to subtract from Gross Sample Activity

2 - The initial sample net activity for location 17 was 475.6 dpm/100cm². A coupon sample was collected from location 17 and analyzed using the Canberra ISOCs system. No transuranic isotopes were detected. The sample activity was determined to be from uranium and naturally occurring isotopes. The sample net activity for location #17 (465.6 dpm/100cm²) is below the uranium DCGL_w limits (5000 dpm/100cm²). All survey results are less than the applicable DCGLs, therefore, no further investigation is required.

Sample 17 was taken because of high activity found during the scanning surveys, and is only reported on the survey package investigation form.

10.4	Sample LAB Average
MIN	-10.4
MAX	22.5
MEAN	5.2
SD	9.7
Transuranic DCGL _w	100

QC Measurements

14 QC	3	6.0	30.2	0.0	0.0	20.1
15 QC	3	4.0	20.1	4.0	20.1	10.1

1 - Average QC LAB used to subtract from Gross Sample Activity

10.1	QC LAB Average
MIN	10.1
MAX	20.1
MEAN	15.1
Transuranic DCGL _w	100

45

**SURVEY UNIT 991-2-004
RSC - DATA SUMMARY**

Manufacturer:	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4
Instrument ID#:	5	6	7
Serial #:	952	966	952
Cal Due Date:	1/10/04	4/23/04	1/10/04
Analysis Date:	12/9/03	12/9/03	12/9/03
Alpha Eff. (c/d):	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.4	0.2	0.4
Sample Time (min)	2	2	2
Bkgd Time (min)	10	10	10
MDC (dpm/100cm²)	9.3	9.0	9.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	5	0.0	-1.6
2	6	0.0	-0.8
3	5	0.0	-1.6
4	6	0.0	-0.8
5	5	1.0	2.4
6	6	0.0	-0.8
7	5	0.0	-1.6
8	6	0.0	-0.8
9	5	1.0	2.4
10	6	0.0	-0.8
11	5	0.0	-1.6
12	6	1.0	3.2
13	5	0.0	-1.6
14	6	0.0	-0.8
15	5	0.0	-1.6
16	6	0.0	-0.8
		MIN	-1.6
		MAX	3.2
		MEAN	-0.5
		SD	1.6
		Transuranic DCGL_w	20

216

991-2-004
Media Conversion Sheet

LOCATION DESCRIPTION	SAMPLE LOCATION NUMBER	SITE SAMPLE ID	NUCLIDE	pCi/g (2)	MDA (pCi/g)	WEIGHT (g)	SURFACE AREA (in ²)	INDIVIDUAL NUCLIDE (dpm/100cm ²) (3)	ESTIMATED MDA (dpm/100cm ²) (4)	URANIUM TOTAL (dpm/100cm ²)	TRANSURANIC TOTAL (dpm/100cm ²)
B998	17	03S0205-016.001	U-234	33.000	45.400	25.8	24.5	1196	1645	1262.6	
			U-235	0.956	0.201			35	7		
			U-238	0.889	0.778			32	28		
			Pu-239	0.000	1.296			0	47		
			Pu-240	0.000	0.180			0	7		
			Am-241	0.000	0.180			0	7		
											0.0



Analysis Results Header

12/11/2003 11:39:29 AM

Page 1

 ***** GAMMA SPECTRUM ANALYSIS *****
 ** Canberra Mobile Laboratory Services **

Report Generated On : 12/11/2003 11:39:29 AM

991-2-004

RIN Number : 04S0097
 Analytical Batch ID : 0312104606
 Line Item Code : RC10C019

B998 Vault

Filename: S:\GENIE2K\CAMFILES\LI014(G)\MOD\G1900116.CNF

LOCATION #17

Sample Number : 04S0097-003.001
 Lab Sample Number : CMLS-4214
 Sample Receipt Date : 12/10/2003
 Sample Volume Received : 2.58E+001 GRAM

Result Identifier : NA

Peak Locate Threshold : 2.50
 Peak Locate Range (in channels) : 100 - 8192
 Peak Area Range (in channels) : 100 - 8192
 Identification Energy Tolerance : 1.000 keV

Sample (Final Aliquot Size) : 2.580E+001 GRAM
 Sample Quantity Error : 0.000E+000
 Systematic Error Applied : 0.000E+000

Sample Taken On : 12/9/2003 2:30:00 PM
 Acquisition Started : 12/11/2003 7:34:50 AM

Count Time : 7200.0 seconds
 Real Time : 7231.1 seconds
 Dead Time : 0.43 %

Energy Calibration Used Done On : 10/1/03
 Energy = 0.263 + 0.250*ch + 2.24E-009*ch^2 + 0.00E+000*ch^3

Corrections Applied:
None

Efficiency Calibration Used Done On : 12/11/03
 Efficiency Geometry ID : 04S0097-003.001

Analyzed By: Phil Sanderson Date: 12/11/03

Reviewed By: Marilyn Umbaugh Date: 12/11/03

 ***** Sample and QC Sample Results Summary *****

Site Sample ID : 04S0097-003.001

Analytical Batch ID : 0312104606

Sample Type (Result Identifier): G19

Lab Sample Number : CMLS-4214

Geometry ID : 04S0097-003.001

Filename: S:\GENIE2K\CAMFILES\LI014(G)\MOD\G1900116.CNF

Detector Name: 4606

MDA = Curie method as specified in Genie-2000 Customization Tools Manual
 Appendix B; Basic Algorithms.

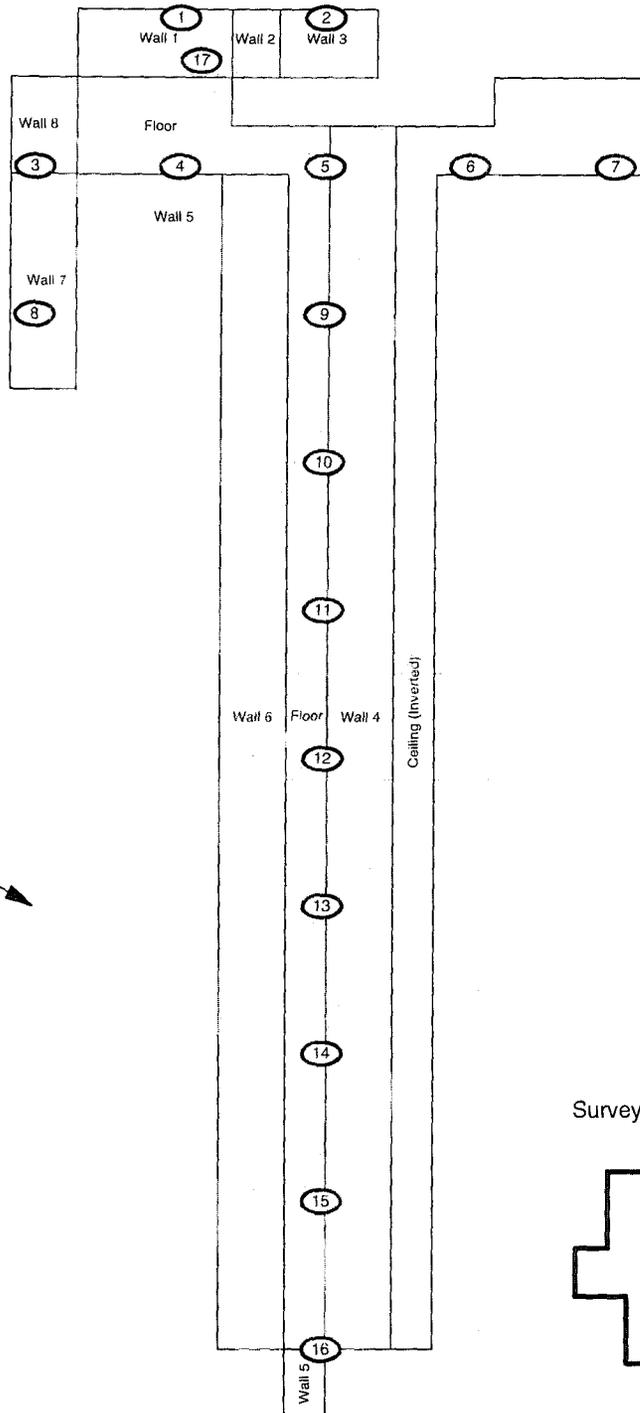
Analyte	Activity (pCi/GRAM)	2-Sigma Uncertainty (pCi/GRAM)	MDA (pCi/GRAM)
K-40n	1.14E+001	2.33E+000	2.74E+000
CS-137n	0.00E+000	0.00E+000	2.87E-001
TL-208n	2.09E-001	6.70E-002	1.38E-001
PO-210in	0.00E+000	0.00E+000	2.56E+004
BI-212n	0.00E+000	0.00E+000	3.82E+000
PB-212n	3.98E-001	9.49E-002	1.88E-001
BI-214n	8.78E-001	1.92E-001	3.55E-001
PB-214n	7.24E-001	1.87E-001	4.99E-001
RA-226n	0.00E+000	0.00E+000	3.24E+000
AC-228n	0.00E+000	0.00E+000	1.21E+000
TH-230n	0.00E+000	0.00E+000	1.78E+001
Th-231n	4.98E-001	3.90E-001	6.82E-001
PA-234Mn	0.00E+000	0.00E+000	3.42E+001
PA-234n	0.00E+000	0.00E+000	2.95E-001
U-234n	3.30E+001	1.54E+001	4.54E+001
U-235	9.56E-001	2.36E-001	2.01E-001
U238	8.89E-001	4.63E-001	7.78E-001
AM-241	0.00E+000	0.00E+000	1.80E-001

i - If Po-210 is detected in the spectrum, this peak may be the result of the interaction of Pb-206(n,n') which also produces a prompt gamma at 803 keV.

n - Non-contractual Nuclide

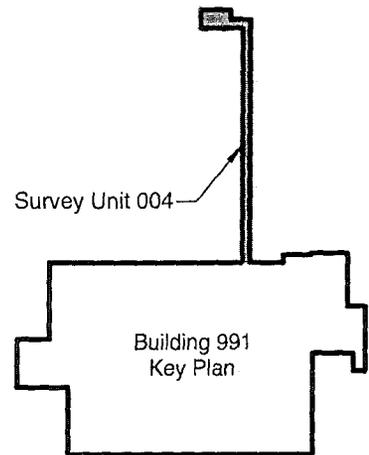
PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-004 Classification: 2
 Building: 991
 Survey Unit Description: B991 East Vault Tunnel
 Total Area: 774 sq. m. Floor Area: 155 sq. m.
 Grid Spacing for Survey Points: 7m X 7m



STARTING POINT
 FOR SQUARE
 SAMPLING GRID
 (X25, Y24)

B991 Interior
 Survey Unit 004
 East Vault Tunnel



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Smear & TSA Location Smear, TSA & Sample Location Open/Inaccessible Area Area in Another Survey Unit 	<p>Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p> <p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 1, 2, 3 & 4</p>	<p style="text-align: center;">N</p>	<p style="text-align: center;">0 FEET 40</p> <p style="text-align: center;">0 METERS 10</p> <p style="text-align: center;">1 inch = 30 feet 1 grid sq. = 1 sq. m.</p>	<p style="text-align: center;">U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> </div> <p style="text-align: center;">MAP ID: 03-JS/991-004-SC July 22, 2003</p>
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SD

SURVEY UNIT 991-2-005
RADIOLOGICAL DATA SUMMARY - PDS

Survey Unit Description: B991 Interior Room 402 and 402A

51

991-2-005
PDS Data Summary

<u>Total Surface Activity Measurements</u>			<u>Removable Activity Measurements</u>		
	15	21		15	21
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-2.5	dpm/100 cm ²	MIN	-0.9	dpm/100 cm ²
MAX	53.7	dpm/100 cm ²	MAX	3.6	dpm/100 cm ²
MEAN	22.8	dpm/100 cm ²	MEAN	1.0	dpm/100 cm ²
STD DEV	15.9	dpm/100 cm ²	STD DEV	1.4	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²	TRANSURANIC DCGL _w	20	dpm/100 cm ²

52

**SURVEY UNIT 991-2-005
TSA - DATA SUMMARY**

Manufacturer:	NE Tech				
Model:	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	1	2	6	7	8
Serial #:	1273	2352	3110	1589	2352
Cal Due Date:	7/23/04	5/11/04	7/12/04	7/19/04	5/11/04
Analysis Date:	1/26/04	1/26/04	1/27/04	1/27/04	1/27/04
Alpha Eff. (c/d):	0.208	0.222	0.211	0.215	0.222
Alpha Bkgd (cpm)	5.0	2.0	0.0	2.0	0.7
Sample Time (min)	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm²)	48.0	48.0	48.0	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
1	1	3.3	15.9	1.3	6.3	-2.5
2	1	8.7	41.8	2.0	9.6	23.5
3	2	12.0	54.1	2.0	9.0	35.7
4	1	7.3	35.1	2.7	13.0	16.7
5	1	6.7	32.2	2.3	11.1	13.8
6	1	10.0	48.1	2.7	13.0	29.7
7	2	6.7	30.2	4.0	18.0	11.8
8	1	3.3	15.9	0.7	3.4	-2.5
9	1	6.0	28.8	2.7	13.0	10.5
10	1	6.0	28.8	2.7	13.0	10.5
11	2	4.7	21.2	2.3	10.4	2.8
12	2	15.3	68.9	0.7	3.2	50.5
13	2	10.7	48.2	1.3	5.9	29.8
14	2	8.7	39.2	8.0	36.0	20.8
15	2	8.0	36.0	5.3	23.9	17.7
16	2	10.0	45.0	6.0	27.0	26.7
17	8	13.3	59.9	6.7	30.2	41.5
18	8	16.0	72.1	8.0	36.0	53.7
19	7	12.0	55.8	7.3	34.0	37.4
20	7	7.0	32.6	8.0	37.2	14.2
21	8	12.0	54.1	7.3	32.9	35.7

¹ - Average LAB used to subtract from Gross Sample Activity

18.4	Sample LAB Average
MIN	-2.5
MAX	53.7
MEAN	22.8
SD	15.9
Transuranic DCGL _w	100

QC Measurements

2 QC	6	8.7	41.2	5.3	25.1	12.8
6 QC	6	11.3	53.6	6.7	31.8	25.1

¹ - Average QC LAB used to subtract from Gross Sample Activity

28.4	QC LAB Average
MIN	12.8
MAX	25.1
MEAN	19.0
Transuranic DCGL _w	100

53

**SURVEY UNIT 991-2-005
RSC - DATA SUMMARY**

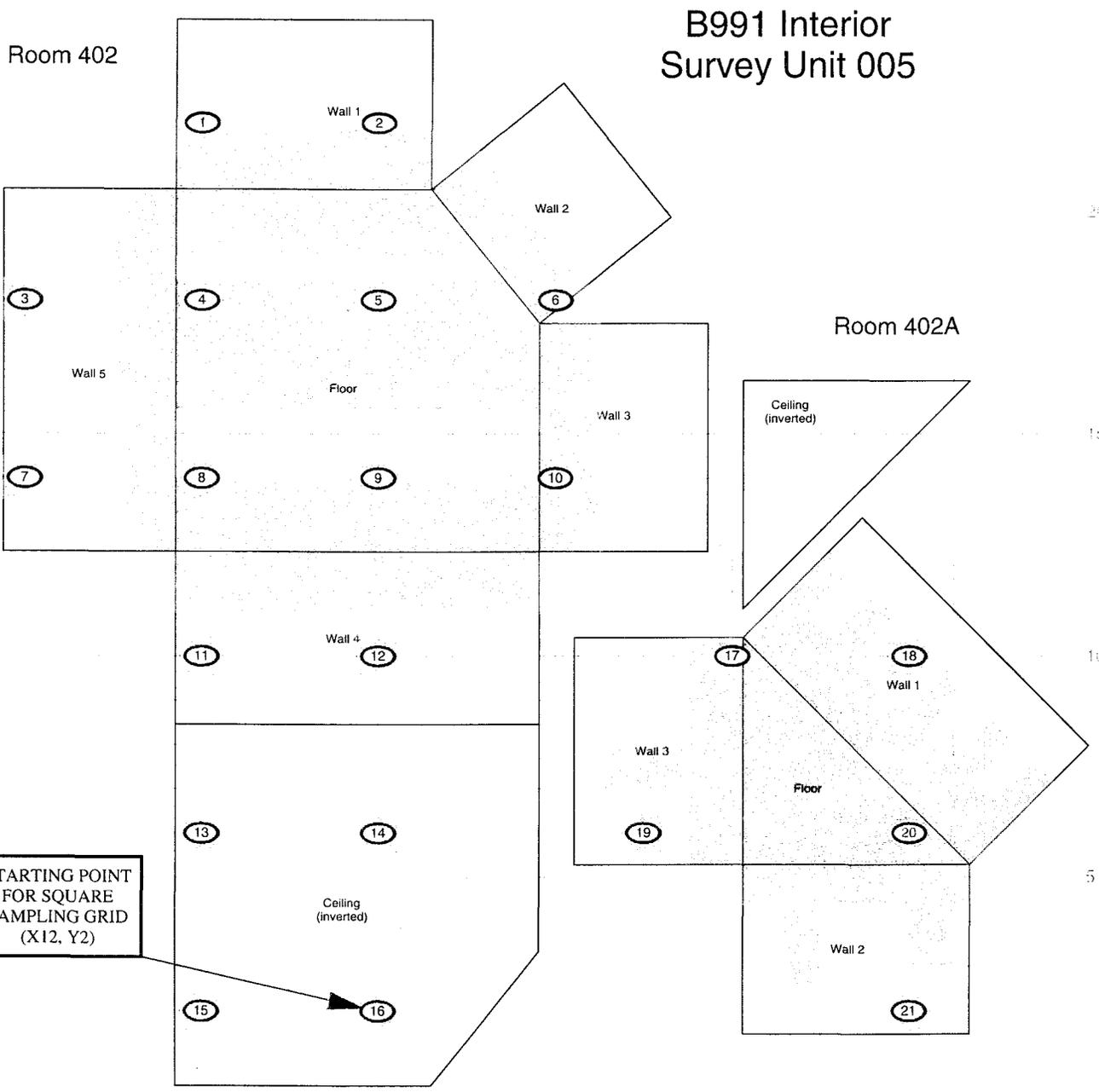
Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	3	4	9	10
Serial #:	830	770	924	966
Cal Due Date:	4/22/04	3/17/04	4/27/04	4/23/04
Analysis Date:	1/26/04	1/26/04	1/27/04	1/27/04
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.0	0.3	0.3	0.3
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	9.0	9.0	9.0	9.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	3	0	0.0
2	4	3	3.6
3	3	1	1.5
4	4	0	-0.9
5	3	0	0.0
6	4	0	-0.9
7	3	0	0.0
8	4	2	2.1
9	3	0	0.0
10	4	3	3.6
11	3	2	3.0
12	4	0	-0.9
13	3	0	0.0
14	4	1	0.6
15	3	1	1.5
16	4	1	0.6
17	9	1	0.6
18	10	2	2.1
19	9	2	2.1
20	10	1	0.6
21	9	2	2.1
		MIN	-0.9
		MAX	3.6
		MEAN	1.0
		SD	1.4
		Transuranic DCGL_w	20

54

PRE-DEMOLITION SURVEY FOR Area2, Group2

Survey Area: 2 Survey Unit: 991-2-005 Classification: 2
 Building: 991
 Survey Unit Description: B991 Interior, Room 402 and 402A
 Total Area: 340 sq. m. Total Floor Area: 76 sq. m.
 Grid Spacing for Survey Points: 4m. X 4m.



STARTING POINT
 FOR SQUARE
 SAMPLING GRID
 (X12, Y2)

Scan Area

<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Smear & TSA Location Smear, TSA & Sample Location Open/Inaccessible Area Area in Another Survey Unit 	<p>Neither the United States Government nor Kaiser Hill Co., nor CH2MHill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p> <p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 2, 7, 8</p>	<p>N</p>	<p>0 FEET 15</p> <p>0 METERS 5</p> <p>1 inch = 12 feet 1 grid sq. = 1 sq. m.</p>	<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>Communications Group</p> </div> <div style="text-align: center;"> </div> </div> <p>MAP ID: 03-JS/A2G2/991-007A Oct 8, 2003</p>
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55

SURVEY UNIT 991-2-006
RADIOLOGICAL DATA SUMMARY - PDS

Survey Unit Description: B991 Interior Basement Utility Tunnel

56

991-2-006
PDS Data Summary

<u>Total Surface Activity Measurements</u>			<u>Removable Activity Measurements</u>		
	15	26		15	26
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-7.0	dpm/100 cm ²	MIN	-0.3	dpm/100 cm ²
MAX	50.2	dpm/100 cm ²	MAX	6.1	dpm/100 cm ²
MEAN	27.2	dpm/100 cm ²	MEAN	0.9	dpm/100 cm ²
STD DEV	15.2	dpm/100 cm ²	STD DEV	1.5	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²	TRANSURANIC DCGL _w	20	dpm/100 cm ²

51

**SURVEY UNIT 991-2-006
TSA - DATA SUMMARY**

Manufacturer:	NE Tech	NE Tech	NE Tech	NE Tech
Model:	DP-6	DP-6	AP-6	AP-6
Instrument ID#:	1	2	6	7
Serial #:	2352	1249	632	1241
Cal Due Date:	5/11/04	4/2/04	7/7/04	3/4/04
Analysis Date:	1/29/04	1/29/04	1/29/04	1/29/04
Alpha Eff. (c/d):	0.222	0.203	0.183	0.195
Alpha Bkgd (cpm)	3.0	1.0	1.0	8.0
Sample Time (min)	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5
MDC (dpm/100cm ²)	48.0	48.0	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
1	1	12.0	54.1	2.7	12.2	38.0
2	1	13.3	59.9	3.3	14.9	43.9
3	1	5.3	23.9	3.3	14.9	7.9
4	1	9.3	41.9	3.3	14.9	25.9
5	1	8.0	36.0	4.0	18.0	20.0
6	1	8.7	39.2	6.0	27.0	23.2
7	1	4.7	21.2	4.0	18.0	5.2
8	1	8.7	39.2	2.7	12.2	23.2
9	1	6.8	30.6	1.0	4.5	14.6
10	1	10.7	48.2	4.7	21.2	32.2
11	1	12.0	54.1	6.0	27.0	38.0
12	1	14.7	66.2	2.7	12.2	50.2
13	1	10.0	45.0	4.0	18.0	29.0
14	1	9.3	41.9	4.7	21.2	25.9
15	1	10.8	48.6	3.3	14.9	32.6
16	1	11.3	50.9	4.7	21.2	34.9
17	1	2.0	9.0	2.7	12.2	-7.0
18	1	4.0	18.0	2.7	12.2	2.0
19	1	13.3	59.9	5.3	23.9	43.9
20	1	4.7	21.2	2.7	12.2	5.2
21	1	14.0	63.1	2.7	12.2	47.1
22	1	9.3	41.9	3.3	14.9	25.9
23	1	11.3	50.9	3.3	14.9	34.9
24	1	13.3	59.9	2.7	12.2	43.9
25	1	9.3	41.9	3.3	14.9	25.9
26	1	12.7	57.2	3.3	14.9	41.2

¹ - Average LAB used to subtract from Gross Sample Activity

16.0	Sample LAB Average
MIN	-7.0
MAX	50.2
MEAN	27.2
SD	15.2
Transuranic DCGL _w	100

QC Measurements

19 QC	2	14.7	72.4	3.3	16.3	51.2
26 QC	2	19.3	95.1	5.3	26.1	73.9

¹ - Average QC LAB used to subtract from Gross Sample Activity

21.2	QC LAB Average
MIN	51.2
MAX	73.9
MEAN	62.6
Transuranic DCGL _w	100

CS

**SURVEY UNIT 991-2-006
RSC - DATA SUMMARY**

Manufacturer:	Eberline	Eberline
Model:	SAC-4	SAC-4
Instrument ID#:	3	4
Serial #:	924	966
Cal Due Date:	4/27/04	4/23/04
Analysis Date:	1/29/04	1/29/04
Alpha Eff. (c/d):	0.33	0.33
Alpha Bkgd (cpm)	0.0	0.1
Sample Time (min)	2	2
Bkgd Time (min)	10	10
MDC (dpm/100cm²)	9.0	9.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	3	1	1.5
2	4	0	-0.3
3	3	0	0.0
4	4	0	-0.3
5	3	1	1.5
6	4	0	-0.3
7	3	0	0.0
8	4	1	1.2
9	3	0	0.0
10	4	1	1.2
11	3	0	0.0
12	4	0	-0.3
13	3	0	0.0
14	4	0	-0.3
15	3	4	6.1
16	4	2	2.7
17	3	0	0.0
18	4	1	1.2
19	3	1	1.5
20	4	1	1.2
21	3	0	0.0
22	4	0	-0.3
23	3	1	1.5
24	4	3	4.2
25	3	0	0.0
26	4	1	1.2
		MIN	-0.3
		MAX	6.1
		MEAN	0.9
		SD	1.5
		Transuranic DCGL_w	20

59

SURVEY UNIT 991-2-007
RADIOLOGICAL DATA SUMMARY - PDS

Survey Unit Description: B991 Paint Samples

Media (Pre & Post)		
<u>Total Surface Activity Measurements</u>		
	15	40
	Number Required	Number Obtained
MIN	(7.33)	dpm/100 cm ²
MAX	60.24	dpm/100 cm ²
MEAN	12.97	dpm/100 cm ²
STD DEV	14.14	dpm/100 cm ²
TRANSURANIC DCGL_w	5,000.0	dpm/100 cm²

Media (Pre & Post)		
<u>Removable Activity Measurements</u>		
	15	40
	Number Required	Number Obtained
MIN	(0.60)	dpm/100 cm ²
MAX	3.00	dpm/100 cm ²
MEAN	0.06	dpm/100 cm ²
STD DEV	0.66	dpm/100 cm ²
TRANSURANIC DCGL_w	1,000.0	dpm/100 cm²

Media Samples		
	15	40
	Number Required	Number Obtained
MIN	28.85	dpm/100 cm ²
MAX	1,806.32	dpm/100 cm ²
MEAN	358.92	dpm/100 cm ²
STD DEV	533.33	dpm/100 cm ²
URANIUM DCGL_w	5,000.0	dpm/100 cm²

62

991-2-007
Media TSA Data Summary

Manufacturer:	N.E.Tech	N.E.Tech	N.E.Tech
Model:	Electra	Electra	Electra
Instrument ID#:	3	6	7
Serial #:	1379	1249	1379
Cal Due Date:	12/25/03	4/2/04	12/25/03
Analysis Date:	11/11/03	11/12/03	11/13/03
Alpha Bkgd (cpm)	2.0	4.0	2.0
Alpha Eff. (C/d)	0.222	0.199	0.222
Instrument β MDC (dpm/100cm²)	48.0	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
Pre 1	6	2.0	10.1	0.7	3.5	2.7
Pre 2	6	1.3	6.5	1.3	6.5	(0.8)
Pre 3	7	6.0	27.0	2.0	9.0	19.7
Pre 4	7	3.0	13.5	4.0	18.0	6.2
Pre 6	6	6.0	30.2	1.0	5.0	22.8
Pre 7	6	2.0	10.1	1.0	5.0	2.7
Pre 8	6	1.0	5.0	3.0	15.1	(2.3)
Pre 9	7	4.0	18.0	1.0	4.5	10.7
Pre 10	7	3.0	13.5	0.0	0.00	6.2
Pre 11	3	4.7	21.2	0.7	3.2	13.8
Pre 12	6	1.0	5.0	0.0	0.00	(2.3)
Pre 13	6	2.0	10.1	1.3	6.5	2.7
Pre 14	6	2.0	10.1	2.0	10.1	2.7
Pre 16	6	4.0	20.1	1.3	6.5	12.8
Pre 17	6	1.3	6.5	1.3	6.5	(0.8)
Pre 18	7	3.0	13.5	0.0	0.00	6.2
Pre 19	7	2.0	9.0	1.0	4.5	1.7
Pre 20	6	4.0	20.1	2.0	10.1	12.8
Pre 21	6	3.3	16.6	0.7	3.5	9.3
Pre 22	3	2.0	9.0	2.0	9.0	1.7
Pre 23	7	4.0	18.0	0.0	0.00	10.7
Pre 24	7	8.0	36.0	0.7	3.2	28.7
Pre 25	6	4.7	23.6	0.7	3.5	16.3
Pre 26	6	2.0	10.1	1.3	6.5	2.7
Pre 27	3	3.3	14.9	1.3	5.9	7.5
Pre 28	3	2.0	9.0	2.8	12.6	1.7
Pre 29	7	2.0	9.0	0.0	0.00	1.7
Pre 30	3	3.4	15.3	2.0	9.0	8.0
Pre 31	3	3.3	14.9	3.3	14.9	7.5
Pre 32	7	1.0	4.5	3.0	13.5	(2.8)
Pre 33	7	4.0	18.0	1.0	4.5	10.7
Pre 34	3	2.7	12.2	2.0	9.0	4.8
Pre 35	3	8.0	36.0	2.0	9.0	28.7
Pre 36	3	2.7	12.2	2.0	9.0	4.8
Pre 37	3	0.7	3.2	0.7	3.2	(4.2)
Pre 38	3	2.0	9.0	4.0	18.0	1.7
Pre 39	3	2.0	9.0	1.3	5.9	1.7
Pre 40	7	2.0	9.0	4.0	18.0	1.7
Pre 41	7	6.0	27.0	0.0	0.00	19.7
Pre 42	7	10.0	45.0	7.0	31.5	37.7
Post 1	6	6.0	30.2	0.7	3.5	22.8
Post 2	6	8.7	43.7	1.3	6.5	36.4

63

Media TSA Data Summary

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2) ¹
Post 3	7	1.0	4.5	4.0	18.0	(2.8)
Post 4	7	6.0	27.0	2.0	9.0	19.7
Post 6	6	5.0	25.1	1.0	5.0	17.8
Post 7	6	3.0	15.1	2.0	10.1	7.7
Post 8	6	5.0	25.1	1.0	5.0	17.8
Post 9	7	1.4	6.3	0.0	0.0	(1.0)
Post 10	7	0.0	0.0	0.0	0.0	(7.3)
Post 11	3	4.7	21.2	4.7	21.2	13.8
Post 12	6	4.0	20.1	2.0	10.1	12.8
Post 13	6	1.3	6.5	2.0	10.1	(0.8)
Post 14	6	9.0	45.2	2.0	10.1	37.9
Post 16	6	6.0	30.2	0.0	0.0	22.8
Post 17	6	9.3	46.7	0.7	3.5	39.4
Post 18	7	2.0	9.0	0.1	0.5	1.7
Post 19	7	5.0	22.5	4.0	18.0	15.2
Post 20	6	10.7	53.8	0.7	3.5	46.4
Post 21	6	5.0	25.1	0.5	2.5	17.8
Post 22	3	6.7	30.2	0.7	3.2	22.9
Post 23	7	3.0	13.5	0.0	0.0	6.2
Post 24	7	6.0	27.0	0.0	0.0	19.7
Post 25	6	8.7	43.7	0.7	3.5	36.4
Post 26	6	12.0	60.3	0.7	3.5	53.0
Post 27	3	2.8	12.6	0.0	0.0	5.3
Post 28	3	1.3	5.9	0.0	0.0	(1.5)
Post 29	7	7.0	31.5	0.0	0.0	24.2
Post 30	3	2.7	12.2	2.0	9.0	4.8
Post 31	3	6.7	30.2	2.0	9.0	22.9
Post 32	7	0.0	0.0	4.0	18.0	(7.3)
Post 33	7	5.0	22.5	1.0	4.5	15.2
Post 34	3	9.3	41.9	0.7	3.2	34.6
Post 35	3	2.7	12.2	2.7	12.2	4.8
Post 36	3	7.3	32.9	2.7	12.2	25.6
Post 37	3	8.0	36.0	0.7	3.2	28.7
Post 38	3	2.0	9.0	0.7	3.2	1.7
Post 39	3	4.7	21.2	1.6	7.2	13.8
Post 40	7	3.0	13.5	6.0	27.0	6.2
Post 41	7	15.0	67.6	5.0	22.5	60.2
Post 42	7	7.0	31.5	1.0	4.5	24.2

1 - Average LAB used to subtract from Gross Sample Activity

7.3	Sample LAB Average
MIN	(7.3)
MAX	60.2
MEAN	13.0
SD	14.1
Uranium DCGL _w	5,000

64

991-2-007
Media RSA Data Summary

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	4	5	8
Serial #:	1158	1164	1158	1164	1158
Cal Due Date:	1/1/04	11/30/03	1/1/04	11/30/03	1/1/04
Analysis Date:	11/10/03	11/10/03	11/12/03	11/12/03	11/13/03
Alpha Eff. (c/d):	33.3%	33.3%	33.3%	33.3%	33.3%
Alpha Bkgd (cpm)	0.2	0.2	0.5	0.2	0.1
Sample Time (min)	2.0	2.0	2.0	2.0	2.0
Bkgd Time (min)	10	10	10	10	10
MDC (dpm/100cm²)	9	9	9	9	9

Manufacturer:	Eberline
Model:	SAC-4
Instrument ID#:	9
Serial #:	1164
Cal Due Date:	11/30/03
Analysis Date:	11/13/03
Alpha Eff. (c/d):	33.3%
Alpha Bkgd (cpm)	0.1
Sample Time (min)	2.0
Bkgd Time (min)	10
MDC (dpm/100cm²)	9

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
Pre 1	8	0	0.0
Pre 2	9	3	3.0
Pre 3	8	1	1.0
Pre 4	9	0	0.0
Pre 6	1	1	0.8
Pre 7	2	1	0.8
Pre 8	1	0	-0.2
Pre 9	4	0	-0.6
Pre 10	5	0	-0.6
Pre 11	1	0	-0.2
Pre 12	2	1	0.8
Pre 13	1	0	-0.2
Pre 14	1	0	-0.2
Pre 16	2	0	-0.2
Pre 17	4	3	2.4
Pre 18	5	0	-0.6
Pre 19	4	0	-0.6
Pre 20	5	0	-0.6
Pre 21	1	0	-0.2
Pre 22	2	0	-0.2
Pre 23	2	1	0.8
Pre 24	1	0	-0.2
Pre 25	2	2	1.8
Pre 26	1	0	-0.2
Pre 27	2	0	-0.2
Pre 28	1	0	-0.2
Pre 29	2	1	0.8
Pre 30	2	0	-0.2
Pre 31	1	0	-0.2
Pre 32	2	0	-0.2
Pre 33	4	0	-0.6
Pre 34	1	1	0.8
Pre 35	2	0	-0.2

65

991-2-007
Media RSA Data Summary

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
Pre 36	1	0	-0.2
Pre 37	2	0	-0.2
Pre 38	1	1	0.8
Pre 39	2	0	-0.2
Pre 40	1	0	-0.2
Pre 41	1	0	-0.2
Pre 42	2	0	-0.2
Post 1	8	0	0.0
Post 2	9	1	1.0
Post 3	8	0	0.0
Post 4	9	1	1.0
Post 6	2	0	-0.2
Post 7	1	0	-0.2
Post 8	4	0	-0.6
Post 9	5	0	-0.6
Post 10	1	0	-0.2
Post 11	2	0	-0.2
Post 12	1	0	-0.2
Post 13	1	0	-0.2
Post 14	2	0	-0.2
Post 16	5	0	-0.6
Post 17	4	0	-0.6
Post 18	5	0	-0.6
Post 19	1	0	-0.2
Post 20	2	1	0.8
Post 21	2	0	-0.2
Post 22	1	0	-0.2
Post 23	2	1	0.8
Post 24	1	1	0.8
Post 25	2	0	-0.2
Post 26	1	0	-0.2
Post 27	2	0	-0.2
Post 28	2	0	-0.2
Post 29	1	0	-0.2
Post 30	2	0	-0.2
Post 31	4	1	0.4
Post 32	1	0	-0.2
Post 33	2	0	-0.2
Post 34	1	1	0.8
Post 35	2	1	0.8
Post 36	1	0	-0.2
Post 37	2	0	-0.2
Post 38	1	0	-0.2
Post 39	1	0	-0.2
Post 40	2	0	-0.2
Post 41	4	1	0.4
Post 42	4	0	-0.6
		MIN	-0.6
		MAX	3.0
		MEAN	0.1
		SD	0.7
		Uranium DCGL _w	1,000

66

991-2-007
Media Conversion Sheet

LOCATION DESCRIPTION	SAMPLE LOCATION NUMBER	SITE SAMPLE ID	NUCLIDE	pCi/g (2)	MDA (pCi/g)	WEIGHT (g)	SURFACE AREA (in ²)	INDIVIDUAL NUCLIDE (dpm/100cm ²) (3)	ESTIMATED MDA (dpm/100cm ²) (4)	URANIUM TOTAL (dpm/100cm ²)	TRANSURANIC TOTAL (dpm/100cm ²)
B991	1	04S0072.028.001	U-234	0.657	0.888	20.6	24.5	19	26	40.2	
			U-235	0.077	0.113			2	3		
			U-238	0.657	0.887			19	26		
			Pu-239								
			Pu-240	0.000	0.878			0	25		
			Am-241	0.000	0.122			0	4		
B991	2	04S0072.030.001	U-234	0.426	0.903	21.4	24.5	13	27	28.9	
			U-235	0.108	0.111			3	3		
			U-238	0.426	0.903			13	27		
			Pu-239								
			Pu-240	0.000	0.806			0	24		
			Am-241	0.000	0.112			0	3		
B991	3, 4	04S0072.031.001	U-234	1.050	0.807	23.7	24.5	35	27	77.8	
			U-235	0.236	0.107			8	4		
			U-238	1.050	0.807			35	27		
			Pu-239								
			Pu-240	0.000	0.878			0	29		
			Am-241	0.000	0.122			0	4		
B991	32	04S0072.032.001	U-234	1.750	0.866	23.4	24.5	58	28	121.7	
			U-235	0.202	0.140			7	5		
			U-238	1.750	0.866			58	28		
			Pu-239								
			Pu-240	0.000	0.907			0	30		
			Am-241	0.000	0.126			0	4		
B991	6,7,8,9	04S0072.033.001	U-234	0.374	0.269	92.0	24.5	48	35	107.0	
			U-235	0.080	0.033			10	4		
			U-238	0.374	0.269			48	35		
			Pu-239								
			Pu-240	0.000	0.246			0	32		
			Am-241	0.000	0.034			0	4		
B991	10	04S0072.034.001	U-234	0.741	0.982	20.4	24.5	21	28	52.3	
			U-235	0.344	0.174			10	5		
			U-238	0.741	0.982			21	28		
			Pu-239								
			Pu-240	0.000	1.001			0	29		
			Am-241	0.000	0.139			0	4		
B991	33, 14	04S0072.035.001	U-234	9.370	9.300	93.0	24.5	1224	1215	1370.6	
			U-235	0.093	0.039			12	5		
			U-238	1.030	0.266			135	35		
			Pu-239								
			Pu-240	0.000	0.273			0	36		
			Am-241	0.000	0.038			0	5		
B991	12, 13, 16	04S0072.036.001	U-234	0.880	0.267	85.3	24.5	105	32	214.0	
			U-235	0.026	0.035			3	4		
			U-238	0.880	0.267			105	32		
			Pu-239								
			Pu-240	0.177	0.250			21	30		
			Am-241	0.025	0.035			3	4		
B991	17, 18, 19, 20	04S0072.037.001	U-234	12.300	9.800	96.1	24.5	1660	1323	1806.3	
			U-235	0.181	0.038			24	5		
			U-238	0.902	0.247			122	33		
			Pu-239								
			Pu-240	0.000	0.264			0	36		
			Am-241	0.000	0.037			0	5		
B991	21, 41, 23	04S0072.038.001	U-234	0.869	0.250	88.1	24.5	108	31	231.4	
			U-235	0.132	0.028			16	3		
			U-238	0.869	0.250			108	31		
			Pu-239								
			Pu-240	0.467	0.307			58	38		
			Am-241	0.065	0.043			8	5		

67

991-2-007
Media Conversion Sheet

LOCATION DESCRIPTION	SAMPLE LOCATION NUMBER	SITE SAMPLE ID	NUCLIDE	pCi/g (2)	MDA (pCi/g)	WEIGHT (g)	SURFACE AREA (in ²)	INDIVIDUAL NUCLIDE (dpm/100cm ²) (3)	ESTIMATED MDA (dpm/100cm ²) (4)	URANIUM TOTAL (dpm/100cm ²)	TRANSURANIC TOTAL (dpm/100cm ²)	
B991	24, 25	04S0072.039.001	U-234	0.345	0.172	85.1	24.5	41	21	88.0		
			U-235	0.046	0.044			6	5			
			U-238	0.345	0.172			41	21			
			Pu-239 Pu-240	0.000	0.199			0	24			
			Am-241	0.000	0.028			0	3			
B991	26, 29, 42, 40	04S0072.040.001	U-234	0.389	0.220	81.6	24.5	45	25	100.0		
			U-235	0.095	0.034			11	4			
			U-238	0.389	0.220			45	25			
			Pu-239 Pu-240	0.000	0.225			0	26			
			Am-241	0.000	0.031			0	4			
B991	22	04S0053.017.001	U-234	1.420	1.260	20.7	24.5	41	37	88.4		
			U-235	0.199	0.161			6	5			
			U-238 Pu-240	1.420	1.260			41	37			
			Am-241	0.000	1.080			0	31			
				0.000	0.150			0	4			
B991	11, 35, 36	04S0053.013.001	U-234	1.180	0.256	91.5	24.5	152	33	312.6		
			U-235	0.072	0.041			9	5			
			U-238 Pu-240	1.180	0.256			152	33			
			Am-241	0.000	0.282			0	36			
				0.000	0.039			0	5			
B991	27, 34	04S0053.014.001	U-234	0.670	0.241	93.0	24.5	88	31	191.2		
			U-235	0.124	0.037			16	5			
			U-238 Pu-240	0.670	0.241			88	31			
			Am-241	0.000	0.248			0	32			
				0.000	0.035			0	5			
B991	28, 37	04S0053.015.001	U-234	6.050	5.190	140.0	24.5	1190	1021	1283.3		
			U-235	0.073	0.020			14	4			
			U-238 Pu-240	0.403	0.135			79	27			
			Am-241	0.000	0.144			0	28			
				0.000	0.020			0	4			
B991	30, 38, 39	04S0053.016.001	U-234	0.901	0.258	88.1	24.5	111	32	242.3		
			U-235	0.156	0.062			19	8			
			U-238 Pu-240	0.901	0.258			111	32			
			Am-241	0.000	0.266			0	33			
				0.000	0.037			0	5			
B991	31	04S0053.018.001	U-234	1.460	0.933	24.4	24.5	50	32	104.8		
			U-235	0.138	0.158			5	5			
			U-238 Pu-240	1.460	0.933			50	32			
			Am-241	0.000	1.166			0	40			
				0.000	0.162			0	6			
										MIN	28.9	0.0
										MAX	1806.3	65.7
										MEAN	358.9	5.0
										SD	533.3	16.2
										DCGL _w =	5,000	100

- Paint samples collected in B991 were analyzed as grouped composites using the Canberra ISOCs Gamma Spectroscopy system.
- Critical Level test criterion were utilized in this analysis. If the net peak area was less than the L_c (critical level), then a "not detected" or "zero" decision was made. The LC value is always less than the applicable MDA, but greater than zero.
- Individual nuclide dpm/100 cm² conversion is conservatively based on the composite sample weight. This assumption presumes that the total sample activity from composited samples is located at one, single sample location. This methodology ensures that no single sample location exceeds the applicable DCGL_w.
- Estimated MDA dpm/100 cm² conversion is conservatively based on the composite sample weight.

68

SURVEY UNIT 991-2-008
RADIOLOGICAL DATA SUMMARY - PDS

Survey Unit Description: B991 West Tunnel Access Corridor

70

991-2-008
PDS Data Summary

<u>Total Surface Activity Measurements</u>			<u>Removable Activity Measurements</u>		
	17	18		17	18
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-12.6	dpm/100 cm ²	MIN	-1.8	dpm/100 cm ²
MAX	23.3	dpm/100 cm ²	MAX	2.7	dpm/100 cm ²
MEAN	4.6	dpm/100 cm ²	MEAN	0.2	dpm/100 cm ²
STD DEV	9.0	dpm/100 cm ²	STD DEV	1.3	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²	TRANSURANIC DCGL _w	20	dpm/100 cm ²

71

**SURVEY UNIT 991-2-008
TSA - DATA SUMMARY**

Manufacturer:	NE Tech	NE Tech
Model:	DP-6	DP-6
Instrument ID#:	5	9
Serial #:	1260	3114
Cal Due Date:	6/2/04	4/29/04
Analysis Date:	1/9/04	1/9/04
Alpha Eff. (c/d):	0.223	0.228
Alpha Bkgd (cpm)	3.0	1.0
Sample Time (min)	1.5	1.5
LAB Time (min)	1.5	1.5
MDC (dpm/100cm²)	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
1	5	0.0	0.0	3.0	13.5	-12.6
2	5	4.0	17.9	2.0	9.0	5.3
3	5	3.3	14.8	3.3	14.8	2.2
4	5	3.3	14.8	2.7	12.1	2.2
5	5	4.7	21.1	4.7	21.1	8.5
6	5	8.0	35.9	4.0	17.9	23.3
7	5	3.3	14.8	0.0	0.0	2.2
8	5	7.3	32.7	2.7	12.1	20.1
9	5	4.0	17.9	4.7	21.1	5.3
10	5	4.0	17.9	2.0	9.0	5.3
11	5	2.7	12.1	2.0	9.0	-0.5
12	5	1.3	5.8	4.0	17.9	-6.8
13	5	4.7	21.1	4.7	21.1	8.5
14	5	6.0	26.9	2.7	12.1	14.3
15	5	5.3	23.8	4.0	17.9	11.2
16	5	1.3	5.8	0.8	3.6	-6.8
17	5	2.7	12.1	0.0	0.0	-0.5
18	5	3.3	14.8	3.3	14.8	2.2

1 - Average LAB used to subtract from Gross Sample Activity

12.6	Sample LAB Average
MIN	-12.6
MAX	23.3
MEAN	4.6
SD	9.0
Transuranic DCGL _w	100

QC Measurements

8 QC	9	2.7	11.8	4.7	20.6	1.5
14 QC	9	3.3	14.5	0.0	0.0	4.2

1 - Average QC LAB used to subtract from Gross Sample Activity

10.3	QC LAB Average
MIN	1.5
MAX	4.2
MEAN	2.9
Transuranic DCGL _w	100

72

**SURVEY UNIT 991-2-008
RSC - DATA SUMMARY**

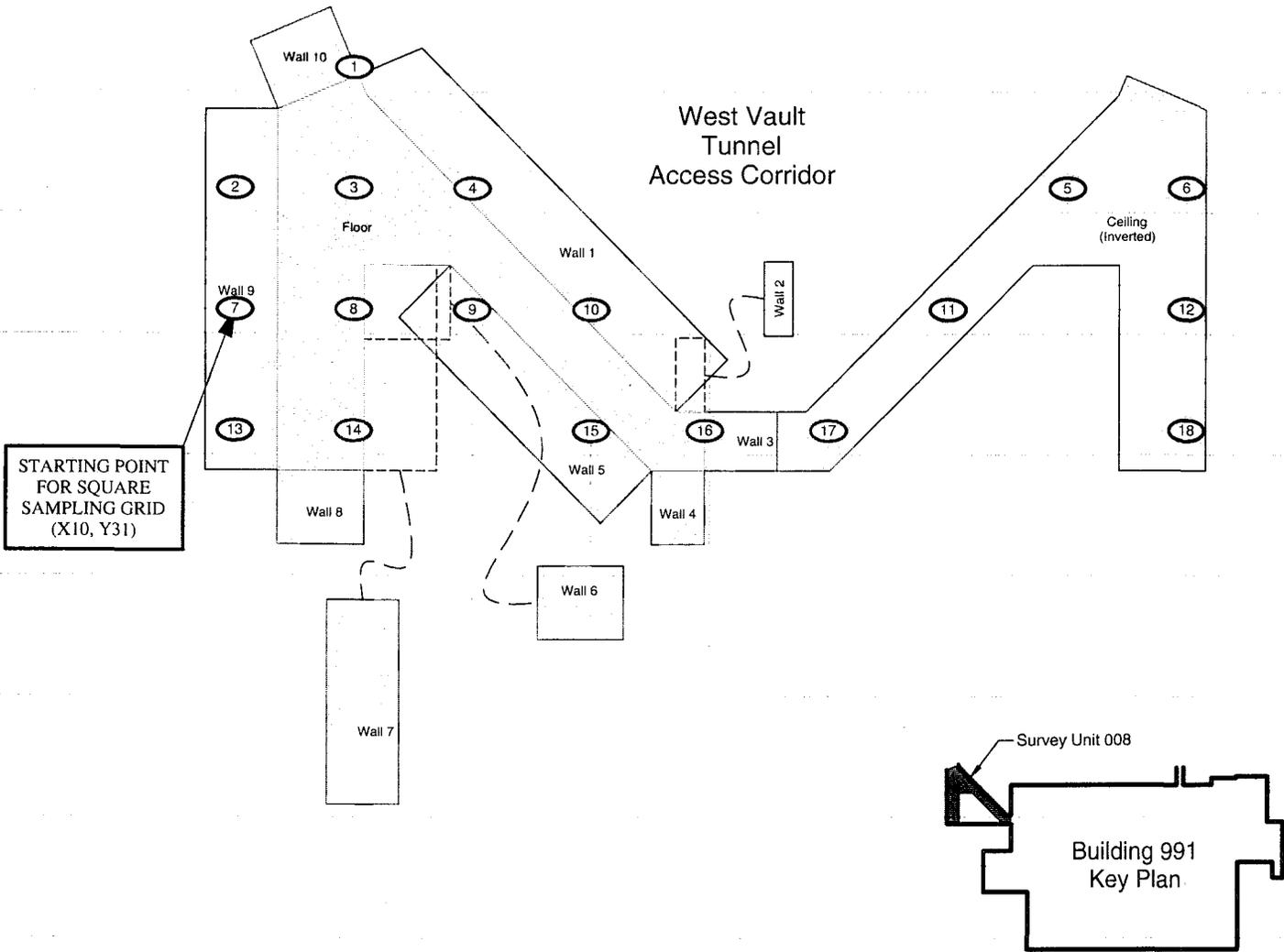
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	4	2	2.7
2	2	1	-0.3
3	3	1	0.9
4	4	0	-0.3
5	4	0	-0.3
6	2	2	1.2
7	3	1	0.9
8	4	2	2.7
9	4	0	-0.3
10	2	2	1.2
11	3	0	-0.6
12	4	0	-0.3
13	4	0	-0.3
14	2	0	-1.8
15	3	0	-0.6
16	4	1	1.2
17	4	0	-0.3
18	2	0	-1.8
		MIN	-1.8
		MAX	2.7
		MEAN	0.2
		SD	1.3
		Transuranic DCGL_w	20

73

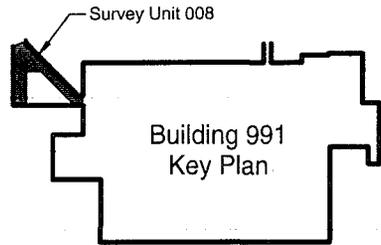
PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-008 Classification: 1
 Building: 991
 Survey Unit Description: B991 Interior, West Tunnel Access Corridor
 Total Area: 440 sq. m. Total Floor Area: 112 sq. m.
 Grid Spacing for Survey Points: 5m. X 5m.

**B991 Interior
 Survey Unit 008**



STARTING POINT
 FOR SQUARE
 SAMPLING GRID
 (X10, Y31)



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> ⊙ Smear & TSA Location ⊕ Smear, TSA & Sample Location ■ Open/Inaccessible Area □ Area in Another Survey Unit 		<p>Neither the United States Government nor Kaiser Hill Co., nor CH2MHILL, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>	<p>N</p>	<p>0 FEET 30</p> <p>0 METERS 10</p> <p>1 inch = 24 feet 1 grid sq. = 1 sq. m.</p>	<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p> <p>CH2MHILL Communications Group</p> <p>KAISER HILL</p> <p>MAP ID: 03-JS/991-008-SC Jan. 13, 2004</p>
<p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 6, 7, 8, 9, 10</p>		<p>Scan Area</p>			

74

**SURVEY UNIT 991-2-EXH
RADIOLOGICAL DATA SUMMARY - PDS**

Survey Unit Description: B991 Exhaust Ventilation System

75

991-2-EXH
PDS Data Summary

<u>Total Surface Activity Measurements</u>			<u>Removable Activity Measurements</u>		
	60	93		60	93
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-16.1	dpm/100 cm ²	MIN	-1.5	dpm/100 cm ²
MAX	89.1	dpm/100 cm ²	MAX	10.9	dpm/100 cm ²
MEAN	24.3	dpm/100 cm ²	MEAN	0.8	dpm/100 cm ²
STD DEV	24.7	dpm/100 cm ²	STD DEV	0.2	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²	TRANSURANIC DCGL _w	20	dpm/100 cm ²

76

**SURVEY UNIT 991-2-EXH
TSA - DATA SUMMARY**

Manufacturer:	NE Tech	NE Tech	NE Tech				
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	1	2	3	4	5	6	7
Serial #:	2352	3115	2352	1682	2352	2352	2352
Cal Due Date:	2/8/04	2/27/04	2/8/04	1/16/04	2/8/04	2/8/04	2/8/04
Analysis Date:	9/30/03	9/30/03	10/1/03	10/9/03	10/15/03	10/28/03	10/29/03
Alpha Eff. (c/d):	0.228	0.219	0.228	0.216	0.228	0.228	0.228
Alpha Bkgd (cpm)	0.0	0.0	0.0	4.0	3.0	4.0	1.0
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm²)	48.0	48.0	48.0	48.0	48.0	48.0	48.0

Manufacturer:	NE Tech	NE Tech	NE Tech
Model:	DP-6	DP-6	DP-6
Instrument ID#:	12	17	18
Serial #:	1379	3125	1271
Cal Due Date:	12/25/03	3/24/04	6/22/04
Analysis Date:	11/14/03	1/20/04	1/21/04
Alpha Eff. (c/d):	0.222	0.221	0.227
Alpha Bkgd (cpm)	1.0	1.0	2.0
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm²)	48.0	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
1	2	0.0	0.0	4.0	18.3	-16.1
2	2	4.0	18.3	3.0	13.7	2.1
3	2	5.0	22.8	4.0	18.3	6.7
4	2	9.0	41.1	0.0	0.0	25.0
5	2	14.0	63.9	0.0	0.0	47.8
6	2	6.0	27.4	1.0	4.6	11.3
7	2	3.0	13.7	1.0	4.6	-2.4
8	2	3.0	13.7	3.0	13.7	-2.4
9	2	7.0	32.0	1.0	4.6	15.8
10	2	4.0	18.3	1.3	5.9	2.1
11	2	3.3	15.1	2.0	9.1	-1.0
12	2	4.7	21.5	1.3	5.9	5.3
13	3	7.3	32.0	3.3	14.5	15.9
14	3	6.7	29.4	3.3	14.5	13.3
15	3	6.7	29.4	8.0	35.1	13.3
16	3	3.3	14.5	4.0	17.5	-1.6
17	3	5.3	23.2	2.7	11.8	7.1
18	3	7.3	32.0	3.3	14.5	15.9
19	3	5.3	23.2	2.0	8.8	7.1
20	3	3.3	14.5	2.0	8.8	-1.6
21	3	1.3	5.7	2.0	8.8	-10.4
22	3	9.3	40.8	0.7	3.1	24.7
23	3	6.0	26.3	4.0	17.5	10.2
24	3	2.0	8.8	4.0	17.5	-7.3
25	3	6.7	29.4	0.7	3.1	13.3
26	3	3.3	14.5	4.0	17.5	-1.6
27	4	12.0	55.6	2.0	9.3	39.4
28	4	22.7	105.1	5.3	24.5	89.0

77

**SURVEY UNIT 991-2-EXH
TSA - DATA SUMMARY**

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm ²)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm ²)	Sample Net Activity (dpm/100cm ²) ¹
29	4	16.7	77.3	4.7	21.8	61.2
30	4	18.0	83.3	5.3	24.5	67.2
31	5	4.0	17.5	3.0	13.2	1.4
32	5	4.0	17.5	2.7	11.8	1.4
33	5	6.7	29.4	1.3	5.7	13.3
34	5	4.7	20.6	1.3	5.7	4.5
35	5	5.3	23.2	0.7	3.1	7.1
36	5	4.7	20.6	4.7	20.6	4.5
37	5	14.0	61.4	2.0	8.8	45.3
38	5	20.0	87.7	2.0	8.8	71.6
39	5	8.0	35.1	5.0	21.9	19.0
40	5	24.0	105.3	6.0	26.3	89.1
41	17	9.3	42.1	6.7	30.3	26.0
42	18	4.7	20.6	7.3	32.0	4.5
43	5	9.0	39.5	5.0	21.9	23.4
44	5	16.0	70.2	8.0	35.1	54.1
45	5	6.0	26.3	6.0	26.3	10.2
46	5	5.0	21.9	4.0	17.5	5.8
47	5	9.0	39.5	6.0	26.3	23.4
48	5	9.0	39.5	9.0	39.5	23.4
49	6	16.7	73.2	8.0	35.1	57.1
50	6	22.7	99.6	2.7	11.8	83.4
51	6	15.3	67.1	4.0	17.5	51.0
52	6	6.7	29.4	2.0	8.8	13.3
53	6	4.7	20.6	1.3	5.7	4.5
54	6	8.0	35.1	4.7	20.6	19.0
55	6	8.7	38.2	8.0	35.1	22.0
56	6	12.0	52.6	2.7	11.8	36.5
57	6	12.7	55.7	2.7	11.8	39.6
58	6	10.7	46.9	4.7	20.6	30.8
59	6	8.7	38.2	2.7	11.8	22.0
60	7	14.7	64.5	0.0	0.0	48.4
61	7	12.7	55.7	2.0	8.8	39.6
62	7	10.0	43.9	5.3	23.2	27.7
63	7	7.3	32.0	5.3	23.2	15.9
64	7	8.0	35.1	7.3	32.0	19.0
65	7	16.0	70.2	7.3	32.0	54.1
66	7	16.7	73.2	5.3	23.2	57.1
67	7	18.7	82.0	5.3	23.2	65.9
68	7	10.0	43.9	4.7	20.6	27.7
69	12	8.7	39.2	4.0	18.0	23.1
70	12	3.0	13.5	4.0	18.0	-2.6
71	12	3.3	14.9	5.3	23.9	-1.3
72	12	4.0	18.0	1.3	5.9	1.9
73	12	4.0	18.0	1.0	4.5	1.9
74	12	5.3	23.9	4.0	18.0	7.8
75	12	5.0	22.5	2.0	9.0	6.4
76	12	5.3	23.9	4.7	21.2	7.8
77	12	6.0	27.0	0.0	0.0	10.9
78	12	5.3	23.9	2.0	9.0	7.8
79	12	12.0	54.1	3.3	14.9	37.9
80	12	4.0	18.0	0.7	3.2	1.9

178

**SURVEY UNIT 991-2-EXH
TSA - DATA SUMMARY**

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2) ¹
81	12	14.7	66.2	2.7	12.2	50.1
82	12	7.3	32.9	10.7	48.2	16.8
83	12	18.0	81.1	0.7	3.2	65.0
84	12	11.3	50.9	4.7	21.2	34.8
85	12	20.7	93.2	0.7	3.2	77.1
86	12	8.7	39.2	2.0	9.0	23.1
87	12	10.0	45.0	1.3	5.9	28.9
88	12	13.3	59.9	7.3	32.9	43.8
89	12	16.0	72.1	7.3	32.9	56.0
90	12	5.3	23.9	4.7	21.2	7.8
91	12	20.7	93.2	3.3	14.9	77.1
92	12	14.7	66.2	7.3	32.9	50.1
93	12	7.3	32.9	2.7	12.2	16.8

1 - Average LAB used to subtract from Gross Sample Activity

2 - The initial Sample Net Activity for location 41 was 106.7 dpm/100cm2, and location 42 was 111.1 dpm/100cm2.

These locations were sealed and allowed to decay. Re-survey results were less than the transuranic DCGLW, and are reported. No further investigations are required.

16.1	Sample LAB Average
MIN	-16.1
MAX	89.1
MEAN	24.3
SD	24.7
Transuranic DCGL _w	100

QC Measurements

33 QC	17	6.7	30.3	4.0	18.1	7.6
37 QC	17	8.7	39.4	2.0	9.0	16.6
38 QC	17	3.3	14.9	4.7	21.3	-7.8
50 QC	17	25.7	116.3	6.7	30.3	93.5
39 QC	18	16.7	73.2	8.0	35.1	50.5

1 - Average QC LAB used to subtract from Gross Sample Activity

22.8	QC LAB Average
MIN	-7.8
MAX	93.5
MEAN	32.1
Transuranic DCGL _w	100

79

**SURVEY UNIT 991-2-EXH
RSC - DATA SUMMARY**

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	8	9	10	11
Serial #:	1158	1164	984	845
Cal Due Date:	2/8/04	11/30/03	1/1/04	1/15/04
Analysis Date:	11/5/03	11/5/03	11/5/03	11/5/03
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.4	0.2	0.0	0.0
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	9.0	9.0	9.0	9.0

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	13	14	15	16
Serial #:	1158	1164	984	845
Cal Due Date:	1/1/04	11/30/03	1/1/04	1/15/04
Analysis Date:	11/14/03	11/14/03	11/14/03	11/14/03
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.3	0.4	0.5	0.0
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	9.0	9.0	9.0	9.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	8	0	-1.2
2	9	0	-0.6
3	10	1	1.5
4	11	2	3.0
5	8	0	-1.2
6	9	0	-0.6
7	10	1	1.5
8	11	0	0.0
9	8	0	-1.2
10	9	1	0.9
11	10	1	1.5
12	11	0	0.0
13	8	1	0.3
14	9	3	3.9
15	10	2	3.0

80

**SURVEY UNIT 991-2-EXH
RSC - DATA SUMMARY**

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
16	11	0	0.0
17	8	0	-1.2
18	9	1	0.9
19	10	3	4.5
20	11	1	1.5
21	8	2	1.8
22	9	3	3.9
23	10	2	3.0
24	11	0	0.0
25	8	0	-1.2
26	9	0	-0.6
27	10	4	6.1
28	11	2	3.0
29	8	1	0.3
30	9	2	2.4
31	8	1	0.3
32	9	0	-0.6
33	10	1	1.5
34	11	0	0.0
35	8	2	1.8
36	9	0	-0.6
37	10	0	0.0
38	11	0	0.0
39	8	8	10.9
40	9	5	7.0
41	10	0	0.0
42	11	2	3.0
43	8	1	0.3
44	9	1	0.9
45	10	0	0.0
46	11	1	1.5
47	8	0	-1.2
48	9	0	-0.6
49	10	2	3.0
50	8	2	1.8
51	9	3	3.9
52	11	0	0.0
53	8	0	-1.2
54	9	0	-0.6
55	10	0	0.0
56	11	1	1.5
57	8	0	-1.2
58	9	0	-0.6
59	10	0	0.0
60	11	1	1.5

81

**SURVEY UNIT 991-2-EXH
RSC - DATA SUMMARY**

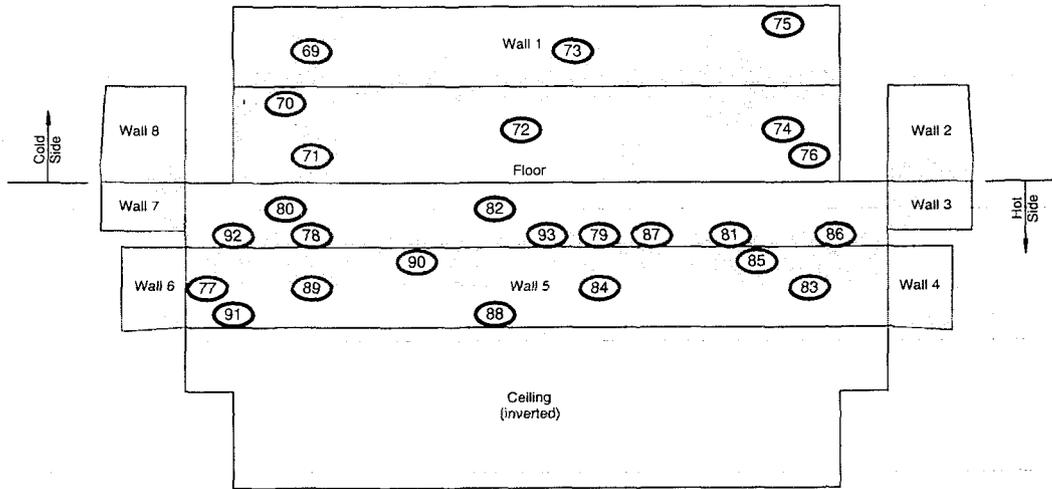
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
61	8	1	0.3
62	9	1	0.9
63	10	0	0.0
64	11	0	0.0
65	8	1	0.3
66	9	1	0.9
67	10	0	0.0
68	11	0	0.0
69	13	0	-0.9
70	14	0	-1.2
71	15	0	-1.5
72	16	0	0.0
73	13	1	0.6
74	14	0	-1.2
75	15	0	-1.5
76	16	0	0.0
77	13	0	-0.9
78	14	2	1.8
79	15	2	1.5
80	16	3	4.5
81	13	0	-0.9
82	14	0	-1.2
83	15	3	3.0
84	16	0	0.0
85	13	0	-0.9
86	14	0	-1.2
87	15	0	-1.5
88	16	1	1.5
89	13	1	0.6
90	14	0	-1.2
91	15	2	1.5
92	16	2	3.0
93	13	0	-0.9
		MIN	-1.5
		MAX	10.9
		MEAN	0.8
		SD	0.2
		Transuranic DCGL_w	20

82

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2 Survey Unit: 991-2-EXH Classification: 2
 Building: 991
 Survey Unit Description: 991 Exhaust Ventilation System
 Total Area: N/A sq. m. Total Floor Area: N/A sq. m.

B991 Interior
 Plenum



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> ⊕ Smear & TSA Location ⬠ Smear, TSA & Sample Location ■ Open/Inaccessible Area □ Area in Another Survey Unit 		<p>Neither the United States Government nor Kaiser Hill Co., nor CH2MHill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>		<p>N</p> <p>↑</p>		<p>0 FEET 30</p> <p>0 METERS 10</p> <p>1 inch = 24 feet 1 grid sq. = 1 sq. m.</p>		<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p>	
		<p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 12</p>				<p>CH2MHILL Communications Group</p>		<p>KAISER HILL</p> <p>MAP ID: 03-JS/991-Plen-Rad Jan. 29, 2004</p>	

83

ATTACHMENT C

Chemical Data Summaries and Sample Maps

ATTACHMENT C-1

PDSR Beryllium Data Summaries and Sample Maps

Beryllium Data Summary

Sample Number	Survey Map Location	Room	Sample Location	Result (ug/100 cm ³)
Building 991				
991-01212004-23-001	1	150	Floor, random	< 0.1
991-01212004-23-002	2	148	Floor, random	< 0.1
991-01212004-23-003	3	158	Floor, random	< 0.1
991-01212004-23-004	4	150	Floor, random	< 0.1
991-01212004-23-005	5	402	Floor, random	< 0.1
991-01212004-23-006	6	Corridor B	Floor, random	< 0.1
991-01212004-23-007	7	140 Mezzanine	Floor, random	< 0.1
991-01212004-23-008	8	118	Floor, random	< 0.1
991-01212004-23-009	9	140	Floor, random	< 0.1
991-01212004-23-010	10	170	Floor, random	< 0.1
991-01212004-23-011	11	147	Floor, random	< 0.1
991-01212004-23-012	12	153	Floor, random	< 0.1
991-01212004-23-013	13	150	Floor, random	0.115 (1)
991-01212004-23-014	14	129	Floor, random	< 0.1
991-01212004-23-015	15	101	Floor, random	< 0.1
991-01212004-23-016	16	170	Floor, random	< 0.1
991-01212004-23-017	17	101	Floor, random	< 0.1
991-01212004-23-018	18	128A	Floor, random	< 0.1
991-01212004-23-019	19	163	Floor, random	< 0.1
991-01212004-23-020	20	138	Floor, random	< 0.1
991-01212004-23-021	21	170	Floor, random	< 0.1
991-01212004-23-022	22	140	Floor, random	< 0.1
991-01212004-23-023	23	153	Floor, random	< 0.1
991-01212004-23-024	24	105	Floor, random	< 0.1
991-01212004-23-025	25	121A	Floor, random	< 0.1
991-01212004-23-026	26	140A	Floor, random	< 0.1
991-01212004-23-027	27	149	Floor, random	< 0.1
991-01212004-23-028	28	170	Floor, random	< 0.1
991-01212004-23-029	29	143	Floor, random	< 0.1
991-01212004-23-030	30	142A	Floor, random	< 0.1
991-01212004-23-031	31	153	Floor, random	< 0.1
991-01212004-23-032	32	132	Floor, random	< 0.1
991-01212004-23-033	33	101	Floor, random	< 0.1
991-01212004-23-034	34	108	Floor, random	< 0.1
991-01212004-23-035	35	110A	Floor, random	< 0.1
991-01212004-23-036	36	124	Floor, random	< 0.1
991-01212004-23-037	37	Corridor B	Floor, random	< 0.1
991-01212004-23-038	38	130	Floor, random	< 0.1
991-01212004-23-039	39	123	Floor, random	< 0.1
991-01212004-23-040	40	146	Floor, random	< 0.1
991-01212004-23-041	41	155	Floor, random	< 0.1
991-01212004-23-042	42	142B	Floor, random	< 0.1
991-01212004-23-043	43	405	Floor, random	< 0.1
991-01212004-23-044	44	405	Floor, random	< 0.1
991-01212004-23-045	45	170	Floor, random	< 0.1
991-01212004-23-046	46	156	Floor, random	< 0.1
991-01292004-23-131	131	150	Floor, biased, next to #13	< 0.1 (1)
991-01292004-23-132	132	150	Floor, biased, next to #13	< 0.1 (1)
991-01292004-23-133	133	150	Floor, biased, next to #13	< 0.1 (1)
991-01292004-23-134	134	150	Floor, biased, next to #13	< 0.1 (1)
991-01102004-23-001	1	Basement	Floor, random	< 0.1
991-01102004-23-002	2	Basement	Floor, random	< 0.1
991-01102004-23-003	3	Basement	Floor, random	< 0.1
991-01102004-23-004	4	Basement	Floor, random	< 0.1
991-01102004-23-005	5	Basement	Floor, random	< 0.1
991-01102004-23-006	6	Basement	Floor, random	< 0.1
991-01102004-23-007	7	Basement	Floor, random	< 0.1
991-01102004-23-008	8	Basement	Floor, random	< 0.1
991-01102004-23-009	9	Basement	Floor, random	< 0.1

Sample Number	Survey Map Location	Room	Sample Location	Result (ug/100 cm ²)
991-01102004-23-010	10	Basement	Floor, random	< 0.1
991-01102004-23-011	11	Basement	Floor, random	0.359 (2)
991-01102004-23-012	12	Basement	Floor, random	< 0.1
991-01102004-23-013	13	Basement	Floor, random	< 0.1
991-01102004-23-014	14	Basement	Floor, random	0.113 (3)
991-01102004-23-015	15	Basement	Floor, random	< 0.1
991-01102004-23-016	16	Basement	Floor, random	< 0.1
991-01102004-23-017	17	Basement	Floor, random	< 0.1
991-01102004-23-018	18	Basement	Floor, random	0.583 (4)
991-01102004-23-019	19	Basement	Floor, random	< 0.1
991-01102004-23-020	20	Basement	Floor, random	< 0.1
991-01102004-23-021	21	Basement	Floor, random	< 0.1
991-01102004-23-022	22	Basement	Floor, random	< 0.1
991-01102004-23-023	23	Basement	Floor, random	< 0.1
991-01102004-23-024	24	Basement	Floor, random	0.414 (5)
991-01102004-23-025	25	Basement	Floor, random	< 0.1
991-01102004-23-026	26	Basement	Floor, random	< 0.1
991-01102004-23-027	27	Basement	Floor, random	< 0.1
991-01292004-23-111	111	Basement	Floor, biased, next to #11	< 0.1 (2)
991-01292004-23-112	112	Basement	Floor, biased, next to #11	< 0.1 (2)
991-01292004-23-113	113	Basement	Floor, biased, next to #11	< 0.1 (2)
991-01292004-23-114	114	Basement	Floor, biased, next to #11	< 0.1 (2)
991-01292004-23-141	141	Basement	Floor, biased, next to #14	< 0.1 (3)
991-01292004-23-142	142	Basement	Floor, biased, next to #14	< 0.1 (3)
991-01292004-23-143	143	Basement	Floor, biased, next to #14	< 0.1 (3)
991-01292004-23-144	144	Basement	Floor, biased, next to #14	< 0.1 (3)
991-01292004-23-181	181	Basement	Floor, biased, next to #18	< 0.1 (4)
991-01292004-23-182	182	Basement	Floor, biased, next to #18	< 0.1 (4)
991-01292004-23-183	183	Basement	Floor, biased, next to #18	< 0.1 (4)
991-01292004-23-184	184	Basement	Floor, biased, next to #18	< 0.1 (4)
991-01292004-23-241	241	Basement	Floor, biased, next to #24	< 0.1 (5)
991-01292004-23-242	242	Basement	Floor, biased, next to #24	< 0.1 (5)
991-01292004-23-243	243	Basement	Floor, biased, next to #24	< 0.1 (5)
991-01292004-23-244	244	Basement	Floor, biased, next to #24	< 0.1 (5)
991-10152003-23-001	1	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-002	2	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-003	3	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-004	4	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-005	5	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-006	6	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-007	7	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-0-08	8	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-009	9	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-010	10	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-011	11	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-012	12	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-013	13	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-014	14	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-015	15	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-016	16	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-017	17	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-018	18	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-019	19	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-020	20	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-021	21	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-022	22	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-023	23	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-024	24	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-025	25	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-026	26	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-027	27	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-028	28	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-029	29	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-030	30	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-031	31	991 Ventilation System	Internal System Ducting, biased	< 0.1

Sample Number	Survey Map Location	Room	Sample Location	Result (ug/100 cm ²)
991-10152003-23-032	32	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-033	33	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-034	34	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-035	35	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-036	36	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-037	37	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-038	38	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-039	39	991 Ventilation System	Internal System Ducting, biased	0.169 (6)
991-10152003-23-040	40	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-041	41	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-042	42	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-043	43	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-044	44	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-045	45	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-046	46	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-047	47	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-048	48	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-49	49	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-50	50	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-51	51	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-52	52	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-53	53	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-54	54	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-55	55	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-56	56	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-57	57	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-58	58	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-59	59	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-60	60	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-61	61	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-62	62	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-63	63	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-64	64	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-65	65	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-66	66	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-10152003-23-67	67	991 Ventilation System	Internal System Ducting, biased	0.153 (6)
991-10152003-23-68	68	991 Ventilation System	Internal System Ducting, biased	< 0.1
991-11142003-23-001	1	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-002	2	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-003	3	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-004	4	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-005	5	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-006	6	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-007	7	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-008	8	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-009	9	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-010	10	991 Roof Plenum	Internal to Plenum, random	0.202 (7)
991-11142003-23-011	11	991 Roof Plenum	Internal to Plenum, random	0.228 (7)
991-11142003-23-012	12	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-013	13	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-014	14	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-015	15	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-016	16	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-017	17	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-018	18	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-019	19	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-020	20	991 Roof Plenum	Internal to Plenum, random	< 0.1
991-11142003-23-021	21	991 Roof Plenum	Internal to Plenum, random	0.278 (7)
991-11142003-23-022	22	991 Roof Plenum	Internal to Plenum, random	0.122 (7)
991-11142003-23-023	23	991 Roof Plenum	Internal to Plenum, random	0.147 (7)
991-11142003-23-024	24	991 Roof Plenum	Internal to Plenum, random	0.482 (7)
991-11142003-23-025	25	991 Roof Plenum	Internal to Plenum, random	0.445 (7)
991-01202004-23-001	26	991 Roof Plenum	Internal to Plenum, biased	< 0.1
991-01202004-23-002	27	991 Roof Plenum	Internal to Plenum, biased	< 0.1
991-01202004-23-003	28	991 Roof Plenum	Internal to Plenum, biased	< 0.1

Sample Number	Survey Map Location	Room	Sample Location	Result (ug/100 cm ²)
991-01202004-23-004	29	991 Roof Plenum	Internal to Plenum, biased	< 0.1
991-01202004-23-005	30	991 Roof Plenum	Internal to Plenum, biased	< 0.1
991-01202004-23-006	31	991 Roof Plenum	Internal to Plenum, biased	0.391 (7)
991-01202004-23-007	32	991 Roof Plenum	Internal to Plenum, biased	0.162 (7)
991-01202004-23-008	33	991 Roof Plenum	Internal to Plenum, biased	< 0.1
991-01202004-23-009	34	991 Roof Plenum	Internal to Plenum, biased	0.183 (7)
991-01202004-23-010	35	991 Roof Plenum	Internal to Plenum, biased	< 0.1
991-01202004-23-011	36	991 Roof Plenum	Internal to Plenum, biased	< 0.1
991-01292004-23-601	601	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-602	602	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-603	603	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-604	604	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-701	701	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-702	702	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-703	703	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-704	704	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-901	901	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-902	902	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-903	903	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
991-01292004-23-904	904	991 Roof Plenum	Internal to Plenum, biased	< 0.1 (7)
Building 991 East Tunnel and 998 Vault				
991-12162003-23-001	1	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-002	2	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-003	3	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-004	4	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-005	5	998 Vault	Floor, random	< 0.1
991-12162003-23-006	6	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-007	7	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-008	8	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-009	9	998 Vault	Floor, random	< 0.1
991-12162003-23-010	10	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-011	11	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-012	12	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-013	13	991 East Tunnel	Floor, random	< 0.1
991-12162003-23-014	14	998 Vault	Floor, random	< 0.1

Footnotes:

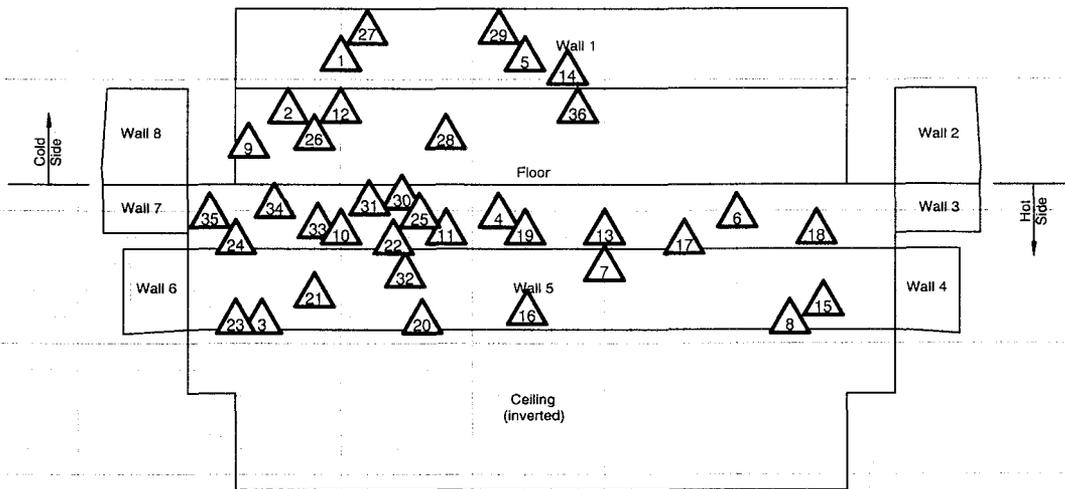
- (1) Beryllium smear result at map location #13 in Room 150 was 0.115 ug/100cm². The area was decontaminated and resurveyed. Four post-decontamination smears (#131, 132, 133 and 134) were all <0.1 ug/100cm². No further follow-up actions are required.
- (2) Beryllium smear result at map location #11 in the 991 basement was 0.359 ug/100cm². The area was decontaminated and resurveyed. Four post-decontamination smears (#111, 112, 113 and 114) were all <0.1 ug/100cm². No further follow-up actions are required.
- (3) Beryllium smear result at map location #14 in the 991 basement was 0.113 ug/100cm². The area was decontaminated and resurveyed. Four post-decontamination smears (#141, 142, 143 and 144) were all <0.1 ug/100cm². No further follow-up actions are required.
- (4) Beryllium smear result at map location #18 in the 991 basement was 0.583 ug/100cm². The area was decontaminated and resurveyed. Four post-decontamination smears (#181, 182, 183 and 184) were all <0.1 ug/100cm². No further follow-up actions are required.
- (5) Beryllium smear result at map location #24 in the 991 basement was 0.414 ug/100cm². The area was decontaminated and resurveyed. Four post-decontamination smears (#241, 242, 243 and 244) were all <0.1 ug/100cm². No further follow-up actions are required.
- (6) Beryllium smear results at map location #39 and #67 of the 991 Ventilation System were 0.169 and 0.153 ug/100cm², respectively. These areas of the 991 Ventilation System were physically removed and disposed of as beryllium waste. No further follow-up actions are required.
- (7) Beryllium smear results at map location #10, #11, and #21-25 in the 991 Roof Plenum were above the 0.1ug/100cm² PDSP investigation level. The area was decontaminated and resurveyed. Three post-decontamination smears (#31, #32 and #34) were still above the 0.1ug/100cm² PDSP investigation level, therefore additional decontamination and re-surveys were performed. Twelve additional post-decontamination smears were collected; #601-604 surrounding #31, #701-704 surrounding #32, and #901-904 surrounding #34, and all were <0.1 ug/100cm². Locations #601-604, 701-704 and 901-904 are not show on the map due to space restrictions. No further follow-up actions are required.

CHEMICAL SAMPLE MAP

Building 991 Roof Plenum
Beryllium

PAGE 1 OF 3

B991 Interior Plenum



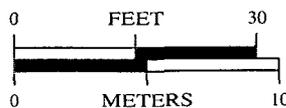
SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location

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- Open/Inaccessible Area
- Area in Another Survey Unit



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



MAP ID: 03-JS/991-Plenum

Nov. 19, 2003

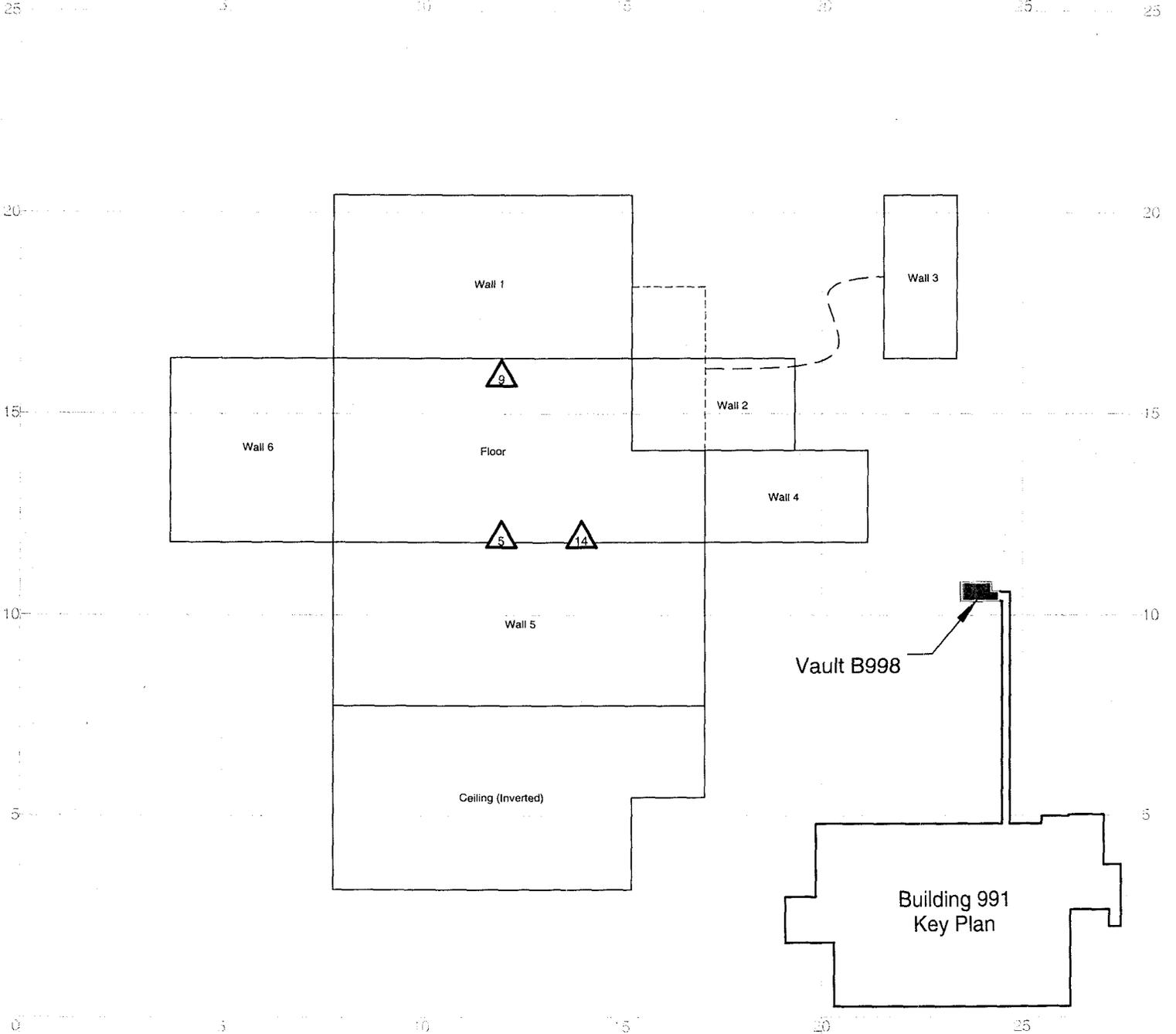
9/21

CHEMICAL SAMPLE MAP

B991 East Tunnel & Vault
 Floor Area = 155 sq. m = 1,670 sq. ft.
 No. of SU Random Samples = 14

Vault B998

PAGE 1 OF 2



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p>Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>	<p>N</p>	<p>0 FEET 15</p> <p>0 METERS 5</p>	<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> </div> <p>MAP ID: 03-JS/991004BE1 Jan 5, 2004</p>
<p>B998 Interior Survey Unit 991-003-Be</p>		<p>1 inch = 12 feet 1 grid sq. = 1 sq. m.</p>		

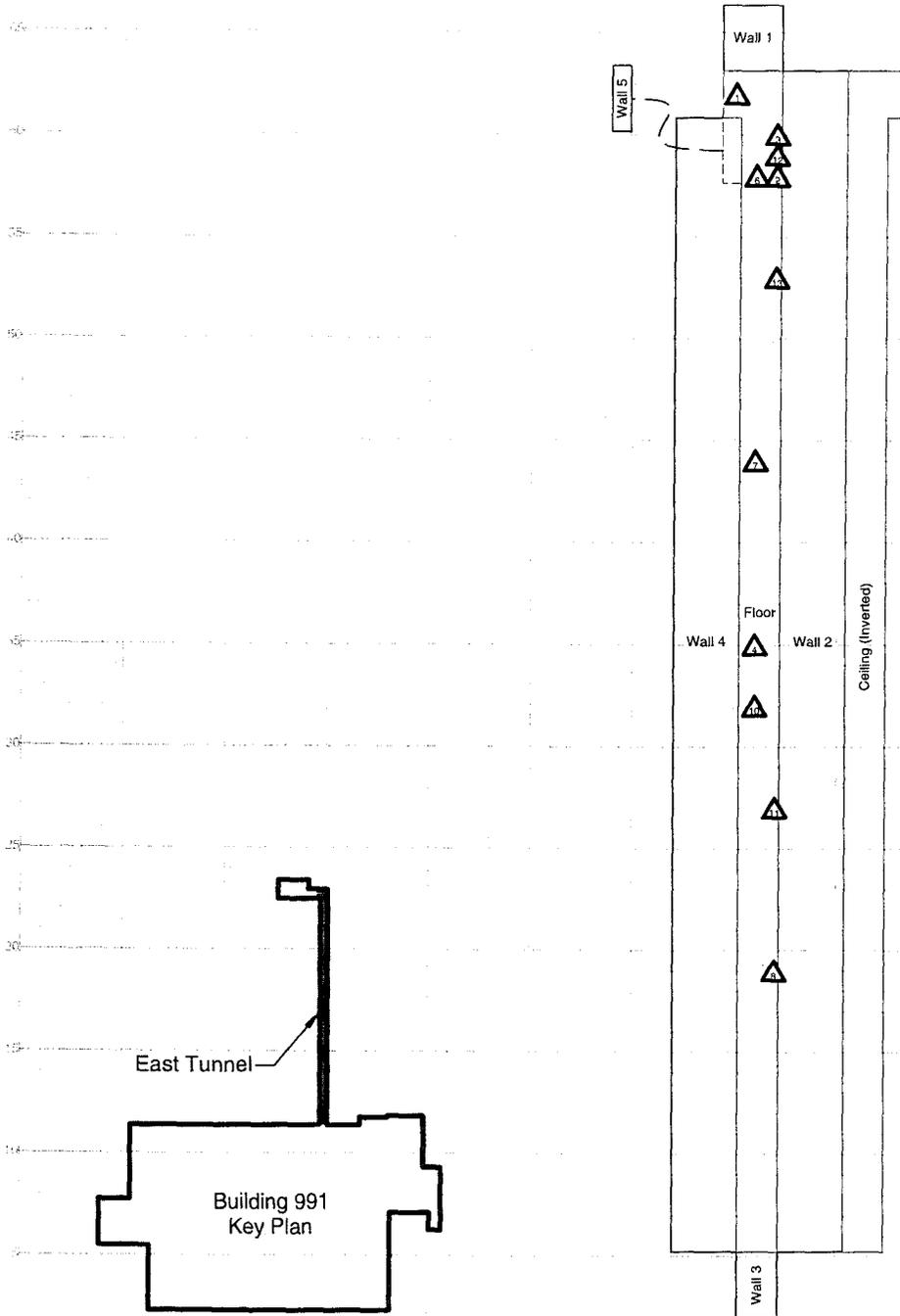
97

CHEMICAL SAMPLE MAP

B991 East Tunnel & 998 Vault
 Floor Area = 155 sq. m = 1,670 sq. ft.
 No. of SU Random Samples = 14

Bldg. 991 East Tunnel

PAGE 2 OF 2



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> ⊛ Asbestos Sample Location ▲ Beryllium Sample Location ⊛ Lead Sample Location ⊛ RCRA/CERCLA Sample Location ⊛ PCB Sample Location 	<p>Neither the United States Government, nor Kaiser Hill Co., nor CH2M Hill, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p>	<p>N</p>	<p>0 FEET 40</p> <p>0 METERS 10</p>	<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-966-7707 Prepared for:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>CH2MHILL Communications Group</p> </div> <div style="text-align: center;"> <p>KAISER HILL ENVIRONMENT</p> </div> </div> <p>MAP ID: 03-JS/991004-BE2 Jan. 5, 2004</p>
<p>■ Open/Inaccessible Area</p> <p>□ Area in Another Survey Unit</p>		<p>1 inch = 30 feet 1 grid sq. = 1 sq. m.</p>		

90

ATTACHMENT C-2

In-Process Beryllium Sample Results

23

Industrial Hygiene Information System
Sample Results Report

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
RFCS							
BOLEY, DICK C							
991-01212004-9-101		ROOF	INSIDE N-S DUCTWORK (PLENUM) SWIPE SAMPLE BOTTOM	WIPE	04Z0828	BERYLLIUM AND B	< 0.0000 _ UG/100CM2
991-01212004-9-102		ROOF	INSIDE N-S DUCTWORK (PLENUM) SAMPLE INSIDE OPENIN	WIPE	04Z0828	BERYLLIUM AND B	< 0.0000 _ UG/100CM2
991-01212004-9-103		ROOF	INSIDE FEEDER PIPE N-S DUCT BOTTOM	WIPE	04Z0828	BERYLLIUM AND B	< 0.0000 _ UG/100CM2
991-01212004-9-104		ROOF	INSIDE FEEDER PIPE N-S DUCT INSIDE OPENING	WIPE	04Z0828	BERYLLIUM AND B	< 0.0000 _ UG/100CM2
991-01212004-9-105		ROOF	INSIDE FEEDER PIPE FROM EAST DUCT BOTTOM	WIPE	04Z0828	BERYLLIUM AND B	< 0.0000 _ UG/100CM2
991-01212004-9-106		ROOF	INSIDE FEEDER PIPE FROM EAST DUCT INSIDE OPENING	WIPE	04Z0828	BERYLLIUM AND B	< 0.0000 _ UG/100CM2
991-01212004-9-107		ROOF	INSIDE FEEDER PIPE ON SOUTH DUCT-BOTTOM	WIPE	04Z0828	BERYLLIUM AND B	< 0.0000 _ UG/100CM2
991-01212004-9-108		ROOF	INSIDE FEEDER PIPE ON SOUTH DUCT-INSIDE OPENING	WIPE	04Z0828	BERYLLIUM AND B	< 0.0000 _ UG/100CM2

Building Sublotat: 8
Hygienist Sublotat: 8

MILLER, GREGG T

991-12022003-607-001		150	LADDER #1	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-002		150	LADDER #1	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-003		150	LIGHT COVER #1	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-004		150	LIGHT COVER #2	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-005		150	LIGHT COVER #3	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-006		150	CAMERA #A	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-007		150	CAMERA #B	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Foot notes: (1) Equipment was either decontaminated or removed from building
(2) Area was decontaminated to < 0.1 ug/100cm².

pgs: 92-121
DOES NOT CONTAIN

OFFICIAL USE ONLY INFORMATION

Name/Org: Shyne Noyce / P&E Date: 1/5/08

Industrial Hygiene Information System Sample Results Report

IHISR_SAMPLE_RESULTS_REPORT

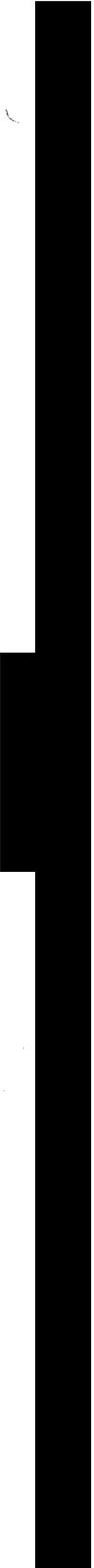
Date: 02/02/2004

Page: 2 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
RFCSS							
MILLER, GREGG T							
991-12022003-607-008		150	CAMERA #C	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-009		150	SPEAKER #D	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-010		150	WHITE BATTER BANK S/N 3202	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-011		150	TOOLS	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-012		150	TOOLS	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-013		150	TOOLS	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-014		150	LAMP SHADE 1	WIPE	04Z0507	BERYLLIUM AND B	0.6730 _ UG/100CM2 (1)
991-12022003-607-015		150	LAMP SHADE 2	WIPE	04Z0507	BERYLLIUM AND B	6.8700 _ UG/100CM2 (1)
991-12022003-607-016		150	LAMP SHADE 3	WIPE	04Z0507	BERYLLIUM AND B	0.4360 _ UG/100CM2 (1)
991-12022003-607-017		150	LAMP SHADE 4	WIPE	04Z0507	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12022003-607-018		150	LAMP SHADE 5	WIPE	04Z0507	BERYLLIUM AND B	0.2100 _ UG/100CM2 (1)
SSOC							
SIMPSON, MARK W							
991-01082004-23-001		150	SEE ATTACHED MAP - ON TOP W. DUCT NW CORNER	WIPE	04Z0748	BERYLLIUM AND B	0.1500 _ UG/100CM2 (1)
991-01082004-23-002		150	SEE ATTACHED MAP - ON TOP W. DUCT CENTER	WIPE	04Z0748	BERYLLIUM AND B	0.3750 _ UG/100CM2 (1)
991-01082004-23-003		150	SEE ATTACHED MAP - ON TOP W. DUCT SW CORNER	WIPE	04Z0748	BERYLLIUM AND B	0.4030 _ UG/100CM2 (1)

Building Subtotal: 18
Hygienist Subtotal: 18
Company Subtotal: 26



Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 3 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-01082004-23-004		150	SEE ATTACHED MAP - ON TOP S. DUCT SW CORNER	WIPE	04Z0748	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01082004-23-005		150	SEE ATTACHED MAP - ON TOP S. DUCT SW CORNER	WIPE	04Z0748	BERYLLIUM AND B	0.1110 _ UG/100CM2 (1)
991-01082004-23-006		150	SEE ATTACHED MAP - ON TOP MIDDLE DUCT W. END	WIPE	04Z0748	BERYLLIUM AND B	0.3380 _ UG/100CM2 (1)
991-01082004-23-007		150	SEE ATTACHED MAP - ON TOP MIDDLE DUCT CENTER	WIPE	04Z0748	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01082004-23-008		150	SEE ATTACHED MAP - ON TOP MIDDLE DUCT E. END	WIPE	04Z0748	BERYLLIUM AND B	0.1180 _ UG/100CM2 (1)
991-01082004-23-009		150	SEE ATTACHED MAP - ON VENT COVER OF MIDDLE DUCT	WIPE	04Z0748	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01082004-23-010		150	SEE ATTACHED MAP - FLOOR BELOW REMOVED BLACK DUST	WIPE	04Z0748	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-001		151	TOP OF VENT DUCT NE CORNER	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-002		151	TOP OF VENT DUCT NORTH CENTRAL	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-003		151	TOP OF MIDDLE VENT DUCT WEST END	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-004		151	TOP OF NORTH SOUTH LONG VENT DUCT ON WEST END N	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-005		151	TOP OF NORTH SOUTH LONG VENT DUCT ON WEST END S	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-006		151	SHORT LEG RUNNING NORTH AND SOUTH WEST END OF ROOM	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-007		151	LARGE CIRCULAR DUCT	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-008		151	TOP OF MIDDLE VENT DUCT (MIDDLE)	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-009		151	TOP OF 3" WHITE PIPE (SOUTH END OF ROOM)	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-010		151	TOP OF MIDDLE DUCT (EAST END)	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT
Date: 02/02/2004

Page: 4 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-01092004-23-011		151	TOP OF FAR EAST GRAY ALUMINUM DUCT NORTHEAST	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-012		151	FLOOR SAMPLE WEST CENTRAL AREA	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01092004-23-013		151	OUTSIDE OF VACUUM CLEANER	WIPE	04Z0762	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-001		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-002		BASEMENT	CEILING - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-003		BASEMENT	CEILING - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-004		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-005		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-006		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-007		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-008		BASEMENT	FLOOR - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-009		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-010		BASEMENT	CEILING - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-011		BASEMENT	FLOOR - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	0.3590 _ UG/100CM2 (Z)
991-01102004-23-012		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-013		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-014		BASEMENT	FLOOR - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	0.1130 _ UG/100CM2 (Z)
991-01102004-23-015		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT
Date: 02/02/2004

Page: 5 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-01102004-23-016		BASEMENT	CEILING - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-017		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-018		BASEMENT	FLOOR - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	0.5830 _ UG/100CM2 (Z)
991-01102004-23-019		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-020		BASEMENT	FLOOR/WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-021		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-022		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-023		BASEMENT	WALL - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-024		BASEMENT	FLOOR - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	0.4140 _ UG/100CM2 (Z)
991-01102004-23-025		BASEMENT	CORNER - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-026		BASEMENT	CEILING - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01102004-23-027		BASEMENT	CEILING - SEE ATTACHED MAP	WIPE	04Z0790	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-001		150	FLOOR NW CORNER AREA	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-002		150	WALL NW CORNER AREA	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-003		150	FLOOR NW CORNER AREA	WIPE	04Z0842	BERYLLIUM AND B	0.1200 _ UG/100CM2 (Z)
991-01192004-23-004		150	WALL NW CORNER AREA	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-005		150	TIRES OF JLG 344185	WIPE	04Z0842	BERYLLIUM AND B	0.1170 _ UG/100CM2 (I)
991-01192004-23-006		150	TIRES OF JLG 344185	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2



Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 6 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-01192004-23-007		150	TIRES OF JLG 344185	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-008		150	TIRES OF JLG 344185	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-009		150	WORKING PLATFORM OF JLG 344185	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-010		150	WORKING PLATFORM OF JLG 344185	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-011		150	SCISSOR SECTION OF JLG 344185 (L)	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-012		150	SCISSOR SECTION OF JLG 344185 (R)	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-013		N/A	ROLL OFF/RECTANGULAR DUCT (PINK)	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-014		N/A	ROLL OFF/INSIDE BLACK DUCT REMOVED FROM 150	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-015		N/A	ROLL OFF/INSIDE BLACK DUCT REMOVED FROM 150	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-016		N/A	ROLL OFF/RECTANGULAR PINK DUCT	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01192004-23-017		N/A	ROLL OFF/RECTANGULAR PINK DUCT	WIPE	04Z0842	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01202004-23-001		991 PLENUM	FLOOR NEAR WEST ENTRANCE	WIPE	04Z0859	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01202004-23-002		991 PLENUM	HEPA FILTER NEAR WEST ENTRANCE	WIPE	04Z0859	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01202004-23-003		991 PLENUM	FLOOR 20 FEET EAST OF WEST ENTRANCE	WIPE	04Z0859	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01202004-23-004		991 PLENUM	HEPA FILTER 20 FT FROM W ENTRANCE	WIPE	04Z0859	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01202004-23-005		991 PLENUM	FLOOR EAST END OF STRUCTURE	WIPE	04Z0859	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01202004-23-006		991 PLENUM	COURSE PRESSCREEN	WIPE	04Z0859	BERYLLIUM AND B	0.3910 _ UG/100CM2 (1)
991-01202004-23-007		991 PLENUM	DEFLECTOR PLATE	WIPE	04Z0859	BERYLLIUM AND B	0.1620 _ UG/100CM2 (1)



Industrial Hygiene Information System Sample Results Report

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Fin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-01202004-23-008		991 PLENUM	FLOOR BELOW DEFLECTOR PLATE	WIPE	04Z0859	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01202004-23-009		991 PLENUM	COURSE PRESCREEN	WIPE	04Z0859	BERYLLIUM AND B	0.1830 _ UG/100CM2 (1)
991-01202004-23-010		991 PLENUM	FLOOR 10 FT W OF DUCT INTAKE	WIPE	04Z0859	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-01202004-23-011		991 PLENUM	LADDER	WIPE	04Z0859	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-09292003-23-001		109	VENT INTAKE OF MAGNETIC PHOTOCOPIER	WIPE	03Z2331	BERYLLIUM AND B	0.2090 _ UG/100CM2 (1)
991-09292003-23-002		109	INSIDE OF LEFT PANEL OF MAGNETIC PHOTOCOPIER	WIPE	03Z2331	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-09292003-23-003		109	TURN TABLE OF MAGNETIC PHOTOCOPIER	WIPE	03Z2331	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-001		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-002		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-003		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-004		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-005		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-006		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-007		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-008		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-009		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-010		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-011		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2



Industrial Hygiene Information System Sample Results Report

12
IHISR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 8 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10062003-23-012		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-013		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-014		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-015		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-016		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-017		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-018		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-019		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-020		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-021		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-022		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-023		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-024		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-025		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-026		ADMIN. HALLWAY	OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-027	114		OVERHEAD LIGHT CONDIUT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-028	110A		OVERHEAD	WIPE	04Z0005	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-029	110A		OVERHEAD	WIPE	04Z0005	BERYLLIUM AND B	RESULTS PENDING < 0.1 DAR 2/11/04

Industrial Hygiene Information System Sample Results Report

108
IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 9 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rtn No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10062003-23-030		123	EAST BY WINDOW	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-031		132	COUNT ROOM	WIPE	04Z0050	BERYLLIUM AND B	RESULTS PENDING (D.I) 2/2/04
991-10062003-23-032		120	WEST SIDE	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-033		122A	EAST SIDE	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-034		122	WEST SIDE	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-035		113	FLOOR	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-036		122B	OVERHEAD	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-037		109	HALLWAY	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-038		109	HALLWAY W DOOR	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-039		122A	OVERHEAD, LIGHT CONDUIT	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-040		110	FLOOR	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-041		109	ENTRANCE TO BACK AREA	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10062003-23-042		123	FLOOR	WIPE	04Z0050	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-001		132	ROOM 132	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-002		132	ROOM 132	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-003		ADMIN. HALLWAY	HALLWAY BY NDT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-004		ADMIN. HALLWAY	HALLWAY BY 131B	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-005		ADMIN. HALLWAY	HALLWAY BY 138	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 10 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10092003-23-006		ADMIN. HALLWAY	HALLWAY BY 137	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-007		ADMIN. HALLWAY	HALLWAY BY 157	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-008		ADMIN. HALLWAY	HALLWAY BY 160	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-009		140	ROOM 140	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-010		ADMIN. HALLWAY	HALLWAY 155	WIPE	04Z0115	BERYLLIUM AND B	0.3240 _ UG/100CM2 (Z)
991-10092003-23-011		ADMIN. HALLWAY	HALLWAY 155	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-012		ADMIN. HALLWAY	HALLWAY BY 141	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-013		ADMIN. HALLWAY	HALLWAY BY 142	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-014		ADMIN. HALLWAY	HALLWAY BY 150	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-015		ADMIN. HALLWAY	HALLWAY BY 147	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-016		149	ROOM 149	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-017		148	ROOM 148	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-018		147	ROOM 147A	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-019		150	ROOM 150	WIPE	04Z0115	BERYLLIUM AND B	0.5490 _ UG/100CM2 (Z)
991-10092003-23-020		165	ROOM 165	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-021		165	ROOM 165	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-022		164	ROOM 164	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-023		162	ROOM 162	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10092003-23-024		161	ROOM 161	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-025		140	ROOM 140	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-026		141	ROOM 141	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-027		151	ON TOP VENT DUCT - SW SECTION OF ROOM	WIPE	04Z0115	BERYLLIUM AND B	0.6120 _ UG/100CM2 (1)
991-10092003-23-028		142	ROOM 142	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-029		170	ROOM 170	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-030		134	ROOM 134	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-031		156	ROOM 156	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10092003-23-032		157	ROOM 157	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10142003-23-001		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	0.5550 _ UG/100CM2 (Z)
991-10142003-23-002		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	0.6230 _ UG/100CM2 (Z)
991-10142003-23-003		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	0.2900 _ UG/100CM2 (Z)
991-10142003-23-004		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	0.1960 _ UG/100CM2 (Z)
991-10142003-23-005		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10142003-23-006		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10142003-23-007		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10142003-23-008		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	0.2480 _ UG/100CM2 (Z)
991-10142003-23-009		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHIR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 12 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10142003-23-010		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10142003-23-011		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10142003-23-012		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	0.1870 _ UG/100CM2 (Z)
991-10142003-23-013		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	0.1400 _ UG/100CM2 (Z)
991-10142003-23-014		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10142003-23-015		BASEMENT	BASEMENT	WIPE	04Z0115	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-049		161	NORTH WALL	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-050		161	EAST WALL	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-051		161	NORTH WALL	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-052		161	E-14 SW CORNER ROOF 5953	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-053		161	E-16 BETWEEN ROOF 5962 AND PLENUM	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-054		161	SE CORNER MAIN PLENUM E-20	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-055		161	EAST END MAIN PLENUM	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-056		161	E-18 NE CORNER MAIN PLENUM	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-057		161	E-1 NE CORNER MAIN PLENUM	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-058		161	N SIDE MAIN PLENUM	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-059		161	N SIDE MAIN PLENUM	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-060		161	E ROOF RADIO EXHAUST FAN	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHIS_SAMPLE_RESULTS_REPORT
Date: 02/02/2004

Page: 13 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10152003-23-061		161	E-2 E ROOF	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-062		161	E-8 E ROOF	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-063		161	E-22 S ROOF	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-064		161	E-12 CENTER OF S ROOF	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-065		161	E-11 SW CORNER OF ROOF	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-066		161	EXHAUST FAN RF-1	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10152003-23-067		161	E-23 NW CORNER OF MAIN ROOF	WIPE	04Z0294	BERYLLIUM AND B	0.1530 _ UG/100CM2 (1)
991-10152003-23-068		161	E-25 NW CORNER OF MAIN ROOF	WIPE	04Z0294	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10172003-23-001		134	RUBBER BOOTS	WIPE	04Z0160	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10172003-23-002		134	RUBBER BOOTS	WIPE	04Z0160	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-001		OUTSIDE	DUCTING ON DOCK	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-002		CORRIDOR B	Y HALLWAY FLOOR S END	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-003		CORRIDOR B	TOP OF LAMP SHADE IN W TUNNEL	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-004		CORRIDOR B	ANGLE SECTION EAST TUNNEL	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-005		OUTSIDE	SLA-15 LIFT IN WEST TUNNEL	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-006		OUTSIDE	LAMP SHADE IN ROLL-OFF	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-007		OUTSIDE	LAMP SHADE IN ROLL-OFF	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-008		OUTSIDE	LAMP SHADE IN ROLL-OFF	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10202003-23-009		OUTSIDE	LAMPSHADE IN ROLL-OFF	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-010		OUTSIDE	LAMPSHADE IN ROLL-OFF	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-011		OUTSIDE	LAMPSHADE IN ROLL-OFF	WIPE	04Z0165	BERYLLIUM AND B	0.1640 _ UG/100CM2 (1)
991-10202003-23-012		170	REFRIGERATOR UNIT IN RM 170	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-013		170	REFRIGERATOR UNIT IN RM 170	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-019		140	LAB HOOD WEST SIDE WALL	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-020		140	LAB HOOD BACK SOUTH WALL	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-021		140	LAB HOOD EAST SIDE WALL	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-023		101	EAST EXIT	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-024		126	EAST END OF HALLWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-025		105	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-026		106	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-027		107	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-028		108	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-029		109	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-030		110	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-031		110A	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-032		110B	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHISR_SAMPLE_RESULTS_REPORT
Date: 02/02/2004

Page: 15 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Fltn No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10202003-23-033		111	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-034		111A	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-035		114	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-036		112	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-037		113	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-038		115	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-039		116	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-040		118	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-041		117	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-042		119	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-043		120	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-044		122	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-045		122A	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-046		122B	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-047		123	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-048		124	WEST DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-049		124	EAST DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-050		128	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 16 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10202003-23-051		128A	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-052		129	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-053		131	DOORWAY BETWEEN 131 AND 131A	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-054		131	DOORWAY BETWEEN 131 AND 131A	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-055		131	DOORWAY BETWEEN 131A AND 131B	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-056		130	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-057		130	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-058		130	BETWEEN 130 AND 137	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-059		130	BETWEEN 137 AND 166	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-060		130	166 AND THE DOCK	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-061		138	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-062		156	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-063		160	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-064		162	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-065		164	BETWEEN 164 AND 165	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-066		163	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-067		161	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-068		157	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10202003-23-069		158	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-070		ADMIN. HALLWAY	HALLWAY TO 998	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-071		155	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-072		151	EAST	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-073		151	WEST DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-074		150	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-075		149	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-076		148	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-077		147	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-078		142	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-079		140	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-080		140	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-081		140	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-082		140	DOORWAY	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-083		140	BETWEEN 140 AND 140A	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-084		131B	BETWEEN 131B AND 134	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-085		134	BETWEEN 134 AND 132	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-086		134	BETWEEN 134 AND 135	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 18 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10202003-23-087		134	BETWEEN 134 AND 136	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-088		136	BETWEEN 136 AND 170	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-089		170	170 AND OUTSIDE DOCK	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-090		153	HALLWAY 153	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-091		153	HALLWAY 153	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10202003-23-092		153	HALLWAY 153	WIPE	04Z0165	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-001		131	BETWEEN 131 AND 131A OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-002		131	CENTRAL OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-003		131	SOUTH OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-004		B998	HALLWAY TO 998 - SOUTH OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-005		B998	HALLWAY TO 998 - MID (S) OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-006		B998	HALLWAY TO 998 - MID (N) OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-007		B998	HALLWAY TO 998 - NORTH OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-008		B998	998 HALLWAY - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-009		158	NW CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-010		157	SE CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-011		B998	HALLWAY TO 998 - NORTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-012		160	SOUTH CENTRAL - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT
Date: 02/02/2004

Page: 19 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10212003-23-013		161	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-014		162	NORTH CENTRAL - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-015		163	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-016		164	SW CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-017		165	NW CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-018		153	153 HALLWAY EAST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-019		153	153 HALLWAY EAST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-020		153	153 HALLWAY CENTER (E) - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-021		153	153 HALLWAY CENTER (W) - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-022		153	153 HALLWAY CENTER (W) - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-023		153	153 HALLWAY CENTER (W) - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-024		153	153 HALLWAY WEST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-025		149	NORTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-026		148	SW CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-027		148	EAST CENTRAL - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-028		147A	NORTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-029		134	134/132 EAST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-030		134	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 20 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10212003-23-031	134	134	NORTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-032	134	134	NORTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-033	170	170	EAST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-034	170	170	CENTRAL - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-035	170	170	WEST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-036	170	170	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-037	147	147	SE CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-038	142	142	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-039	142B	142B	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-040	142A	142A	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-041	150	150	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-042	150	150	SOUTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-043	150	150	SW CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-044	150	150	SW CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	0.4780 _ UG/100CM2 (Z)
991-10212003-23-045	150	150	WEST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-046	150	150	WEST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	0.6770 _ UG/100CM2 (Z)
991-10212003-23-047	150	150	NORTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-048	150	150	MID-ROOM - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 21 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rtn No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10212003-23-049		150	NORTH - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-050		150	NE CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-051		150	EAST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-052		150	SE CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-053		150	EAST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-054		150	MID-ROOM - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-055		151	WEST - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-056		151	NW CORNER - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	0.1790 _ UG/100CM2 (2)
991-10212003-23-057		151	MID-ROOM - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-058		151	MID-ROOM - OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-059		150	SOUTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-060		150	SOUTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-061		150	SW CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-062		150	WEST - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-063		150	NW CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-064		150	NORTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-065		150	NORTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-066		150	NE CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 22 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10212003-23-067		150	SE CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-068		150	SE CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-069		150	SOUTH - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-070		150	SOUTH - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-071		150	SW CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-072		150	WEST - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-073		150	NW CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-074		150	NORTH - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-075		150	NE CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-076		150	NE CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-077		150	EAST/MIDDLE - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-078		150	WEST/MIDDLE - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-079		151	SOUTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-080		151	SOUTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-081		151	SW CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-082		151	NW CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-083		151	NORTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-084		151	NORTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10212003-23-085		151	NORTH - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-086		151	EAST - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-087		151	SE CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-088		151	SE CORNER - WALLS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-089		151	SOUTH - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-090		151	SW CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-091		151	WEST - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-092		151	NW CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-093		151	NORTH - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-094		151	NORTH - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-095		151	NE CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-096		151	SE CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-097		151	SE CORNER - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-098		151	MID-FLOOR - FLOORS	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-105		130	130Y - CIRCUIT BOARDS -01	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-106		166	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-107		166	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-108		166	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 24 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10212003-23-109		166	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-110		166	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-111		137	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-112		137	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-113		137	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-114		137	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-115		137	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-116		130	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-117		130	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-118		130	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-119		130	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-120		130	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-121		151	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-122		150	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-123		146	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-124		146	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-125		146	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-126		143	OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHIR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 25 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Fin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10212003-23-127	143		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-128	140		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-129	140		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-130	140		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-131	156		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-132	156		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-133	155		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-134	155		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-135	155		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-136	153		OVERHEAD	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-137	153		HALLWAY CEILING	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-138	153		HALLWAY	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-139	153		HALLWAY	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-140	153		HALLWAY	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10212003-23-141	151		HALLWAY	WIPE	04Z0169	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10282003-23-002	167		FLAMMABLE CABINET SOUTH	WIPE	04Z0223	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10282003-23-003	167		FLAMMABLE CABINET NORTH	WIPE	04Z0223	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10282003-23-004	167		RED TOOL CABINET	WIPE	04Z0223	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

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Industrial Hygiene Information System Sample Results Report

IHISR_SAMPLE_RESULTS_REPORT
Date: 02/02/2004

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-10282003-23-005		167	PAINT HOOD	WIPE	04Z0223	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10282003-23-006		167	FLOOR	WIPE	04Z0223	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10282003-23-007		115	DUCT AIR CHASE	WIPE	04Z0223	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-10282003-23-008		OUTSIDE	Y TUNNEL	WIPE	04Z0223	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11032003-23-002		402	CONFINE SPACE	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11032003-23-003		402	CONFINE SPACE	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-002		170	SHELF #1	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-003		170	SHELF #2	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-004		170	SHELF #3	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-005		170	SHELF SECTION 11	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-006		170	SHELF SECTION 28	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-007		170	SHELF SECTION 25	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-008		170	SHELF SECTION 8	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-009		170	SHELF SECTION 8	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-010		170	SHELF SECTION 13	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-011		170	SHELF SECTION 12	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11052003-23-012		170	SHELF SECTION 2	WIPE	04Z0269	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-001		991 PLENUM	INSIDE VENTILATION DUCT NW CORNER CLEAN SIDE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2



Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 27 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rtn No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-11142003-23-002		991 PLENUM	INSIDE VENTILATION DUCT CENTRAL CLEAN SIDE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-003		991 PLENUM	CLEAN SIDE FILTER LEDGE NW SIDE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-004		991 PLENUM	NW CLEAN SIDE FLOOR	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-005		991 PLENUM	CLEAN SIDE INSIDE MIDDLE VENT DUCT	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-006		991 PLENUM	CLEAN SIDE FLOOR NEAR NORTH WALL EAST SIDE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-007		991 PLENUM	CLEAN SIDE INSIDE NE VENT DUCT	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-008		991 PLENUM	CLEAN SIDE INSIDE NEFILTER BANK LEDGE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-009		991 PLENUM	DIRTY SIDE INSIDE SUBMARINE DOOR	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-010		991 PLENUM	DIRTY SIDE ON FLOOR 10 FT IN FROM SUBMARINE DOOR	WIPE	04Z0379	BERYLLIUM AND B	0.2020 _ UG/100CM2 (Z)
991-11142003-23-011		991 PLENUM	DIRTY SIDE ON FLOOR 15 FT IN FROM SUBMARINE DOOR	WIPE	04Z0379	BERYLLIUM AND B	< 0.2280 _ UG/100CM2 (Z)
991-11142003-23-012		991 PLENUM	DIRTY SIDE UNDER FILTER BANK NORTH WALL	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-013		991 PLENUM	DIRTY SIDE FLOOR NEAR MIDDLE VENT DUCT	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-014		991 PLENUM	DIRTY SIDE MIDDLE OF PLENUM NORTH WALL 5 FT FROM F	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-015		991 PLENUM	DIRTY SIDE MIDDLE VENT DUCT SW CORNER	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-016		991 PLENUM	DIRTY SIDE MIDDLE VENT DUCT INSIDE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-017		991 PLENUM	DIRTY SIDE MIDDLE AREA WALK THROUGH DOOR LEDGE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-018		991 PLENUM	DIRTY SIDE SW VENT DUCT NEAR BOTTOM OF DEFL PLATE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 28 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-11142003-23-019		991 PLENUM	DIRTY SIDE FLOOR BELOW DEFLECTOR PLATE	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-020		991 PLENUM	DIRTY SIDE S WALL 7 FT FROM FLOOR	WIPE	04Z0379	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11142003-23-021		991 PLENUM	DIRTY SIDE INSIDE SW VENT DUCT DEFLECTOR PLATE	WIPE	04Z0379	BERYLLIUM AND B	0.2780 _ UG/100CM2 (1)
991-11142003-23-022		991 PLENUM	DIRTY SIDE LEDGE OF PRESCREEN SW SIDE	WIPE	04Z0379	BERYLLIUM AND B	0.1220 _ UG/100CM2 (1)
991-11142003-23-023		991 PLENUM	DIRTY SIDE WALL 6 FT FROM FLOOR SW CORNER	WIPE	04Z0379	BERYLLIUM AND B	0.1470 _ UG/100CM2 (1)
991-11142003-23-024		991 PLENUM	DIRTY SIDE FLOOR BELOW SW VENT DUCT	WIPE	04Z0379	BERYLLIUM AND B	0.4820 _ UG/100CM2 (1)
991-11142003-23-025		991 PLENUM	DIRTY SIDE FLOOR 10 FOOT EAST OF SW VENT DUCT	WIPE	04Z0379	BERYLLIUM AND B	0.4450 _ UG/100CM2 (1)
991-11182003-23-003		131B	HEATING WATER RETURN LINE	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-004		131B	RED FIRE PIPE	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-005		131B	HANGER	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-006		131B	ELECTRICAL CONDUIT	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-007		131B	ELECTRICAL CONDUIT	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-008		153	TOP OF FIRE PIPE	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-009		153	TOP OF CONDUIT RACK	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-010		153	HEATING LINE SUPPLY	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-011		153	TOP OF LIGHT FIXTURE	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-012		153	TOP OF 3" FIRE LINE	WIPE	04Z0435	BERYLLIUM AND B	0.1550 _ UG/100CM2 (1)
991-11182003-23-013		153	TOP OF 1" CONDUIT	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHSR_SAMPLE_RESULTS_REPORT
Date: 02/02/2004

Page: 29 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-11182003-23-014		153	TOP OF LIGHT FIXTURE	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-015		153	TOP OF WIRE RUN	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-016		153	TOP OF 2" FIRE PIPE	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-017		153	TOP OF RACK	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-018		153	TOP OF TSI	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-019		153	TOP OF 3" CONDUIT	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-020		153	TOP OF J BOX	WIPE	04Z0435	BERYLLIUM AND B	0.1060 _ UG/100CM2 (1)
991-11182003-23-021		153	TOP OF 1" CONDUIT	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11182003-23-022		153	TOP OF INSULATED VENT DUCT	WIPE	04Z0435	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-11192003-23-003		BASEMENT	STEP OFF PAD	WIPE	04Z0445	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-001		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-002		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-003		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-004		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-005		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-006		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-007		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-008		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System Sample Results Report

IHIR_SAMPLE_RESULTS_REPORT

Date: 02/02/2004

Page: 30 of 30

SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rln No	Analyte	Concentration
SSOC							
SIMPSON, MARK W							
991-12162003-23-009		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-010		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-011		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-012		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-013		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12162003-23-014		998 TUNNEL	SEE MAP ATTACHED	WIPE	04Z0600	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12292003-23-001		B998	DOORWAY OF 998 WEST DOOR	WIPE	04Z0695	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12292003-23-002		B998	DOORWAY OF 998 EAST DOOR	WIPE	04Z0695	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12292003-23-004		150	ROOM 105 DOORWAY EAST & WEST DOORS	WIPE	04Z0695	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12292003-23-005		N/A	HEPA VACUUM	WIPE	04Z0695	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12292003-23-006		BASEMENT	URS DRILL PIECE	WIPE	04Z0695	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12292003-23-007		N/A	URS CORE STEM	WIPE	04Z0695	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
991-12292003-23-008		N/A	URS TOOLS/EXT. CORD AND MISC TOOLS	WIPE	04Z0695	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Building Subtotal: 500

Hygienist Subtotal: 500

Company Subtotal: 500

Grand Total 526

ATTACHMENT C-3

RCRA/CERCLA (TCLP Metals) Data Summaries and Sample Maps

TABLE C-2: BUILDING 991 RCRA METALS DATA SUMMARY

Sample Location	Sample Number	Result (mg/kg)
B991 Rm#109	04D0188-001	Below Regulatory Limits
B991 Rm#140	04D0188-002	Below Regulatory Limits

RCRA Metals Toxicity Characteristic Limits

Analyte	Regulatory limit (mg/L)
Arsenic (D004)	5.0
Barium (D005)	100.0
Cadmium (D006)	1.0
Chromium (D007)	5.0
Lead (D008)	5.0
Mercury (D009)	0.2
Selenium (D010)	1.0
Silver (D011)	5.0

- (a) Quantitation Limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.
(b) If o-, m-, and p-Cresol concentrations cannot be differentiated, the total Cresol (D026) concentration (200mg/l) is used.

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 and metals).

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, beryllium in Table D-2 and Metals in Table D-3. A data completeness summary for all results is given in Table D-4.

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.

Beta/gamma survey designs were not implemented for this PDS based on the conservatism of the transuranic limits used as DCGLs in the unrestricted release decision process. Survey designs were implemented for Building 991, 991 East Tunnel and 998 Vault based on the transuranic limits used as DCGLs in the unrestricted release decision process. All survey results were evaluated against, and were less than the Transuranic DCGL_w (100 dpm/100cm²) and the Uranium DCGL_w (5,000 dpm/100cm²) unrestricted release limits. 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/100cm²) and the Uranium DCGL_w (5,000 dpm/100cm²) unrestricted release limits. Media results were converted to dpm/100cm² using the Media Conversion Table, evaluated against the transuranic and uranium DCGL limits, and are the values reported in the Radiological TSA Data Summary in support of the unrestricted release decision process. On this basis, all 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.

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. However the following anomalous conditions were investigated and dispositioned as follows:

- During scanning of the 998 Vault, net activity ($475.6 \text{ dpm}/100\text{cm}^2$) greater than the transuranic DCGL_w of $100 \text{ dpm}/100\text{cm}^2$ was identified. This area was assigned sample location #17 and a coupon sample was taken and analyzed by gamma spectroscopy. No transuranic isotopes were detected. Activity was determined to be uranium and naturally occurring isotopes. The gamma spectroscopy results were converted to dpm/cm^2 using the Media Conversion Table. The resulting sample net activity was below the Uranium DCGL_w ($5,000 \text{ dpm}/100\text{cm}^2$), therefore, no further investigation was required.
- Initial net activity at locations #41 ($106.7 \text{ dpm}/100\text{cm}^2$) and #42 ($111.1 \text{ dpm}/100\text{cm}^2$) were identified in survey unit 991-2-EXH greater than the Transuranic DCGL_w ($100 \text{ dpm}/100\text{cm}^2$). The locations were sealed, allowed to decay and resurveyed. Re-survey results were below the Transuranic DCGL_w and are the values reported in the PDS data summary. No further investigation required.
- Initial net activity was identified in survey unit 991-2-001 greater than the Transuranic DCGL_w ($100 \text{ dpm}/100\text{cm}^2$) at location #26 ($318.8 \text{ dpm}/100\text{cm}^2$). The area was sealed, allowed to decay and re-surveyed. The re-survey result was less than the Transuranic DCGL and is the value reported in the TSA Data Summary. No further investigation required.
- Activity greater than the Transuranic DCGL_w ($100 \text{ dpm}/100\text{cm}^2$) was identified in survey unit 991-2-002 during scan surveys ($18,287.8 \text{ dpm}/100\text{cm}^2$). A coupon sample was taken and assigned sample number #21. The coupon sample was analyzed by OASIS and results did not detect any transuranic activity greater than the Transuranic DCGL ($100 \text{ dpm}/100\text{cm}^2$). Therefore, the area was decontaminated and resurveyed to the uranium unrestricted release limits. All results were less than the Uranium DCGL ($5,000 \text{ dpm}/100\text{cm}^2$), therefore, no further investigation is required. Refer to the PDS Data Summary, sample numbers #22 through #30, for the sample results.
- There are no maps for the in-process Beryllium sampling locations. However, the in process Beryllium sampling results and sample location descriptions can be found in Attachment C-2, *In-Process Beryllium Sample Results*.

Based upon an independent review of the radiological data, it was determined that the original project DQOs satisfied MARSSIM guidance. All facility contamination levels were below applicable PDSP DCGL unrestricted release levels confirming the 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 was within acceptable limits. All results meet the PDS unrestricted release criteria.

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 2 Isolation Controls have been posted to prevent the inadvertent introduction of contamination into Building 991, 991 East Tunnel and 998 Vault. On this basis, Building 991, 991 East Tunnel and 998 Vault meet the PDSP unrestricted release criteria with the confidences stated herein.

Table D-1 V&V of Radiological Results - Building 991, 991 East Tunnel and 998 Vault

V&V CRITERIA, RADIOLOGICAL SURVEYS		K-H RSP 16-00 Series MARSSIM (NUREG-1575)		COMMENTS
QUALITY REQUIREMENTS				
ACCURACY	Parameters	Measure	Frequency	
	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.)
	Field duplicate measurements for TSA	≥ 5% of real survey points	≥ 10% of reals	N/A
REPRESENTATIVENESS	MARSSIM methodology: Survey Units 991-2-001, 991-2-002, 991-2-003, 991-2-004, 991-2-005, 991-2-006, 991-2-007 and 991-2-008 (interior). Survey Maps	Statistical and biased	NA	Random w/ statistical confidence.
	Controlling Documents (Characterization Pkg; RSPs)	qualitative	NA	Random and biased measurement locations controlled/mapped to ± 1m.
COMPARABILITY	Units of measure	dpm/100cm ²	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.
COMPLETENESS	Plan vs. Actual surveys Usable results vs. unusable	> 95% > 95%	NA	Use of standardized engineering units in the reporting of measurement results.
SENSITIVITY	Detection limits	TSA: ≤ 50 dpm/100cm ² RA: ≤ 10 dpm/100cm ²	all measures	See Table D-4 for details. PDS MDAs ≤ 50% DCGL _w

Table D-2 V&V of Beryllium Results - Building 991, 991 East Tunnel and 998 Vault

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		COMMENTS
BERYLLIUM	Prep: NMAM 7300 METHOD: OSHA ID-125G	LAB ---->	Johns Manville, Littleton, Colorado Numerous RIN #'s - see Table D-4	
		RIN ---->		
QUALITY REQUIREMENTS				
ACCURACY	Calibrations	Measure	Frequency	No qualifications significant enough to change project decisions, i.e. classification of Type 2 Facilities confirmed; all final PDS results were below associated action levels.
	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	
REPRESENTATIVENESS	Field duplicate	All results < RL	≥1	
	COC	Qualitative	NA	
	Hold times/preservation	Qualitative	NA	
COMPARABILITY	Controlling Documents (Plans, Procedures, maps, etc.)	Qualitative	NA	
	Measurement units	Ug/100cm ²	NA	
COMPLETENESS	Plan vs. Actual samples	>95%	NA	
	Usable results vs. unusable	>95%	NA	
SENSITIVITY	Detection limits	MDL of 0.012 ug/100cm ²	all measures	

Table D-3 V&V of Metals - Building 991, 991 East Tunnel and 998 Vault

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE	
Metals (total)	METHOD: SW6010/6020	LAB ---->	Severn-Trent Services, Denver, Co.
		RIN ---->	RIN04D0188 (998 Vault & E. Tunnel)
QUALITY REQUIREMENT			
ACCURACY	calibrations	Initial	frequency
		Continuing	Measure
	LCS	Linear calibration	≥1/batch
	MS	80% < %R < 120%	≥1/batch
	blanks	80% < %R < 120%	≥1/batch
	serial dilutions	75% < %R < 125%	≥1/batch
	interference check std (ICP)	mg/kg	≥1/batch
	MSD	%D < 10%	≥1/batch
	field duplicate	80% < %R < 120%	bracket batch
	COC	RPD < 30%	≥1/batch
	hold times/preservation	All results < RL	≥1/batch
	Controlling Documents (Plans, Procedures, Maps, etc.)	Qualitative	NA
	Plan vs. Actual samples usable results vs. unusable detection limits	≤180 days	NA
		Qualitative	NA
		mg/kg	NA
		>95%	NA
		>95%	NA
		Various	all analytes
COMPARABILITY			
COMPLETENESS			
SENSITIVITY			
<p>COMMENTS</p> <p>No qualifications significant enough to change project decision, i.e., classification of Type 2 Facilities confirmed; TCLP results well below associated action levels.</p>			

Table D-4 Data Completeness Summary – Building 991, 991 East Tunnel and 998 Vault

ANALYTE	Building/Area/ Unit	Sample Number Planned (Real & QC) ^A	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Beryllium	Building 991 Main Level (interior)	66 samples (46 random/20 biased) (interior)	50 samples (46 random/4 biased-interior)	Refer to footnotes in Attachment C-1	10CFR850; OSHA ID-125G RIN04Z0892 – (sample numbers 991-01212004-23-001 through 991-01212004-23-046) Numerous results identified greater than the investigative level (0.1 ug/100cm ²) and/or the action level (0.2 ug/100cm ²). Refer to footnotes in Attachment C-1 for discussion and disposition.
Beryllium	Building 991 Basement Level (interior)	37 samples (27 random/10 biased) (interior)	43 samples (27 random/16 biased) (interior)	Refer to footnotes in Attachment C-1	10CFR850; OSHA ID-125G RIN04Z0790 – (sample numbers 991-01102004-23-001 through 991-01102004-23-027). RIN04Z0969 - (sample numbers 991-01292004-23-111 through 991-01292004-23-114, 991-01292004-23-141 through 991-01292004-23-144, , 991-01292004-23-181 through 991-01292004-23-184 and 991-01292004-23- 241 through 991-01292004-23-244). Numerous results identified greater than the investigative level (0.1 ug/100cm ²) and/or the action level (0.2 ug/100cm ²). Refer to footnotes in Attachment C-1 for discussion and disposition.
Beryllium	Building 998 Vault and 991 East Tunnel (interior)	19 samples (14 random/5 biased) (interior)	14 samples (14 random-interior)	No contamination found at any location	10CFR850; OSHA ID-125G RIN04Z0600 – 998 Vault and 991 East Tunnel (sample numbers 991-12162003-23-001 through 991-12162003- 23-014). Final results were all below the PDSP investigative level (0.1 ug/100cm ²) and the action level (0.2 ug/100cm ²).

Table D-4 Data Completeness Summary – Building 991, 991 East Tunnel and 998 Vault

ANALYTE	Building/Area/ Unit	Sample Number Planned (Real & QC) ^A	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Beryllium	Building 991 Ventilation System, including Roof Plenum and Plenum Filter after vacuuming (interior)	0 samples Samples collected during in-process stripout	116 samples (68 biased in ducting/23 biased and 25 random in plenum)	Refer to footnotes in Attachment C-1	10CFR850; OSHA ID-125G RIN04Z0171 – Building 991 Ventilation System (sample numbers 991-10152003-23-001 through 991-10152003- 23-048). RIN04Z0294 – Building 991 Ventilation System (sample numbers 991-10152003-23-49 through 991-10152003- 23-68). RIN04Z0379 – Building 991 Roof Plenum (sample numbers 991-11142003-23-001 through 991-111462003- 23-025). RIN04Z0589 – Building 991 Roof Filter Plenum after vacuuming (sample numbers 991-01202004-23-001 through 991-012062004-23-011). RIN04Z0969 – Building 991 Roof Plenum (sample numbers 991-01292004-23-601 through 991-01292004- 23-604, 991-01292004-23-701 through 991-01292004- 23-704 and 991-01292004-23-901 through 991- 01292004-23-904). Numerous results identified greater than the investigative level (0.1 ug/100cm ²) and/or the action level (0.2 ug/100cm ²). Refer to the footnotes in Attachment C-1 for discussion and disposition.
Metals	Building 991	0 samples	4 biased (solids)	No metal contamination found, all results were below the regulatory limit	Sample map show approximate sample locations relative to ventilation duct access points. SW 6010/6020 – RIN04D0188

142

Table D-4 Data Completeness Summary – Building 991, 991 East Tunnel and 998 Vault

ANALYTE	Building/Area/ Unit	Sample Number Planned (Real & QC) ^A	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area 2 Survey Unit: 991-2-EXH Bldg. 991 Exhaust Ventilation	1 α TSA at each access location (biased) 25 α TSA and 25 α RSA inside Plenum (60 estimated total - biased) 4 QC TSA 100% scan to 1 m ² at each ventilation access point	1 α TSA and 1 α RSA at each access location (total of 68 locations-biased) 25 α TSA and 25 α RSA inside Plenum (25 total locations- biased) 5 QC TSA 100% scan to 1 m ² at each ventilation access point	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable. Refer to Attachment D-DQA Summary for discussion regarding initial net activity identified at locations 41 (106.7 dpm/100cm ²) and 42 (111.1 dpm/100cm ²) that were greater than the Transuranic DCGL _w (100 dpm/100cm ²). Sample map show approximate sample locations relative to ventilation duct access points.
Radiological	Survey Area 2 Survey Unit: 991-2-001 Bldg. 991 Interior North Rooms	19 α TSA and 19 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 25% of remaining surfaces	26 α TSA and 26 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 25% of remaining surfaces	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable. Refer to Attachment D-DQA Summary for discussion regarding initial net activity identified at location 26 (318.8 dpm/100cm ²) that was greater than the Transuranic DCGL _w (100 dpm/100cm ²).
Radiological	Survey Area 2 Survey Unit: 991-2-002 Bldg. 991 Interior Center Rooms (interior)	15 α TSA and 15 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 25% of remaining surfaces	20 α TSA and 20 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 25% of remaining surfaces	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable. Refer to Attachment D-DQA Summary for discussion regarding activity identified greater than the Transuranic DCGL _w (100.0 dpm/100cm ²) that was identified during scan surveys (18,287.8 dpm/100cm ²) and subsequently assigned sample number 21.

143

Table D-4 Data Completeness Summary – Building 991, 991 East Tunnel and 998 Vault

ANALYTE	Building/Area/ Unit	Sample Number Planned (Real & QC) ^A	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area 2 Survey Unit: 991-2-003 Bldg. 991 Interior South Rooms (interior)	15 α TSA and 15 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 25% of remaining surfaces	15 α TSA and 15 α Smears (systematic) 2 QC TSA	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable.
Radiological	Survey Area 2 Survey Unit: 991-2-004 Bldg. 991 East Vault Tunnel and Bldg. 998 Vault (interior)	15 α TSA and 15 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 25% of remaining surfaces	16 α TSA and 16 α Smears (systematic) 2 QC TSA	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable. During scanning of the 998 vault area, net activity (475.6 dpm/100cm ²) greater than the transuranic DCGL _w (100.0 dpm/100cm ²) was identified. This area was assigned sample location 17 and a coupon sample was taken and analyzed by gamma spectroscopy (RIN03S0205. Refer to Attachment D-DQA Summary regarding the elevated activity and subsequent investigation.
Radiological	Survey Area 2 Survey Unit: 991-2-005 Bldg. 991 – Room 402 and 402A (interior)	15 α TSA and 15 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 10% of remaining surfaces	21 α TSA and 21 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 10% of remaining surfaces	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable.

Table D-4 Data Completeness Summary – Building 991, 991 East Tunnel and 998 Vault

ANALYTE	Building/Area/ Unit	Sample Number Planned (Real & QC) ^A	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area 2 Survey Unit: 991-2-006 Bldg. 991 Basement Utility Tunnel (interior)	15 α TSA and 15 α Smears (systematic) 2 QC TSA 50% scan of floor surfaces and 25% of remaining surfaces	16 α TSA and 16 α Smears (systematic) 10 α TSA and 10 α Smears (biased) 2 QC TSA 50% scan of floor surfaces and 25% of remaining surfaces	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable.
Radiological	Survey Area 2 Survey Unit: 991-2-007 Bldg. 991 Rooms, Walls, Floors and Ceilings (interior)	15 media samples (biased) 15 Pre and 15 Post TSA and Smear Media Samples	40 media samples (biased) 40 Pre and 40 Post TSA and Smear Media Samples	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable.
Radiological	Survey Area 2 Survey Unit: 991-2-008 Bldg. 991 West Tunnel Access Corridor B (interior)	17 α TSA and 17 α Smears (systematic) 2 QC TSA 100% scan of all accessible surfaces	18 α TSA and 18 α Smears (systematic) 2 QC TSA 100% scan of floors, 25% of walls and 10% ceilings	No contamination at any location; all values below unrestricted release levels	Uranium and/or Transuranic DCGL as applicable.

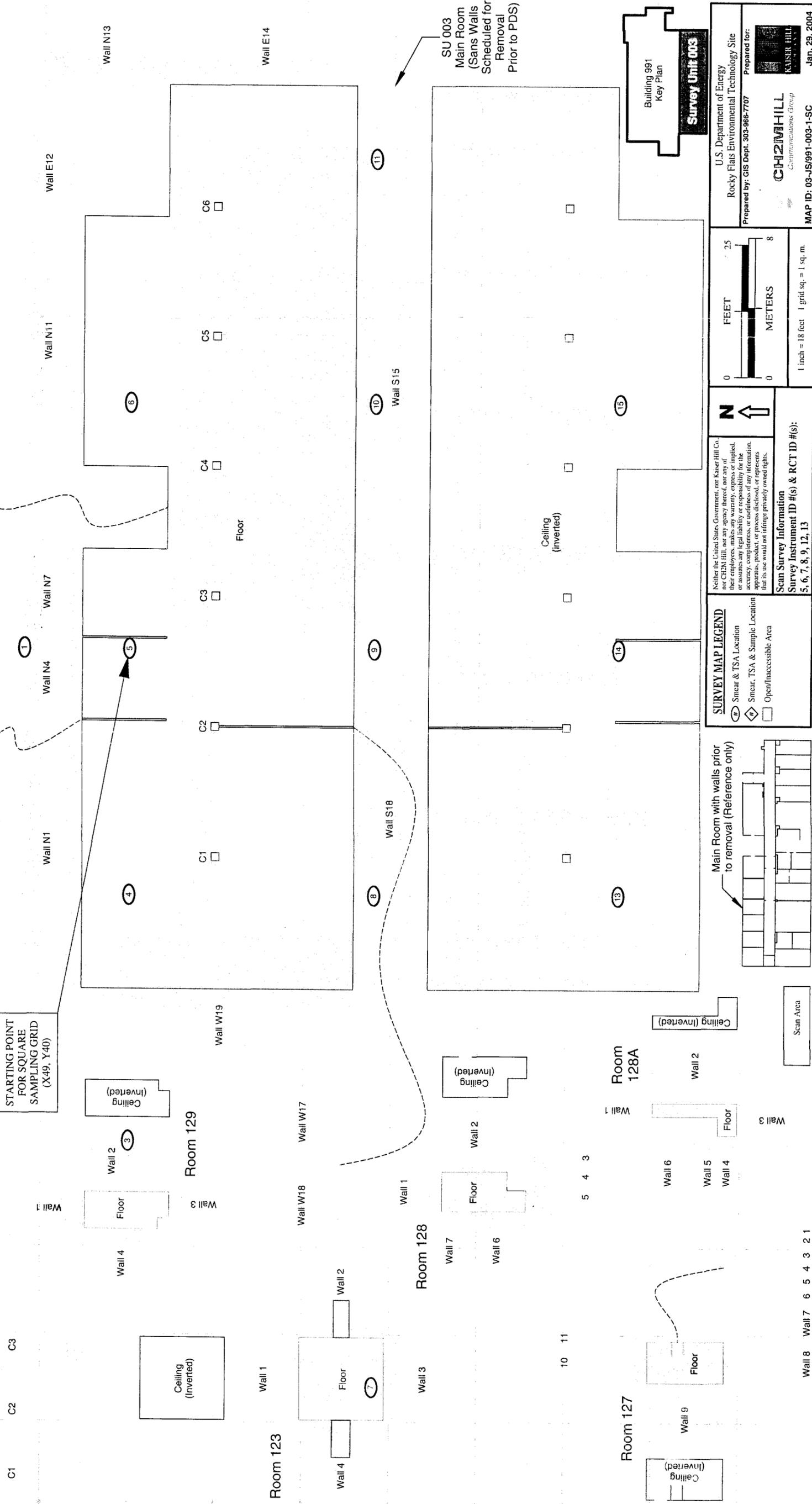
145/145

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

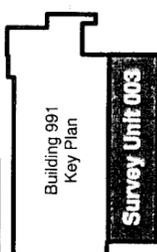
Survey Area: 2
 Building: 991
 Survey Unit Description: Building 991 Interior, South Rooms
 Total Area: 3,054 sq. m.
 Floor Area: 914 sq. m.
 Grid Spacing for Survey Points: 14m X 14m

Classification: 2

PAGE 1 OF 2

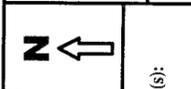


SU 003
 Main Room
 (Sans Walls
 Scheduled for
 Removal
 Prior to PDS)



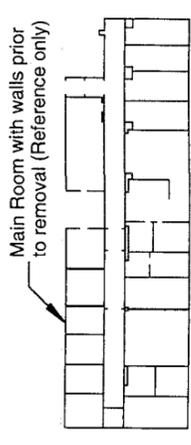
Building 991
 Key Plan
Survey Unit 003

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 Prepared by: GIS Dept. 303-966-7707



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SURVEY MAP LEGEND
 [Symbol] Smear & TSA Location
 [Symbol] Smear, TSA & Sample Location
 [Symbol] Open/Inaccessible Area



Scan Survey Information
 Survey Instrument ID #(s) & RCT ID #(s):
 5, 6, 7, 8, 9, 12, 13

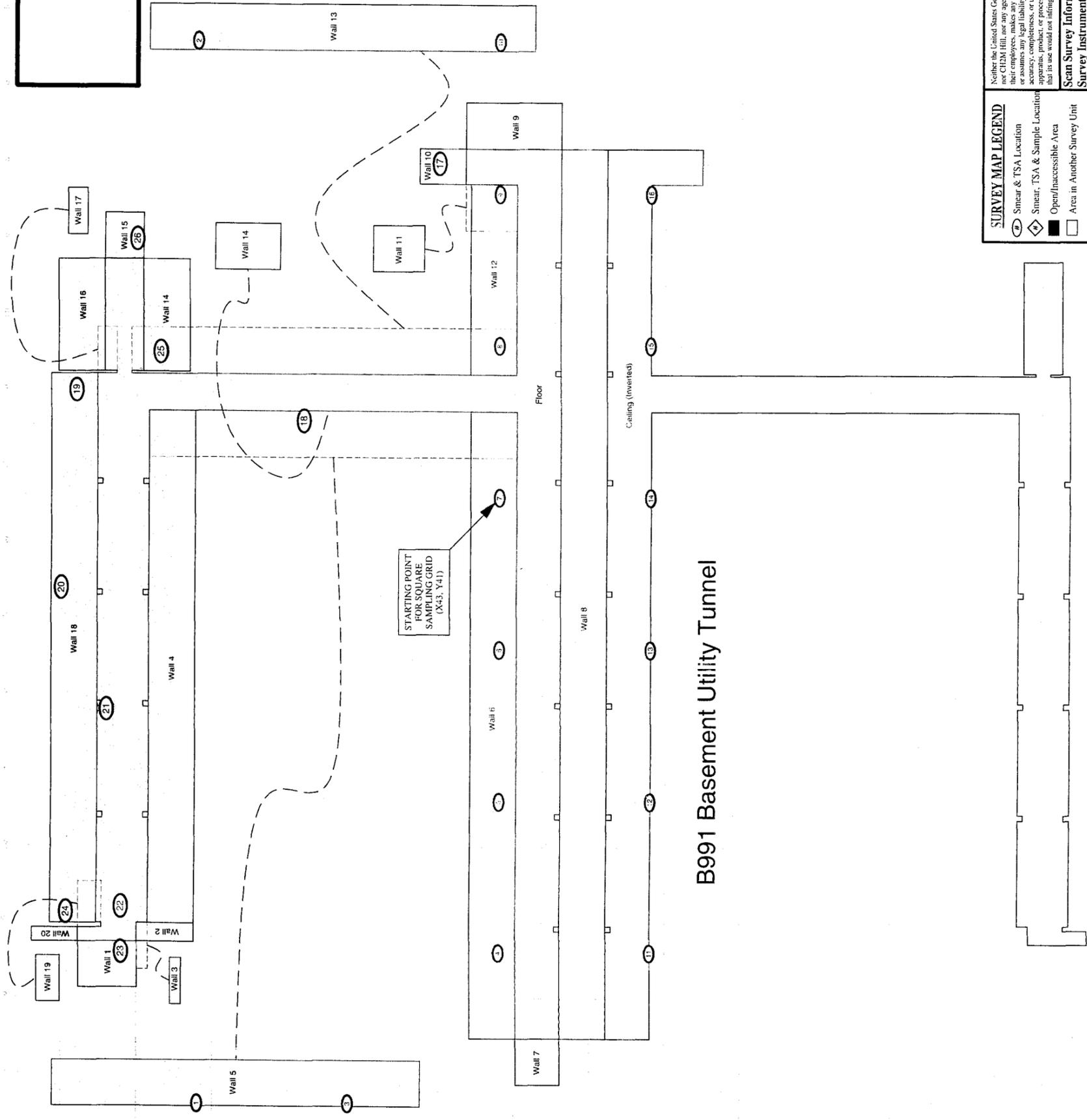
Prepared for:
CH2MHILL
 Communications Group
 KAISER HILL
 MAP ID: 03-JS/991-003-1-SC
 Jan. 29, 2004

PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

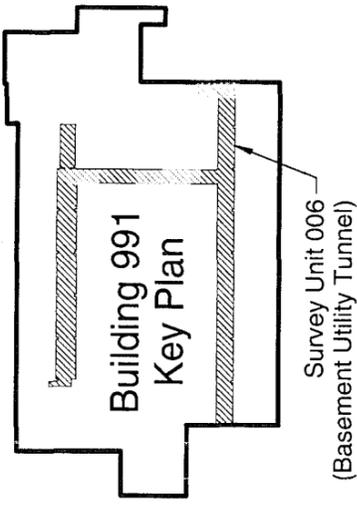
Survey Area: 2
 Building: 991
 Survey Unit Description: B991 Utility Tunnel Floor, Walls, & Ceiling
 Total Area: 1,646 sq. m.
 Floor Area: 392 sq. m.
 Grid Spacing for Survey Points: 10m X 10m

Survey Unit: 991-2-006

Classification: 2



B991 Basement Utility Tunnel

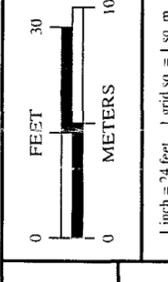


SURVEY MAP LEGEND

- ◻ 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, 6, 7



Scan Area

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

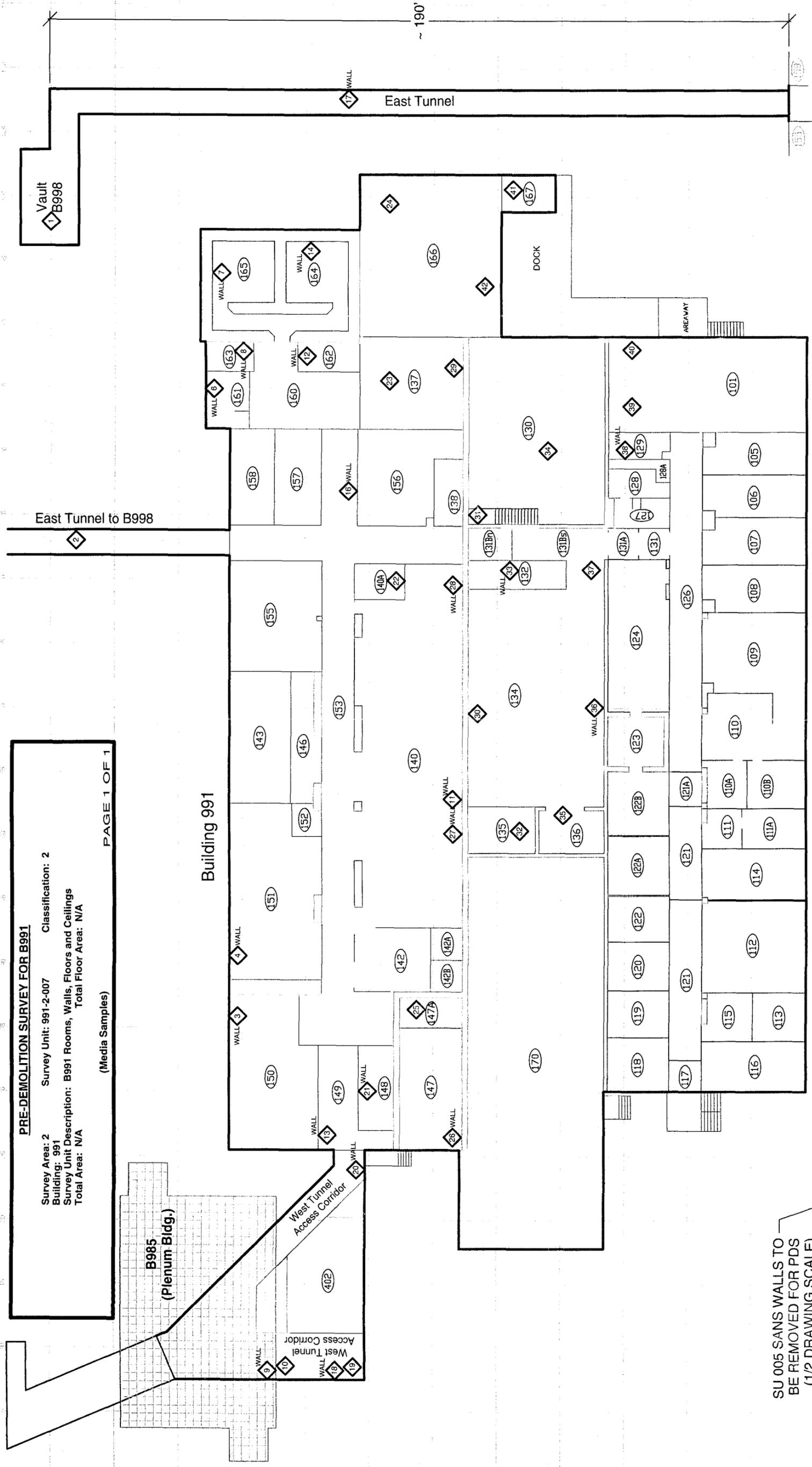
Prepared by: GIS Dept. 303-986-7707

Prepared for:

CH2M HILL
 Communications Services

MAP ID: 03-JS/991-006-SC
 Feb. 02, 2004

PRE-DEMOLITION SURVEY FOR B991
 Survey Area: 2 Survey Unit: 991-2-007 Classification: 2
 Building: 991
 Survey Unit Description: B991 Rooms, Walls, Floors and Ceilings
 Total Floor Area: N/A
 Total Area: N/A
 (Media Samples)
 PAGE 1 OF 1



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MAP ID: 03-JS-A2G2/991-Media
 Nov. 5, 2003

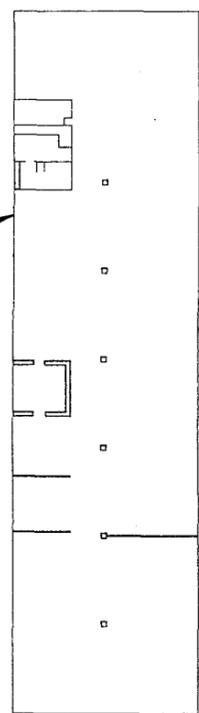
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SURVEY MAP LEGEND
 Smear & TSA Location
 Smear, TSA & Sample Location
 Open/Inaccessible Area

Scan Survey Information
 Survey Instrument ID #(s) & RCT ID #(s):
 3, 6, 7

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

SU 005 SANS WALLS TO BE REMOVED FOR PDS (1/2 DRAWING SCALE)



PRE-DEMOLITION SURVEY FOR AREA 2, GROUP 2

Survey Area: 2
 Building: 991
 Survey Unit Description: Building 991, Exhaust Ventilation System
 Total Area: N/A sq. m.

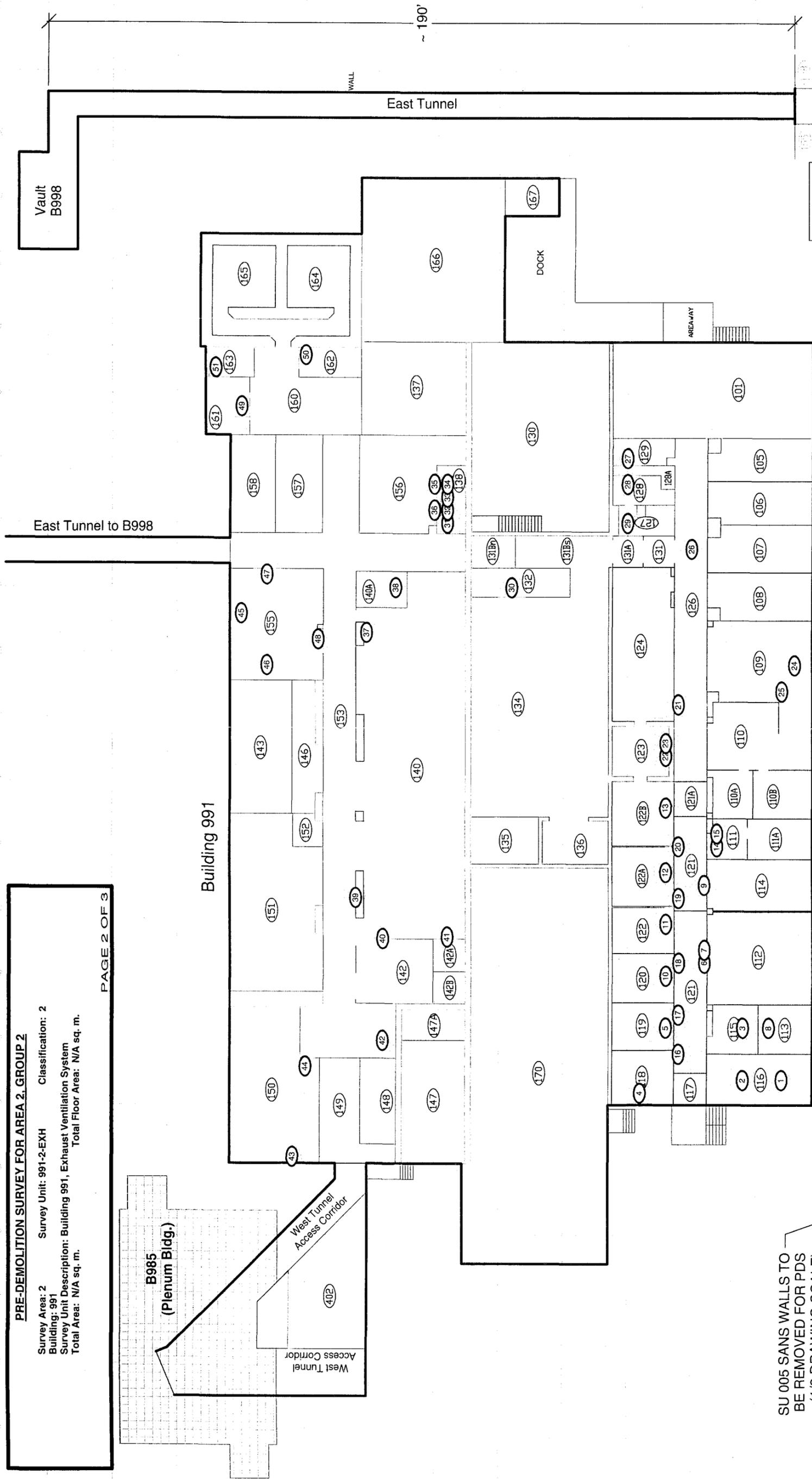
Survey Unit: 991-2-EXH

Classification: 2

Exhaust Ventilation System

Total Floor Area: N/A sq. m.

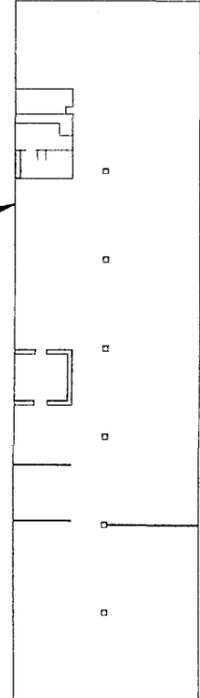
PAGE 2 OF 3



B985
 (Plenum Bldg.)

Building 991

SU 005 SANS WALLS TO
 BE REMOVED FOR PDS
 (1/2 DRAWING SCALE)



SURVEY MAP LEGEND
 ◯ Sinter & TSA Location
 ◊ Sinter, 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):
 1-7, 12

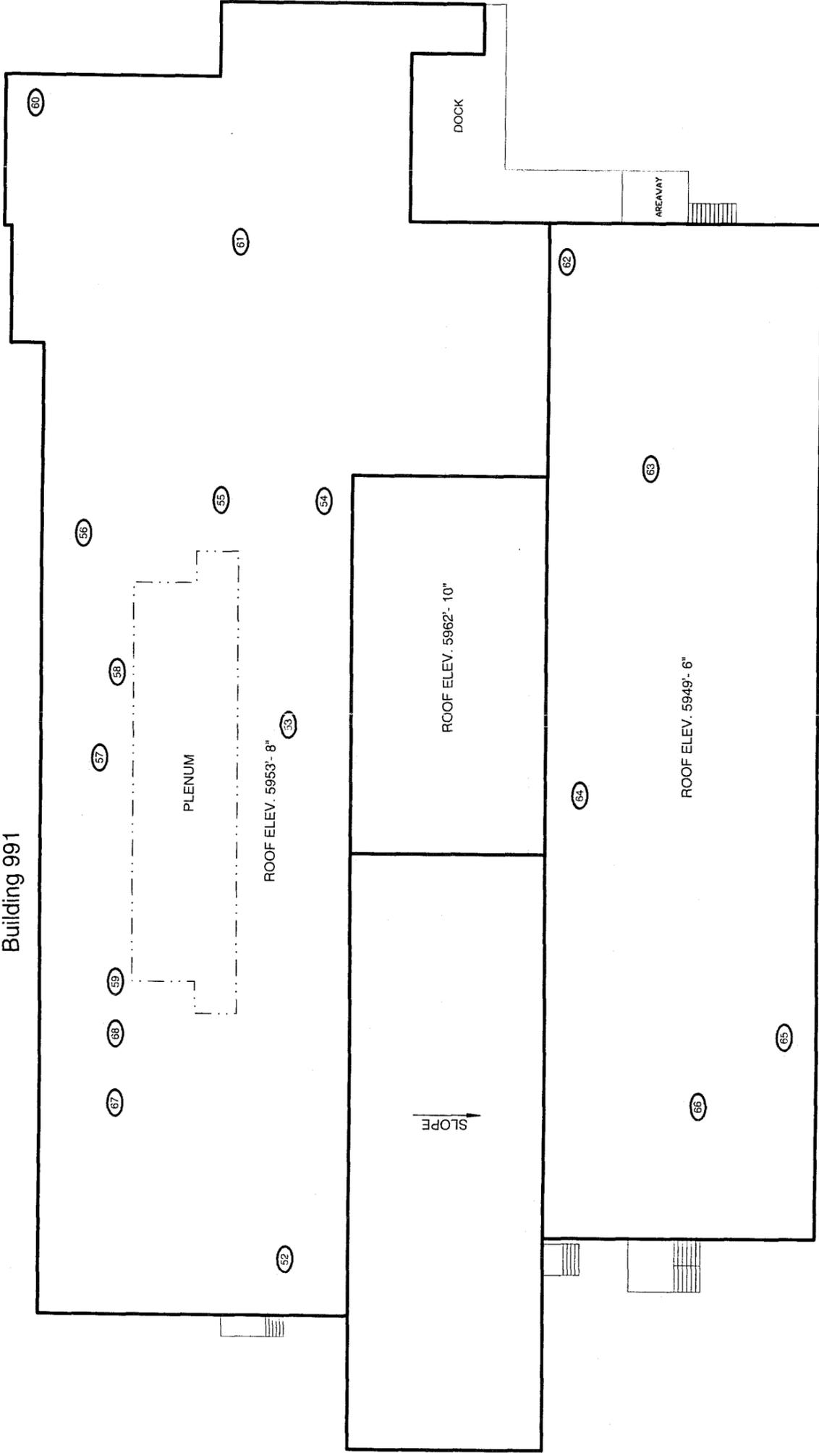
Scale
 0 30 FEET
 0 10 METERS
 1 inch = 24 feet 1 grid sq. = 1 sq. m.

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 Prepared by: GIS Dept. 303-965-7707
CH2MHILL
 Communications Group
 KAISER HILL
 Prepared for:
 MAP ID: 03-JS-A2G2/991-FIPlan Jan. 27, 2004

PRE-DEMOLITION SURVEY FOR AREA2, GROUP2

Survey Area: 2 Survey Unit: 991-2-EXH Classification: 2
 Building: 991
 Survey Unit Description: Building 991, Ventilation System
 Total Area: N/A sq. m. Total Roof Area: N/A sq. m.

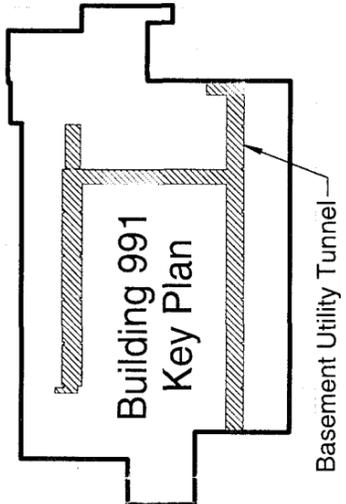
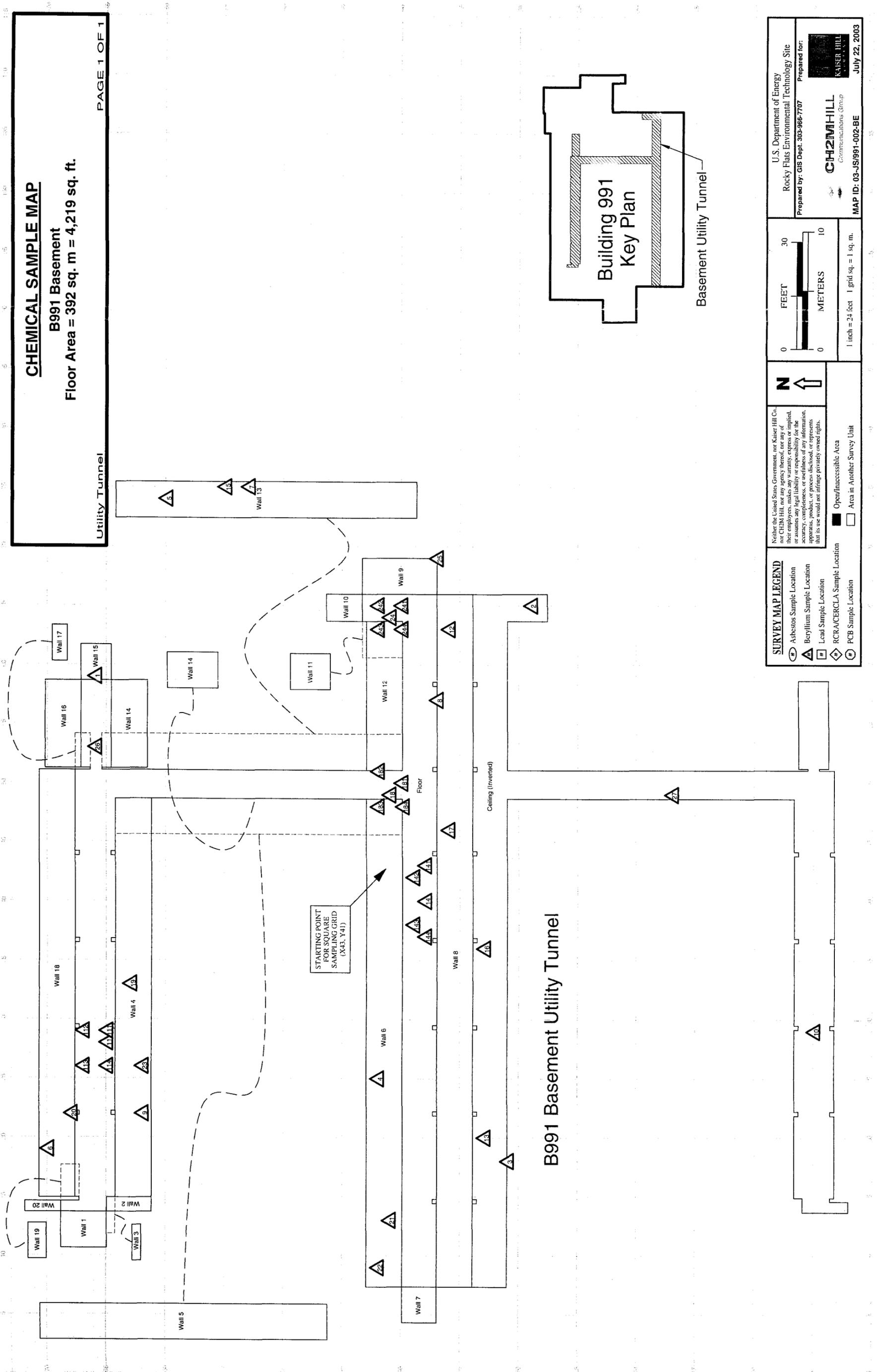
Building 991



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> ○ Sinear & TSA Location ◇ Sinear, TSA & Sample Location ■ Open/Inaccessible Area □ Area in Another Survey Unit 		<p>Neither the United States Government nor Kaiser Hill Co., nor CH2MHILL, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p> <p>Scan Survey Information Survey Instrument ID #(s) & RCT ID #(s): 1 - 7, 12</p>		<p>U.S. Department of Energy Rocky Flats Environmental Technology Site Prepared by: GIS Dept. 303-866-7707</p> <p>CH2MHILL Communications Group KAISER HILL</p> <p>Prepared for: KAISER HILL MAP ID: 03-JS-A2G2/991-Roof Jan. 27, 2004</p>	
<p>Scale Area</p>		<p>0 30 FEET 0 10 METERS</p> <p>1 inch = 24 feet 1 grid sq. = 1 sq. m.</p>		<p>North Arrow</p>	

CHEMICAL SAMPLE MAP

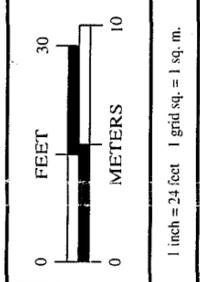
B991 Basement
Floor Area = 392 sq. m = 4,219 sq. ft.



SURVEY MAP LEGEND

(W)	Asbestos Sample Location
(A)	Beryllium Sample Location
(P)	Lead Sample Location
(V)	RCRA/CERCLA Sample Location
(C)	PCB Sample Location

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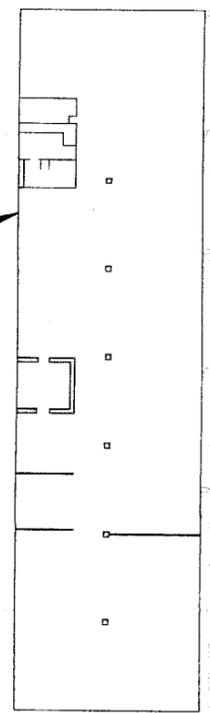
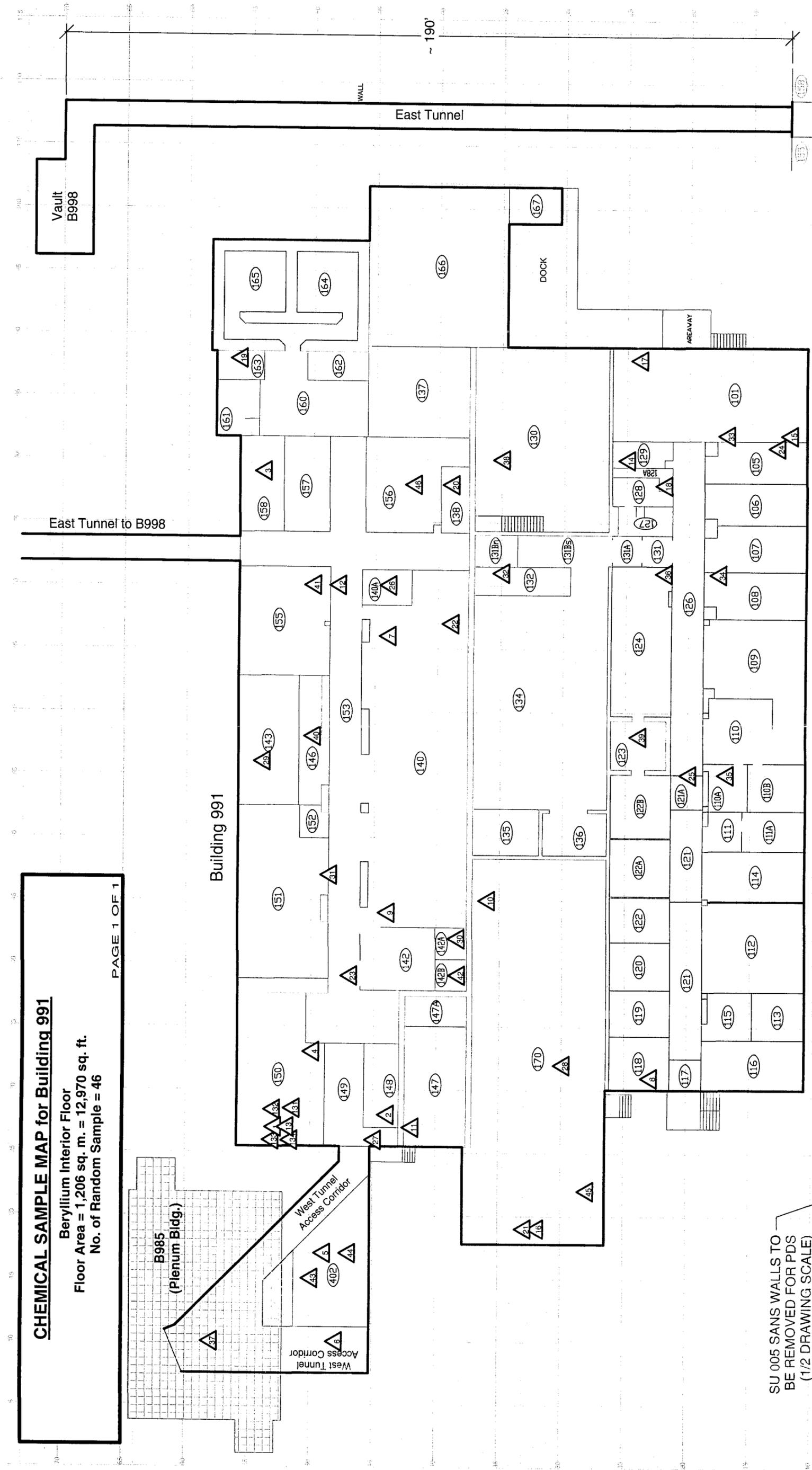


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CH2MHILL
Communications Group
Kaiser Hill
MAP ID: 03-JS/991-002-BE
July 22, 2003

CHEMICAL SAMPLE MAP for Building 991

Beryllium Interior Floor
 Floor Area = 1,206 sq. m. = 12,970 sq. ft.
 No. of Random Sample = 46

PAGE 1 OF 1



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SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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 Communications Group
 KAISER HILL
 Feb. 4, 2004
 MAP ID: 03-JS/991BE

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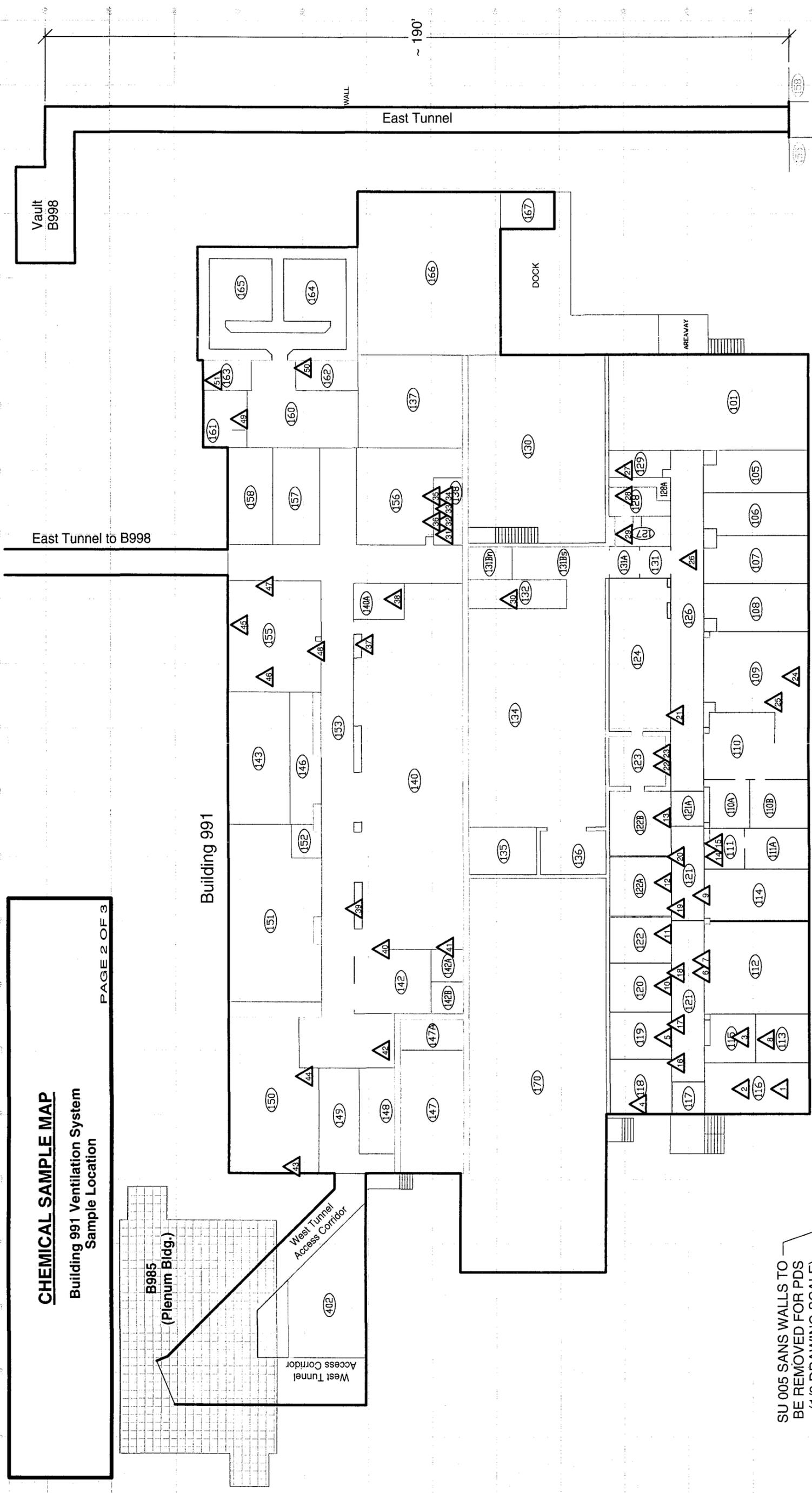
0 30 FEET
 0 10 METERS

N ↑

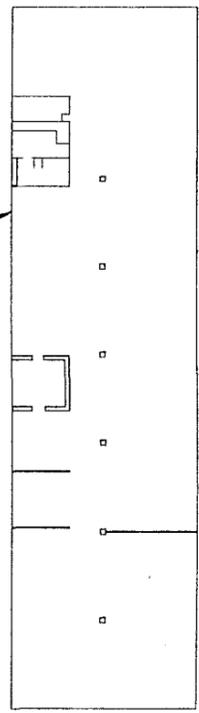
CHEMICAL SAMPLE MAP

Building 991 Ventilation System
Sample Location

PAGE 2 OF 3



SU 005 SANS WALLS TO
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(1/2 DRAWING SCALE)



SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/CERCLA Sample Location
- PCB Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

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MAP ID: 03-JS-A2G2/991-BE
Jan. 27, 2004

Scale: 1 inch = 24 feet | 1 grid sq. = 1 sq. m.

FEET: 0, 30
METERS: 0, 10

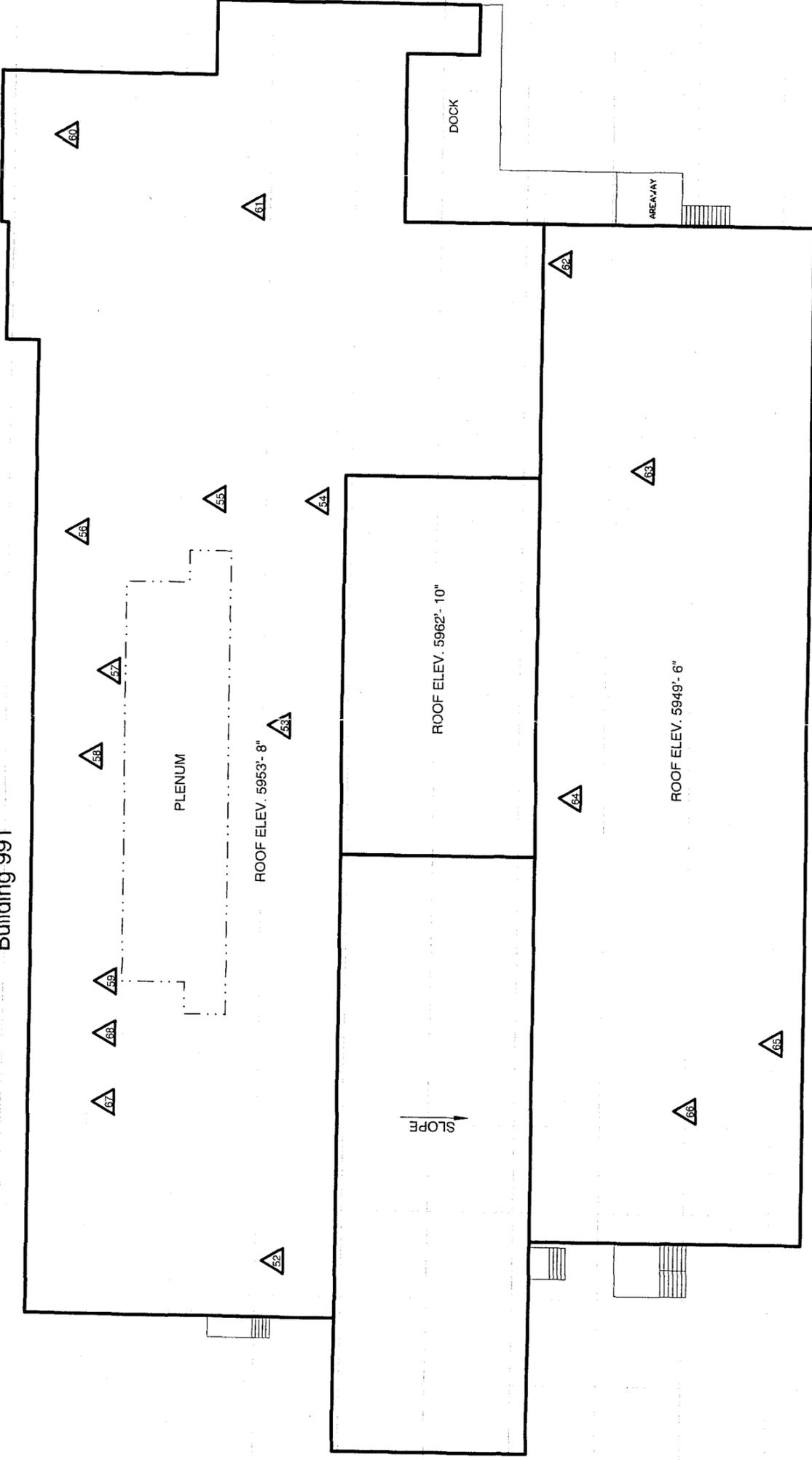
North Arrow

CHEMICAL SAMPLE MAP

Building 991 Ventilation System
Sample Locations

PAGE 3 OF 3

Building 991

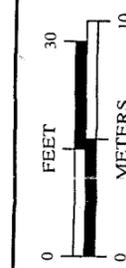
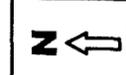


SURVEY MAP LEGEND

- Asbestos Sample Location
- Beryllium Sample Location
- Lead Sample Location
- RCRA/IGCLIA Sample Location
- PCB Sample Location

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- Open/Inaccessible Area
- Area in Another Survey Unit



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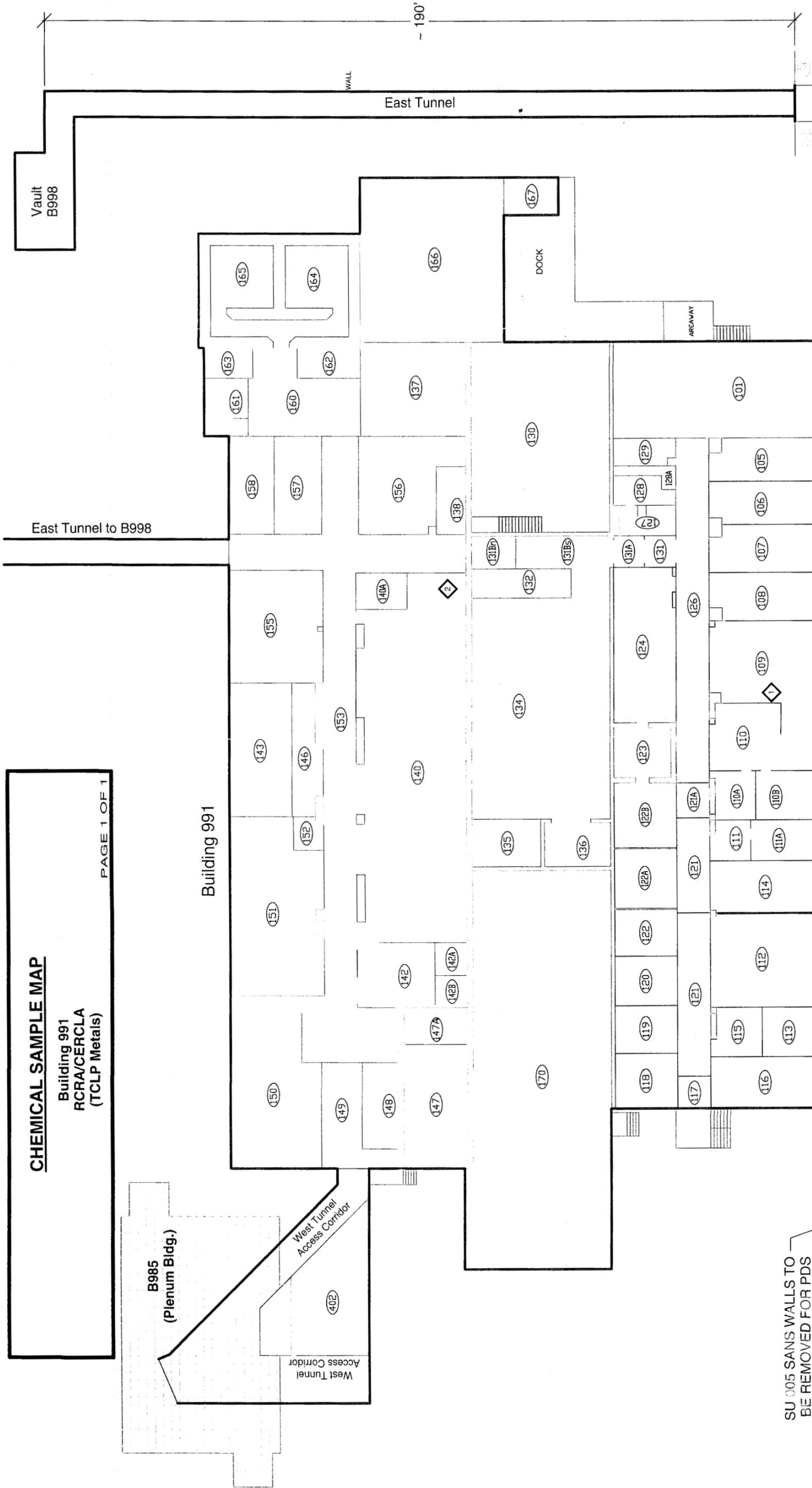
KAISER HILL

MAP ID: 03-JS-A2G2991-Roof-BE Jan. 29, 2004

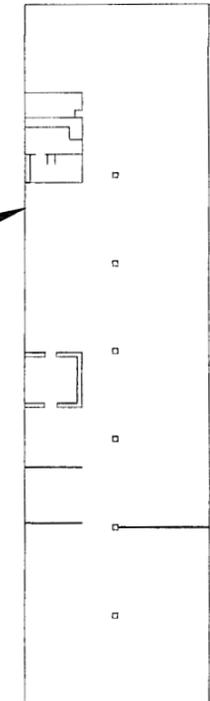
CHEMICAL SAMPLE MAP

Building 991
RCRA/CERCLA
(TCLP Metals)

PAGE 1 OF 1

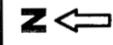


SU 005 SANS WALLS TO
BE REMOVED FOR PDS
(1/2 DRAWING SCALE)



- SURVEY MAP LEGEND**
- Asbestos Sample Location
 - △ Beryllium Sample Location
 - Lead Sample Location
 - ◇ RCRA/CERCLA Sample Location
 - ⊕ PCB Sample Location

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- Open/Inaccessible Area
- Area in Another Survey Unit

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Jan. 27, 2004