



Rocky Flats Environmental Technology Site

RECONNAISSANCE LEVEL CHARACTERIZATION REPORT (RLCR)

B452, S452, T428B, T452A, T452B, T452D, T452E, T452F and
T452G

GROUP 12 CLOSURE PROJECT

REVISION 0

December 12, 2001



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RECONNAISSANCE LEVEL CHARACTERIZATION REPORT (RLCR)

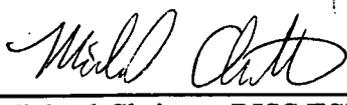
B452, S452, T428B, T452A, T452B, T452D, T452E, T452F and
T452G

GROUP 12 CLOSURE PROJECT

REVISION 0

December 12, 2001

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ABBREVIATIONS/ACRONYMS

ACM	Asbestos containing material
Be	Beryllium
CDPHE	Colorado Department of Public Health and the Environment
DCGL _{EMC}	Derived Concentration Guideline Level – elevated measurement comparison
DCGL _w	Derived Concentration Guideline Level – Wilcoxon Rank Sum Test
D&D	Decontamination and Decommissioning
DDCP	Decontamination and Decommissioning Characterization Protocol
DOE	U.S. Department of Energy
DPP	Decommissioning Program Plan
DQA	Data quality assessment
DQOs	Data quality objectives
EPA	U.S. Environmental Protection Agency
FDPM	Facility Disposition Program Manual
HVAC	Heating, ventilation, air conditioning
HSAR	Historical Site Assessment Report
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
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 Reconnaissance Level Characterization (RLC) was performed to enable facility "Typing" per the RFETS Decommissioning Program Plan (DPP; K-H, 1999) and compliant disposition and waste management of Group 12 facilities (i.e., B452, S452, T428B, T452A, T452B, T452D, T452E, T452F and T452G). Because these facilities were anticipated to be Type 1 facilities, the characterization was performed in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP). All facility surfaces were characterized in this RLC, including the interior and exterior surfaces (i.e., floors (slabs), walls, ceilings and roofs). Environmental media beneath and surrounding the facilities were not within the scope of this RLCR and will be addressed at a future date using the Soil Disturbance Permit process and in compliance with RFCA.

The RLC encompassed both radiological and chemical characterization to enable compliant disposition and waste management pursuant to the D&D Characterization Protocol (MAN-077-DDCP). The characterization built upon physical, chemical and radiological hazards identified in the facility-specific Historical Site Assessment Reports.

Results indicate that no radiological contamination exists in excess of the PSDP unrestricted release limits of DOE Order 5400.5, and no hazardous wastes. Non-friable asbestos containing materials were identified in Building 452 in the black mastic adhesive beneath the 12" x 12" white and black floor tiles in the Men's Restroom (15% and 9% Chrysotile). All samples of suspect friable materials were negative for asbestos. Fluorescent light ballasts may contain PCBs. Any PCB ballasts and asbestos containing materials will be managed and disposed of in compliance with Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) regulations. All concrete associated with these facilities meet the criteria for recycling concrete per the RFCA RSOP for Recycling Concrete.

Based upon this RLCR and subject to concurrence by the CDPHE, Group 12 facilities are considered to be Type 1 facilities. To ensure that the facilities remain free of contamination and that RLC data remain valid, isolation controls have been established, and the facilities have been posted accordingly.

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1 INTRODUCTION

A Reconnaissance Level Characterization (RLC) was performed to enable compliant disposition and waste management of Group 12 facilities (i.e., B452, S452, T428B, T452A, T452B, T452D, T452E, T452F and T452G). Because these facilities were anticipated to be Type 1 facilities, a PDS characterization was performed. All facility surfaces were characterized in this RLC, including the interior and exterior surfaces of the facilities (i.e., floors (slabs), walls, ceilings and roofs). Environmental media beneath and surrounding the facilities were not within the scope of this RLC Report (RLCR) and will be addressed at a future date 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 the Group 12 facilities. The locations of these facilities are shown in Attachment A, Facility Location Map. These facilities no longer support the RFETS mission and will be removed to reduce Site infrastructure, risks and/or operating costs.

Before the facilities can be removed, a Pre-Demolition Survey (PDS) must be conducted; this document presents the PDS results. 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 Reports.

1.1 Purpose

The purpose of this report is to communicate and document the results of the RLC effort. PDSs are performed before 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 the Group 12 facilities. Environmental media beneath and surrounding the facilities are not within the scope of this RLCR 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 RLC 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.

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2 HISTORICAL SITE ASSESSMENT

Facility-specific Historical Site Assessments (HSAs) were conducted to understand facility histories and related hazards. The assessments consisted of facility walkdowns, interviews, and document review, including review of the Historical Release Report (refer to the D&D Characterization Protocol, MAN-077-DDCP). Results were used to identify data gaps and needs, and to develop radiological and chemical characterization packages. Results of the facility-specific HSAs were documented in facility-specific Historical Site Assessment Reports (HSARs). Refer to Attachment B, Historical Site Assessment Report, for a copy of the Group 12 HSAR. In summary, the HSAR identified no potential for radiological and chemical hazards, except the potential for asbestos containing materials and PCBs in paint and light ballasts.

3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS

Group 12 facilities 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 the Group 12 Radiological Characterization Plan). Radiological survey unit packages were developed for each survey unit. Survey unit identification numbers are as follows: G12-A-001 – G12-A-004 & G12-A-006 – G12-A-009. Each survey unit included the interior and exterior surfaces of the affected facility/structure. T452C is still in use as an office trailer for RISS Radiological Operations and will be characterized in a future PDS effort. Individual radiological survey unit packages are maintained in the RISS Characterization Project files.

Group 12 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*. Radiological survey data, statistical analysis results, survey locations, and radiological scan maps are presented in Attachment C, Radiological Data Summary and Survey Maps.

A total of 185 TSA measurements, 185 RSA measurements, and 5% scan surveys were performed on the nine Group 12 facilities. None of the measurements indicated elevated activity above the appropriate DCGL_w values. Therefore, the PDS confirmed the indicated facilities do not contain radiological contamination above the surface contamination guidelines provided in the RFETS PDSP for D&D Facilities. Isolation control postings are displayed on affected structures to ensure no radioactive materials are introduced.

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4 CHEMICAL CHARACTERIZATION AND HAZARDS

Group 12 facilities 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 these facilities. Based upon a review of historical and process knowledge, visual inspections, and PDSP DQOs, additional sampling needs were determined. A Chemical Characterization Plan (refer to RISS Characterization Project files for the Group 12 Chemical Characterization Plan) was developed during the planning phases that describes sampling requirements and the justification for the sample locations and estimated sample numbers. Contaminants of concern included asbestos, beryllium, RCRA/CERCLA constituents, and PCBs. Refer to Attachment D, 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 in the aforementioned buildings in accordance with the PDSP. A CDPHE-certified asbestos inspector conducted the inspection and sampling in accordance with the *Asbestos Characterization Protocol, PRO-563-ACPR, Revision 0*. Building materials suspected of containing asbestos were identified for sampling at the discretion of the inspector. S452 is a wooden shed on a concrete slab with rolled-roofing material and is not suspected of containing asbestos and therefore was not sampled.

Non-friable asbestos containing materials were identified in Building 452 in the black mastic adhesive beneath the 12" x 12" white and black floor tiles in the Men's Restroom (15% and 9% Chrysotile). All samples of suspect, friable building materials were negative for asbestos. Asbestos sample data and sample location maps are contained in Attachment D, Chemical Data Summaries and Sample Maps.

4.2 Beryllium (Be)

Based on the HSAR and personnel interviews, these buildings were anticipated Type 1 facilities. There is not, however, adequate historical and process knowledge to conclude that beryllium was not used or stored in these buildings. Therefore, biased beryllium sampling was performed in accordance with the PDSP and the *Beryllium Characterization Procedure, PRO-536-BCPR, Revision 0, September 9, 1999*. Biased sample locations corresponded with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

All beryllium sample results were less than $0.1 \mu\text{g}/100\text{cm}^2$. Beryllium sample data and sample location maps are contained in Attachment D, Chemical Data Summaries and Sample Maps.

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

Based on the Group 12 HSAR, interviews and facility walkdowns, there was no record of RCRA/CERCLA constituent operations, storage or spills, and therefore,

Sampling for lead in paint in the Group 12 facilities 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.

4.4 Polychlorinated Biphenyls (PCBs)

Based on the Group 12 HSARs, interviews and facility walkdowns, no PCB-containing equipment were ever present in any of the buildings, and therefore, there is no potential for PCB contamination resulting from spills. Therefore, PCB sampling was not performed in these facilities. Some facilities may contain fluorescent light ballasts that may contain PCBs. Therefore, fluorescent light fixtures will be inspected to identify PCB ballasts during removal operations. PCB ballasts will be identified based on factors such as labeling (e.g., PCB-containing and non-PCB-containing), manufacturer, and date of manufacturing. All ballasts that do not indicate non-PCB-containing are assumed to be PCB-containing. Based on the age of the facilities (constructed after 1980), paints used on the facilities do not contain PCBs, and painted surfaces can be disposed of as sanitary waste.

5 PHYSICAL HAZARDS

Physical hazards associated with Group 12 facilities consist of those common to standard industrial environments and include hazards associated with energized systems, utilities, and trips and falls. There are no 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 decommissioning of Group 12 facilities, and consequent waste management, are of adequate quality to support the decisions documented in this report. The data presented in this report (Attachments C and D) were verified and validated relative to DOE quality requirements, applicable EPA guidance, and original DQOs of the project.

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 E.

7 DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES

The demolition and disposal of Group 12 facilities will generate a variety of wastes. Estimated waste types and waste volumes are presented below by facility. All wastes can be disposed of as sanitary waste, except asbestos containing material and PCB Bulk Product Waste. There is no radioactive or hazardous waste. Asbestos and PCB ballasts will be managed pursuant to Site asbestos and PCB abatement and waste management procedures.

Waste Volume Estimates and Material Types, Group 12							
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)
B452	5,100	1,050	2,374	3,694	3,800	Floor tile & Mastic Adhesive – 135 cu. ft.	Glass 90 cu ft Carpet 500 cu ft Mercury. Lights 2 cu ft
S-452	15	72	6	None	None	None	Glass 1 cu ft
T428B	None	184	4	114	30	None	None
T452A	390	460	722	2,100	300	None	Glass 30 cu ft Carpet 120 cu ft
T452B	390	460	722	2,100	600	None	Glass 30 cu ft Carpet 120 cu ft
T452D	390	460	722	2,100	600	None	Glass 30 cu ft Carpet 120 cu ft
T452E	60	180	6	16	26	None	Glass 30 cu ft
T452F	480	460	722	2,100	300	None	Glass 30 cu ft Carpet 120 cu ft
T452G	1,160	460	722	2,100	300	None	Glass 30 cu ft Carpet 120 cu ft

8 FACILITY CLASSIFICATION AND CONCLUSIONS

Based on the analysis of radiological, chemical and physical hazards, Group 12 facilities (i.e., B452, S452, T428B, T452A, T452B, T452D, T452E, T452F and T452G) are classified as RFCA Type 1 facilities pursuant to the RFETS Decommissioning Program Plan (DPP; K-H, 1999). The Type 1 classification is based on a review of historical and process knowledge, and newly acquired RLC data, and will be subject to concurrence by the Colorado Department of Public Health and the Environment (CDPHE).

The RLC of the Group 12 facilities was performed in accordance with the DDCP and PDSP, all PDSP DQOs were met, and all data satisfied the PDSP DQA criteria. These facilities do not contain radiological or hazardous wastes. PCB ballasts and asbestos containing material will be removed and disposed of in compliance with EPA and CDPHE regulations. 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. All concrete associated with these facilities meet the criteria for recycling concrete per the RFCA RSOP for Recycling Concrete.

To ensure that the Type 1 facilities remain free of contamination and that RLC data remain valid, isolation controls have been established, and the facilities are 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. 0, November 15, 2000.
- MAN-076-FDPM, *Facility Disposition Program Manual*, Rev. 1, September 1999.
- MAN-077-DDCP, *Decontamination and Decommissioning Characterization Protocol*, Rev. 3, April 23, 2001.
- MAN-127-PDSP, *Pre-Demolition Survey Plan for D&D Facilities*, Rev. 0, April 23, 2001.
- MARSSIM - Multi-Agency Radiation Survey and Site Investigation Manual, December 1997 (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.
- RFCA Standard Operation Protocol for Recycling Concrete, September 28, 1999.
- RFETS, Historical Site Assessment for Group 12, November 2001.

ATTACHMENT A

Facility Location Map

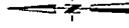
Group 12 Cluster

Standard Map Features

-  Buildings and other structures
-  Solar Evaporation Ponds (SEPs)
-  Lakes and ponds
-  Streams, ditches, or other drainage features
-  Fences and other barriers
-  Paved roads
-  Dirt roads

DATA SOURCE BASE FEATURES:

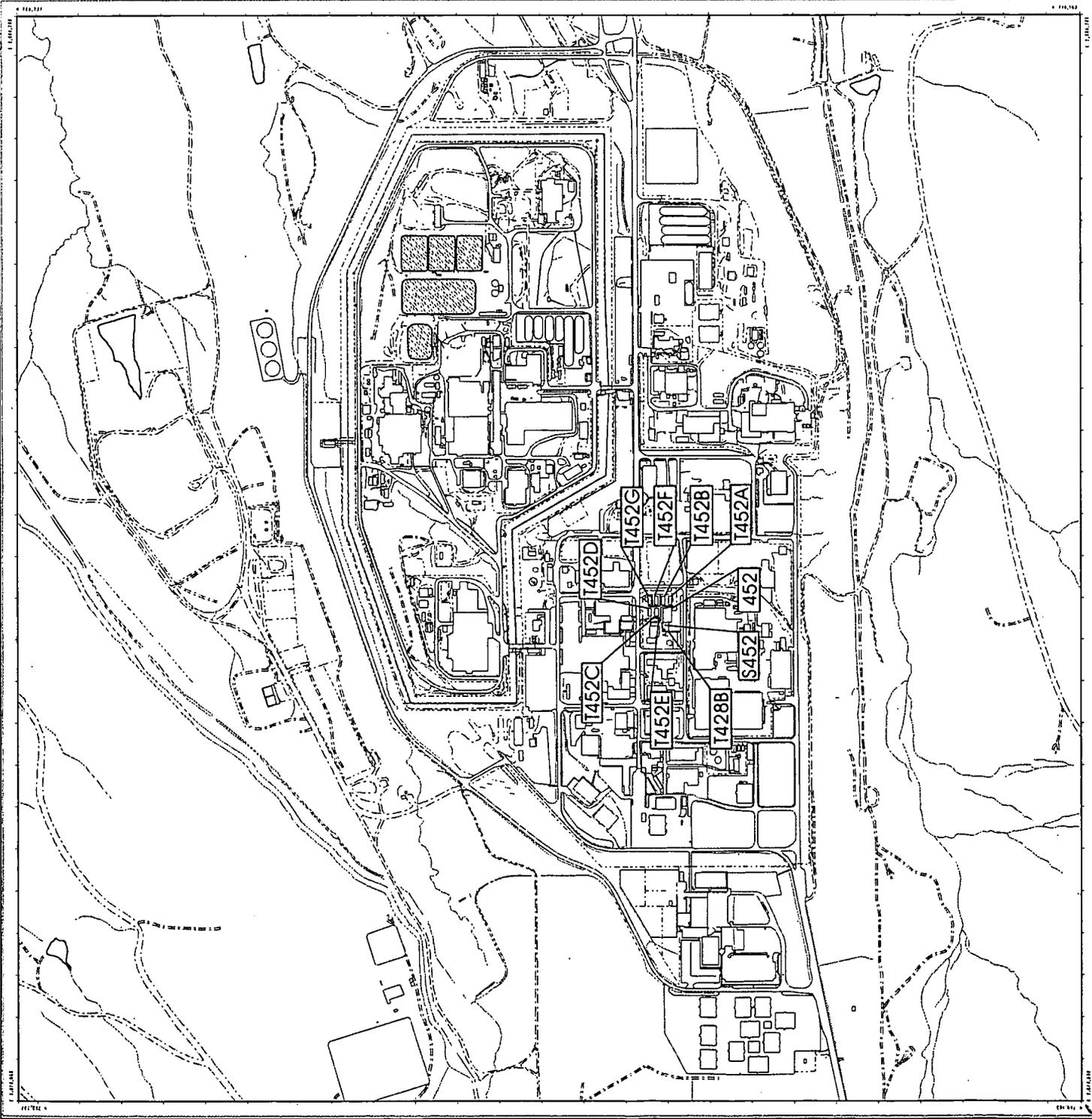
Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EGNIG RSL, Las Vegas. Digitized from the orthophotographs, 1995



Scale = 1 : 12450
1 inch represents approximately 1038 feet



State Plane Coordinate Projection
Colorado Zone
Datum: NAD83



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

Prepared by:
DynCorp
AN ENVIRONMENTAL TECHNOLOGY

Prepared for:
KAISER-HILL
CORPORATION

OS Dept. 000066-7707
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MAP ID: FY 2002

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ATTACHMENT B

Historical Site Assessment Report

**D&D RISS Facility Characterization
Historical Site Assessment Report
November 1, 2001, Rev. 0**

Facility ID: Area 1 – Group 12, aka Building 452 Cluster Facilities, Includes: Building 452, S-452 Janitor's Storage, T-428B Storage, T-452A Office Trailer, T-452B Office Trailer, T-452C Office Trailer, T-452D Office Trailer, T-452E Portable Rest Rooms Trailer, T-452F Office Trailer, T-452G Office Trailer

Anticipated Facility Type (1, 2, or 3): Building 452 = Type 1, S-452 = Type 1, T-428B = Type 1, T-452A = Type 1, T-452B = Type 1, T-452C = Type 1, T-452D = Type 1, T-452E = Type 1, T-452F = Type 1, T-452G = Type 1

Refer to attached site drawing for facility location.

This facility – specific Historical Site Assessment (HSA) has been performed in accordance with:

D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Physical Description

Building 452 is an office facility and it is a single-story, pre-engineered, metal-frame building on a concrete foundation and floor. Building 452 is located immediately north of Cottonwood Avenue at approximately Sixth Street. Building 452 was constructed and put into service in 1983. The exterior walls are drab-olive color enamel corrugated steel panels sandwiched over 3" of fiberglass insulation. Building 452 is a rectangular-shaped facility with dimensions of approximately 60' wide X 100' long X 12 high at the roof eave, 16' high at the roof peak. The roof is corrugated steel panels over 3" batting insulation. The size of Building 452 is approximately 6,000 square feet. Building 452 has no floor drains. Building 452 has a Men's and Women's Restrooms, which are connected to the Plant sewer system. The restrooms, which are located in the southwest corner of Building 452 and have drywall ceilings and walls. Both restrooms have 12" X 12" vinyl-type tiled floors. Building 452 has no visible roof drain downspouts, but they must be located under the exterior metal skin and probably drain into an underground storm-sewer and drainage system. The offices and hallways of Building 452 are partitioned with drywall and paneling with steel-stud construction. The hallways, offices, and rooms, and labs have the drop-ceilings with acoustical ceiling tiles. Building 452 has 2 entry doors and both are covered for weather protection. Door 1 is a personnel entry door on the west side. Door 2 is an exit door on the east side of the building.

Building 452 is heated by natural gas and the HVAC system is located outside on the west wall directly north of the west entrance to the office facility. The HVAC is ducted to all offices and rooms above the ceiling. Building 452 electrical power is provided by a large 480-V transformer located north of the building near Central Avenue and it supplies power to all of the office trailers in Area 1 - Group 12. This power transformer area has power disconnects for Building 452 and each individual office trailer. Building 452 has another dedicated 480-V transformer located on a concrete pad near the northwest corner of the building.

Building 452 domestic cold water is connected to the two restrooms in the building. The Women's Restroom has an electric hot water heater, which provides hot water for both restrooms. Building 452 has a LSDW System with speakers in all areas of the facility. Building 452 is connected to the Plant sanitary sewer system. There are no process sinks or process drains in Building 452. Building 452 is connected to the Plant Fire Detection and Alarm System. Building 452 has two exterior mercury vapor lights, one near the west entrance and one near the east entrance.

S-452 Janitor's Storage is an all-wood storage shed on a concrete slab, it is located directly west of the west entrance to Building 452. S-452 is approximately 4' – 6" wide X 6' long X 8' high on the east and 7' – 6" on the west. The roof of S-452 is flat and slopes to the west for water drainage and the roof is covered with roll roofing material, which might contain asbestos.

**D&D RISS Facility Characterization
Historical Site Assessment Report
November 1, 2001, Rev. 0**

Physical Description (Con't)

T-428B Storage is a skid mounted wooden storage shed (listed as a trailer on the Projects Facility List) and is located directly west of the northwest corner of Building 452. T-428B is approximately 10' wide X 12' long X 8' high. The roof of T-428B and the exterior walls are covered with corrugated metal. The interior walls are insulated and covered with wood paneling. The drop-ceiling contains acoustical tile, roof/ceiling insulation, and one 2' X 4' recessed lighting panel. T-428B was acquired (or constructed) in 1980 and has always been used as a storage facility for "cold" equipment items as per the interviewees for this facility. T-428B has a wood entry ramp that is 3' wide X 5' long X 0" high to 18" high and the ramp is not attached to the storage shed.

T-452A Office Facility is a modular construction type and was constructed in the summer of 1983. T-452A is 60'3" long X 24'3" wide X 13'4" high including the 40" metal skirt around the foundation. Covered entry doors are located on the east and west ends of the facility. There are 5' by 8' covered wooden decks and steps leading to the doors. The covering for entryway and the sides of the building is galvanized corrugated sheet metal. The skirting around T-452A is enamel baked on corrugated aluminum. The building is located at the corner of Cottonwood Avenue and Sixth Street. Structurally the building is sound, there are no leaks in the ceiling and the outside has no damage. The interior perimeter is dry wall over insulation, the ceiling is a drop ceiling with 2' by 4' acoustical tile and the floor is carpet covering wood flooring. The foundation could not be observed as the skirting covered it. Both entry doors have cipher locks on them. It has been an office building through out its use.

The utilities for this building are an electric heat pump for heating and cooling, and it is connected to the Plant Fire Alarm and LSDW Systems. The drawings for this unit consist only of a Facility Planning layout sketch of the cubicles. Radiological surveys may have been done, but the old data is not available. This unit will have to be resurveyed to meet present standards for unrestricted release.

T-452B Office Facility is of the modular construction type and was constructed in 1983, 84 time frame. T-452B is 60'3" long X 24'3" wide X 13'4" high including the 40" metal skirt around the foundation. Covered entry doors are located on the east and west ends of the facility. There are 5' by 8' covered wooden decks and steps leading to the doors. The covering for the entryway and the sides of the building is galvanized sheet metal. The skirting around T-452B is enamel baked on corrugated aluminum. The building is located at the corner of Cottonwood Avenue and Sixth Street. Structurally the building is sound, there are no leaks in the ceiling and the outside has no damage. The interior perimeter is dry wall over insulation, the ceiling is a drop ceiling with 2' by 4' acoustical tile and the floor is carpet covering wood flooring. The foundation could not be observed as the skirting covered. Both entry doors have cipher locks on them.

It has been an office building through out its use. Presently T-452B Office Trailer is not occupied, but there is some miscellaneous chairs, desks, and furniture left over from the previous occupants

The utilities for this building are an electric heat pump for heating and cooling and it is connected to the Plant Fire Alarm and LSDW Systems. The drawings for this unit consist only of a Facility Planning lay out sketch of the cubicles. Radiological surveys may have been done, but the old data is not available. This unit will have to be resurveyed to meet present standards for unrestricted release.

**D&D RISS Facility Characterization
Historical Site Assessment Report
November 1, 2001, Rev. 0**

Physical Description (Con't)

T-452C Office Facility is a modular construction type of building constructed in 1984, 85-time frame. T-452C is 60'3" long X 24'3" wide X 13'4" high including the 40" metal skirt around the foundation. Covered entry doors are located on the east and west ends of the facility. There are 5' by 8' covered wooden decks and steps leading to the doors. The covering for the entryway and the sides of the building is galvanized sheet metal. Skirting around the building is enamel baked on corrugated Aluminum. The building is located at the corner of Central Avenue and Sixth Street. Structurally the building is sound, there are no leaks in the ceiling and the outside has no damage. The interior perimeter is dry wall over insulation, the ceiling is a drop ceiling with 2' by 4' acoustical tile panels and the floor is carpet over wood flooring. The foundation could not be observed because of the skirting around the building. Both entry doors have cipher locks on them.

It has been an office building through out its use. There are 12 cubicles, two hard walled offices and a hard walled Lektreiver® area. One cubicle is a printer/copier area and one is used for storage. The offices are equipped with a desk, chair, computer, over desk book shelf, book shelves, filing cabinets of various sizes and in some offices a table and extra chairs.

The utilities for this building are an electric heat pump for heating and cooling and it is connected to the Plant Fire Alarm and LSDW Systems. The drawings for this unit consist only of a Facility Planning lay out sketch of the cubicles. Radiological surveys may have been done, but the old data is not available. This unit will have to be resurveyed to meet present standards for unrestricted release.

T-452D Office Facility is a modular construction type of building which was put into service in 1983 at the Plant's T-452 Site, which is south of Central Avenue and west of the Railroad Tracks at approximately Sixth Street of the RFETS. T-452D is 60'3" long X 24'3" wide X 13'4" high including the 40" metal skirt around the foundation. Covered entry doors are located on the east and west ends of the facility. There are 5' by 8' covered wooden decks and steps leading to the doors. The T-452D Unit has an exterior covering of galvanized corrugated metal with enameled metal skirt approximately 40" high around the base of the building. The footing/foundation could not be observed because of the skirting around the building. Both of the T-452D door entryways are constructed from wood with a painted surface and they are covered with a galvanized corrugated metal skin. T-452D has approximately 1440 square feet of floor space. The interior of T-452D is dry wall over insulation, the ceiling is a drop type with acoustical tile panels, and floor is carpeting over wood flooring. Both entry doors have cipher locks on them.

The T-452D Unit has an electric heat pump, which provides both heat and air conditioning. Each office has a computer, desk, chair, bookcase, and one or more file cabinets. There are 6 computers, a fax machine, and a copier in use in this office facility. One office cubicle has approximately 10 large filing cabinets. The T-452D Unit does not have an as built drawing, but a building layout drawing is available.

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Physical Description (Con't)

T-452E is a Portable Restroom Facility. The T-452E Unit appears to be in good condition. The T-452E location is Central Avenue and Sixth Street, southwest corner, west of the railroad tracks. The T-452E Unit was put into service in 1984 at the Plant's T452 Site. The physical size of the modular building is approximately 8' X 10' for approximately 80 square feet of floor space. The building has been a Men and Women restroom facility since the 1984 installation date. The modular building sets on a concrete foundation/footers. The modular building has 2 entry doors with steps and deck entry, which is approximately 5' X 9' including the two steps, is constructed from wood with a painted surface. The foundation/footers have a wooden skirt approximately 18' high all around, at the base of the building, for this reason the footing/foundation and tie-down method could not be observed. The materials of construction for the small modular building are: concrete foundation/footers, wooden steps and entry way, wooden building frame with Masonite® wall material on the interior walls, and the exterior walls and roof are covered with a corrugated metal skin. Both doors on this facility have privacy locks, sliding bolt locks, on the inside of the doors.

The T-452E Unit has electric baseboard type heat. According to Nick Demos, HRR Contact on X4605. T452E has no CERCLA concerns. The building system consists of a water closet, water, a sink in both the men's and the women's restroom. The T-452E Unit has electric baseboard type heat. The building has heat tracing of the water pipes to keep from freezing. The T-452E Unit has two exhaust fans installed, one on the north wall and one on the south wall. The T-452E Unit is hooked up to the Plant Sewer System and there are 3 sewer vents extending up through the roof. T-452E does not have an as-built drawing or a building layout drawing.

T-452F Office Trailer was put in place in the 1985, 86 time frame and is a doublewide type of construction. The location for this trailer is at the corner of Central Avenue and Sixth Street. T-452F is approximately 60' 3" long X 26' 3" wide X 13' high with two covered side entries on the south side. Wooden steps and deck covered by plywood sides and roof reach the entry. The trailer is enamel baked on corrugated Aluminum and the skirting is enamel baked on corrugated sheet metal. The foundation could not be observed as the skirting covered it. Structurally the building is sound, there are no leaks in the ceiling and the outside has no damage. The interior perimeter is wood paneling over insulation. Some of the interior walls are wood paneling and two are drywall. The ceiling is a drop ceiling with 2' by 4' acoustical tile and the floor is carpet over wood flooring. Both entry doors have cipher locks on them

The original use was an office in the East End and a health effects lab in the West End. Only the East End is occupied at the present time. There are two labs in the West End and in the East End there are two hard walled offices and a work center. The offices have a desk, chair, computer, over desk bookcase, printer, and file cabinets. The work center has a fax machine, computer, printer, worktables and chairs.

The utilities for this trailer are an electric heat pump for heating and cooling and it is connected to the plant fire alarm and PA systems. The drawings for this unit consist only of a Facility Planning lay out sketch. The trailer has been surveyed for Be as the lab did analysis on Be smears and other Be analysis. The Be smears were taken on all the working surfaces but none were taken in the hood or the exhaust duct. No detectable Be was found on the working surfaces. It is unknown at the present time if there were any chemical spills in the lab. Radiological surveys may have been done, but the old data is not available. This unit will have to be resurveyed to meet present standards for unrestricted release. A WSRIC has been written for this trailer.

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Physical Description (Con't)

T-452G Office Trailer is doublewide trailer, that was put into service at the Plant's T-452 Site late 1986 or early 1987. The T-452G Unit is located south of Central Avenue and west of the Railroad Tracks at approximately Sixth Street of the RFETS. The T-452G Unit has an exterior covering of enameled corrugated aluminum with an enameled aluminum skirt approximately 28" high around the footing/foundation. The footing/foundation could not be observed because of the skirting around the building. The T-452-G Unit has 2 entry doors on the south side of the unit with steps and deck entryway, which is approximately 4' X 9' including the 5 steps on the west entry. The entry is, constructed from wood and the roof is covered with wood and asphalt. The trailer's east door entry is approximately 9' X 5' with 5 steps, constructed from wood, is an L-shaped entry, covered door/dock with asphalt type roofing material. The physical size of the modular building is approximately 26'3" X 60' 3" for approximately 1582 square feet of floor space. In addition, this trailer has a 12' X 12' X 8' section, for an additional 144 square feet, that has been added on to the NE corner of the trailer. This added-on section has a corrugated sloped metal roof. The added-on section has equipment to support the unused respirator fit chambers. The interior of T-452G is wood paneling over insulation, the ceiling is a drop type with acoustical tile panels, and the floor is carpeting over wood flooring. Both entry doors have cipher locks on them.

T-452G has 2 office cubicles, 2 lab rooms, 2 storage rooms, 2 unused respirator fit test chamber rooms, and the T-452G Trailer is occupied by two employees full time, Industrial Hygiene personnel. The T-452G Trailer serves as a Thermoluminescent Dosimeter (TLD) Badge Exchange location for the T-452A-G Building 452 Trailer Complex. Other historical information was obtained from Kris Keith, X8253, Building 122 Room 171. Mr. Keith operated the Respirator Fit Chambers when they were operating in T-452G and he was the longest known resident of the trailer. The equipment being used in T-452G include, 4 computers, electronic typewriter, 2 small refrigerators for food, 1 microwave unit for cooking, Industrial Hygiene test/calibration instrumentation, and three auxiliary window type air conditioning units.

The utilities for the T-452G Unit are an electric heat pump type which provides both heat and air conditioning, and the unit is connected to the Plant Fire Alarm, the unit has a Fire Sprinkler System, and LSDW Systems.

Historical Operations

Building 452 originally was a building to provide space for Building 444 Production Offices. Later, Building 452 became Product Engineering Offices. In 1992 Building 452 became a Human Resource Office Facility. In 1992 Building 452 was modified by, adding many additional hard-walled offices, office cubicles, and four records Lektreviers® were also added.

S-452 Janitor's Storage has always been a storage facility.

T-428B Storage has always been a storage facility.

T-452A Office Trailer, T-452B Office Trailer, T-452C Office Trailer, T-452D Office Trailer, have always been an office facilities.

T-452E Portable Restroom Trailer has always been a Men's and Women's Restroom Facility.

T-452F Office Trailer has always been an office facility and calibration and Be anti-body lab.

T-452G Office Trailer has been a respirator fit/test facility and an office facility.

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Current Operational Status

Building 452 is currently used as a Human Resource office facility for RFETS. Building 452 provides offices for approximately 20 Human Resources employees including Employment and other Human Resources related job functions.

S-452 Janitor's Storage is currently used as a janitorial storage facility.

T-428B Storage is currently used as a storage facility for Building 374 Waste Operations. Items being stored in T-428B include excess office equipment, office chairs, and several storage cabinets along with miscellaneous tools.

T-452A Office Trailer is currently used as an office facility for the Site Custodial Services Group. Four Custodial Managers/Foremen have offices in T-452A and daily meetings are held with Site employees.

T-452B Office Trailer is currently not in use, but some excess office chairs and equipment are stored in the facility.

T-452C Office Trailer is currently used as a Radiological Operations Office and a Smear Counting Lab for radiological smear sample. Nine Radiological Foremen and Radiological Control Technicians are assigned to work in and out of the facility.

T-452D Office Trailer is currently used as an office facility for nine RFCSS and other miscellaneous engineers.

T-452E Portable Restroom Trailer is currently used as a Men's and Women's Restroom Facility for the 452 Office Trailer Site.

T-452F Office Trailer is currently used as an office facility for two RFCSS Managers.

T-452G Office Trailer is currently used as an office-facility for two RFCSS employees.

Contaminants of Concern

Asbestos

Describe any potential, likely, or known sources of asbestos:

None of entry doors into the Area 1- Group 12 Office Facilities are posted with the standard ACM warning signs.

Asbestos sample data exists for Area 1- Group 12 Office Facilities T-452A, T-452B, T-452C, T-452D, T-452F, and T-452G. Asbestos data exists in the Plant Industrial Hygiene Asbestos Library, T-130B east of Cubicle. No asbestos sample data exists for Area 1- Group 12 Office Facilities Building 452, S-452, T-428B, or T-452E.

Beryllium (Be)

Describe any potential, likely, or known Be production or storage locations:

There were no known, likely, or potential beryllium production or storage areas in Building 452. The Building 452 is not on the Listing of Beryllium Areas, Historical and Present.

Summarize any recent Be sampling results:

None

None of the people interviewed knew of any Be sampling that was ever conducted in Building 452 or the other facilities in Area 1- Group 12, except T-452F, which at one time contained a small beryllium antibody research laboratory. Be sampling in T-452F would not have been recent.

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Lead

Describe any potential, likely, or known sources of Lead (e.g., paint, shielding, etc.):

Building 452 does not have any lead shielding. During an October 2001 walkdown tour, no lead of any kind was found in any of the Area 1 – Group 12 Facilities. Building 452 was constructed in 1983 and the many painted areas both inside and outside probably were not painted with lead-based paints. All of the rest of the facilities in Area 1 – Group 12 date back to 1979 for construction dates and may have been painted with lead-based paints. These lead-based paints may have also contained PCBs. Lead solder may have been used in electrical connections in Building 452 and all the rest of the Area 1 – Group 12 Facilities. The Plant stopped the use of lead base paint for office buildings in 1989. If any of the Area 1 – Group 12 Facilities were, painted before this date, may have been painted with lead based paints.

RCRA/CERCLA Constituents

Describe any potential, likely, or known sources of RCRA/CERCLA constituents (e.g., chemical storage, waste storage, processes):

Building 452 contained no visible sources of RCRA/CERCLA constituents. The only known chemical storage in Building 452 was chemicals for janitorial cleaning and toner supplies for copiers and printers. The interviewees had no knowledge of sources of RCRA/CERCLA constituents. The Building 452 exterior east and west walls each contain one lighting fixture that appear to be mercury vapor lights. None of the facilities in Area 1 – Group 12 have any tanks or areas that are listed on the Master Listing of RCRA Units. Building 452 does not have any equipment that is listed in the Appendix 1 – Idle Equipment With Hazardous Materials Inventory. Building 452 does not any have any equipment that is listed in the Appendix 1A – Idle Equipment With Non-Hazardous Materials Inventory. Office Trailer T-452G is the facility in Area 1 – Group 12 Facilities that as WSRIC written for it. Several years ago Office Facility T-452F also had a WSRIC, but currently it does not.

Describe any potential, likely, or known spill locations (and sources, if any):

None

There are no potential, likely, or known spills of RCRA/CERCLA constituents in any of the Area 1 – Group 12 Facilities.

Describe methods in which spills were mitigated, if any:

None

N/A for the Area 1 – Group 12 Facilities.

PCBs

Describe any potential, likely, or known sources of PCBs (e.g., light Ballasts, paints, equipment, etc.):

Power transformers, light ballasts, and paints used in the Building 452 could contain PCBs, but the facility was constructed in the 1982-1983 time frame. All the rest of the facilities, modular facilities and trailers (T-452A-G and T-428B), are much older, therefore the power transformers, light ballasts, and paints used in these facilities could contain PCBs. S-452 is very small janitorial storage facility, which is fairly new, and is not likely to contain PCBs in the paint and there are no other potential sources of PCBs.

Describe any potential, likely, or known spill locations (and sources, if any):

Interviewees had no knowledge of PCBs and/or spills of PCBs.

Describe methods in which spills were mitigated, if any:

Interviewees had no knowledge of PCBs and/or spills of PCBs, therefore mitigation would not have been required.

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Radiological Contaminants

Describe any potential, likely, or known radiological production or storage locations:

None

Interviewees had no knowledge of any radiological production areas Building 452. depleted uranium and contaminated pieces of equipment found during strip-out of the Building 452 labs, as of August 22, 2001, as per Richard A. Link.

Describe any potential, likely, or known spill locations (e.g., known leaking sealed radioactive sources, leaking waste drums, potentially contaminated drains, etc.):

None

Describe methods in which spills were mitigated, if any:

None

Describe any potential, likely, or known isotopes of concern (e.g., weapons grade plutonium, uranium isotopes, pure Beta emitters, mixed fission products, etc.):

None

Describe any potential, likely, or known external facility contamination (e.g., stack release points, unfiltered ventilation, facility's physical location to known site releases, etc.):

None

Radiological Contaminants (Cont't)

Describe any process waste lines associated with the facility, if any (Are any abandoned? Capped?)

None

Environmental Restoration Concerns

Describe any ER concerns that could affect facility characterization (e.g., IHSSs, PACs, UBCs):

Building 452 and all the other facilities in the Area 1 – Group 12 Facilities have no IHSSs, PACs, or UBC in the facilities themselves, but the land/soils beneath and around where these facilities are constructed have several IHSS/PACs.

According to Nick Demos, HRR Contact on X4605, Area 1 – Group 12 Facilities have no has no CERCLA concerns, but the land/soils where the facilities are constructed does have CERCLA concerns. The land/soils IHSS/PACs include IHSS 400-157.2, PAC 400-803, 400-804, and PAC 400-187. The Rock Pit located adjacent to the south side of Building 452 contains potentially contaminated soil generated under near Emergency I&E Security Projects as per Mr. Demos.

Additional Information

Describe any additional information that may be useful during facility characterization (e.g., contaminant migration routes, waste-handling operations, physical hazards, Historical Release Reports, WSRIC data, etc.):

Interviewees had no knowledge of any additional information that may be useful during facility characterization. There is very little HRR information concerning Building 452. Extensive WSRIC books exist for Building 452, but the labs for which they were written no longer exist.

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References

Provide all sources of information utilized to gather data for facility history (e.g., documents, files, interviews). Attach all applicable supporting documentation.

References used were: HRR, Site SAR, IHSS/PAC/UBC Site Maps, Listing of Beryllium Areas, Historical and Present, the T-130B Industrial Hygiene Asbestos Inventory Library, Building 452 Engineering Drawings, Appendix 1 of Idle Equipment With Hazardous Materials Inventory, Master Listing of RCRA Units, and Appendix 1A of Idle Equipment With Non-Hazardous Materials Inventory, the T- 452G WSRIC Books, and Historic American Engineering Record for the RFETS.

Waste Volume Estimates and Material Types, Area 1 – Group 12

Facility	Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM	Other Waste (cu ft)
B452	5,100	1,050	2,374	3,694	3,800	(ACM TBB) Floor tile 10 cu ft Insul. 5, 500 cu ft Accoust. Ceil. Tile 500 cu ft	Glass 90 cu ft Carpet 500 cu ft Merc. Lights 2 cu ft
S-452	15	72	6	None	None	Roofing 4 cu ft (ACM TBD)	Glass 1 cu ft
T428B	None	184	4	114	30	82 cu ft (ACM TBD)	None
T452A	390	460	722	2,100	300	Insul. 1,852 cu ft (ACM TBD)	Glass 30 cu ft Carpet 120 cu ft
T452B	390	460	722	2,100	600	Insul. 1,852 cu ft (ACM TBD)	Glass 30 cu ft Carpet 120 cu ft
T452C	390	460	722	2,100	600	Insul. 1,852 cu ft (ACM TBD)	Glass 30 cu ft Carpet 120 cu ft
T452D	390	460	722	2,100	600	Insul. 1,852 cu ft (ACM TBD)	Glass 30 cu ft Carpet 120 cu ft
T452E	60	180	6	16	26	Insul. 480 cu ft (ACM TBD)	Glass 30 cu ft
T452F	480	460	722	2,100	300	Insul. 1,852 cu ft (ACM TBD)	Glass 30 cu ft Carpet 120 cu ft
T452G	1,160	460	722	2,100	300	Insul. 1,852 cu ft (ACM TBD)	Glass 30 cu ft Carpet 120 cu ft

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Further Actions

Recommend any further actions, if any (e.g., characterization, decontamination, special handling, etc.):

Begin the RLC/PDS process.

Note:

This HSA was performed prior to SME walkdowns, and chemical and radiological characterization package preparations. SMEs should evaluate and/or verify all information during the RLC/PDS process. SMEs may need to review additional documentation and perform additional interviews. Information contained in this HSA only represents a "snapshot" in time. Subsequent data may be obtained during SME walkdowns and chemical and radiological characterization package preparations, which may conflict with this report. However, this report will not be amended, and the newer data will take precedence over the data in the report. Newer Data will appear in the RLCR/PDSR.

Prepared By:

Bob Sheets

Print Name



Signature

November 1, 2001

Date

D&D RISS Facility Characterization Historical Site Assessment - Interview Checklist

Facility ID: Area 1 – Group 12, Building 452 Human Resources Offices, S-452 Janitor's Storage, T-428B Storage Facility, T-452A Office Trailer, T-452B Office Trailer, T-452C Office Trailer, T-452D Office Trailer, T-452E Portable Rest Rooms Trailer, T-452F Office Trailer, T-452G Office Trailer

Anticipated Facility Type (1, 2, or 3): Building 452 = Type 1, S-452 = Type 1, T-428B = Type 1, T-452A = Type 1, T-452B = Type 1, T-452C = type 1, T-452D = Type 1, T-452E = Type 1, T-452F = Type 1, T-452G = Type 1

This facility specific Historical Site Assessment (HSA) – Interview Checklist has been conducted in accordance with:
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

A. J. (Toni) Beruman, Employee Relations Manager, Human Resource Planner, Recruiting/Staffing, Job Posting System, Work Force Career Transition, and other duties

What time frame did the interviewee work in the facility? What was his/her function(s)?

Ms Beruman worked in Building 452 from 1992 until the present. Employee Relations Manager and other functions as described above. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

Has the building configuration changed since you worked in the building (e.g., rooms & equipment)? Have there been any building renovations? If so, in what way? Ms Beruman said that Building 452 has had some re-configuration since she moved into the facility. Offices and Work Centers were re-configured; and four Employee Records Lektrovers® which were installed when Employee Relations/Human Resources first moved into the Building in 1992. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

What operations/processes were conducted in the building during the interviewee's time in the facility?

Ms Beruman said to the best of her knowledge Building 452 has always been an office facility. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Ms Beruman said that computers, computer workstations, desks, file cabinets, fax machines, copy machines, and etc are found through out Building 452. The four Lektrovers® are located in the north central section of Building 452 between office cubicles 100-7 and 100-8. The Men's and Women's Restrooms are located in the southwest corner of Building 452. Ms Beruman gave a quick tour of Building 452 and identified the Telecommunications Room, Room 113. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12. Ms Beruman said Building 452 has a LSDW System and it also is connected to the Plant Fire Detection and Alarm System.

Were any radioactive materials or equipment handled in the building (e.g., wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Ms Beruman had no knowledge of any radioactive materials, of any kind, ever being in Building 452. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Ms Beruman had no knowledge of Research and Development work ever being done in Building 452. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where?

Ms Beruman was not aware of any beryllium, RCRA/CERCLA constituents and/or PCBs being handled in Building 452. Ms Beruman reiterated the fact that Building 452 has always been an office facility. Ms Beruman said the only chemicals she was aware of in Building 452 were toner cartridges, copier supplies, and janitorial cleaning supplies. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

Were there any Asbestos Containing Materials (e.g., transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e.g., process equipment, lifts, hydraulic systems, etc.), or any other chemical hazards (past or present)?

Ms Beruman did not know if any of the Building 452 construction materials contained asbestos. Ms Beruman was not aware of any lead or lead shielding and/or PCB oils in Building 452. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Ms Beruman was not aware of any spills radioactive (no knowledge of any radioactive materials in Building 452) or chemical spills in Building 452. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

N/A for Building 452. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Ms Beruman said that the only concern she had was the Rock Pit adjacent to the south side of Building 452. Ms Beruman said she did not know what the Rock Pit was or why it was there. Ms Beruman had no knowledge of the other facilities in Area 1 – Group 12.

Prepared By:

Bob Sheets

Print Name

Bob Sheets

Signature

10/9/2001

Date

D&D RISS Facility Characterization Historical Site Assessment - Interview Checklist

Facility ID: Area 1 – Group 12, Building 452 Human Resources Office, S-452 Janitor's Storage, T-428B Storage Facility, T-452A Office Trailer, T-452B Office Trailer, T-452C Office Trailer, T-452D Office Trailer, T-452E Portable Rest Rooms Trailer, T-452F Office Trailer, T-452G Office Trailer

Anticipated Facility Type (1, 2, or 3): Building 452 = Type 1, S-452 = Type 1, T-428B = Type 1, T-452A = Type 1, T-452B = Type 1, T-452C = type 1, T-452D = Type 1, T-452E = Type 1, T-452F = Type 1, T-452G = Type 1

This facility specific Historical Site Assessment (HSA) – Interview Checklist has been conducted in accordance with:
D&D Characterization Protocol, RFETS MAN-077-DDCP, latest version, and
Facility Disposition Program Manual, RFETS MAN-076-FDPM, latest version

Personnel Interviewed (Name, Title, and Function)

Richard A. Link, Radiological Engineer, Building Closure Support, RISS Closure Support, and PU&D Radiological Support

What time frame did the interviewee work in the facility? What was his/her function(s)?

From 1982 through 1987 Mr. Link was assigned to the 400 Area, which included all the facilities in Area 1 – Group 12, as a Radiological Control Technician. Mr. Link's functions were to monitor people, equipment, and office areas for radiological contamination.

Has the building configuration changed since you worked in the building (e.g., rooms & equipment)? Have there been any building renovations? If so, in what way? Mr. Link said that Building 452 has had some configuration changes when some groups moved out and other groups moved in. The same information applies to the other facilities in Area 1 – Group 12.

What operations/processes were conducted in the building during the interviewee's time in the facility?

Mr. Link said to the best of his knowledge Building 452 has always been an office facility. Mr. Link said that initially Building 452 was a Building 444 Production Office Facility. Mr. Link said after a few years, Building 452 became an office facility for Product Engineering. Mr. Link said most of the office trailers in Area 1 – Group 12 were mostly IH&S offices, except T-452G which contained the Site Respirator Fit Chamber for many years; Mr. Link said T-452G was moved to the 452 Site from the Building 371 Area. Mr. Link said that the west end of T-130G housed an Industrial Hygiene Calibration Lab and may have contained radioactive sources at one time. Mr. Link said that T-452F contained a Be Analysis Lab at one time and may have contained Be smear samples and low-level Be standards.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)

Mr. Link said that Building 452's offices contain computers, computer workstations, desks, file cabinets, fax machines, copy machines, and etc. Mr. Link said that the four Lektrovers® now in Building 452 were added many years after the construction of the facility, which he thought, was 1982. Mr. Link said he thought the Men's and Women's Restrooms are still located in the southwest corner of Building 452. Mr. Link said all of the Area 1 – Group 12 facilities contained mostly office equipment, except T-452F and T-452G previously discussed in this interview.

Were any radioactive materials or equipment handled in the building (e.g., wastes, residues, product, feed material, sealed radioactive sources)? If so, what types and where?

Mr. Link had no knowledge of any radioactive materials, of any kind, ever being stored or handled in Building 452. Mr. Link did not remember any sealed radioactive sources being in Building 452. Mr. Link did remember a small piece of depleted uranium being found in a cabinet during a Radiological Control Technician's area survey. Mr. Link said that he thought T-452G, in the Industrial Hygiene Lab, may have contained radioactive sources at one time.

**D&D RISS Facility Characterization
Historical Site Assessment - Interview Checklist**

Were there any Research & Development area (past or present) located in the facility or area? If so, where?

Mr. Link had no knowledge of Research and Development work ever being done in Building 452. Mr. Link had no knowledge of the other facilities in Area 1 – Group 12, except he thought the 452 Office Trailers was mostly Industrial Hygiene and Safety personnel.

Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where?

Mr. Link was not aware of any beryllium, RCRA/CERCLA constituents and/or PCBs being handled in Building 452. Mr. Link said. Mr. Link said the only chemicals he was aware of in Building 452 were toner cartridges, copier supplies, and janitorial cleaning supplies. Mr. Link said that other facilities in Area 1 – Group 12 had toner cartridges, copier supplies, and janitorial cleaning supplies. Mr. Link said that T-452G contained the chemicals used for the Respirator Fit Test Chamber. Mr. Link said the Industrial Hygiene's Calibration Lab in the west end of T-452G contained cleaning solvents, calibration gas cylinders, etc. used in operations in the lab.

Were there any Asbestos Containing Materials (e.g., transite wall board, ceiling tiles, floor tile), lead shielding, equipment utilizing PCB oils (e.g., process equipment, lifts, hydraulic systems, etc.), or any other chemical hazards (past or present)?

Mr. Link did not know if any of the Building 452 construction materials contained asbestos. Mr. Link was not aware of any lead or lead shielding and/or PCB oils in Building 452 or in any of the other facilities in Area 1 – Group 12. Mr. Link said that the older facilities (trailers and modular buildings) in Area 1 – Group 12 probably contains asbestos materials of construction such as wallboards, ceiling tiles, floor tiles, etc. Mr. Link said that the lighting ballasts in the older facilities in this group might contain PCBs. Mr. Link said these same older Area 1 – Group 12 facilities might contain some lead-based paints which might also contain trace amounts of PCBs.

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? If so, what types, quantities, and where?

Mr. Link was not aware of any spills of radioactive material in Building 452. Mr. Link said that he did not know if any chemical spills in Building 452. Mr. Link did remember acid and oil spills on the land before the facilities were constructed and/or moved into the 452 Area (Cottonwood Avenue at Sixth Street up to Central Avenue). Mr. Link had no knowledge spills of radioactive materials or chemical of any of the other facilities in Area 1 – Group 12.

Were these spills/releases cleaned up or mitigated? If so, how, and to what extent?

N/A for Building 452. Mr. Link had no knowledge of any spills/releases in the other facilities in Area 1 – Group 12.

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization?

Mr. Link said that the only concern he had was the Rock Pit adjacent to the south side of Building 452. Mr. Link said she did not know what the Rock Pit was or why it was there, but he though it had something to do with Security. Mr. Link had no knowledge of the other facilities in Area 1 – Group 12 that might affect facility characterization.

Prepared By: Bob Sheets

Print Name

Bob Sheets

Signature

10/10/2001

Date

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**D&D Facility Characterization
Interview Checklist**

ID No.: T-452A
Date: 05/20/99
Page 2 of 2
Groups B & C Series

What timeframe did the interviewee work in the facility? N/A The Facility is an Office Building.

From 1990 until the present.

Has the building configuration changed since you worked in the building? If so, in what way?

N/A The Facility is an Office Building. No

What types of equipment were in the building during the interviewee's time there?

Computers, printers, fax machine, and other office equipment such as desks, chairs, book cases, file cabinets, etc.

Where was the equipment located? (specific rooms/areas) In the office rooms and office cubicles.

Were any radioactive materials or metals handled in the building? If so, what types? No, none

Which equipment handled radioactive material? N/A

Were any chemicals handled in the building? If so, what types? N/A

Did any spills or uncontrolled releases of radioactive materials or chemicals occur while you were working in the facility? No, none.

Were these spills/releases cleaned-up? How were they cleaned-up? N/A

Where did these spills/releases occur? N/A

Interviewed by: D. A. Burton

Print Name

D.R. Sharts for D.A. Burton

Signature

05/20/99

Interview Date

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D&D Facility Characterization Interview Checklist

ID No.: T-452B
Date: 05/20/99
Page 1 of 2
Groups B & C Series

Check List for - Title: D&D Facility Characterization - Interviews

- CRITERIA:**
- A *D&D Characterization Protocol*, RFETS MAN-077-DDCP, Rev. 0
 - A *Facility Disposition Program Manual*, RFETS MAN-076-FDPM
 - A RFETS Radiological Safety Practices, January 12, 1998

Facility Name & Type (1, 2, or 3) T-452B, Group C Type 1 Facility, Modular Office Building

Personnel Interviewed (Name & Title/Function) Michael P. Giacomini, T-452B, Room 1, X7620, K-H JCUSC

-- Y/N --

Does a current WSRIC exist for the facility? N

If so, are there exceptions to the WSRIC as written?.....No WSRIC, No Exceptions

COMMENTS (incl. WSRIC contacts)

WSRIC Contact is James M. Schoen who is in charge of the WSRIC Reports, T130J, X3579, C-83.

Are rad surveys available that indicate current status of the facility? N

Are historical rad surveys available that indicate historical status, or evolution, of the facility? N*

COMMENT N* According to Mark R. Richards, X5148 of SSOC any historical data, which is probably at the Federal Center, would not be adequate for unrestricted release. New monitor surveys would have to be taken.

Is an HRR available for the facility?..... N

Do any other reports exist beyond the HRR (e.g., spill reports, reportable incidents, etc.) that further Characterize the facility relative to chemical &/or radiological contamination? N**

Are engineering drawings (esp. "as-builts") available?..... N*

Are any nonconformances or issues with the facility status currently being tracked in PATS? N

If so, what are the issues (note in Comments, below)?

COMMENTS N* Facility Planning Sketches only that exist show office/cubicle layout and approximate building size dimensions. Radiological surveys may have been done, but the old data is not available. This unit will have to be resurveyed to meet present standards for unrestricted release. The Plant stopped using lead based paints for office buildings in 1989. If T-452B was painted prior to this date, lead based paints may have been used. N** The west end of T-452B Site is within IHSS #187 because of a sulfuric acid (H₂SO₄) spill that occurred in September, 1970. The spill remediation was neutralization with lime. Trailer T-452B and the Site is also within PAC 800-802. Both IHSS #187 and PAC 400-802 are areas where hazardous substances/radiological contamination may have been released to the environment (to the soils underlying T4-52B) as per, Nick Demos, ER Characterization/HRR Manager, X4605. (see Nick Demos's documentation behind Tab #13 of this Manual.)

Have any types of chemical characterization, incl. asbestos, been performed recently?..... Y*

If so, what types of characterization were performed (note in Comments, below)?

COMMENTS Y* Yes asbestos characterization data exists, according to Kevin Sheehan, X7250, T-452D, Room C-1. The asbestos data reports are located in Cubicle C-13, of T-452D and the reports are under the control of Kevin Sheehan.

Interviewed by: D. A. Burton *[Signature]* 05/20/99
Print Name Signature Interview Date

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**D&D Facility Characterization
Interview Checklist**

ID No.: T-452B
Date: 05/20/99
Page 2 of 2
Groups B & C Series

What timeframe did the interviewee work in the facility? N/A The Facility is an Office Building.

From July, 1996 until the present.

Has the building configuration changed since you worked in the building? If so, in what way?

N/A The Facility is an Office Building. No

What types of equipment were in the building during the interviewee's time there?

There are 4 Computers and printers being used by the 4 permanent residents of this office facility. There also is a fax machine, and other office equipment such as desks, chairs, bookcases, file cabinets, etc. In addition, in one area of this office facility, there are 10 more computers setup as temporary classroom.

Where was the equipment located? (specific rooms/areas) In the office rooms and office cubicles.

Were any radioactive materials or metals handled in the building? If so, what types? No, none

Which equipment handled radioactive material? N/A

Were any chemicals handled in the building? If so, what types? N/A

Did any spills or uncontrolled releases of radioactive materials or chemicals occur while you were working in the facility? No, none.

Were these spills/releases cleaned-up? How were they cleaned-up? N/A

Where did these spills/releases occur? N/A

Interviewed by: D. A. Burton

Print Name

Signature

05/20/99

Interview Date



**D&D Facility Characterization
Interview Checklist**

ID No.: T-452C

Date: 05/20/99
Page 2 of 2
Groups B & C Series

What timeframe did the interviewee work in the facility? N/A The Facility is an Office Building.

From 1996 to present.

Has the building configuration changed since you worked in the building? If so, in what way?

N/A The Facility is an Office Building. No

What types of equipment were in the building during the interviewee's time there?

An Electriever in a hard-walled, computers in 7 of the offices, and other miscellaneous office equipment such as bookshelves, desks, office chairs, etc. One cubicle has a shared printer and a photocopier.

Where was the equipment located? (specific rooms/areas) In the office rooms and office cubicles.

Were any radioactive materials or metals handled in the building? If so, what types? No, none

Which equipment handled radioactive material? N/A

Were any chemicals handled in the building? If so, what types? N/A

Did any spills or uncontrolled releases of radioactive materials or chemicals occur while you were working in the facility? No, none.

Were these spills/releases cleaned-up? How were they cleaned-up? N/A

Where did these spills/releases occur? N/A

Interviewed by: D. A. Burton

D.A. Burton

05/20/99

Print Name

Signature

Interview Date

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D&D Facility Characterization Interview Checklist

ID No.: T-452D
Date: 05/20/99
Page 1 of 2
Groups B & C Series

Check List for - Title: D&D Facility Characterization - Interviews

- CRITERIA:
- A *D&D Characterization Protocol*, RFETS MAN-077-DDCP, Rev. 0
 - A *Facility Disposition Program Manual*, RFETS MAN-076-FDPM
 - A RFETS Radiological Safety Practices, January 12, 1998

Facility Name & Type (1, 2, or 3) T-452D, Group C Type 1 Facility, Modular Office Building
 Personnel Interviewed (Name & Title/Function) John C. Todd (Jack), T-452C, Room 3, X7206, K-H Safety & IH
 - Y/N -

Does a current WSRIC exist for the facility? N
 If so, are there exceptions to the WSRIC as written?..... No WSRIC, No Exceptions

COMMENTS (incl. WSRIC contacts)
WSRIC Contact is James M. Schoen who is in charge of the WSRIC Reports, T130J, X3579, C-83.

Are rad surveys available that indicate current status of the facility? N
 Are historical rad surveys available that indicate historical status, or evolution, of the facility? N*

COMMENT N* According to Mark R. Richards, X5148 of SSOC any historical data, which is probably at the Federal Center, would not be adequate for unrestricted release. New monitor surveys would have to be taken.

Is an HRR available for the facility?..... N Do any other reports exist beyond the HRR (e.g., spill reports, reportable incidents, etc.) that further

Characterize the facility relative to chemical &/or radiological contamination? N**

Are engineering drawings (esp. "as-builts") available?..... N*

Are any nonconformances or issues with the facility status currently being tracked in PATS? N If so, what are the issues (note in Comments, below)?

COMMENTS N* Facility Planning Sketches only that exist show office/cubicle layout and approximate building size dimensions. N** Radiological surveys may have been done, the old data is not available. This unit will have to be resurveyed to met present standards for unrestricted release. The Plant stopped using lead based paints in 1989, if the unit was painted prior to this date, lead based paints may have been used N** Nick Demos, ER Characterization/HRR Manager, X4605, agrees that the T-452D Trailer itself falls outside IHSS #187 (400-187) and it falls outside PAC 400-802 and the trailer is not considered to be a CERCLA issue. The land/soils below the unit would have CERCLA concerns.

Have any types of chemical characterization, incl. asbestos, been performed recently?..... N
 If so, what types of characterization were performed (note in Comments, below)?

COMMENTS Asbestos characterization data exists, according to Kevin Sheehan, X7250, T-452D. The asbestos data reports are under the control of Kevin Sheehan.

Interviewed by: J. R. Sheets *J.R. Sheets* 05/20/99
 Print Name Signature Interview Date

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**D&D Facility Characterization
Interview Checklist**

ID No.: T-452D

Date: 05/20/99

Page 2 of 2

Groups B & C Series

What timeframe did the interviewee work in the facility? N/A. Interviewee acquired the building when the previous point of contact left.

Has the building configuration changed since you worked in the building? If so, in what way?

N/A The T-452D modular building has always been an office facility.

What types of equipment were in the building during the interviewee's time there?

Each office has a computer, desk, chair, bookcase, and one or more file cabinets. There are a total of 6 computers, a fax machine, and a copier in use in this office facility. One office cubicle has approximately 10 large filing cabinets.

Where was the equipment located? (specific rooms/areas) N/A The equipment is located in the offices.

Were any radioactive materials or metals handled in the building? If so, what types? N/A

Which equipment handled radioactive material? N/A

Were any chemicals handled in the building? If so, what types? N/A

Did any spills or uncontrolled releases of radioactive materials or chemicals occur while you were working in the facility? N/A

Were these spills/releases cleaned-up? How were they cleaned-up? N/A

Where did these spills/releases occur? N/A

Interviewed by: J. R. Sheets

05/20/99

Print Name

Signature

Interview Date

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D&D Facility Characterization Interview Checklist

ID No.: T-452E
Date: 05/20/99
Page 1 of 2
Groups B & C Series

Check List for - Title: D&D Facility Characterization - Interviews

- CRITERIA:
- Λ *D&D Characterization Protocol*, RFETS MAN-077-DDCP, Rev. 0
 - Λ *Facility Disposition Program Manual*, RFETS MAN-076-FDPM
 - Λ RFETS Radiological Safety Practices, January 12, 1998

Facility Name & Type (1, 2, or 3) T-452E, Group C, Type 1 Facility, Portable Restrooms
 Personnel Interviewed (Name & Title/Function) Bob Clark, X3777, Work Control Center

-- Y/N --

Does a current WSRIC exist for the facility? N
 If so, are there exceptions to the WSRIC as written? No WSRIC, No Exceptions

COMMENTS (incl. WSRIC contacts)
WSRIC Contact is James M. Schoen who is in charge of the WSRIC Reports, T130J, X3579, C-83.

Are rad surveys available that indicate current status of the facility? N
 Are historical rad surveys available that indicate historical status, or evolution, of the facility? N*

COMMENT N* Radiological surveys may have been done, but the old data is not available. This Unit will have to be resurveyed to meet present standards of unrestricted release.

Is an HRR available for the facility? N*

Do any other reports exist beyond the HRR (e.g., spill reports, reportable incidents, etc.) that further Characterize the facility relative to chemical &/or radiological contamination? N**

Are engineering drawings (esp. "as-builts") available? N*

Are any nonconformances or issues with the facility status currently being tracked in PATS? N
 If so, what are the issues (note in Comments, below)?

COMMENTS N** Radiological surveys may have been done, but the old data is not available.
N* No as-Builts Or room layout sketches exist for this Portable Restroom Facility. An exterior photograph is available. The Plant stopped using lead based paints in 1989, if the unit was painted prior to this date, lead based paints may have been used. N**Nick Demos, ER Characterization/HRR Manager, X4605, agrees that T-452E Trailer falls outside IHSS #187 (400-187) and it falls outside PAC 400-802 and the trailer itself is not considered to a CERCLA issue. The land/soils below the unit would have CERCLA concerns!

If so, what types of characterization were performed (note in Comments, below)?

COMMENTS N*** No asbestos characterization data exists, according to Kevin Sheehan, X7250, T-452D, under Mr. Sheehan's control.

Interviewed by: J. R. Sheets / JR Sheets / 05/20/99
 Print Name Signature Interview Date

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**D&D Facility Characterization
Interview Checklist**

ID No.: T -452E
Date: 05/20/99
Page 2 of 2
Groups B & C Series

What timeframe did the interviewee work in the facility? N/A The Facility is only a portable restroom.

Has the building configuration changed since you worked in the building? If so, in what way?

N/A The Facility is only a portable restroom.

What types of equipment were in the building during the interviewee's time there?

The south half of the facility, the Men's Restroom, has a stool on the west wall and a sink on the north wall with running water.

The north half of the facility, the Women's Restroom, has a stool on the west wall and a sink on the south wall with running water.

Where was the equipment located? (specific rooms/areas) N/A

Were any radioactive materials or metals handled in the building? If so, what types? N/A

Which equipment handled radioactive material? N/A

Were any chemicals handled in the building? If so, what types? N/A

Did any spills or uncontrolled releases of radioactive materials or chemicals occur while you were working in the facility? N/A

Were these spills/releases cleaned-up? How were they cleaned-up? N/A

Where did these spills/releases occur? N/A

Interviewed by: J. R. Sheets

Print Name

Signature

05/20/99

Interview Date



**D&D Facility Characterization
Interview Checklist**

ID No.: T-452F

Date: 05/20/99
Page 2 of 2
Groups B & C Series

What timeframe did the interviewee work in the facility? Interviewee has worked in the facility from 1995 to the present.

Has the building configuration changed since you worked in the building? If so, in what way?

N/A The T-452F modular building has always been an office facility.

What types of equipment were in the building during the interviewee's time there?

Each office has a computer, desk, chair, bookcase, and one or more file cabinets. There are a total of 3 computers, 3 printers, and a fax machine in this office facility. Lab equipment still exists in the two west rooms of this facility.

Where was the equipment located? (specific rooms/areas) N/A The equipment is located in the offices and the two lab rooms of this facility.

Were any radioactive materials or metals handled in the building? If so, what types? N/A

Which equipment handled radioactive material? N/A

Were any chemicals handled in the building? If so, what types? Chemicals were used in this facility, but the chemicals have since been removed.

Did any spills or uncontrolled releases of radioactive materials or chemicals occur while you were working in the facility? Unknown if any chemical spills occurred.

Were these spills/releases cleaned-up? How were they cleaned-up? If chemical spills occurred, they must have been cleaned up but no knowledge or written record exists.

Where did these spills/releases occur? N/A, or unknown!

Interviewed by: J. R. Sheets / *JR Sheets* / 05/20/99
Print Name Signature Interview Date

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**D&D Facility Characterization
Interview Checklist**

ID No.: T-452G

Date: 05/20/99

Page 2 of 2

Groups B & C Series

What timeframe did the interviewee work in the facility? Interviewee has worked in the facility from 1997 to the present.

Has the building configuration changed since you worked in the building? If so, in what way? Yes. The facility used to be a Respirator Fit/Test Facility on the east end of the Trailer. The Fit/Test Facility has been since moved out of the Trailer. Other equipment and one operating computer is being used in the fit chamber rooms. Two offices, a break room, calibrated instrumentation items are stored in two rooms on the west end of the facility, along with a calibration/instrumentation lab is currently being operated.

What types of equipment were in the building during the interviewee's time there? Each office has a computer, desk, chair, bookcase, and one or more file cabinets. There are a total of 3 computers, 3 printers, a fax machine, and a copier in use in this office facility. Lab equipment still exists in the two west rooms of this facility. A microwave for cooking and a refrigerator are also in the break-room.

Where was the equipment located? (specific rooms/areas) The equipment is located in the offices, the break room, the test chamber rooms, and the two lab rooms of this facility. Two computers and 2 printers are used in the two offices, Room 8 and Room 9 of the T-452G Trailer.

Were any radioactive materials or metals handled in the building? If so, what types? N/A

Which equipment handled radioactive material? N/A

Were any chemicals handled in the building? If so, what types? Calibration gases are used in this facility and full and empty gas cylinders are stored in three different areas of the T-452G Trailer

Did any spills or uncontrolled releases of radioactive materials or chemicals occur while you were working in the facility? N/A

Were these spills/releases cleaned-up? How were they cleaned-up? N/A

Where did these spills/releases occur? N/A

Interviewed by: J. R. Sheets

Print Name

Signature

05/20/99

Interview Date

ATTACHMENT C

Radiological Data Summaries and Survey Maps

SURVEY UNIT DATA SUMMARY: G12-A-001

Survey Unit Description:

Interior and Exterior of B452

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Survey Unit G12-A-001 Data Summary

Total Surface Activity Measurements

30	30
Number Required	Number Obtained

MIN	-8.1	dpm/100 cm ²
MAX	62.9	dpm/100 cm ²
MEAN	12.3	dpm/100 cm ²
STD DEV	19.1	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²

Removable Activity Measurements

30	30
Number Required	Number Obtained

MIN	-0.9	dpm/100 cm ²
MAX	12.1	dpm/100 cm ²
MEAN	1.8	dpm/100 cm ²
STD DEV	2.9	dpm/100 cm ²
TRANSURANIC DCGL _w	20	dpm/100 cm ²

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Survey Unit G12-A-001 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	394	1379	1136
Cal Due Date:	11/23/01	11/1/01	1/17/02
Analysis Date:	10/25/01	10/29/01	10/29/01
Alpha Eff. (e/d):	0.218	0.208	0.211
Alpha Bkgd (cpm)	0.7	2.7	1.3
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm ²)	23.8	39.6	30.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm ²)
1	8	1.3	4.7	-8.1
2	8	4.7	2.0	8.2
3	7	16.7	0.7	62.9
4	8	2.7	2.7	-1.4
5	8	2.7	2.7	-1.4
6	7	12.7	6.0	44.5
7	8	3.3	1.3	1.5
8	8	1.3	2.0	-8.1
9	8	8.0	4.0	24.1
10	8	5.3	1.3	11.1
11	8	2.0	2.7	-4.8
12	8	3.3	2.7	1.5
13	7	10.0	2.0	32.1
14	8	2.7	2.7	-1.4
15	7	9.3	3.7	28.9
16	8	2.0	5.3	-4.8
17	8	11.3	2.0	39.9
18	8	1.3	2.0	-8.1
19	8	2.0	4.0	-4.8
20	8	10.0	2.0	33.7
21	8	2.7	3.3	-1.4
22	8	1.3	5.3	-8.1
23	8	12.0	2.7	43.3
24	8	4.0	1.3	4.8
25	8	3.3	2.0	1.5
26	8	8.0	0.7	24.1
27	8	6.0	4.7	14.5
28	8	8.0	3.3	24.1
29	7	4.7	3.3	7.8
30	7	6.0	6.7	13.8
Average LAB				3.0
MIN				-8.1
MAX				62.9
MEAN				12.3
SD				19.1
Transuranic DCGL _w				100

24 QC	9	2.7	2.7	0.0
1 QC	9	3.3	2.7	2.8
Average LAB				2.7
MIN				0.0
MAX				2.8
MEAN				1.4
SD				2.0
Transuranic DCGL _w				100

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Survey Unit G12-A-001 Smear Results

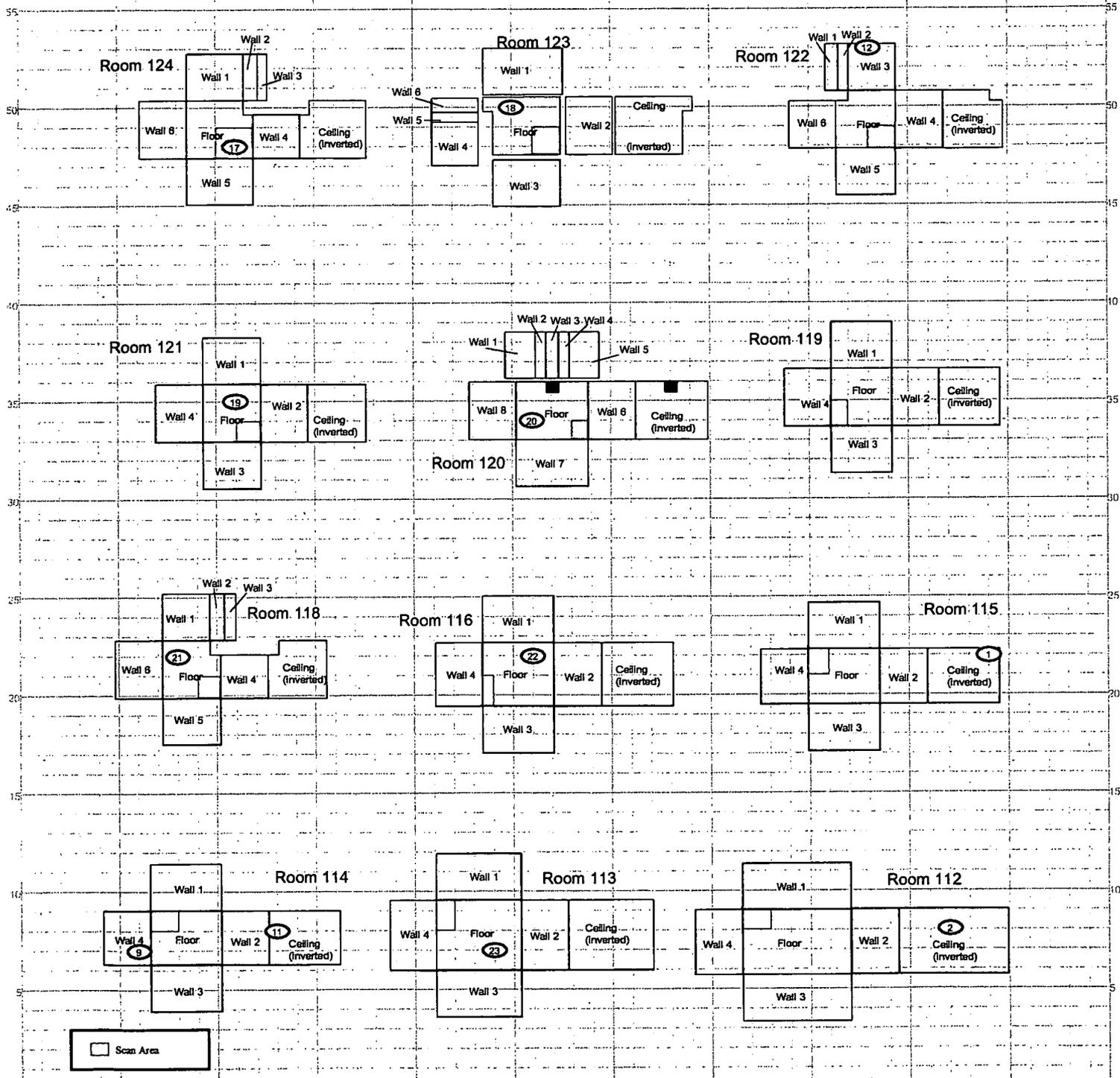
Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	833	1157	830	770
Cal Due Date:	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	10/29/01	10/29/01	10/29/01	10/29/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.0	0.3	0.0	0.2
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	4.5	8.8	4.5	8.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	1	1.0	3.0
2	2	1.0	2.1
3	3	2.0	6.1
4	4	1.0	2.4
5	1	1.0	3.0
6	2	1.0	2.1
7	3	0.0	0.0
8	4	0.0	-0.6
9	1	0.0	0.0
10	2	0.0	-0.9
11	3	0.0	0.0
12	4	0.0	-0.6
13	1	0.0	0.0
14	2	0.0	-0.9
15	3	2.0	6.1
16	4	1.0	2.4
17	1	4.0	12.1
18	2	1.0	2.1
19	3	2.0	6.1
20	4	1.0	2.4
21	1	0.0	0.0
22	2	0.0	-0.9
23	3	0.0	0.0
24	4	0.0	-0.6
25	1	0.0	0.0
26	2	1.0	2.1
27	3	1.0	3.0
28	4	1.0	2.4
29	1	1.0	3.0
30	2	0.0	-0.9
		MIN	-0.9
		MAX	12.1
		MEAN	1.8
		SD	2.9
		Transuranic	20

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PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: G12-A-001** **Classification: 3**
Building: 452
Survey Unit Description: Interior of Building 452
Total Area: 1867 sq. m. **Total Floor Area: 475 sq. m.**

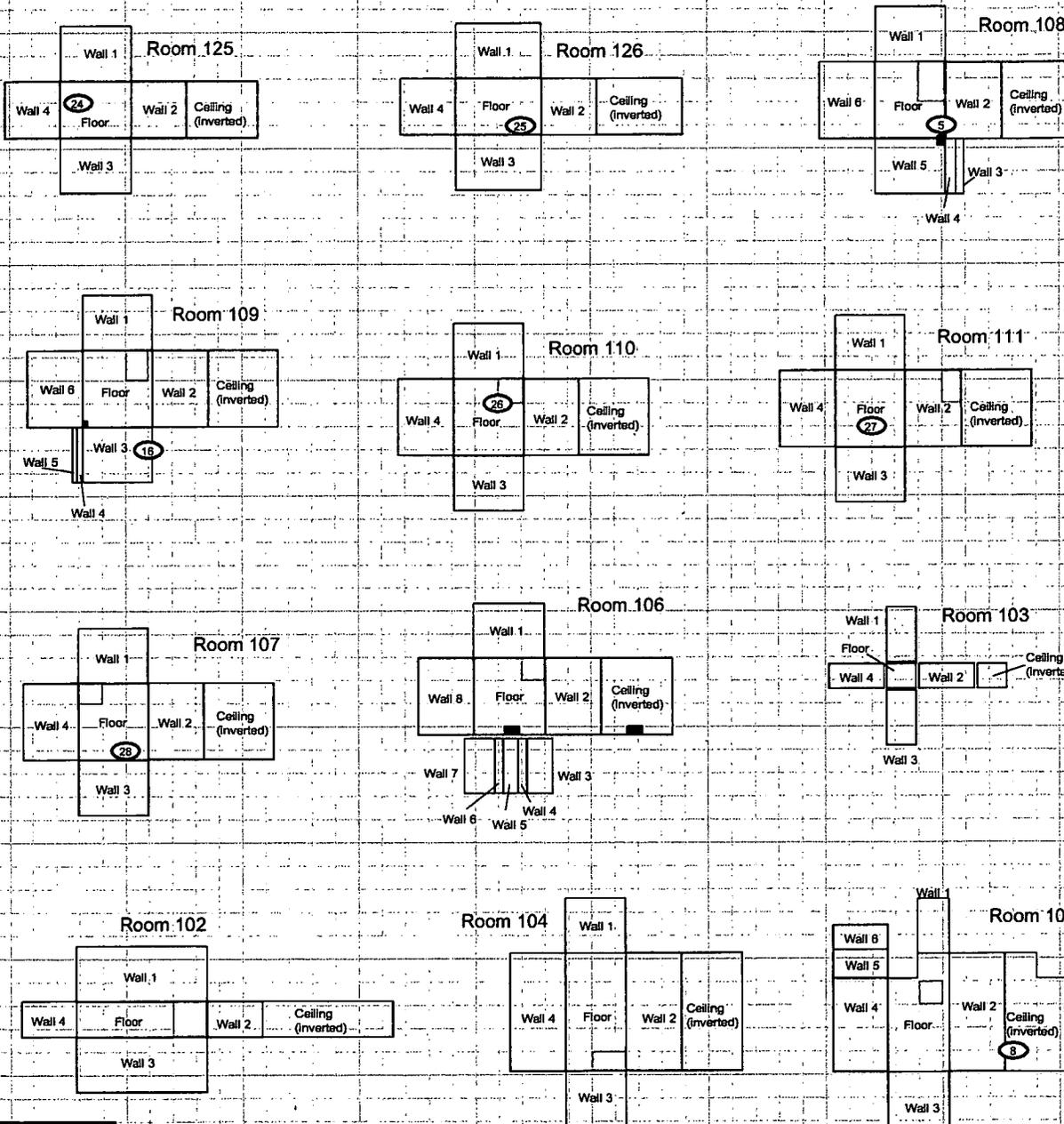


<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> W Smear & TSA Location ◆ Smear, TSA & Sample Location Open/Inaccessible Area Area in Another Survey Unit 	<p>Neither the United States Government nor Kaiser Hill Co., nor DynCorp LLC, nor any agency thereof, nor any of their employees, makes 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): <u>7, 8</u> RCT ID #(s): <u>1, 2</u></p>	<p>N ↑</p> <p>0 FEET 30</p> <hr style="width: 100%;"/> <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. 303-966-770 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: fv2002/02-0048/B452-Int-1 October 18, 2001</p>
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49

PRE-DEMOLITION SURVEY

Survey Area: A Survey Unit: G12-A-001 Classification: 3
 Building: 452
 Survey Unit Description: Interior of Building 452
 Total Area: 1867 sq. m. Total Floor Area: 475 sq. m.



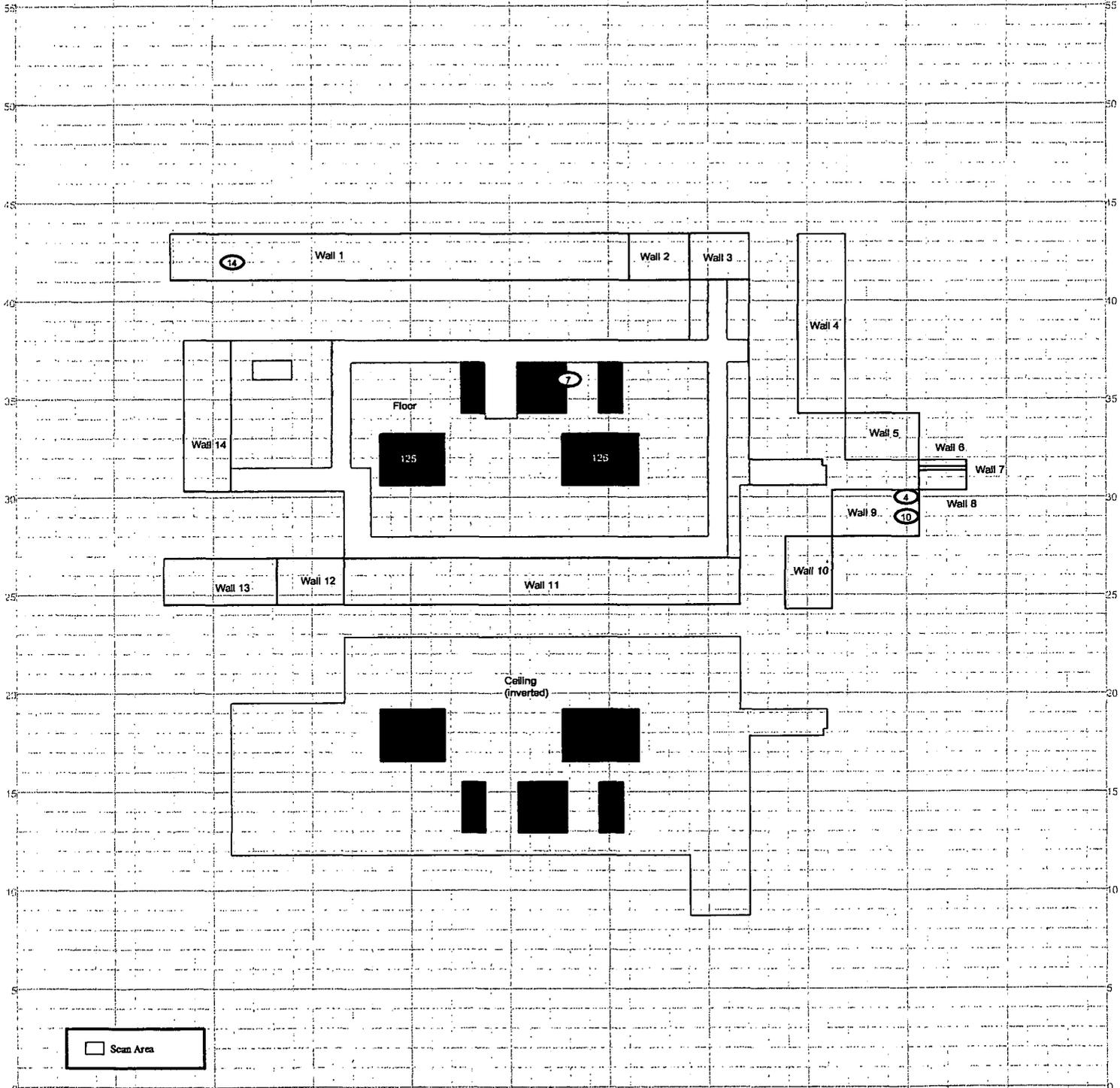
□ Scan Area

<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 Kniser Hill Co., nor DynCorp I&ET, 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, systems, product, or process disclosed, or represents that its use would not infringe privately owned rights.</p> <p>Scan Survey Information Survey Instrument ID #(s): 7, 8 RCT ID #(s): 1, 2</p>	<p>0 FEET 30</p> <p>0 METERS 10</p> <p>1 inch = 24 feet 1 grid sq. = 1 sq. m.</p> <p>N ↑</p>	<p>U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: G18 Dept. 303-966-770 Prepared for: DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: fv2002/02-0048/B452-Int-2 October 18, 2001</p>
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50

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: G12-A-001** **Classification: 3**
Building: 452
Survey Unit Description: Interior of Building 452
Total Area: 1867 sq. m. **Total Floor Area: 475 sq. m.**



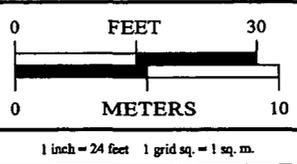
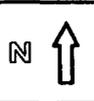
□ Scan Area

SURVEY MAP LEGEND

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

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Scan Survey Information
 Survey Instrument ID #(s): 7, 8
 RCT ID #(s): 1, 2



U.S. Department of Energy
 Rocky Flats Environmental Technology Site
 Prepared by: GIS Dept. 303-960-770 Prepared for:

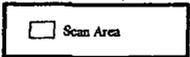
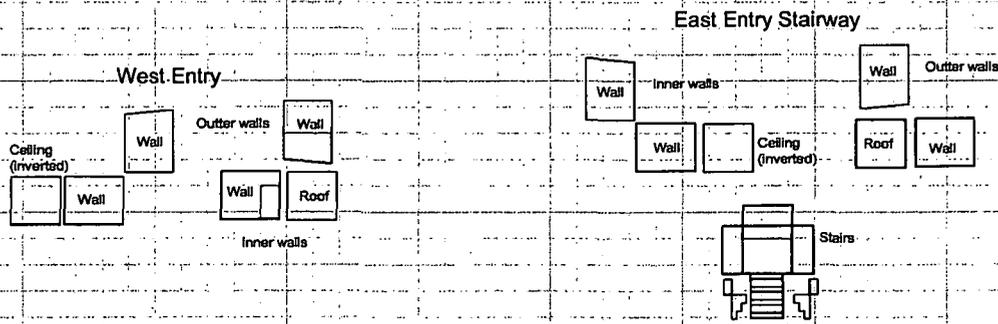
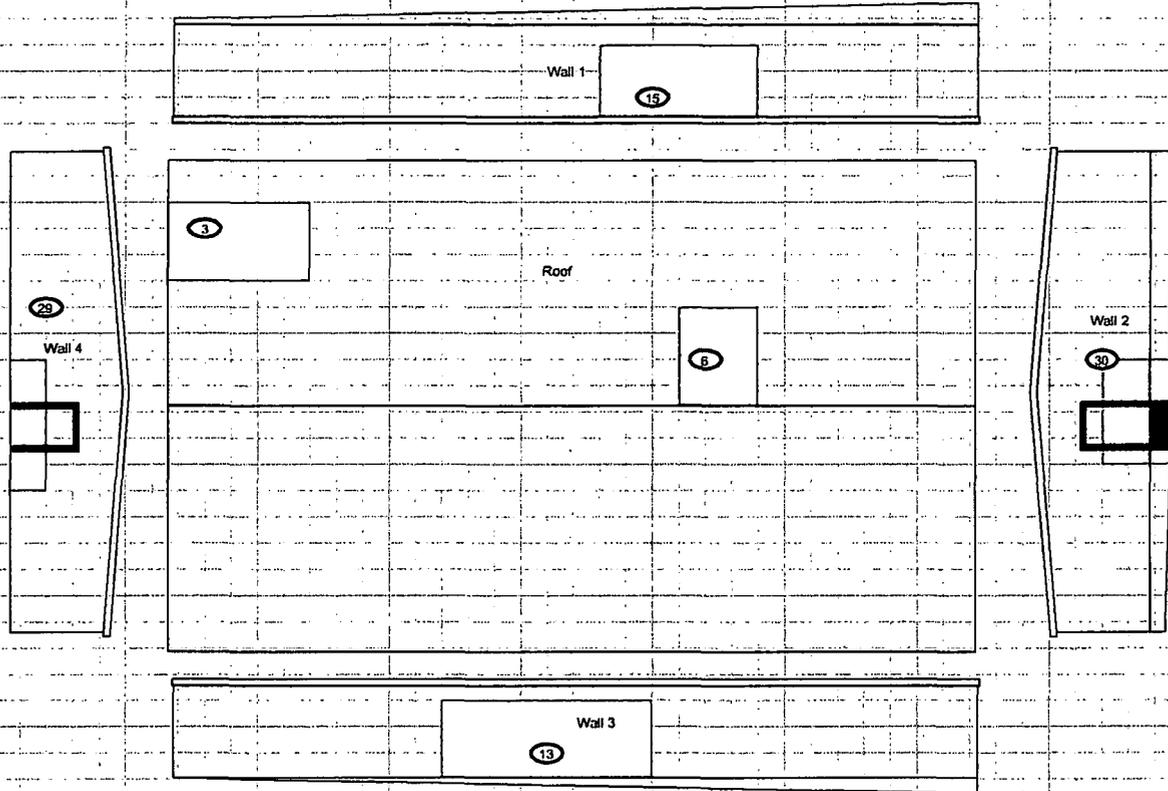
DynCorp
 THE ART OF TECHNOLOGY

MAP ID: tv2002/02-0048/B452-Int-3 October 19, 2001

51

PRE-DEMOLITION SURVEY

Survey Area: A Survey Unit: G12-A-001 Classification: 3
 Building: 452
 Survey Unit Description: Exterior of Building 452
 Total Area: 1048 sq. m. Total Roof Area: 572 sq. m.



<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 DynCorp (aEIT), 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>U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p>Prepared by: GIS Dept. 303-668-770 Prepared for: DynCorp THE ART OF TECHNOLOGY</p>
			<p>0 METERS 10</p> <p>1 inch = 24 feet 1 grid sq. = 1 sq. m.</p>	

Scan Survey Information
 Survey Instrument ID #(s): 7, 8
 RCT ID #(s): 1, 2

52

SURVEY UNIT DATA SUMMARY: G12-A-002

Survey Unit Description:

Interior and Exterior of T428B & S452

Survey Unit G12-A-002 Data Summary

Total Surface Activity Measurements

15	15
Number Required	Number Obtained

MIN	-9.5	dpm/100 cm ²
MAX	54.7	dpm/100 cm ²
MEAN	18.5	dpm/100 cm ²
STD DEV	17.9	dpm/100 cm ²
TRANSURANIC DCGL_w	100	dpm/100 cm ²

Removable Activity Measurements

15	15
Number Required	Number Obtained

MIN	-0.9	dpm/100 cm ²
MAX	2.7	dpm/100 cm ²
MEAN	0.3	dpm/100 cm ²
STD DEV	1.4	dpm/100 cm ²
TRANSURANIC DCGL_w	20	dpm/100 cm ²

54

Survey Unit G12-A-002 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	1379	1379	1513
Cal Due Date:	5/6/02	5/6/02	4/8/02
Analysis Date:	11/15/01	11/16/01	11/16/01
Alpha Eff. (c/d):	0.187	0.187	0.212
Alpha Bkgd (cpm)	3.7	2.7	5.1
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm²)	49.8	44.1	49.9

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm ²)
1	7	8.0	10.7	15.7
2	7	9.3	5.3	22.6
3	8	7.3	2.0	11.9
4	8	12.7	2.7	40.8
5	8	15.3	3.3	54.7
6	8	12.0	4.7	37.0
7	7	7.3	4.0	11.9
8	7	6.7	7.3	8.7
9	8	11.3	4.7	33.3
10	8	4.0	2.7	-5.7
11	7	3.3	6.0	-9.5
12	8	10.0	6.7	26.3
13	8	8.7	4.0	19.4
14	7	7.3	9.3	11.9
15	7	4.7	2.7	-2.0
Average LAB				5.1
MIN				-9.5
MAX				54.7
MEAN				18.5
SD				17.9
Transuranic DCGL_w				100

10 QC	9	7.3	7.3	-8.0
15 QC	9	4.0	10.7	-23.6
Average LAB				9.0
MIN				-23.6
MAX				-8.0
MEAN				-15.8
SD				11.0
Transuranic DCGL_w				100

55

Survey Unit G12-A-002 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	770	830	1157	833
Cal Due Date:	1/19/02	2/16/02	2/16/02	1/31/02
Analysis Date:	11/16/01	11/16/01	11/16/01	11/16/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.3	0.1	0.1	0.1
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	8.8	7.0	7.0	7.0

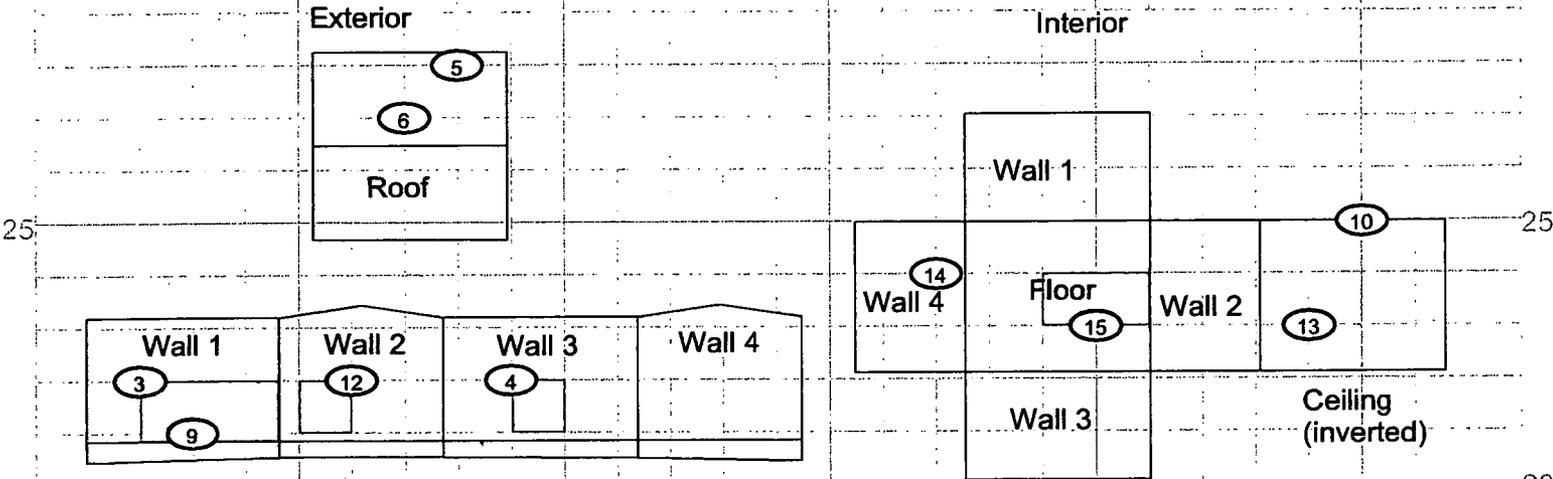
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	1	0.0	-0.9
2	2	0.0	-0.3
3	3	0.0	-0.3
4	4	0.0	-0.3
5	1	0.0	-0.9
6	2	1.0	2.7
7	3	0.0	-0.3
8	4	0.0	-0.3
9	1	0.0	-0.9
10	2	0.0	-0.3
11	3	0.0	-0.3
12	4	1.0	2.7
13	1	1.0	2.1
14	2	1.0	2.7
15	3	0.0	-0.3
		MIN	-0.9
		MAX	2.7
		MEAN	0.3
		SD	1.4
		Transuranic DCGL_w	20

56

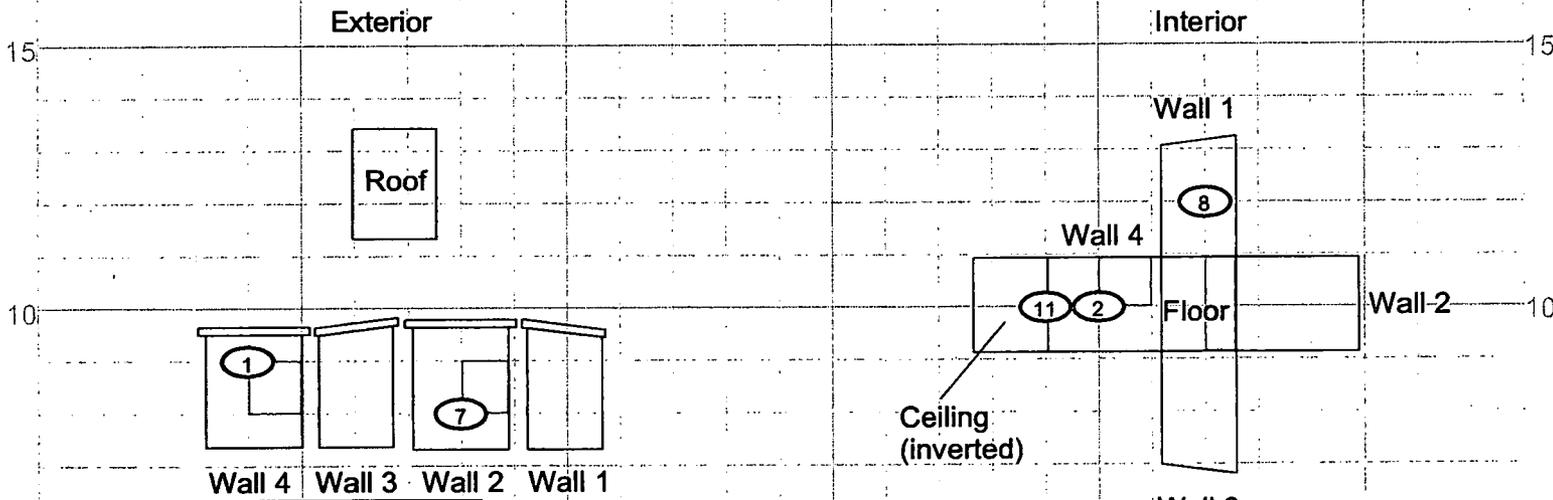
PRE-DEMOLITION SURVEY

Survey Area: A Survey Unit: G12-A-002 Classification: 3
 Building: T428B & S452
 Survey Unit Description: Interior and Exterior Total Roof Area: 16 sq. m.
 Total Area: 134 sq. m. Total Floor Area: 13 sq. m.

T428B



S452

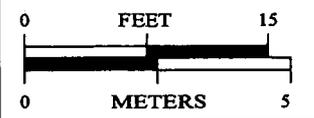


□ Scan Area

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): 7, 8
 RCT ID #(s): 1, 2

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

Prepared by: GIS Dept. 303-606-7770 Prepared for:
DynCorp
 THE ART OF TECHNOLOGY

MAP ID: 02-0048/T428B/Scan November 5, 2001

57

SURVEY UNIT DATA SUMMARY: G12-A-003

Survey Unit Description:

Interior and Exterior of T452A

58

Survey Unit G12-A-003 Data Summary

Total Surface Activity Measurements

25	25
Number Required	Number Obtained

MIN	-12.5	dpm/100 cm ²
MAX	60.0	dpm/100 cm ²
MEAN	8.9	dpm/100 cm ²
STD DEV	18.9	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²

Removable Activity Measurements

25	25
Number Required	Number Obtained

MIN	-0.6	dpm/100 cm ²
MAX	3.0	dpm/100 cm ²
MEAN	0.3	dpm/100 cm ²
STD DEV	1.3	dpm/100 cm ²
TRANSURANIC DCGL _w	20	dpm/100 cm ²

Survey Unit G12-A-003 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9	10
Serial #:	3114	1136	3114	1136
Cal Due Date:	4/25/02	1/17/02	4/25/02	1/17/02
Analysis Date:	10/31/01	10/31/01	11/1/01	11/6/01
Alpha Eff. (c/d):	0.211	0.211	0.211	0.211
Alpha Bkgd (cpm)	4.7	3.3	2.0	3.3
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)	48.5	42.2	34.9	42.2

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm ²)
1	7	4.0	2.0	3.2
2	7	6.0	1.0	12.6
3	7	2.0	3.3	-6.3
4	7	2.7	4.0	-3.0
5	9	5.3	4.7	9.3
6	7	6.7	4.0	16.0
7	9	7.3	5.3	18.8
8	9	5.3	4.7	9.3
9	7	1.3	2.7	-9.6
10	7	1.3	2.7	-9.6
11	9	16.0	4.0	60.0
12	7	6.0	3.3	12.6
13	7	8.7	5.3	25.4
14	7	16.0	5.3	60.0
15	7	6.7	4.7	16.0
16	7	2.7	4.0	-3.0
17	7	5.3	1.3	9.3
18	9	4.0	2.0	3.2
19	7	8.0	2.0	22.1
20	7	4.7	2.0	6.5
21	7	0.7	2.7	-12.5
22	7	3.3	4.7	-0.2
23	7	0.7	2.0	-12.5
24	7	1.3	2.3	-9.6
25	7	4.0	3.3	3.2
Average LAB				3.3
MIN				-12.5
MAX				60.0
MEAN				8.9
SD				18.9
Transuranic DCGL_w				100

20 QC	8	7.3	3.3	15.6
12 QC	10	6.0	4.7	9.5
Average LAB				4.0
MIN				9.5
MAX				15.6
MEAN				12.6
SD				4.4
Transuranic DCGL_w				100

60

Survey Unit G12-A-003 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	833	1157	830	770
Cal Due Date:	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	11/1/01	11/1/01	11/1/01	11/1/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.2	0.1	0.0
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	7.0	8.0	7.0	4.5

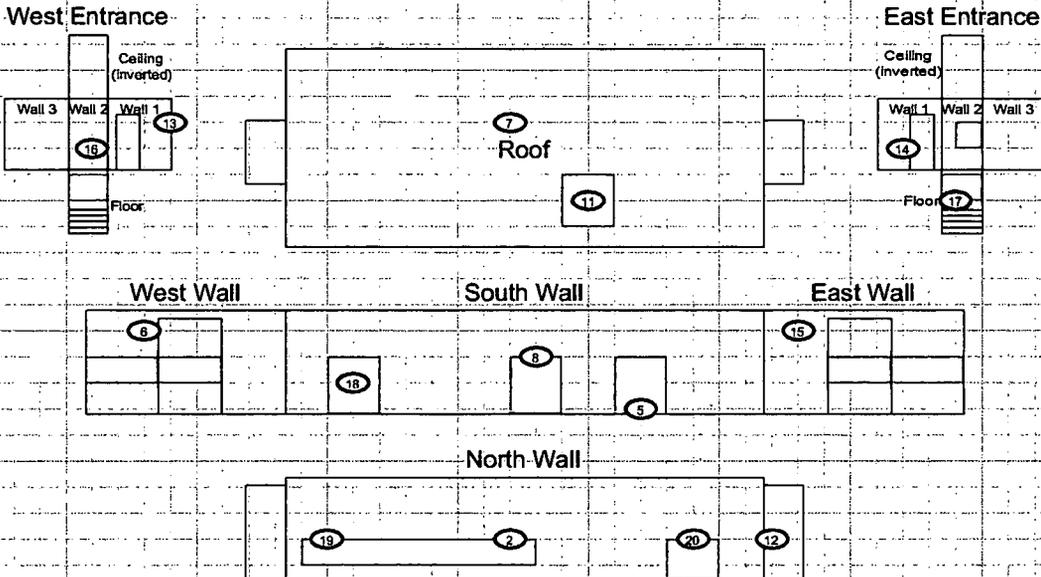
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	1	0.0	-0.3
2	2	0.0	-0.6
3	3	0.0	-0.3
4	4	0.0	0.0
5	1	1.0	2.7
6	2	0.0	-0.6
7	3	1.0	2.7
8	4	0.0	0.0
9	1	0.0	-0.3
10	2	0.0	-0.6
11	3	0.0	-0.3
12	4	0.0	0.0
13	1	0.0	-0.3
14	2	0.0	-0.6
15	3	0.0	-0.3
16	4	0.0	0.0
17	1	1.0	2.7
18	2	0.0	-0.6
19	3	0.0	-0.3
20	4	0.0	0.0
21	1	0.0	-0.3
22	2	0.0	-0.6
23	3	0.0	-0.3
24	4	1.0	3.0
25	1	1.0	2.7
		MIN	-0.6
		MAX	3.0
		MEAN	0.3
		SD	1.3
		Transuranic	20

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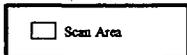
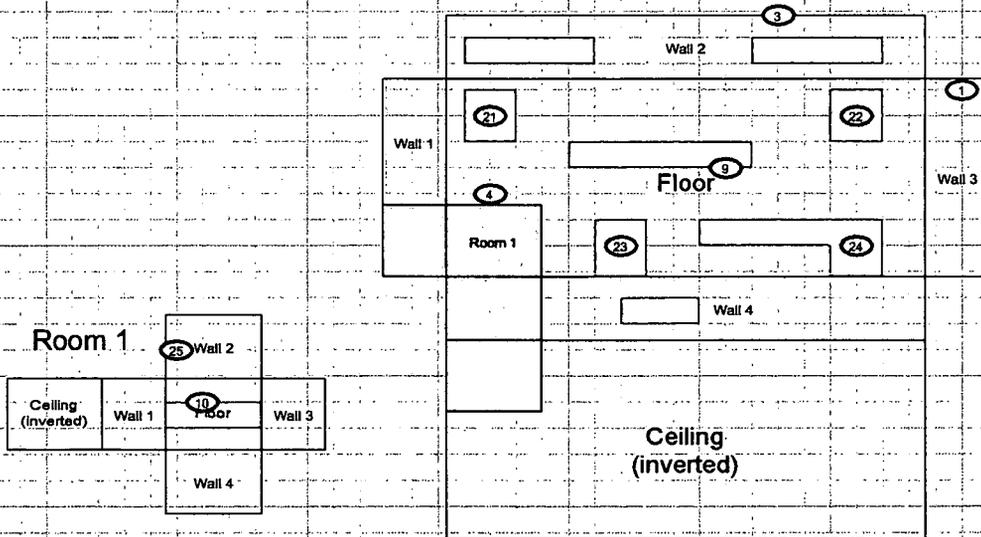
PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-003 Classification: 3
 Building: T452A
 Survey Unit Description: Group 12 Total Roof Area: 147 sq. m.
 Total Area: 835 sq. m. Total Floor Area: 147 sq. m.

T452A Exterior



T452A Interior



<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 Location 	<p>Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, 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>U.S. Department of Energy Rocky Flats Environmental Technology Site Prepared by: QAS Dept. 303-668-770 Prepared for: DynCorp THE ART OF TECHNOLOGY </p>
			<p>0 METERS 10</p> <p>1 inch = 24 feet 1 grid sq. = 1 sq. m.</p>	
<p>Scan Survey Information Survey Instrument ID #(s): 7, 9 RCT ID #(s): 1, 2</p>				

(Handwritten mark)

SURVEY UNIT DATA SUMMARY: G12-A-004

Survey Unit Description:

Interior and Exterior of T452B

63

Survey Unit G12-A-004 Data Summary

Total Surface Activity Measurements

25	25
Number Required	Number Obtained

MIN	-10.8	dpm/100 cm ²
MAX	71.1	dpm/100 cm ²
MEAN	8.8	dpm/100 cm ²
STD DEV	19.0	dpm/100 cm ²
TRANSURANIC DCGL_w	100	dpm/100 cm ²

Removable Activity Measurements

25	25
Number Required	Number Obtained

MIN	-1.2	dpm/100 cm ²
MAX	9.1	dpm/100 cm ²
MEAN	0.9	dpm/100 cm ²
STD DEV	2.4	dpm/100 cm ²
TRANSURANIC DCGL_w	20	dpm/100 cm ²

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Survey Unit G12-A-004 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra
Model:	DP-6	DP-6
Instrument ID#:	7	8
Serial #:	3114	1136
Cal Due Date:	4/25/02	1/17/02
Analysis Date:	11/2/01	11/6/01
Alpha Eff. (c/d):	0.211	0.211
Alpha Bkgd (cpm)	2.7	3.3
Sample Time (min)	1.5	1.5
LAB Time (min)	1.5	1.5
MDC (dpm/100cm²)	39.1	42.2

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm ²)
1	7	3.3	0.7	1.5
2	7	2.7	0.7	-1.4
3	7	0.7	2.0	-10.8
4	7	10.7	3.3	36.5
5	7	1.3	1.3	-8.0
6	7	18.0	8.0	71.1
7	7	4.0	2.0	4.8
8	7	4.7	4.0	8.1
9	7	5.3	0.7	11.0
10	7	2.7	4.7	-1.4
11	7	10.7	4.0	36.5
12	7	1.3	0.7	-8.0
13	7	3.3	2.0	1.5
14	7	3.3	2.0	1.5
15	7	2.7	2.7	-1.4
16	7	2.0	0.7	-4.7
17	7	3.3	2.0	1.5
18	7	8.7	3.3	27.1
19	7	5.3	4.0	11.0
20	7	3.3	5.3	1.5
21	7	7.3	5.3	20.4
22	7	2.0	6.0	-4.7
23	7	2.7	3.3	-1.4
24	7	2.0	2.0	-4.7
25	7	10.0	4.0	33.2

Average LAB	3.0
MIN	-10.8
MAX	71.1
MEAN	8.8
SD	19.0
Transuranic DCGL _w	100

18 QC	8	6.7	2.7	25.4
14 QC	8	3.3	0.0	9.2

Average LAB	1.4
MIN	9.2
MAX	25.4
MEAN	17.3
SD	11.4
Transuranic DCGL _w	100

65

Survey Unit G12-A-004 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	833	1157	830	770
Cal Due Date:	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	11/6/01	11/6/01	11/6/01	11/6/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.2	0.0	0.4	0.0
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	8.0	4.5	9.4	4.5

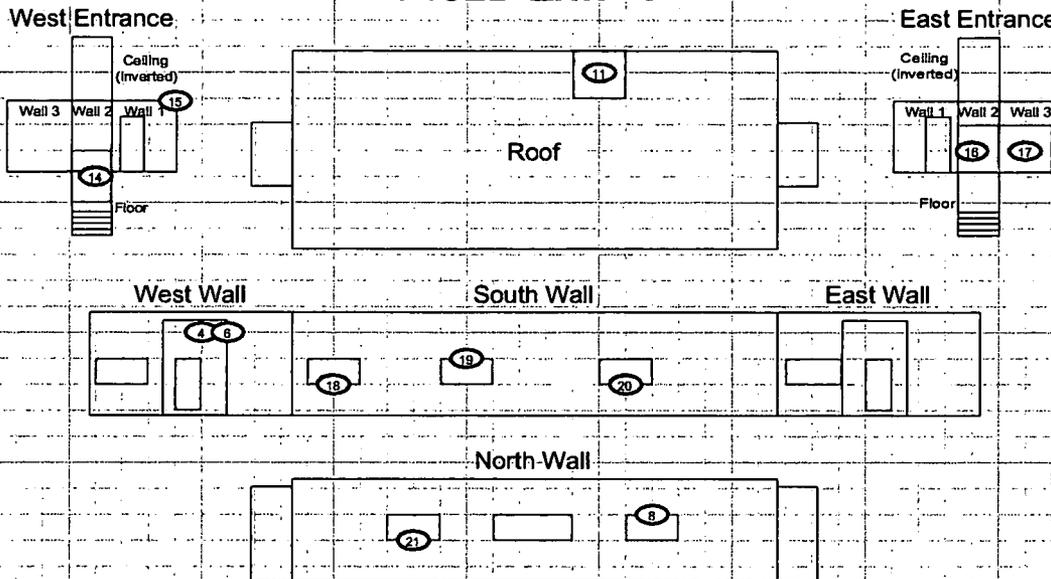
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	3	0.0	-1.2
2	1	2.0	5.5
3	2	0.0	0.0
4	1	1.0	2.4
5	3	0.0	-1.2
6	2	0.0	0.0
7	1	0.0	-0.6
8	4	0.0	0.0
9	2	0.0	0.0
10	1	0.0	-0.6
11	1	0.0	-0.6
12	4	1.0	3.0
13	1	1.0	2.4
14	3	0.0	-1.2
15	4	3.0	9.1
16	2	0.0	0.0
17	3	1.0	1.8
18	2	0.0	0.0
19	1	1.0	2.4
20	4	0.0	0.0
21	3	0.0	-1.2
22	4	0.0	0.0
23	4	0.0	0.0
24	2	1.0	3.0
25	3	0.0	-1.2
		MIN	-1.2
		MAX	9.1
		MEAN	0.9
		SD	2.4
		Transuranic	20

66

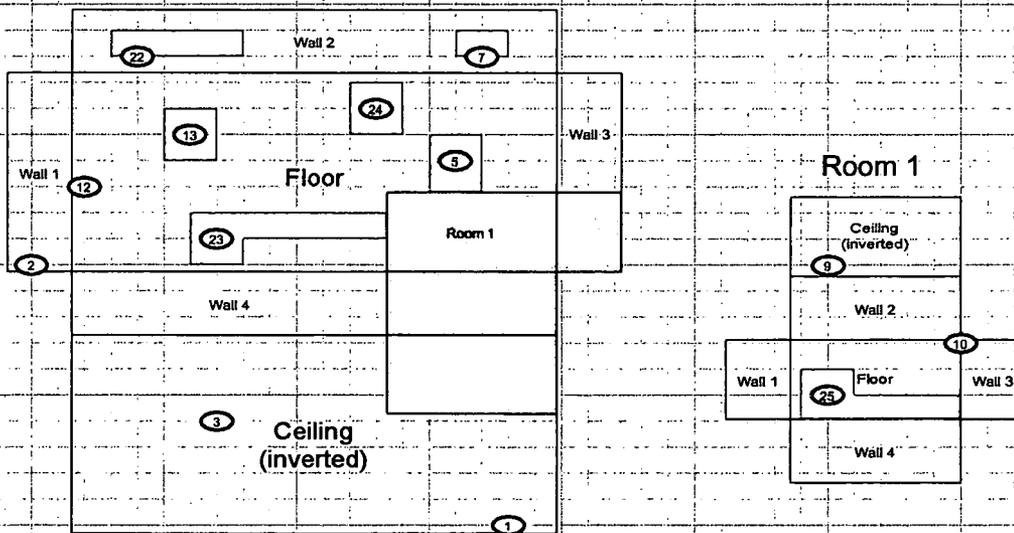
PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-004 Classification: 3
 Building: T452B
 Survey Unit Description: Group 12 Total Roof Area: 147 sq. m.
 Total Area: 842 sq. m. Total Floor Area: 147 sq. m.

T452B Exterior



T452B Interior



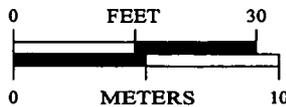
Scan Area

SURVEY MAP LEGEND

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

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Scan Survey Information
 Survey Instrument ID #(s): 7
 RCT ID #(s): 1



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

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

Prepared by: G12 Dept. 303-068-770 Prepared for:

DynCorp
 THE ART OF TECHNOLOGY



MAP ID: fv2001/02-0048

October 23, 2001

ce7

SURVEY UNIT DATA SUMMARY: G12-A-006

Survey Unit Description:

Interior and Exterior of T452D

68

Survey Unit G12-A-006 Data Summary

Total Surface Activity Measurements

25	25
Number Required	Number Obtained

MIN	-18.9	dpm/100 cm ²
MAX	53.3	dpm/100 cm ²
MEAN	11.7	dpm/100 cm ²
STD DEV	20.4	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²

Removable Activity Measurements

25	25
Number Required	Number Obtained

MIN	-0.6	dpm/100 cm ²
MAX	3.0	dpm/100 cm ²
MEAN	0.8	dpm/100 cm ²
STD DEV	1.5	dpm/100 cm ²
TRANSURANIC DCGL _w	20	dpm/100 cm ²

69

Survey Unit G12-A-006 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	3114	394	1513
Cal Due Date:	4/25/02	11/23/01	4/8/02
Analysis Date:	11/7/01	11/7/01	11/7/01
Alpha Eff. (c/d):	0.211	0.218	0.212
Alpha Bkgd (cpm)	2.0	0.7	5.1
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm²)	34.9	23.8	49.9

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm ²)
1	9	4.7	8.0	-9.4
2	9	11.3	4.7	21.7
3	9	12.0	6.7	25.0
4	9	7.3	4.0	2.8
5	9	10.0	12.0	15.6
6	9	16.0	10.0	43.9
7	9	17.3	6.7	50.0
8	7	6.0	1.3	-3.3
9	7	2.7	3.3	-18.9
10	9	8.7	6.7	9.5
11	9	3.3	4.7	-16.0
12	9	6.7	4.0	0.0
13	9	8.0	10.7	6.2
14	9	8.7	4.0	9.5
15	9	6.0	2.7	-3.3
16	9	13.3	12.0	31.2
17	7	10.0	2.0	15.7
18	9	14.7	11.3	37.8
19	9	13.3	9.3	31.2
20	7	6.7	6.0	0.0
21	9	18.0	8.7	53.3
22	9	4.0	8.0	-12.7
23	9	6.0	7.3	-3.3
24	9	7.3	6.0	2.8
25	9	7.3	7.3	2.8

Average LAB	6.7
MIN	-18.9
MAX	53.3
MEAN	11.7
SD	20.4
Transuranic DCGL _w	100

24 QC	8	3.3	1.3	9.2
2 QC	8	2.7	1.3	6.4

Average LAB	1.3
MIN	6.4
MAX	9.2
MEAN	7.8
SD	2.0
Transuranic DCGL _w	100

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Survey Unit G12-A-006 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	833	1157	830	770
Cal Due Date:	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	11/8/01	11/8/01	11/8/01	11/8/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.2	0.1	0.0	0.1
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	8.0	7.0	4.5	7.0

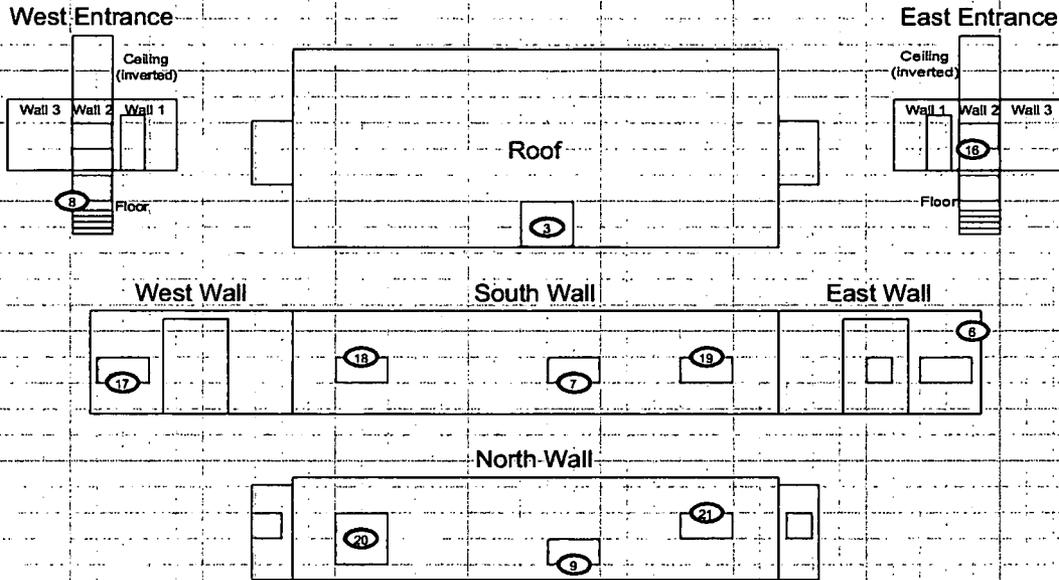
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	1	0.0	-0.6
2	2	0.0	-0.3
3	3	1.0	3.0
4	4	1.0	2.7
5	1	0.0	-0.6
6	2	0.0	-0.3
7	3	0.0	0.0
8	4	0.0	-0.3
9	1	1.0	2.4
10	2	1.0	2.7
11	3	1.0	3.0
12	4	0.0	-0.3
13	1	0.0	-0.6
14	2	1.0	2.7
15	3	0.0	0.0
16	4	1.0	2.7
17	1	0.0	-0.6
18	2	0.0	-0.3
19	3	0.0	0.0
20	4	1.0	2.7
21	1	1.0	2.4
22	2	0.0	-0.3
23	3	0.0	0.0
24	4	0.0	-0.3
25	1	0.0	-0.6
		MIN	-0.6
		MAX	3.0
		MEAN	0.8
		SD	1.5
		Transuranic	20

71

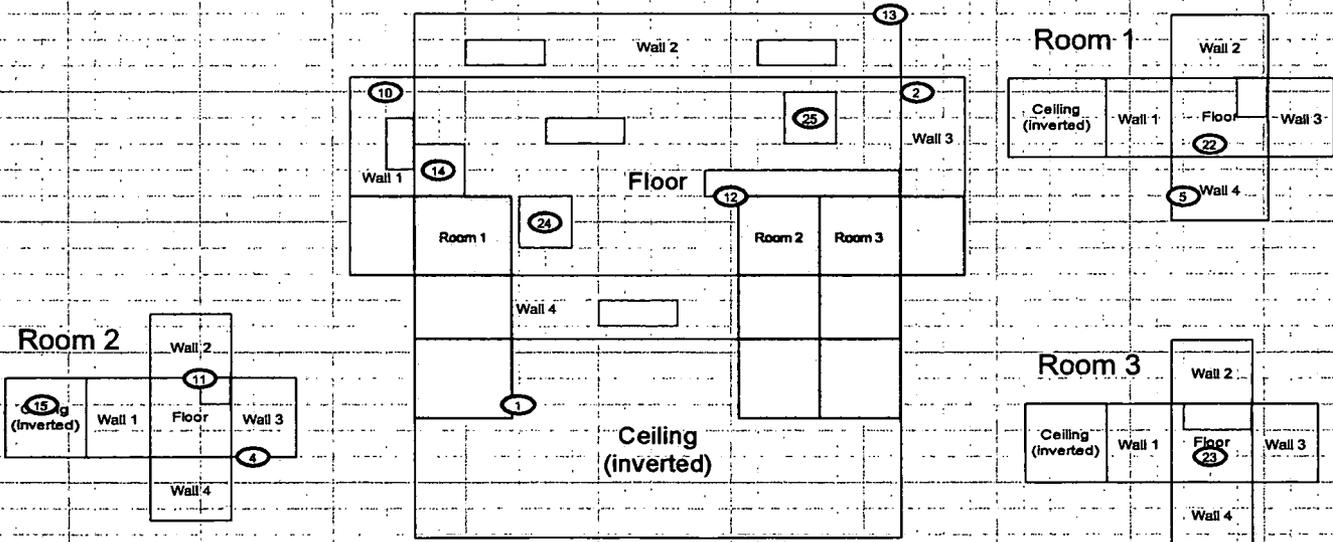
PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-006 Classification: 3
 Building: T452D
 Survey Unit Description: Group 12 Total Roof Area: 147 sq. m.
 Total Area: 872 sq. m. Total Floor Area: 147 sq. m.

T452D Exterior



T452D Interior



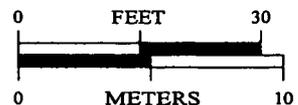
□ Scan Area

SURVEY MAP LEGEND

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

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Scan Survey Information
 Survey Instrument ID #(s): 7, 9
 RCT ID #(s): 1, 2



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

U.S. Department of Energy
 Rocky Flats Environmental Technology Site
 Prepared by: GIS Dept. 303-666-7750 Prepared for:
DynCorp
 THE ART OF TECHNOLOGY
 KAISER HILL
 MAP ID: IV2002/02-0048 October 29, 2001

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SURVEY UNIT DATA SUMMARY: G12-A-007

Survey Unit Description:

Interior and Exterior of T452E

Survey Unit G12-A-007 Data Summary

Total Surface Activity Measurements

15	15
Number Required	Number Obtained

MIN	-18.3	dpm/100 cm ²
MAX	35.2	dpm/100 cm ²
MEAN	7.5	dpm/100 cm ²
STD DEV	17.0	dpm/100 cm ²
 TRANSURANIC DCGL _w	 100	 dpm/100 cm ²

Removable Activity Measurements

15	15
Number Required	Number Obtained

MIN	-0.3	dpm/100 cm ²
MAX	8.8	dpm/100 cm ²
MEAN	0.9	dpm/100 cm ²
STD DEV	2.5	dpm/100 cm ²
 TRANSURANIC DCGL _w	 20	 dpm/100 cm ²

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Survey Unit G12-A-007 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra
Model:	DP-6	DP-6
Instrument ID#:	7	8
Serial #:	1379	1136
Cal Due Date:	5/6/02	1/17/02
Analysis Date:	11/12/01	11/12/01
Alpha Eff. (c/d):	0.187	0.211
Alpha Bkgd (cpm)	3.7	3.3
Sample Time (min)	1.5	1.5
LAB Time (min)	1.5	1.5
MDC (dpm/100cm²)	49.8	42.2

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm ²)
1	7	6.7	6.7	3.1
2	7	11.3	5.3	27.7
3	7	3.3	2.7	-15.1
4	7	8.7	6.7	13.8
5	7	11.3	10.0	27.7
6	7	6.0	5.3	-0.7
7	7	12.7	8.0	35.2
8	7	4.7	9.3	-7.6
9	7	9.3	0.7	17.0
10	7	8.0	3.3	10.0
11	7	6.0	5.3	-0.7
12	7	4.0	11.3	-11.4
13	7	11.3	4.0	27.7
14	7	7.0	11.3	4.7
15	7	2.7	2.0	-18.3
Average LAB				6.1
MIN				-18.3
MAX				35.2
MEAN				7.5
SD				17.0
Transuranic DCGL_w				100

2 QC	8	3.3	1.3	11.8
3 QC	8	0.7	0.3	-0.5
Average LAB				0.8
MIN				-0.5
MAX				11.8
MEAN				5.7
SD				8.7
Transuranic DCGL_w				100

75

Survey Unit G12-A-007 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	833	1157	830	770
Cal Due Date:	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	11/12/01	11/12/01	11/12/01	11/12/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.1	0.1	0.1
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	7.0	7.0	7.0	7.0

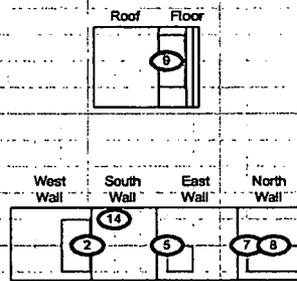
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	1	0.0	-0.3
2	2	0.0	-0.3
3	3	0.0	-0.3
4	4	0.0	-0.3
5	1	1.0	2.7
6	2	0.0	-0.3
7	3	0.0	-0.3
8	4	0.0	-0.3
9	1	1.0	2.7
10	2	0.0	-0.3
11	3	1.0	2.7
12	4	0.0	-0.3
13	1	3.0	8.8
14	2	0.0	-0.3
15	3	0.0	-0.3
		MIN	-0.3
		MAX	8.8
		MEAN	0.9
		SD	2.5
		Transuranic DCGL_w	20

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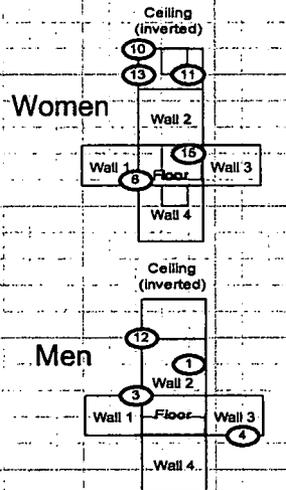
PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-007 Classification: 3
 Building: T452E
 Survey Unit Description: Group 12 Total Roof Area: 10 sq. m.
 Total Area: 91 sq. m. Total Floor Area: 10 sq. m.

T452E Exterior



T452E Interior



☐ Scan Area

SURVEY MAP LEGEND

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

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Scan Survey Information
 Survey Instrument ID #(s): 7
 RCT ID #(s): 1



0 FEET 30

0 METERS 10

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

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

Prepared by: GHS Dept. 303-868-770 Prepared for:

DynCorp
 THE ART OF TECHNOLOGY

MAP ID: 02-0048/452E/Scan November 14, 2001

77

SURVEY UNIT DATA SUMMARY: G12-A-008

Survey Unit Description:

Interior and Exterior of T452F

Survey Unit G12-A-008 Data Summary

Total Surface Activity Measurements

25	25
Number Required	Number Obtained

MIN	-28.4	dpm/100 cm ²
MAX	53.9	dpm/100 cm ²
MEAN	4.4	dpm/100 cm ²
STD DEV	22.0	dpm/100 cm ²
TRANSURANIC DCGL_w	100	dpm/100 cm ²

Removable Activity Measurements

25	25
Number Required	Number Obtained

MIN	-0.3	dpm/100 cm ²
MAX	8.8	dpm/100 cm ²
MEAN	1.5	dpm/100 cm ²
STD DEV	2.8	dpm/100 cm ²
TRANSURANIC DCGL_w	20	dpm/100 cm ²

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Survey Unit G12-A-008 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra
Model:	DP-6	DP-6
Instrument ID#:	7	8
Serial #:	1379	1136
Cal Due Date:	5/6/02	1/17/02
Analysis Date:	11/13/01	11/13/01
Alpha Eff. (c/d):	0.187	0.211
Alpha Bkgd (cpm)	0.7	2.3
Sample Time (min)	1.5	1.5
LAB Time (min)	1.5	1.5
MDC (dpm/100cm²)	27.7	36.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm ²)
1	7	6.0	5.3	-3.3
2	7	6.7	8.0	0.5
3	7	8.7	8.7	11.2
4	7	16.7	12.7	53.9
5	7	12.7	9.3	32.6
6	7	13.3	2.0	35.8
7	7	3.3	6.0	-17.7
8	7	16.0	6.7	50.2
9	7	8.0	6.0	7.4
10	7	6.0	5.3	-3.3
11	7	1.3	1.3	-28.4
12	7	6.0	4.0	-3.3
13	7	13.3	8.7	35.8
14	7	4.7	8.0	-10.2
15	7	2.7	4.0	-20.9
16	7	8.0	8.0	7.4
17	7	4.7	4.7	-10.2
18	7	4.0	9.3	-14.0
19	7	10.0	11.3	18.1
20	7	5.3	10.7	-7.0
21	7	5.3	8.7	-7.0
22	7	3.3	0.0	-17.7
23	7	6.0	7.3	-3.3
24	7	6.0	6.0	-3.3
25	7	8.0	3.3	7.4

Average LAB	6.6
MIN	-28.4
MAX	53.9
MEAN	4.4
SD	22.0
Transuranic DCGL _w	100

25 QC	8	6.7	4.0	19.2
2 QC	8	6.7	1.3	19.2

Average LAB	2.7
MIN	19.2
MAX	19.2
MEAN	19.2
SD	0.0
Transuranic DCGL _w	100

80

Survey Unit G12-A-008 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	833	1157	830	770
Cal Due Date:	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	11/13/01	11/13/01	11/13/01	11/13/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.1	0.1	0.0
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	7.0	7.0	7.0	4.5

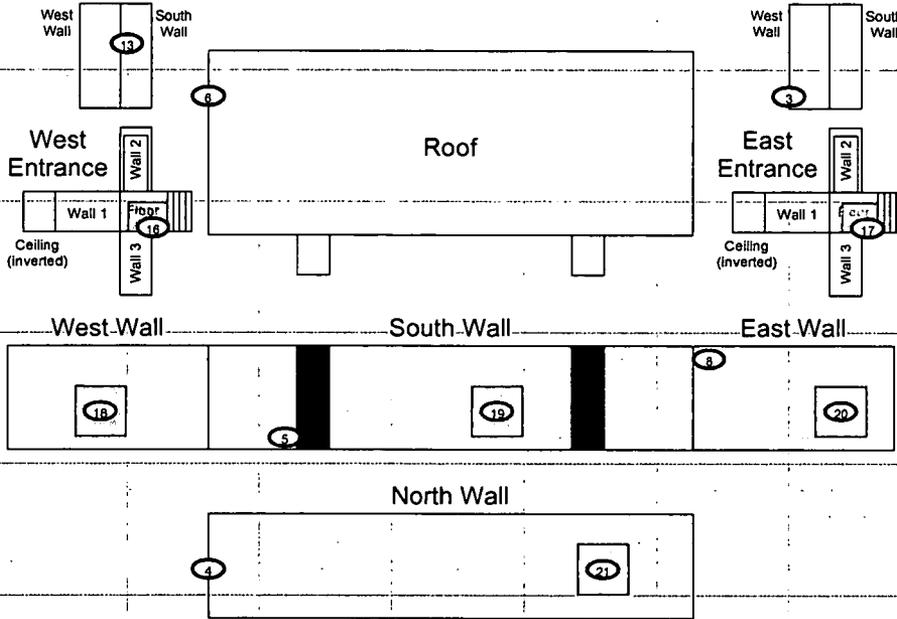
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	1	0.0	-0.3
2	2	0.0	-0.3
3	3	3.0	8.8
4	4	0.0	0.0
5	1	1.0	2.7
6	2	2.0	5.8
7	3	0.0	-0.3
8	4	2.0	6.1
9	1	0.0	-0.3
10	2	2.0	5.8
11	3	0.0	-0.3
12	4	0.0	0.0
13	1	0.0	-0.3
14	2	2.0	5.8
15	3	0.0	-0.3
16	4	1.0	3.0
17	1	0.0	-0.3
18	2	0.0	-0.3
19	3	0.0	-0.3
20	4	0.0	0.0
21	1	0.0	-0.3
22	2	0.0	-0.3
23	3	1.0	2.7
24	4	0.0	0.0
25	1	0.0	-0.3
		MIN	-0.3
		MAX	8.8
		MEAN	1.5
		SD	2.8
		Transuranic DCGL_w	20

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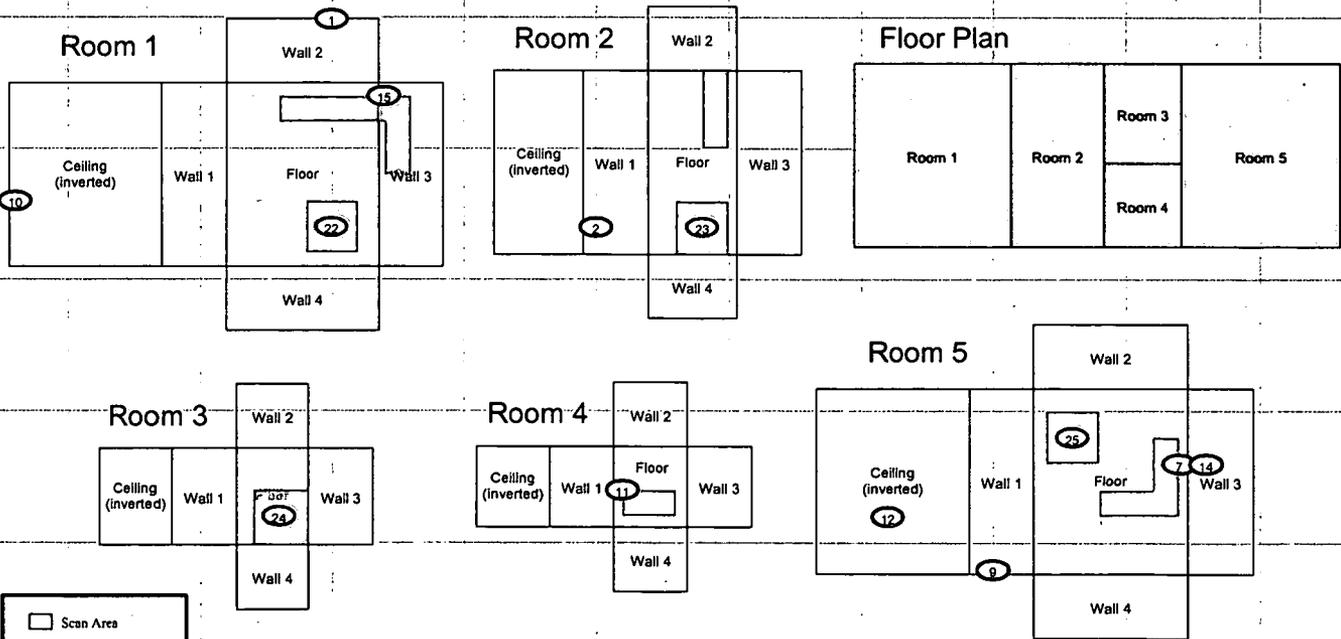
PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-008 Classification: 3
 Building: T452F
 Survey Unit Description: Group 12 Total Roof Area: 132 sq. m.
 Total Area: 861 sq. m. Total Floor Area: 131 sq. m.

T452F Exterior



T452F Interior



□ 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 Location 	<p><small>Neither the United States Government nor Kaiser Hill Co., nor DynCorp Inc. ET, 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.</small></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. 303-666-7707 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p>
	<p>Scan Survey Information Survey Instrument ID #(s): 7, 8 RCT ID #(s): 1, 2</p>		<p>MAP ID: 02-0048/452F/Scan October 30, 2001</p>	

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SURVEY UNIT DATA SUMMARY: G12-A-009

Survey Unit Description:

Interior and Exterior of T452G

Survey Unit G12-A-009 Data Summary

Total Surface Activity Measurements

25	25
Number Required	Number Obtained

MIN	-15.2	dpm/100 cm ²
MAX	97.1	dpm/100 cm ²
MEAN	20.2	dpm/100 cm ²
STD DEV	30.1	dpm/100 cm ²
TRANSURANIC DCGL _w	100	dpm/100 cm ²

Removable Activity Measurements

25	25
Number Required	Number Obtained

MIN	-0.3	dpm/100 cm ²
MAX	6.1	dpm/100 cm ²
MEAN	1.0	dpm/100 cm ²
STD DEV	1.8	dpm/100 cm ²
TRANSURANIC DCGL _w	20	dpm/100 cm ²

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Survey Unit G12-A-009 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	1379	1379	1136
Cal Due Date:	5/6/02	5/6/02	1/17/02
Analysis Date:	11/13/01	11/14/01	11/14/01
Alpha Eff. (c/d):	0.187	0.187	0.211
Alpha Bkgd (cpm)	0.7	2.7	1.3
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm²)	27.7	44.1	30.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm ²)
1	8	9.3	4.7	20.1
2	8	10.0	7.3	23.8
3	7	23.7	4.0	97.1
4	8	4.0	2.7	-8.3
5	8	5.3	2.0	-1.3
6	7	20.0	5.3	77.3
7	8	6.7	5.3	6.2
8	8	14.7	5.3	49.0
9	8	7.3	5.3	9.4
10	7	15.3	6.0	52.2
11	8	7.4	11.3	9.9
12	8	7.3	4.0	9.4
13	8	8.0	4.7	13.1
14	8	12.0	12.0	34.5
15	8	15.3	6.7	52.2
16	8	4.7	4.0	-4.5
17	8	2.7	3.3	-15.2
18	8	6.7	11.3	6.2
19	8	16.7	8.0	59.7
20	8	12.7	8.0	38.3
21	8	3.3	4.7	-12.0
22	8	8.7	8.0	16.9
23	8	2.7	2.0	-15.2
24	8	4.7	2.7	-4.5
25	8	4.0	0.0	-8.3

Average LAB	5.5
MIN	-15.2
MAX	97.1
MEAN	20.2
SD	30.1
Transuranic DCGL _w	100

24 QC	9	2.0	2.7	0.0
4 QC	9	1.3	1.3	-3.3

Average LAB	2.0
MIN	-3.3
MAX	0.0
MEAN	-1.7
SD	2.4
Transuranic DCGL _w	100

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Survey Unit G12-A-009 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	833	1157	830	770
Cal Due Date:	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	11/14/01	11/14/01	11/14/01	11/14/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.0	0.0	0.0
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm²)	7.0	4.5	4.5	4.5

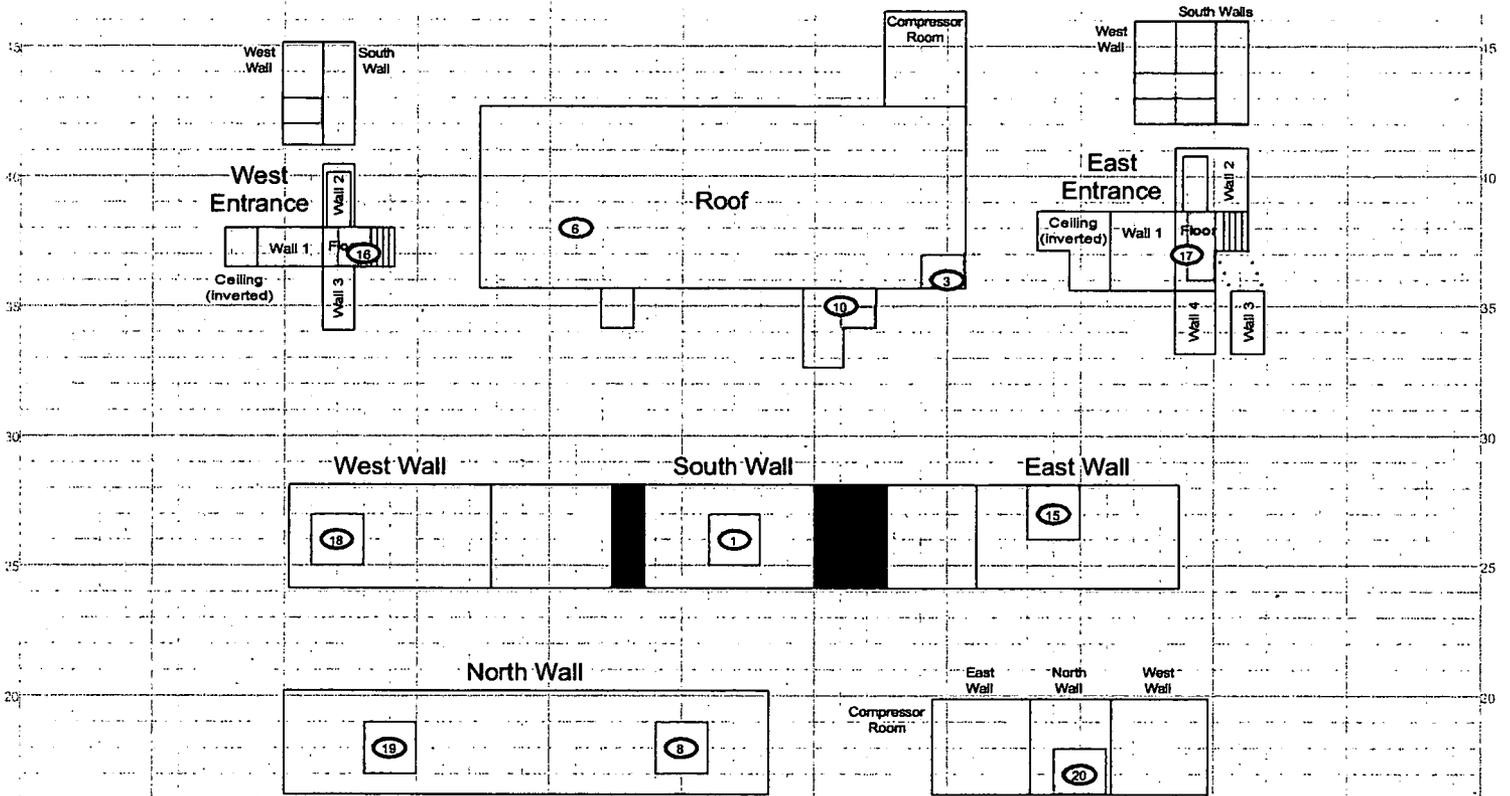
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm ²)
1	1	0.0	-0.3
2	2	1.0	3.0
3	3	0.0	0.0
4	4	1.0	3.0
5	1	0.0	-0.3
6	2	1.0	3.0
7	3	0.0	0.0
8	4	1.0	3.0
9	1	0.0	-0.3
10	2	0.0	0.0
11	3	0.0	0.0
12	4	1.0	3.0
13	1	0.0	-0.3
14	2	0.0	0.0
15	3	1.0	3.0
16	4	0.0	0.0
17	1	0.0	-0.3
18	2	1.0	3.0
19	3	2.0	6.1
20	4	0.0	0.0
21	1	0.0	-0.3
22	2	0.0	0.0
23	3	0.0	0.0
24	4	0.0	0.0
25	1	0.0	-0.3
MIN			-0.3
MAX			6.1
MEAN			1.0
SD			1.8
Transuranic DCGL_w			20

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PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-009 Classification: 3
 Building: T452G
 Survey Unit Description: Group 12 Total Roof Area: 148 sq. m.
 Total Area: 1124 sq. m. Total Floor Area: 144 sq. m.

T452G Exterior



☐ 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 Location 	<p><small>Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, 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 in any way infringe on any third party's rights.</small></p> <p>Scan Survey Information Survey Instrument ID #(s): 89 RCT ID #(s): 12</p>	<p style="text-align: center;">N ↑</p> <p style="text-align: center;">0 FEET 30</p> <p style="text-align: center;">0 METERS 10</p> <p style="text-align: center;">1 inch = 24 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 style="text-align: center;">Prepared by: GIS Dept. 303-868-7770 Prepared for: DynCorp THE ART OF TECHNOLOGY</p> <p style="text-align: center;">MAP ID: 02-0048/452G-1Scan October 30, 2001</p>
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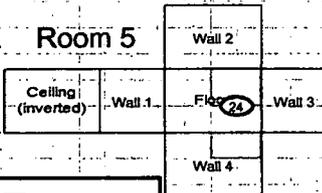
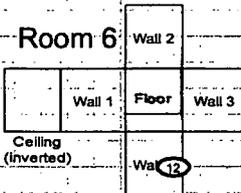
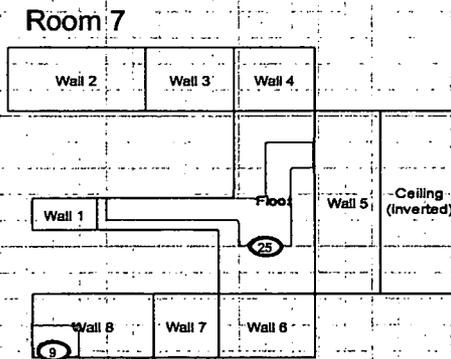
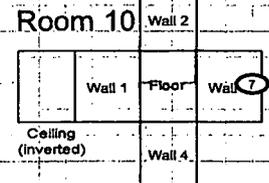
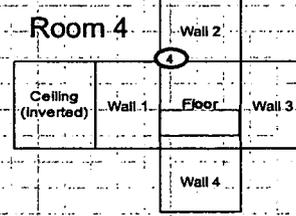
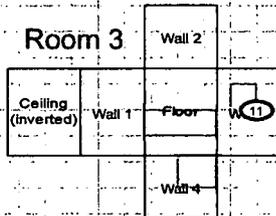
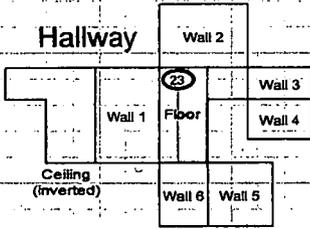
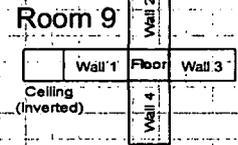
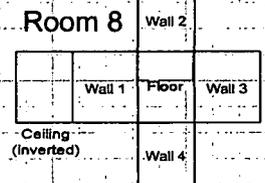
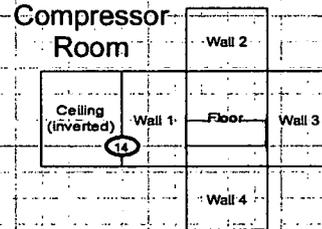
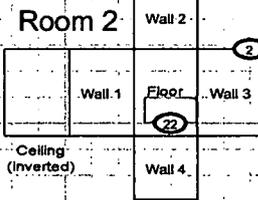
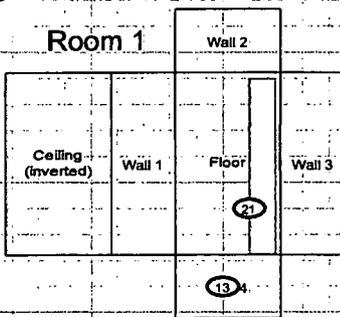
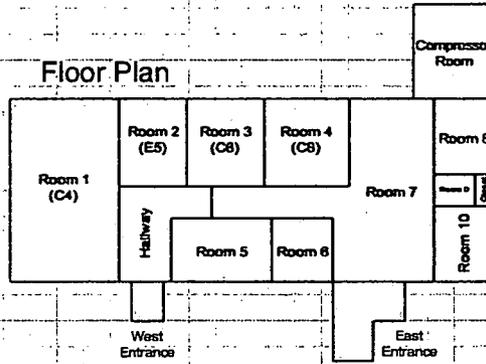
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PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-009 Classification: 3
 Building: T452G
 Survey Unit Description: Group 12 Total Roof Area: 148 sq. m.
 Total Area: 1124 sq. m. Total Floor Area: 144 sq. m.

T452G Interior

Floor Plan

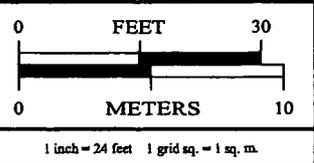


SURVEY MAP LEGEND

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

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Scan Survey Information
 Survey Information ID # (s): **89**
 RCT ID # (s): **12**



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

Prepared by: G4S Dept. 303-960-7707 Prepared for:
DynCorp
 THE ART OF TECHNOLOGY

MAP ID: 02-0048/452G-2Scan October 30, 2001

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ATTACHMENT D

**Chemical Data Summaries
and Sample Maps**

Asbestos Data Summary

Sample Number	Survey Map Location Point	Material Sampled & Location	Analytical Results
Building T452A			
T452A-11132001-315-101	1	Main Room, 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452A-11132001-315-102	2	Main Room, 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452A-11132001-315-103	3	Main Room, 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452A-11132001-315-104	4	Main Room, 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452A-11132001-315-105	5	Main Room, 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452A-11132001-315-106	6	Main Room, 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452A-11132001-315-107	7	Main Room, 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452A-11132001-315-108	8	Main Room, 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452A-11132001-315-109	9	Main Room, drywall, north wall	None Detected
T452A-11132001-315-110	10	Main Room, drywall and joint compound, south wall	None Detected
T452A-11132001-315-111	11	Main Room, drywall and joint compound, west wall	None Detected
T452A-11132001-315-112	12	Main Room, drywall, east wall	None Detected
T452A-11132001-315-113	13	Main Room, HVAC seam duct tape	None Detected
Building T452F			
T452F-11132001-315-114	14	Room 5 -- 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452F-11132001-315-115	15	Room 5 -- 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452F-11132001-315-116	16	Room 4 -- 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452F-11132001-315-117	17	Room 1 -- 2' x 4' white & gray drop ceiling tile with large "worm" pattern.	None Detected
T452F-11132001-315-118	18	Room 1 -- 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452F-11132001-315-119	19	Room 1 -- 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452F-11132001-315-120	20	Room 2, 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452F-11132001-315-121	21	Room 1, 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452F-11132001-315-122	22	Room 4, drywall, north wall	None Detected
T452F-11132001-315-123	23	Room 3, drywall, north wall	None Detected
T452F-11132001-315-124	24	Room 2, drywall, north wall	None Detected
Building T452G			
T452G-11142001-315-125	25	Room 10 - Dark beige, wall board ceiling	None Detected
T452G-11142001-315-126	26	Room 9 - Dark beige, wall board ceiling	None Detected
T452G-11142001-315-127	27	Room 8 - Dark beige wall board, north wall	None Detected
T452G-11142001-315-128	28	Room 7 - 2' x 4' white textured, wall board drop ceiling	None Detected
T452G-11142001-315-129	29	Room 7 - 2' x 4' white textured, wall board drop ceiling	None Detected
T452G-11142001-315-130	30	Room 4 - 2' x 4' white textured, wall board drop ceiling	None Detected
T452G-11142001-315-131	31	Hallway - 2' x 4' white textured, wall board drop ceiling	None Detected
T452G-11142001-315-132	32	Room 1 - 2' x 4' white textured, wall board drop ceiling	None Detected
T452G-11142001-315-133	33	Room 8 - tan & white linoleum, first layer	None Detected
T452G-11142001-315-134	34	Room 8 - tan & white linoleum, 2 nd layer	None Detected
T452G-11142001-315-135	35	Room 7 - Edge of wall, joint compound	None Detected
T452G-11142001-315-136	36	Room 6 - dry wall, north wall	None Detected
T452G-11142001-315-137	37	Room 3 - dry wall, south wall	None Detected

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Sample Number	Survey Map Location Point	Material Sampled & Location	Analytical Results
Building T452D			
T452D-11142001-315-138	38	Main Room - 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452D-11142001-315-139	39	Main Room - 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452D-11142001-315-140	40	Main Room - 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452D-11142001-315-141	41	Main Room - 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452D-11142001-315-142	42	Main Room - 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452D-11142001-315-143	43	Main Room - 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452D-11142001-315-144	44	Main Room - drywall	None Detected
T452D-11142001-315-145	45	Main Room - drywall	None Detected
T452D-11142001-315-146	46	Main Room - drywall and joint compound	None Detected
T452D-11142001-315-147	47	Main Room - drywall	None Detected
Building T452B			
T452B-11152001-315-159	59	Main Room - 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452B-11152001-315-160	60	Main Room - 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452B-11152001-315-161	61	Main Room - 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452B-11152001-315-162	62	Main Room - 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452B-11152001-315-163	63	Main Room - 2' x 4' white & gray drop ceiling tile with large "worm" pattern	None Detected
T452B-11152001-315-164	64	Main Room - 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452B-11152001-315-165	65	Main Room - 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452B-11152001-315-166	66	Main Room - 2' x 4' ivory & gray drop ceiling tile with small "worm" pattern	None Detected
T452B-11152001-315-167	67	Main Room - drywall, exterior wall	None Detected
T452B-11152001-315-168	68	Main Room - drywall and joint compound, exterior wall	None Detected
T452B-11152001-315-169	69	Main Room - drywall, interior wall	None Detected
Building T452E			
T452E-11162001-315-170	70	Exterior window caulking, south window	None Detected
T452E-11162001-315-171	71	Men's Room - 2' x 4' tan drop ceiling tile	None Detected
Building 452			
452-11162001-315-172	72	Room 113 - white, 2' x 4' drop ceiling tile with small "worm" pattern	None Detected
452-11162001-315-173	73	Main Room - white, 2' x 4' drop ceiling tile with small "worm" pattern	None Detected
452-11162001-315-174	74	Main Room - white, 2' x 4' drop ceiling tile with small "worm" pattern	None Detected
452-11162001-315-175	75	Main Room - white, 2' x 4' drop ceiling tile with small "worm" pattern	None Detected
452-11162001-315-176	76	Main Room - white, 2' x 4' drop ceiling tile with small "worm" pattern	None Detected
452-11162001-315-177	77	Room 106 - white, 2' x 4' drop ceiling tile with small "worm" pattern	None Detected
452-11162001-315-178	78	Main Room - white, 2' x 4' drop ceiling tile with small "worm" pattern	None Detected
452-11162001-315-179	79	Main Room - drywall, exterior wall	None Detected
452-11162001-315-180	80	Room 101, Men's Room - drywall, interior wall	None Detected
452-11162001-315-181	81	Room 113 - drywall and joint compound	None Detected
452-11162001-315-182	82	Room 101, Men's Room - 12" x 12" white & black floor tile with black mastic adhesive	15% Chrysotile - Black mastic None Detected - White floor tile
452-11162001-315-183	83	Room 103, Janitor's Closet - 12" x 12" white & black floor tile with black mastic adhesive	9% Chrysotile - Black mastic None Detected - White floor tile
Building T428B			
T428B-11162001-315-184	84	2' x 4' white drop ceiling tile	None Detected

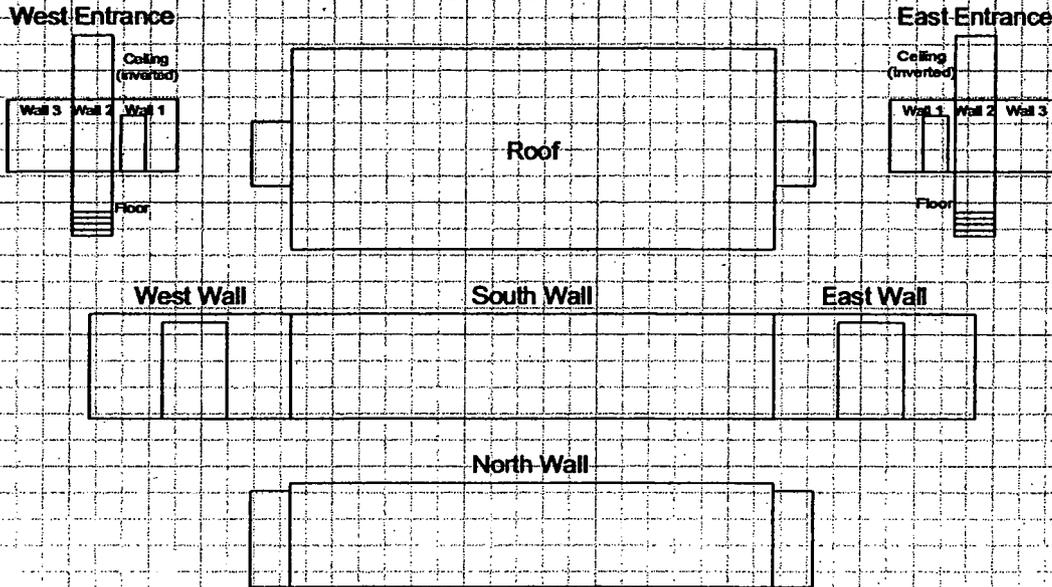
Note: Building T452C is not in the scope of this RLC.

91

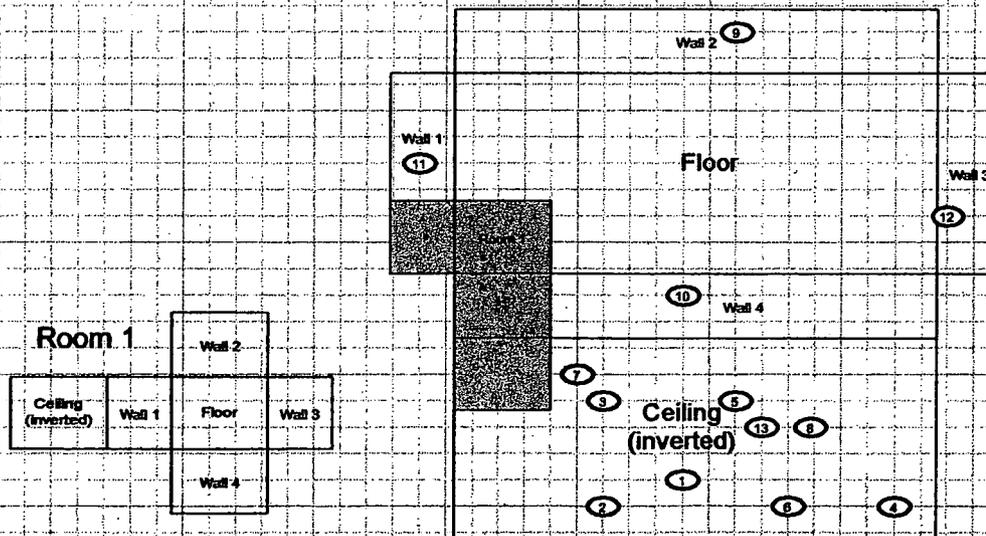
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A **Survey Unit: G12-A-003** **Classification: 3**
Building: T452A
Survey Unit Description: Group 12 **Total Roof Area: 147 sq. m.**
Total Area: 835 sq. m. **Total Floor Area: 147 sq. m.**

T452A Exterior



T452A Interior



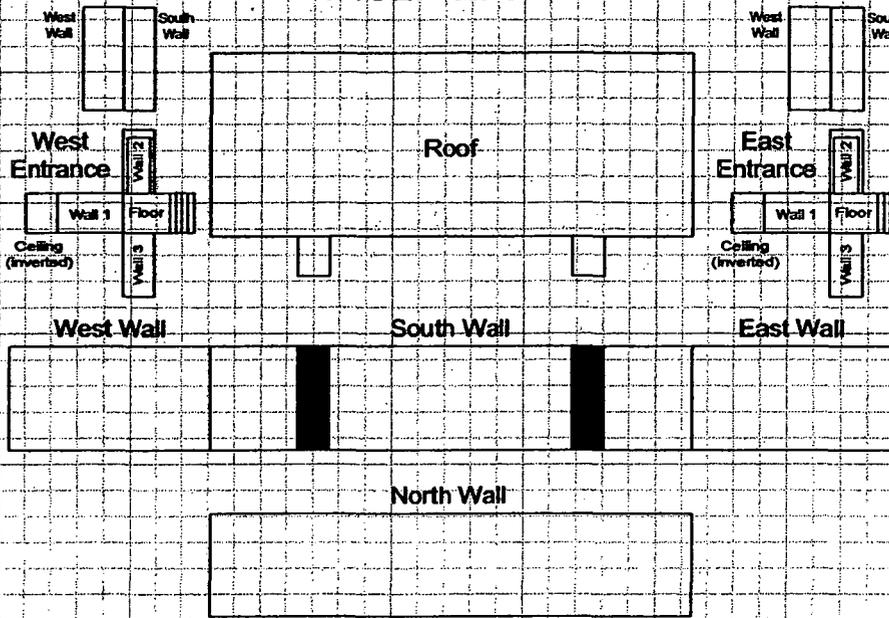
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p><small>Neither the United States Government nor Ecolab USA Co., nor DynCorp INC, nor any agency thereof, nor any of their 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.</small></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: G12 Dept. 303-080-779 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: fy02-0045452A-Asb November 28, 2001</p>
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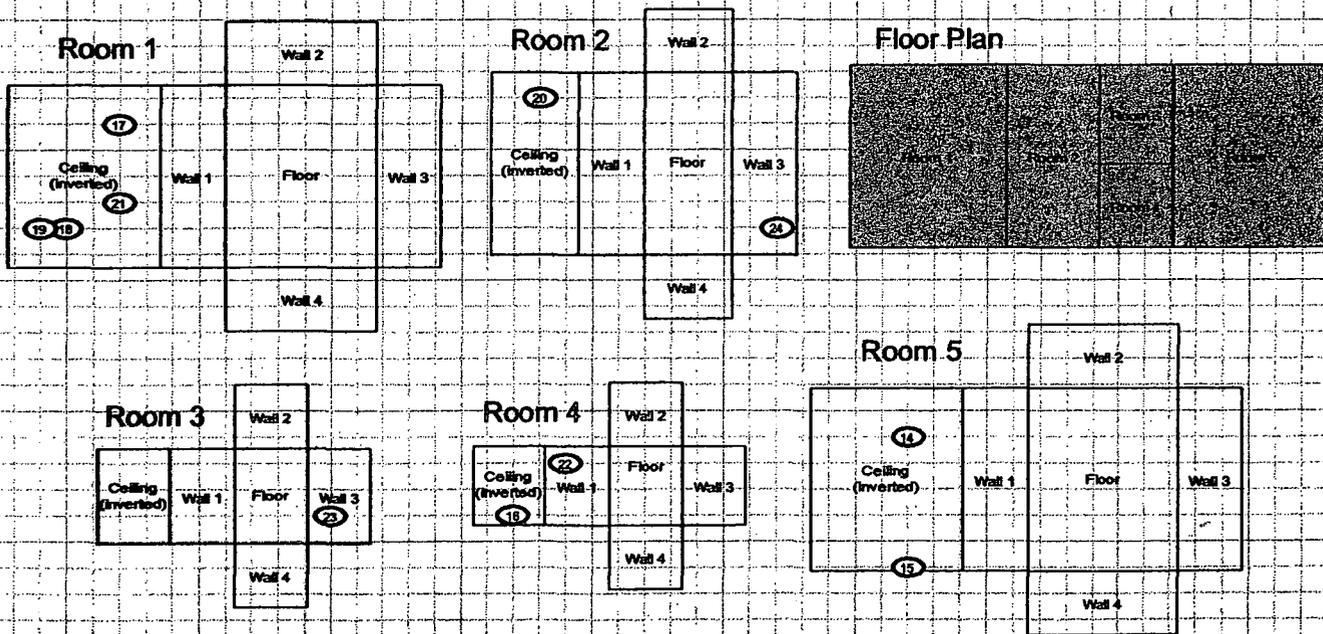
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-008 Classification: 3
 Building: T452F
 Survey Unit Description: Group 12 Total Roof Area: 132 sq. m.
 Total Area: 861 sq. m. Total Floor Area: 131 sq. m.

T452F Exterior



T452F Interior



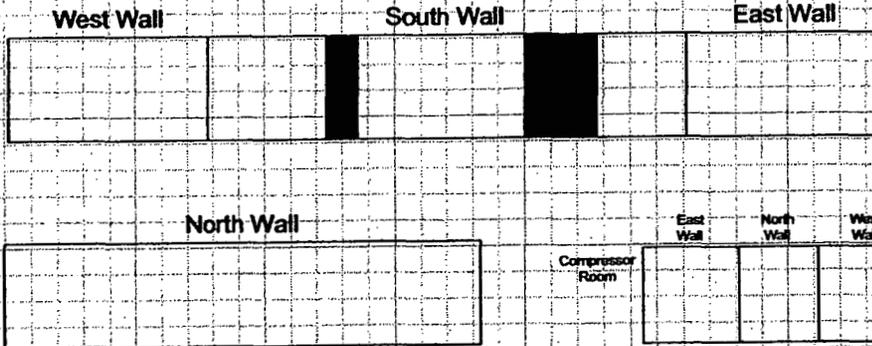
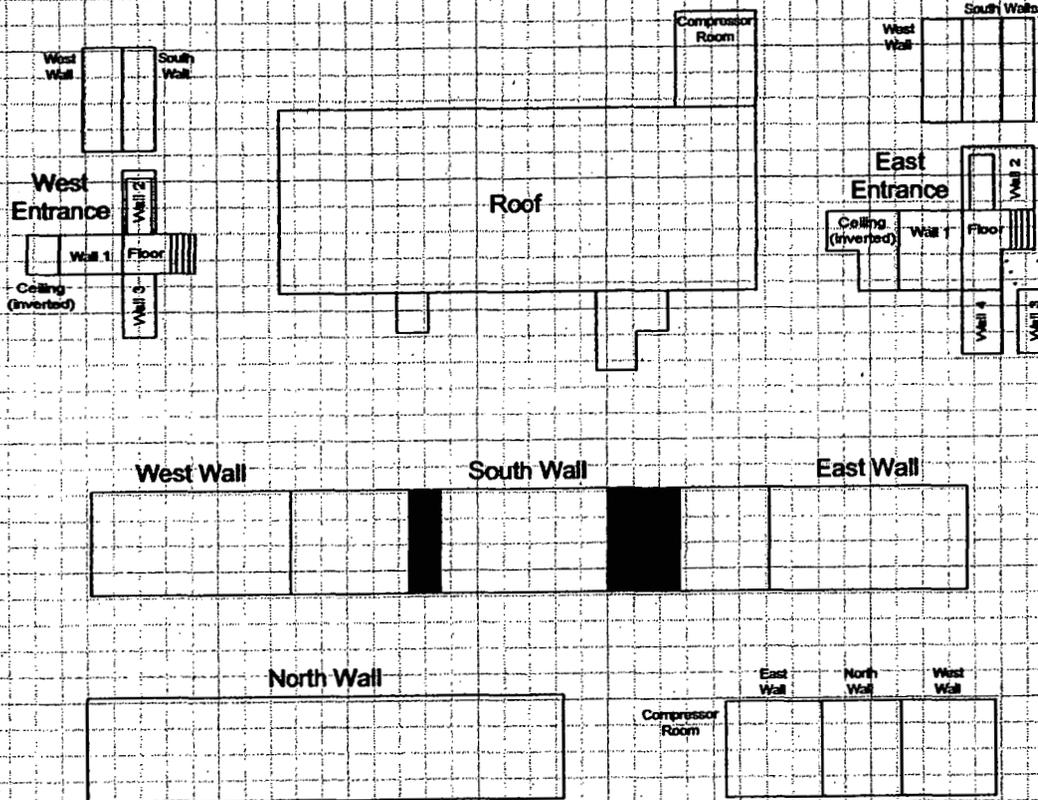
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> ⊙ Asbestos Sample Location ⚠ Beryllium Sample Location ⊠ Lead Sample Location ⬡ RCRA CERCLA Sample Location ⊕ PCB Sample Location 	<p><small>Under the United States Government and DynCorp MEX, and any agency thereof, and any of their employees, 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.</small></p> <p>Open/Inaccessible Area</p> <p>Area in Another Survey Unit</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 Plate Environmental Technology Site</p> <p>Prepared by: G12 Dept. 303-699-7797 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: IV02-00484452F-Abs November 28, 2001</p>
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CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-009 Classification: 3
 Building: T452G Survey Unit Description: Group 12 Total Roof Area: 148 sq. m.
 Total Area: 1124 sq. m. Total Floor Area: 144 sq. m.

T452G Exterior



<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><small>Neither the United States Government nor Kvaerner 120 Co., nor DynCorp LLC, 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.</small></p> <p> Open/Inaccessible Area</p> <p> Area in Another Survey Unit</p>	<p style="text-align: center;">N ↑</p> <p style="text-align: center;">0 FEET 30</p> <p style="text-align: center;">0 METERS 10</p> <p style="text-align: center;">1 inch = 24 feet 1 grid sq. = 1 sq. m.</p>	<p style="text-align: right;">U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p style="text-align: right;">Prepared by: G2S Dept. 263-566-778 Prepared for:</p> <p style="text-align: center;">DynCorp THE ART OF TECHNOLOGY</p> <p style="text-align: right;">MAP ID: R2001/02-0049 October 30, 2001</p>
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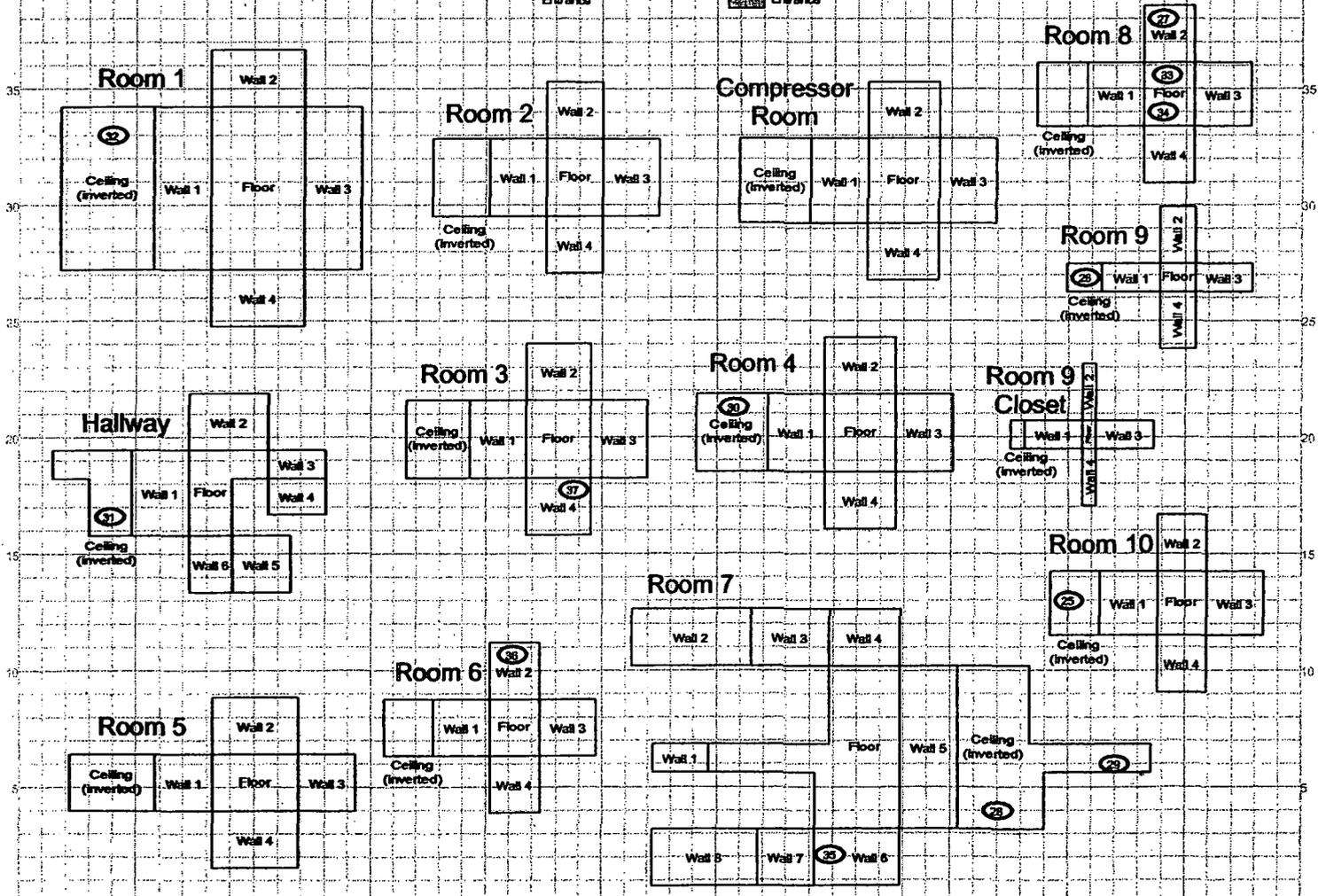
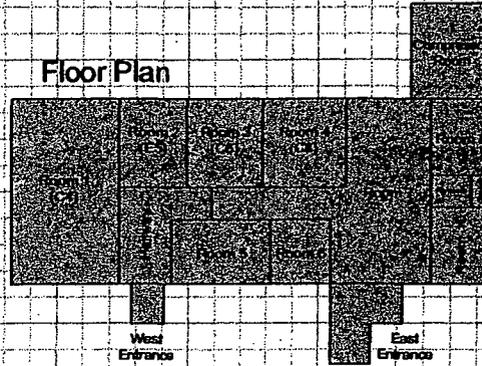
94

CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-009 Classification: 3
 Building: T452G Survey Unit Description: Group 12 Total Roof Area: 148 sq. m.
 Total Area: 1124 sq. m. Total Floor Area: 144 sq. m.

T452G Interior

Floor Plan



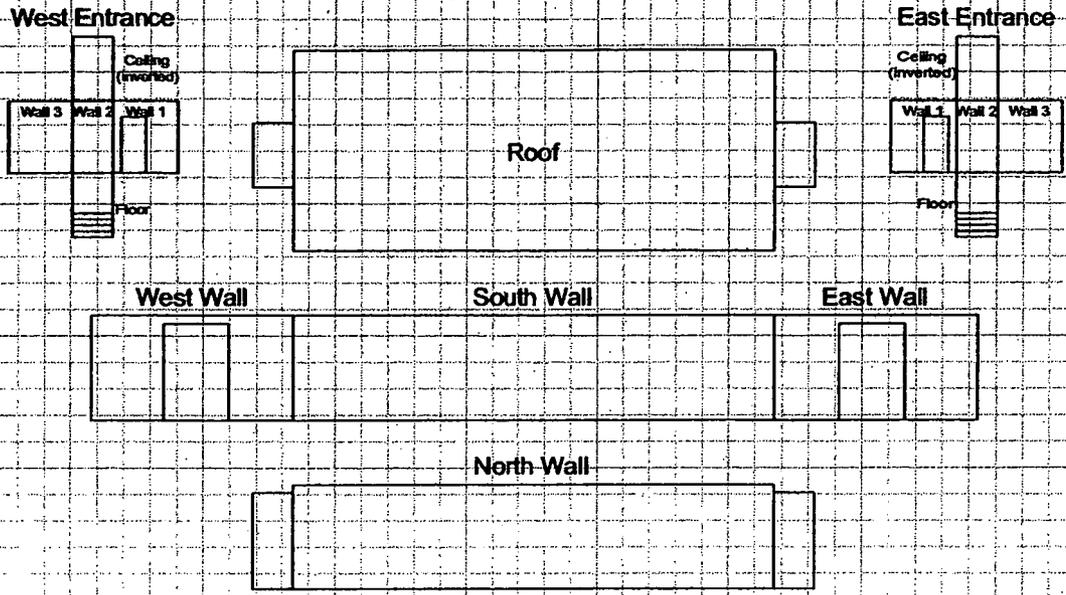
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p><small>Under the United States Government and Kaiser I&S Co., nor DynCorp INC, nor any agency thereof, nor any of their 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.</small></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: OES Dept. 303-006-779 Prepared for: DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: N02-004B/45G-Asb November 28, 2001</p>
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9/5

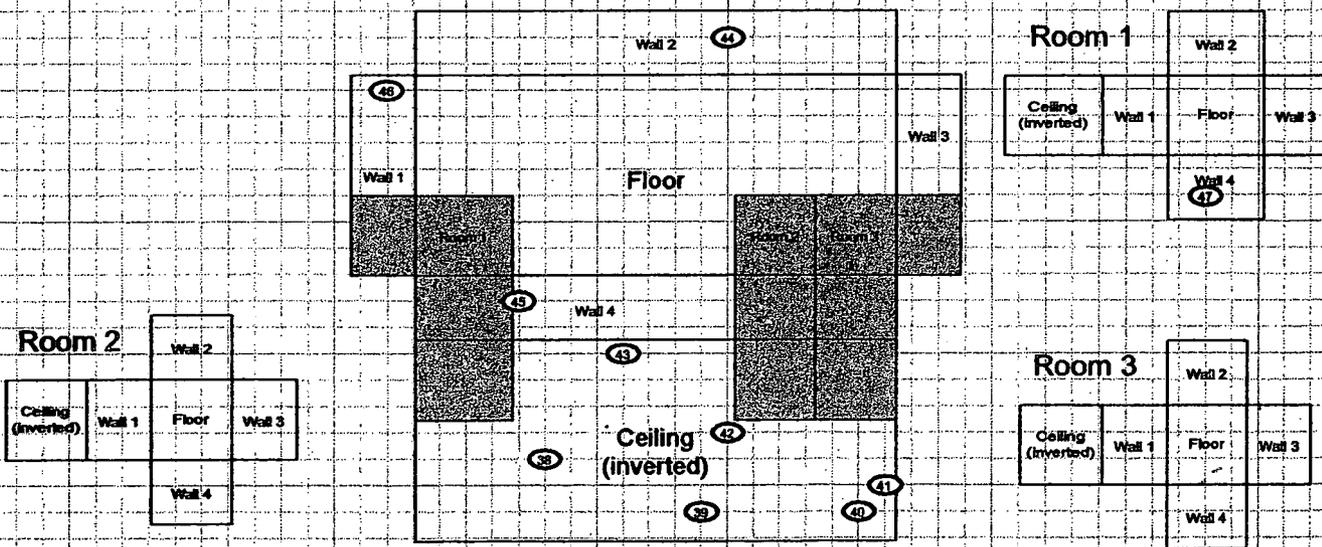
PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-006 Classification: 3
 Building: T452D Total Roof Area: 147 sq. m.
 Survey Unit Description: Group 12 Total Floor Area: 147 sq. m.
 Total Area: 872 sq. m.

T452D Exterior



T452D Interior



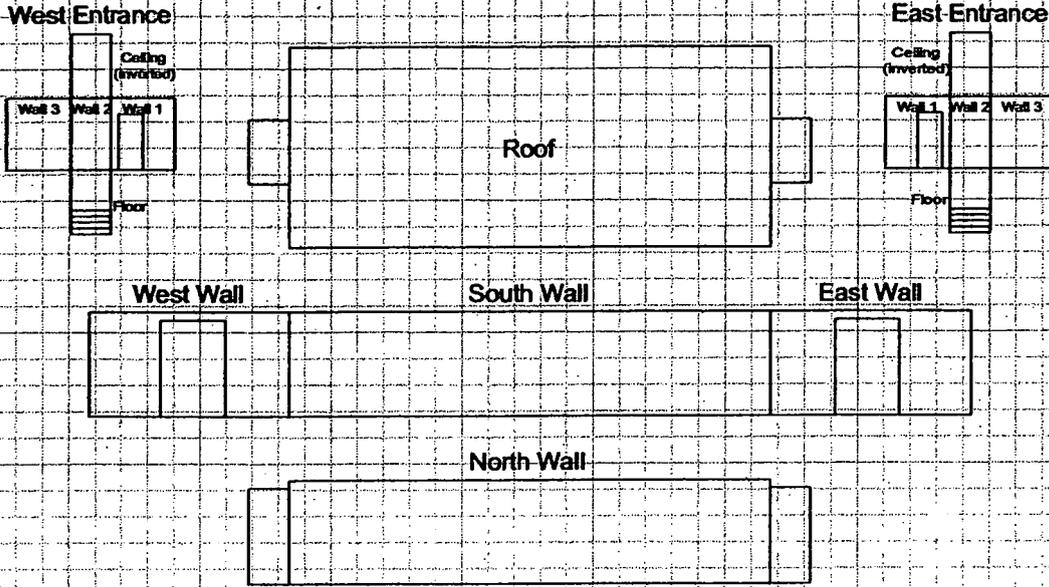
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p><small>Under the United States Government and Export 158 Co., nor DynCorp INC, nor any agency thereof, nor any of their 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.</small></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: GHS Dept. 303-000-7707 Prepared for: DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: rv02-0048/452D-Ash November 28, 2001</p>
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96

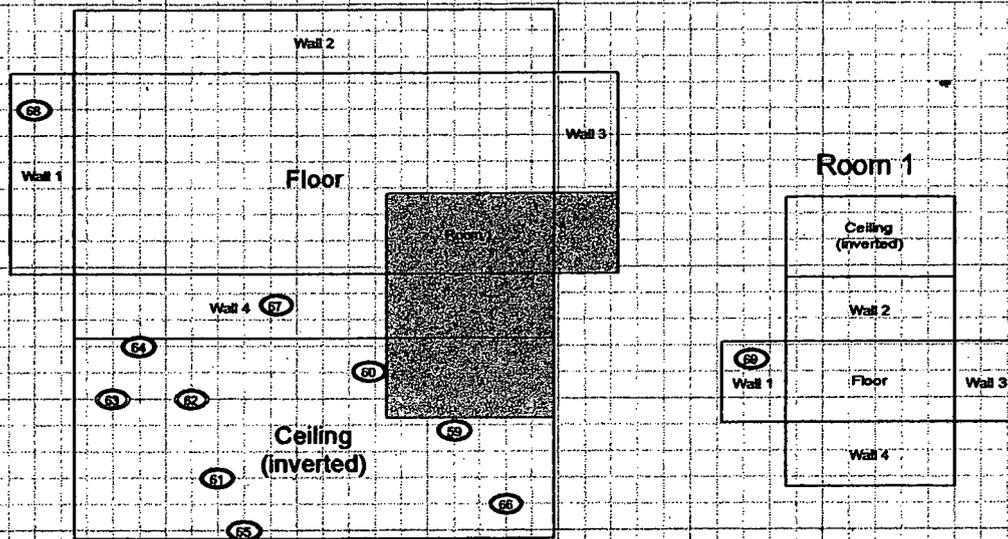
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A **Survey Unit: G12-A-004** **Classification: 3**
Building: T452B
Survey Unit Description: Group 12 **Total Roof Area: 147 sq. m.**
Total Area: 842 sq. m. **Total Floor Area: 147 sq. m.**

T452B Exterior



T452B Interior



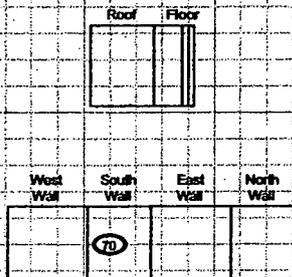
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p>Neither the United States Government nor Kaiser I&I Co., nor DynCorp M&E, nor any agency thereof, nor any of their employees, 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> Open/Inaccessible Area</p> <p> Area in Another Survey Unit</p>	<p style="text-align: center;">N ↑</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>0 FEET 30</p> </div> <div style="text-align: center;"> <p>0 METERS 10</p> </div> </div> <p style="text-align: center;">1 inch = 24 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 style="text-align: center;">Prepared by: GES Dept. 303-886-770 Prepared for:</p> <p style="text-align: center;">DynCorp THE ART OF TECHNOLOGY</p> <p style="text-align: center;">MAP ID: W02-0048/452B-A-04 November 28, 2001</p>
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97

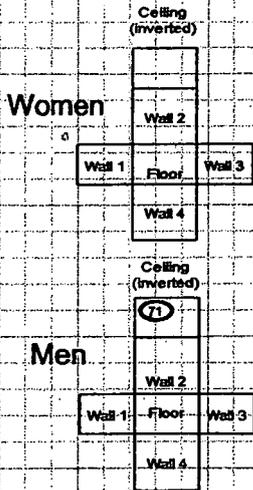
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A **Survey Unit: G12-A-007** **Classification: 3**
Building: T452E
Survey Unit Description: Group 12 **Total Roof Area: 147 sq. m.**
Total Area: 835 sq. m. **Total Floor Area: 147 sq. m.**

T452E Exterior



T452E Interior



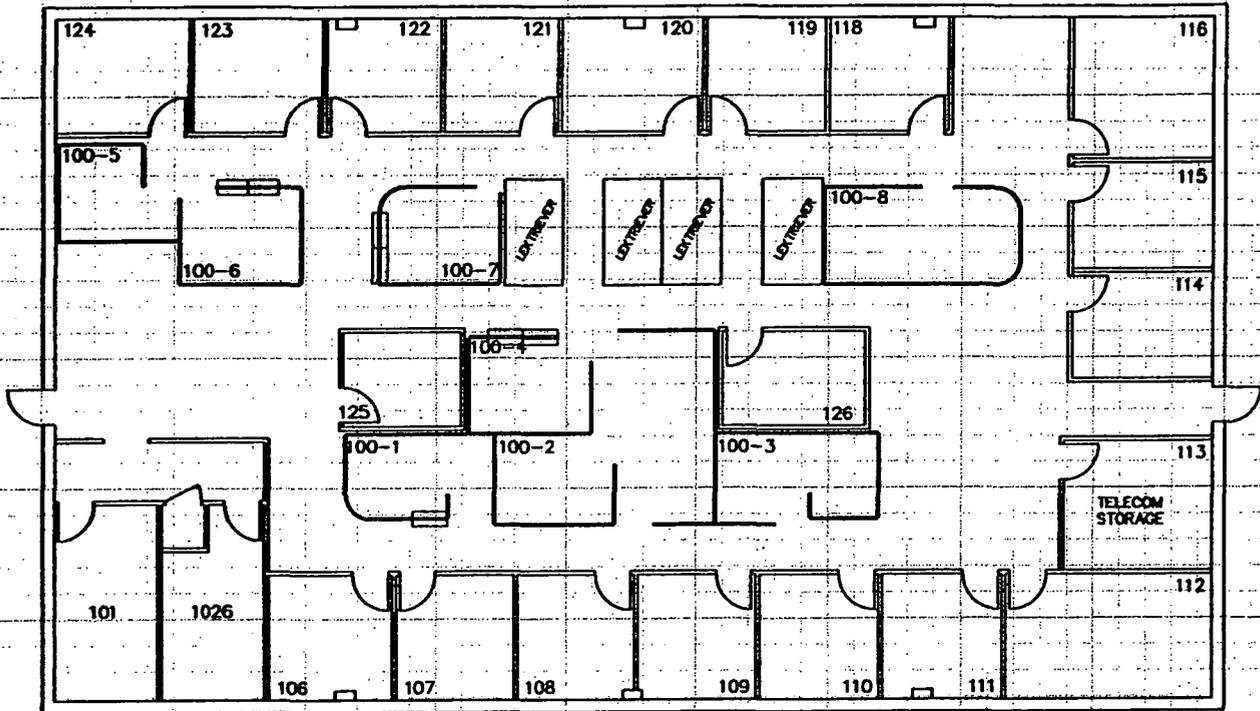
SURVEY MAP LEGEND <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	Within the United States Government and Kaiser Hill Co., and DynCorp INC, nor any agency thereof, nor any of their employees, makes 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.	N 	0 FEET 30 0 METERS 10 1 inch = 24 feet 1 grid sq. = 1 sq. m.	U.S. Department of Energy Rocky Flats Environmental Technology Site Prepared by: GRS Dept. 363-068-7707 Prepared for: DynCorp THE ART OF TECHNOLOGY MAP ID: fv02-0048/452E-Asb November 23, 2001
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PRE-DEMOLITION SURVEY

Survey Area: A Survey Unit: G12-A-001 Classification: 3
 Building: 452
 Survey Unit Description: Floor Plan of Building 452
 Total Area: xxx sq. m. Total Floor Area: xxx sq. m.

Building 452



Drawing Not To Scale

<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> ⊙ Aesthetic Sample Location △ Dry/Water Sample Location □ Lead Sample Location ◇ RCRA/CERCLA Sample Location ⊕ PCB Sample Location 	<p><small>Neither the United States Government nor Ecolab Inc., nor DynCorp USA, 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 timeliness of any information, opinions, profits, or gross receipts, or represents that its use would not infringe privately owned rights.</small></p> <p>■ Open/Inaccessible Area ■ Area in Another Survey Unit</p>	<p style="text-align: center;">N ↑</p> <p style="text-align: center;">0 FEET 30</p> <p style="text-align: center;">0 METERS 10</p> <p style="text-align: center;">1 inch = 24 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 style="text-align: center;"><small>Prepared by: G12 Dept. 303-606-7700; updated by:</small></p> <p style="text-align: center;">DynCorp THE ART OF TECHNOLOGY</p> <p style="text-align: center;">MAP ID: R2002/02-0048/B452-FF October 18, 2001</p>
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G12-A-001

PAGE 1 OF 1

99

CHEMICAL SAMPLE MAP

Survey Area: A

Survey Unit: G12-A-001

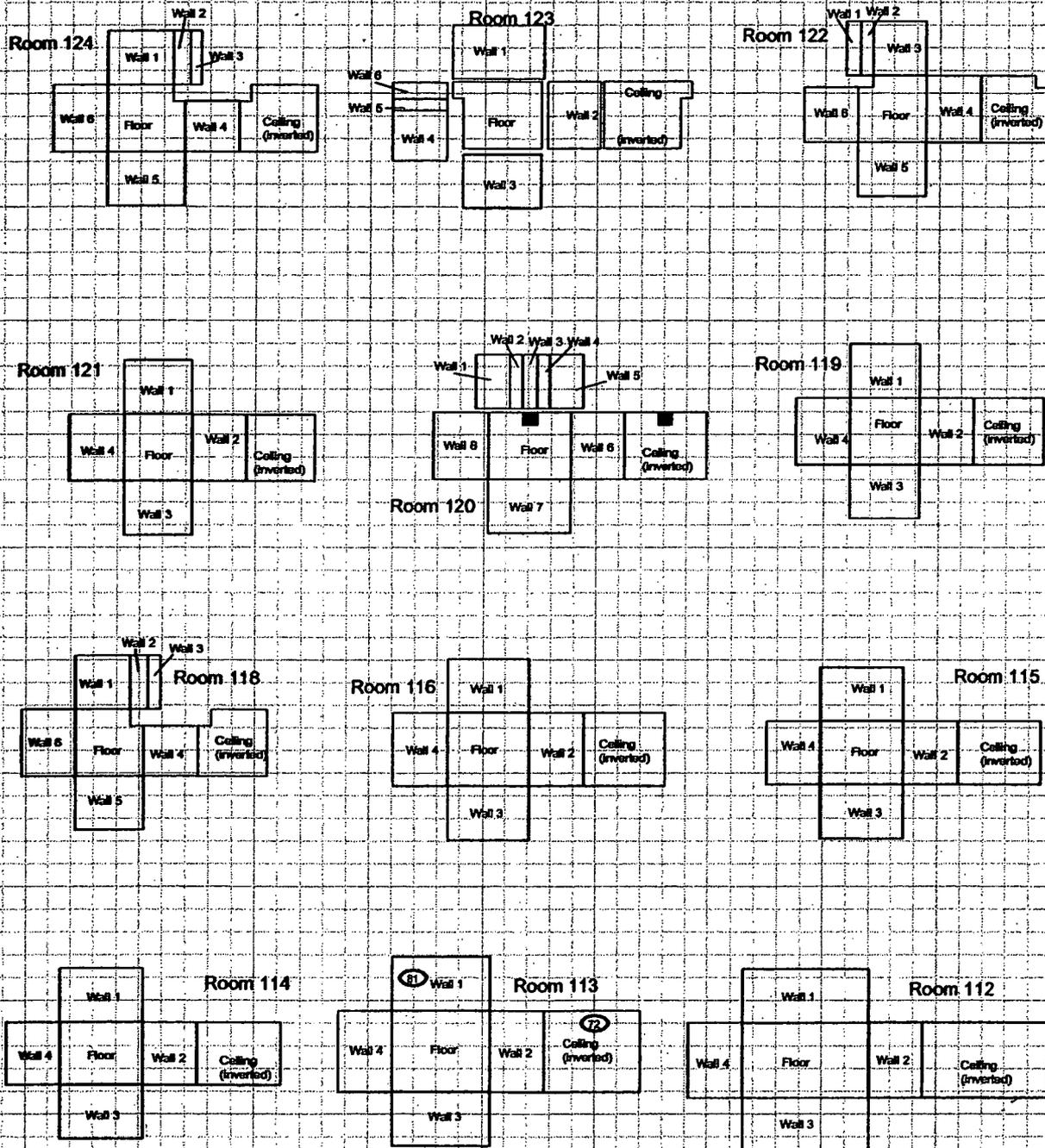
Classification: 3

Building: 452

Survey Unit Description: Interior of Building 452

Total Area: 1867 sq. m.

Total Floor Area: 475 sq. m.

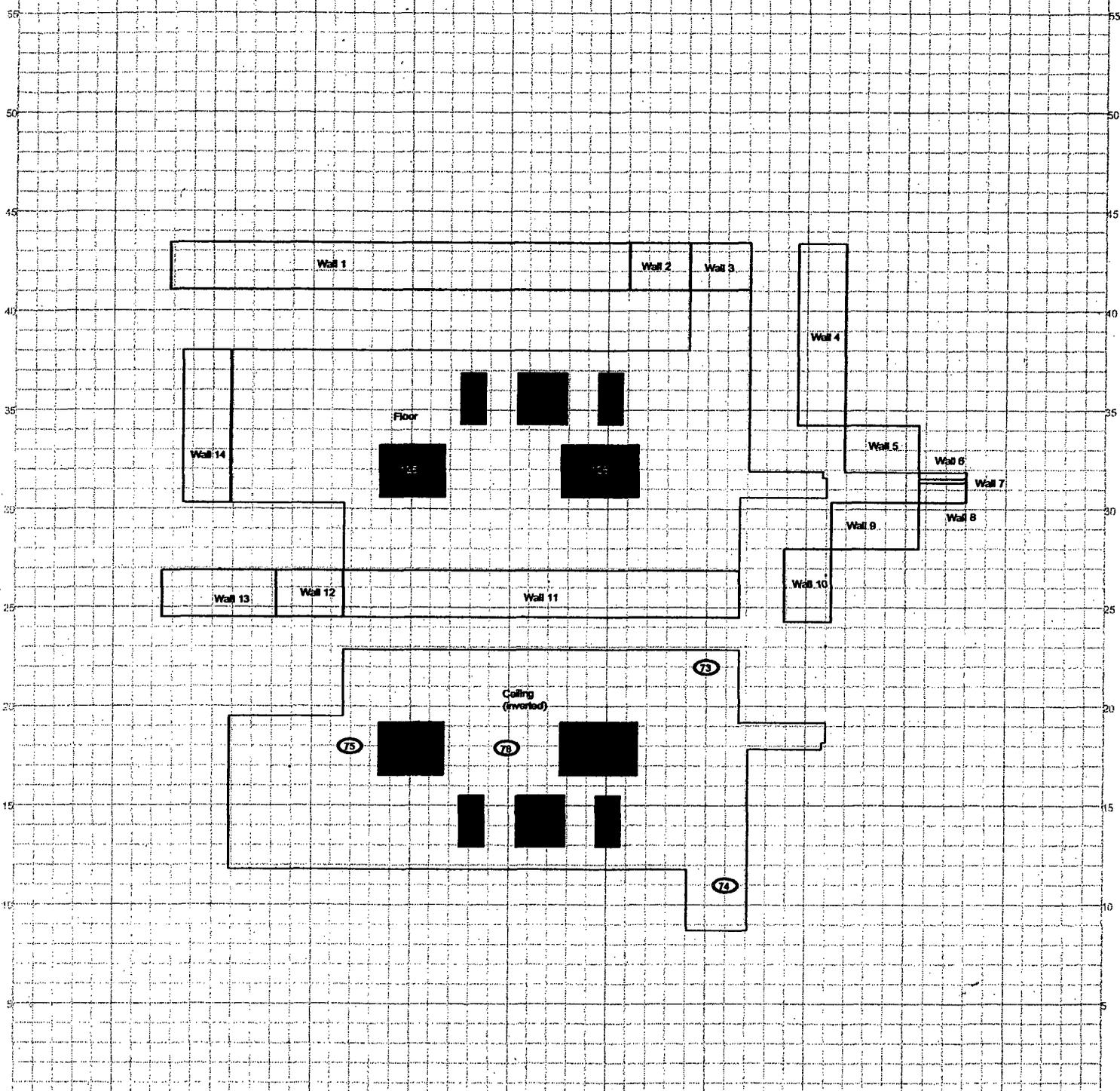


<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p>Neither the United States Government nor Edcor FBE Co., nor DynCorp AMCC, nor any agency thereof, nor any of their employees, 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: GIB Dept. 383-008-779 Prepared for: DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: fv02-0048/452-Int-1-Asb November 28, 2001</p>
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100

CHEMICAL SAMPLE MAP

Survey Area: A **Survey Unit: G12-A-001** **Classification: 3**
Building: 452
Survey Unit Description: Interior of Building 452
Total Area: 1867 sq. m. **Total Floor Area: 475 sq. m.**

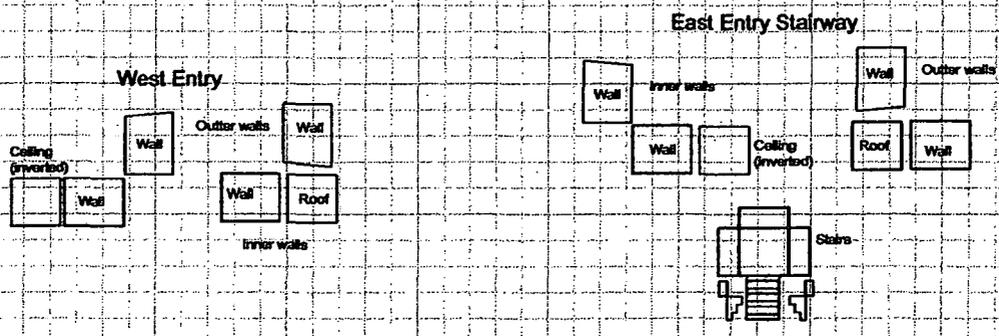
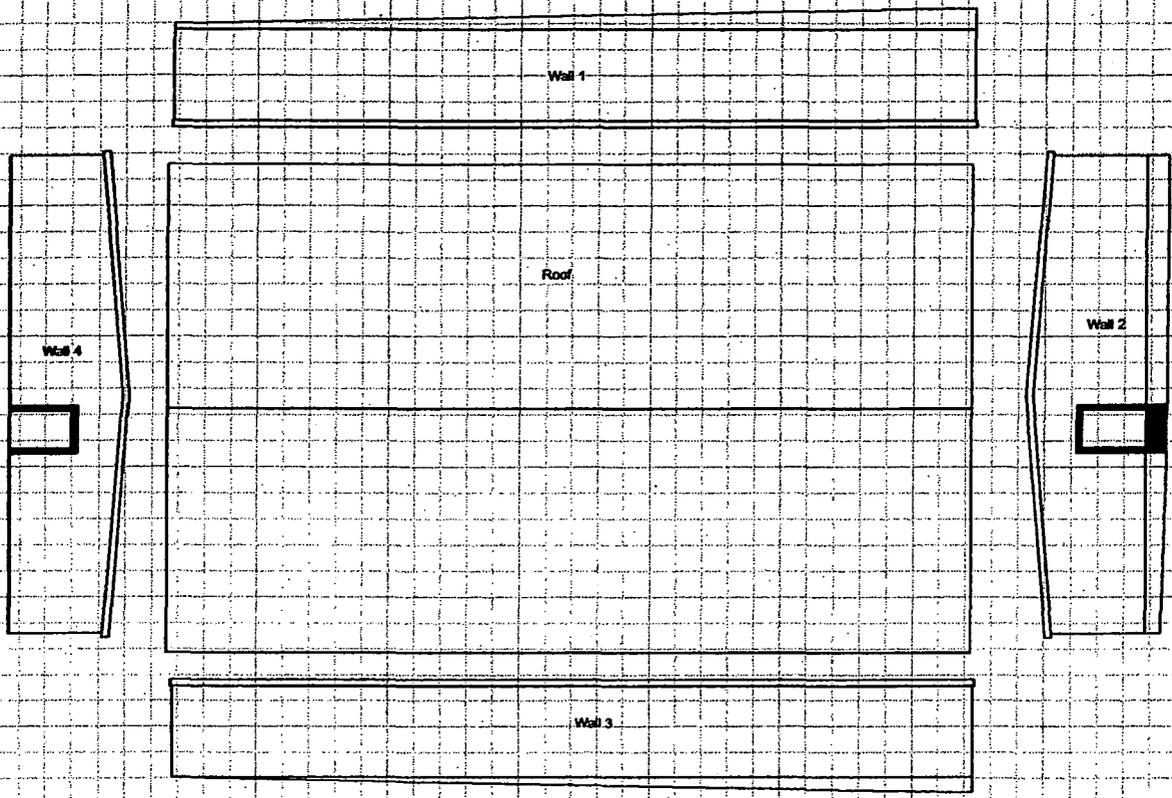


<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p>Neither the United States Government nor Ecolab USA Co., nor DynCorp M&E, nor any agency thereof, nor any of their employees, 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 30 FEET</p> <hr style="width: 100%;"/> <p>0 10 METERS</p> <p>1 inch = 24 feet 1 grid sq. = 1 sq. m.</p>	<p style="font-size: small;">U.S. Department of Energy Rocky Flats Environmental Technology Site</p> <p style="font-size: x-small;">Prepared by: G12 Dept. 303-000-778/Prepared for:</p> <p style="font-size: large; font-weight: bold; margin: 0;">DynCorp</p> <p style="font-size: x-small; margin: 0;">THE ART OF TECHNOLOGY</p> <div style="border: 1px solid black; width: 30px; height: 30px; margin: 5px auto;"></div> <p style="font-size: x-small; margin: 0;">MAP ID: fy02-0048/452-Int-3-A-Sub November 28, 2001</p>
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102

CHEMICAL SAMPLE MAP

Survey Area: A **Survey Unit: G12-A-001** **Classification: 3**
Building: 452
Survey Unit Description: Exterior of Building 452
Total Area: 1048 sq. m. **Total Roof Area: 572 sq. m.**



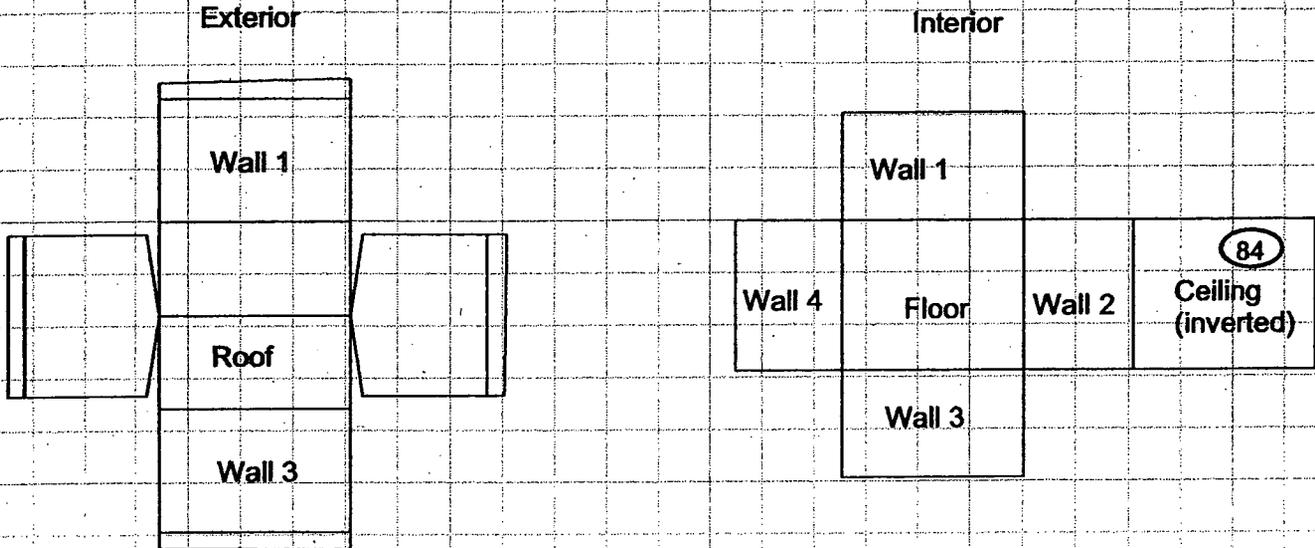
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Adhesive Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p><small>Neither the United States Government nor Labor 551 Co., nor DynCorp M&E, nor any agency thereof, nor any of their 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.</small></p>	<p style="text-align: center;">N ↑</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; font-size: small;">1 inch = 24 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 style="text-align: center; font-size: x-small;">Prepared by: GHS Dept. 263-069-7167 Prepared for:</p> <p style="text-align: center;">DynCorp THE ART OF TECHNOLOGY</p> <p style="text-align: center; font-size: x-small;">MAP ID: N2002/02-0048/BA52-Ext October 18, 2001</p>
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103

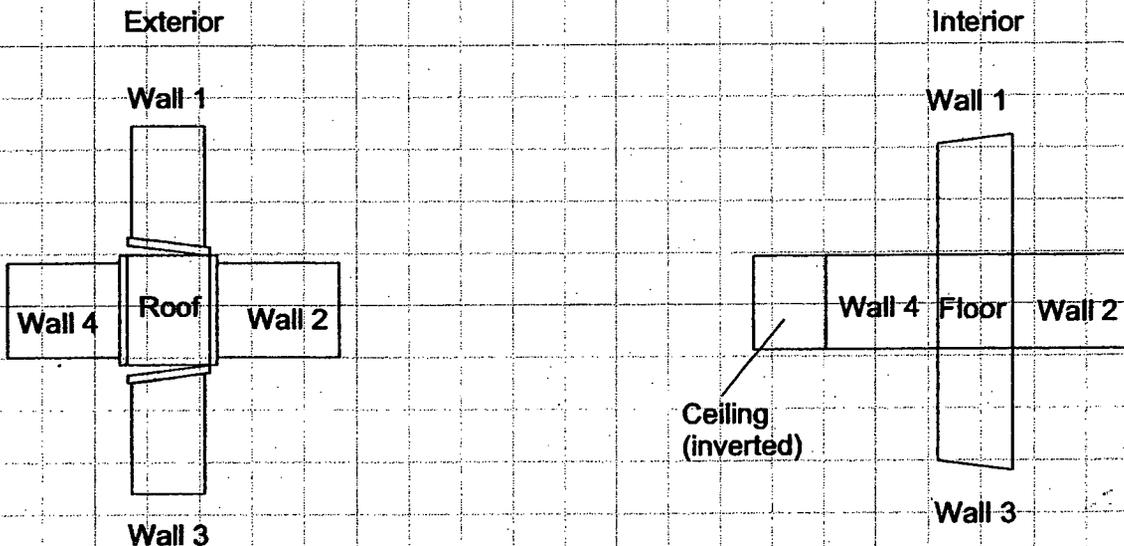
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-002 Classification: 3
 Building: T428B & S452
 Survey Unit Description: Interior and Exterior Total Roof Area: 16 sq. m.
 Total Area: 134 sq. m. Total Floor Area: 13 sq. m.

T428B



S452



<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><small>Neither the United States Government nor Kinney TSB Co., nor DynCorp M&E, 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.</small></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: G12 Dept. 303-000-7797 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: fy02-0048/B428-A-01 November 28, 2001</p>
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Beryllium Data Summary

Sample Number	Survey Map Location Point	Sample Location	Result (ug/100 cm ²)
Building T452A			
T452A-11132001-315-201	1	Main Room, top of fluorescent light fixture	< 0.1
T452A-11132001-315-202	2	Main Room, top of fluorescent light fixture	< 0.1
T452A-11132001-315-203	3	Main Room, top of announcement speaker, east wall	< 0.1
T452A-11132001-315-204	4	Main Room, top of shelving, north wall	< 0.1
T452A-11132001-315-205	5	Main Room, top of electrical track, south wall	< 0.1
Building T452F			
T452F-11132001-315-206	6	Room 1, metal shelf, west wall	< 0.1
T452F-11132001-315-207	7	Room 1, metal shelf, east wall	< 0.1
T452F-11132001-315-208	8	Room 1, top of HVAC diffuser	< 0.1
T452F-11132001-315-209	9	Room 1, top of fluorescent light fixture	< 0.1
T452F-11132001-315-210	10	Room 5, top of fluorescent light fixture	< 0.1
T452F-11132001-315-211	11	Room 5, top of HVAC diffuser	< 0.1
T452F-11132001-315-212	12	Room 4, top of fluorescent light fixture	< 0.1
T452F-11132001-315-213	13	Room 2, front edge of fume hood	< 0.1
T452F-11132001-315-214	14	Room 2, top of stainless steel grate to fume hood	< 0.1
T452F-11132001-315-215	15	Room 2, bottom of fume hood	< 0.1
T452F-11132001-315-216	16	Room 2, top exterior of fume hood	< 0.1
T452F-11132001-315-217	17	Room 2, vertical side of plenum fume hood exhaust	< 0.1
Building T452G			
T452G-11142001-315-218	18	Room 4, top of fluorescent light fixture	< 0.1
T452G-11142001-315-219	19	Room 1, top of window AC unit	< 0.1
T452G-11142001-315-220	20	Room 1, top of venetian blind	< 0.1
T452G-11142001-315-221	21	Room 4, top of book shelf	< 0.1
T452G-11142001-315-222	22	Room 7, top of red pipe for fire suppression	< 0.1
Building T452D			
T452D-11142001-315-223	23	Main Room, top of fluorescent light fixture	< 0.1
T452D-11142001-315-224	24	Main Room, top of Public Address speaker, west wall	< 0.1
T452D-11142001-315-225	25	Main Room, top of fluorescent light fixture	< 0.1
T452D-11142001-315-226	26	Main Room, top of electrical track	< 0.1
T452D-11142001-315-227	27	Main Room, top of electrical conduit leading to fire alarm	< 0.1

105

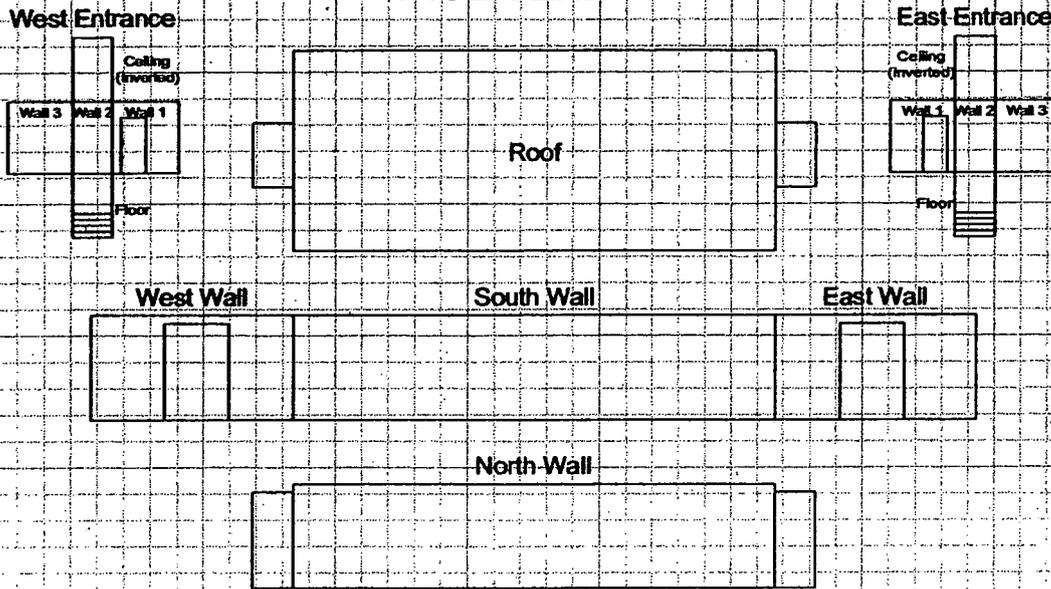
Building T452B			
T452B-11152001-315-233	33	Main Room, top of fluorescent light fixture	< 0.1
T452B-11152001-315-234	34	Main Room, top of electrical track	< 0.1
T452B-11152001-315-235	35	Room 1, top of cabinet	< 0.1
T452B-11152001-315-236	36	Main Room, top of fire alarm, west wall	< 0.1
T452B-11152001-315-237	37	Main Room, top of SD-39 box, east wall	< 0.1
Building T452E			
T452E-11162001-315-238	38	Women's, top edge of fluorescent light fixture	< 0.1
T452E-11162001-315-239	39	Women's, top of paper towel dispenser	< 0.1
T452E-11162001-315-240	40	Women's, top of electrical baseboard heater	< 0.1
T452E-11162001-315-241	41	Men's, top of fluorescent light fixture	< 0.1
T452E-11162001-315-242	42	Men's, corner floor on 12"x12" tiles	< 0.1
Building S452			
S452-11162001-315-243	43	Main Room, concrete floor	< 0.1
S452-11162001-315-244	44	Main Room, wood foot plate	< 0.1
S452-11162001-315-245	45	Main Room, top of door jamb ledge	< 0.1
S452-11162001-315-246	46	Main Room, top of wooden top plate	< 0.1
S452-11162001-315-247	47	Main Room, concrete floor	< 0.1
Building 452			
452-11162001-315-248	48	Main Room, top of fluorescent light fixture	< 0.1
452-11162001-315-249	49	Main Room, top of electrical box in plenum	< 0.1
452-11162001-315-250	50	Main Room, top of HVAC diffuser plate	< 0.1
452-11162001-315-251	51	Main Room, top plate of interior wall	< 0.1
452-11162001-315-252	52	Room 113, top of diffuser	< 0.1
Building T428B			
T428B-11162001-315-253	53	Main Room, top of fluorescent light fixture	< 0.1
T428B-11162001-315-254	54	Main Room, top of metal storage cabinet	< 0.1
T428B-11162001-315-255	55	Main Room, SW corner of floor	< 0.1
T428B-11162001-315-256	56	Main Room, top of electrical equipment cabinet	< 0.1
T428B-11162001-315-257	57	Main Room, top of 6' metal storage cabinet	< 0.1

106

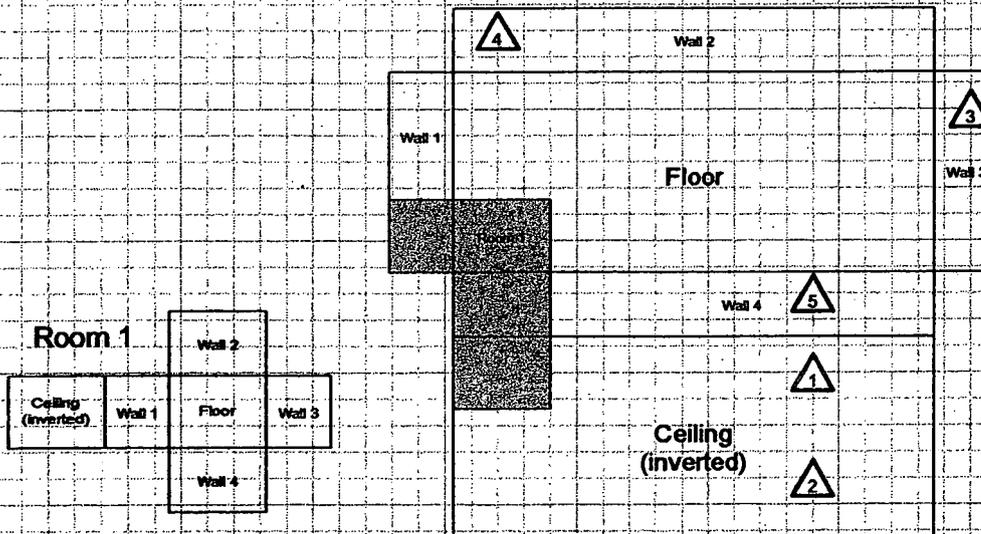
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-003 Classification: 3
 Building: T452A
 Survey Unit Description: Group 12 Total Roof Area: 147 sq. m.
 Total Area: 835 sq. m. Total Floor Area: 147 sq. m.

T452A Exterior



T452A Interior



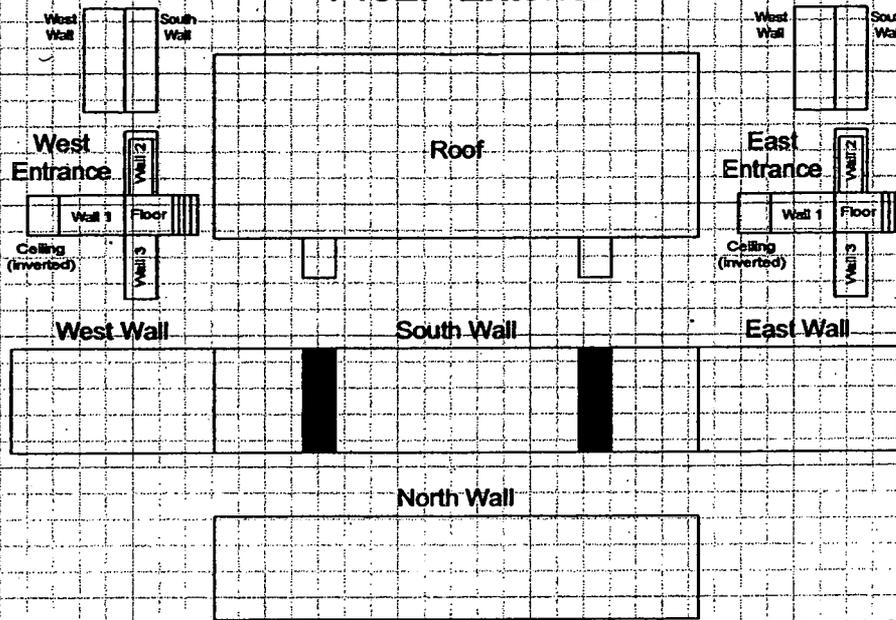
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p>Under the United States Government per Eater 158 Co., see DynCorp A&E, see any agency Request, see any of their employees, neither any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or timeliness 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: G23 Dept. 363-086-7707 Prepared for: DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: F02-0048/452A-BE November 28, 2001</p>
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107

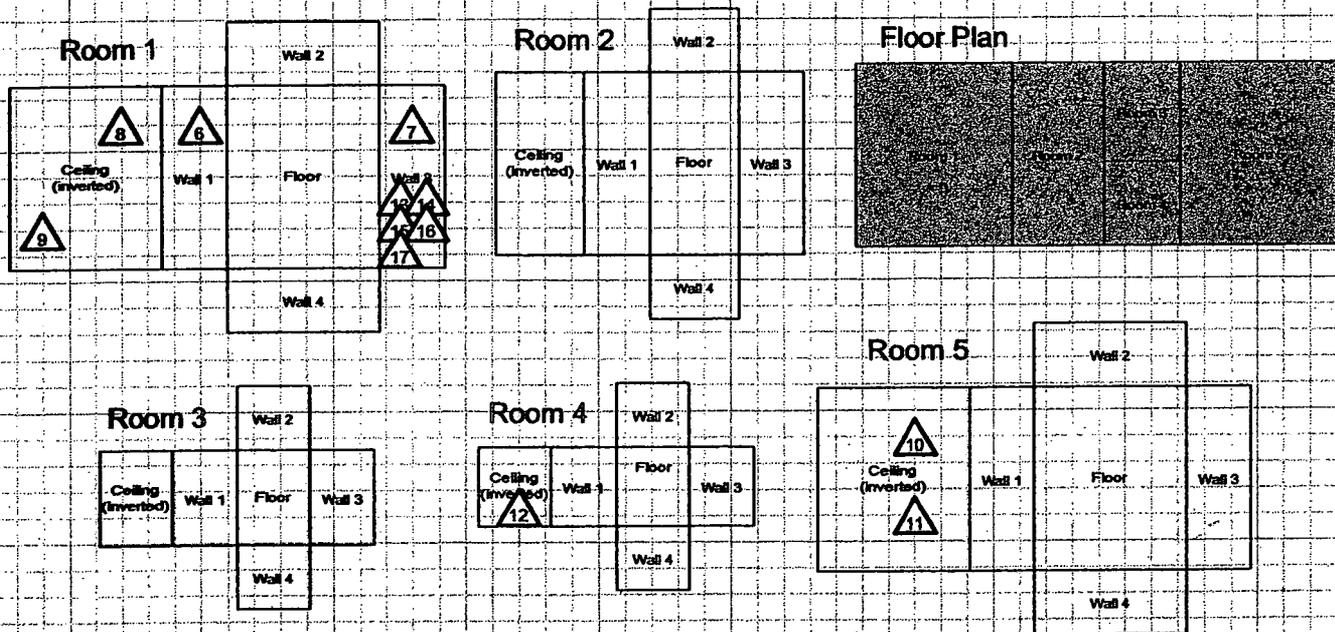
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-008 Classification: 3
 Building: T452F
 Survey Unit Description: Group 12 Total Roof Area: 132 sq. m.
 Total Area: 861 sq. m. Total Floor Area: 131 sq. m.

T452F Exterior



T452F Interior



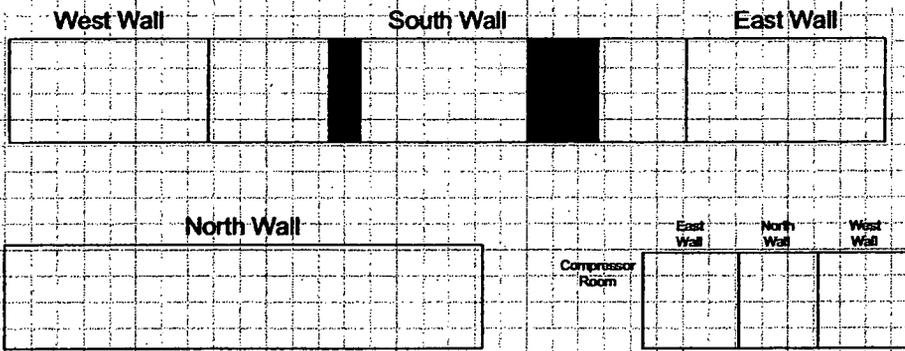
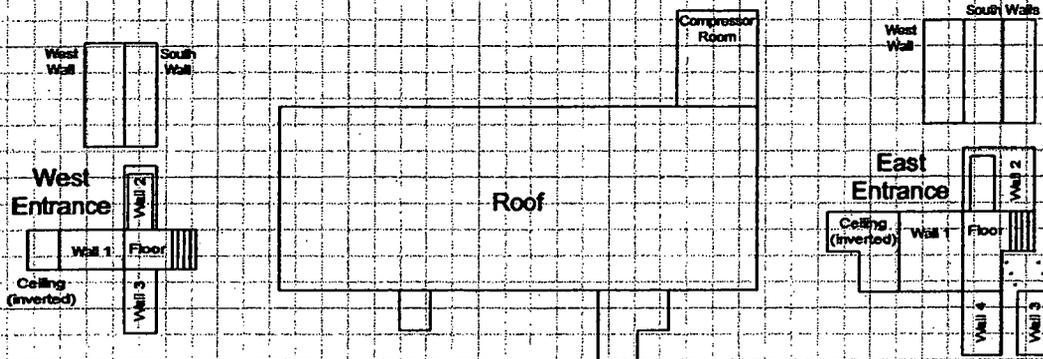
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p> <small> Whether the United States Government or DynCorp Inc., or any agency thereof, nor any of their employees, makes 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. </small> </p> <p> </p>	<p> FEET 0 30 </p> <p> METERS 0 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 Prepared by: GRS Dept. 383-008-770/Prepared for: DynCorp THE ART OF TECHNOLOGY </p> <p> MAP ID: RY02-0048/452F-BE November 23, 2001 </p>
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108

CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A **Survey Unit: G12-A-009** **Classification: 3**
Building: T452G
Survey Unit Description: Group 12 **Total Roof Area: 148 sq. m.**
Total Area: 1124 sq. m. **Total Floor Area: 144 sq. m.**

T452G Exterior



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRACERCLA Sample Location PCB Sample Location 	<p><small>Neither the United States Government nor Entech 550 Co., nor DynCorp M&E, 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.</small></p> <p>Open/Inaccessible Area (thick black bar)</p> <p>Area in Another Survey Unit (dotted pattern)</p>	<p style="text-align: center;">N ↑</p> <p style="text-align: center;">0 FEET 30</p> <p style="text-align: center;">0 METERS 10</p> <p style="text-align: center;">1 inch = 24 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 style="text-align: center;"><small>Prepared by: GIS Dept. 383-886-776 Prepared for:</small></p> <p style="text-align: center;">DynCorp THE ART OF TECHNOLOGY</p> <p style="text-align: center;">MAP ID: 1/2001/02-0048 October 30, 2001</p>
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109

CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A

Survey Unit: G12-A-009

Classification: 3

Building: T452G

Survey Unit Description: Group 12

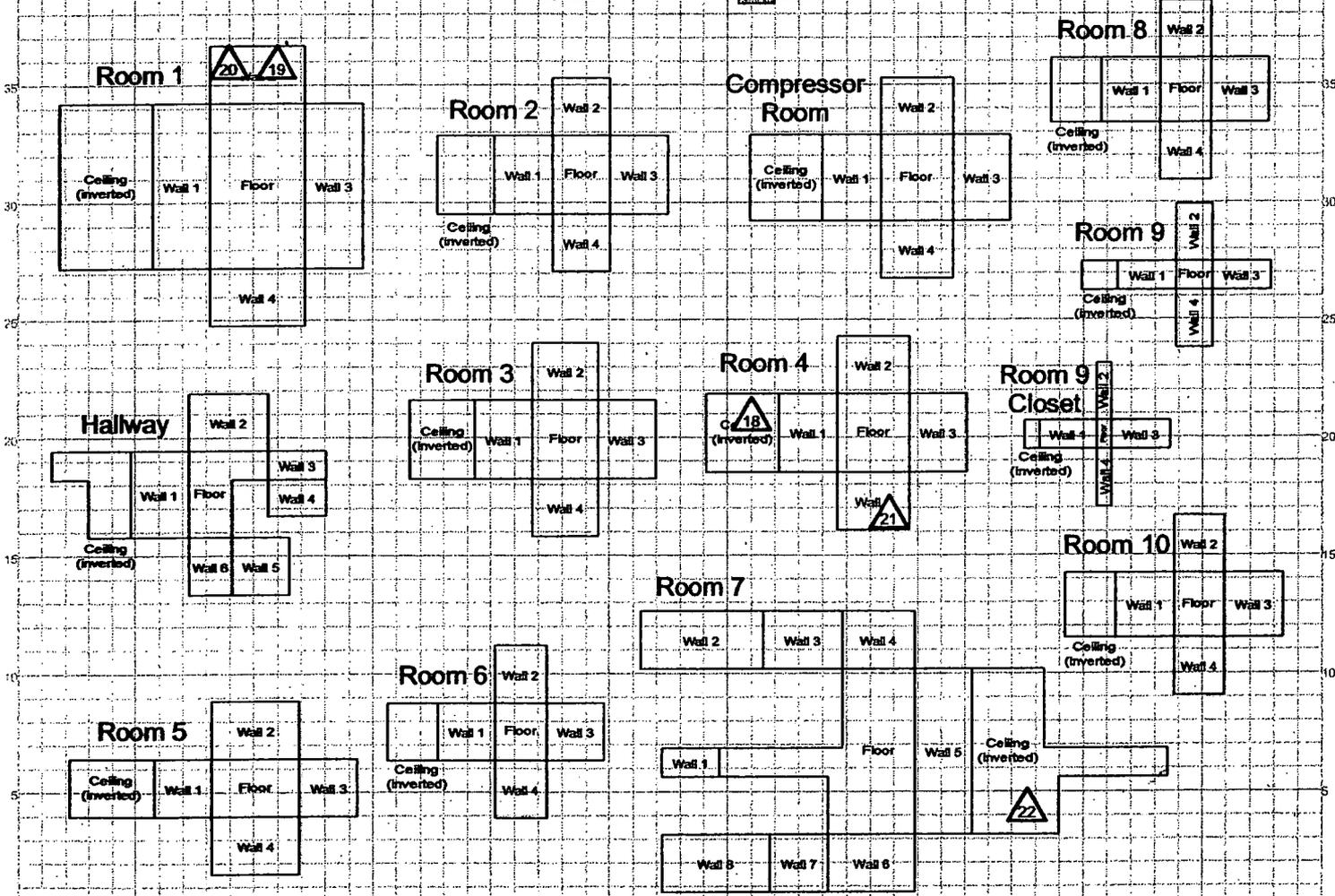
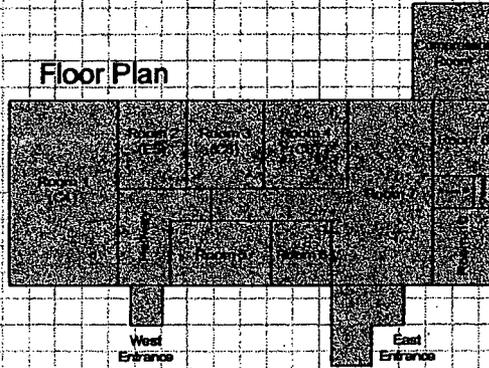
Total Roof Area: 148 sq. m.

Total Area: 1124 sq. m.

Total Floor Area: 144 sq. m.

T452G Interior

Floor Plan



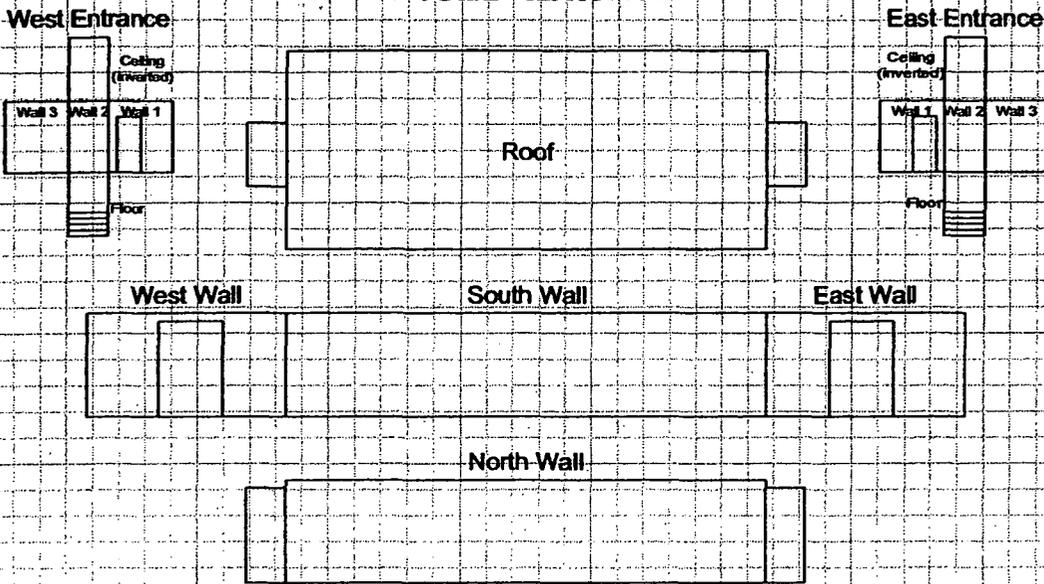
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRACERCLA Sample Location PCB Sample Location Open/Inaccessible Area Area in Another Survey Unit 		<p>Neither the United States Government nor Kaiser I&S Co., nor DynCorp M&E, 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>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: G&S Dept. 303-606-770 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: 1492-004B/45G-BE November 28, 2001</p>	
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110

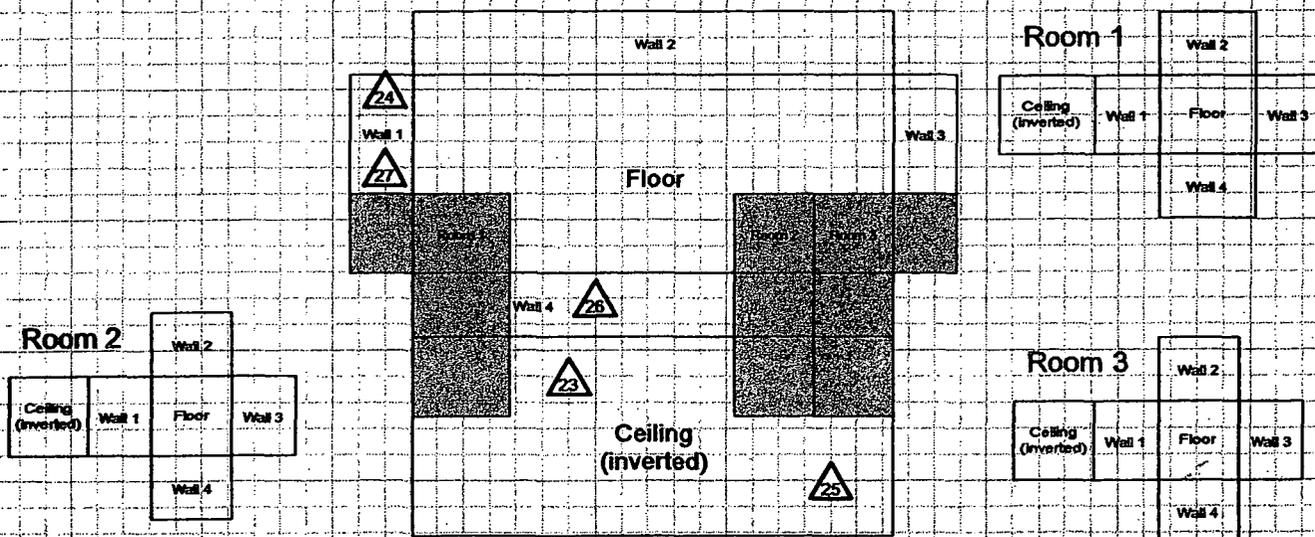
PRE-DEMOLITION SURVEY FOR GROUP 12

Survey Area: A Survey Unit: G12-A-006 Classification: 3
 Building: T452D
 Survey Unit Description: Group 12 Total Roof Area: 147 sq. m.
 Total Area: 872 sq. m. Total Floor Area: 147 sq. m.

T452D Exterior



T452D Interior

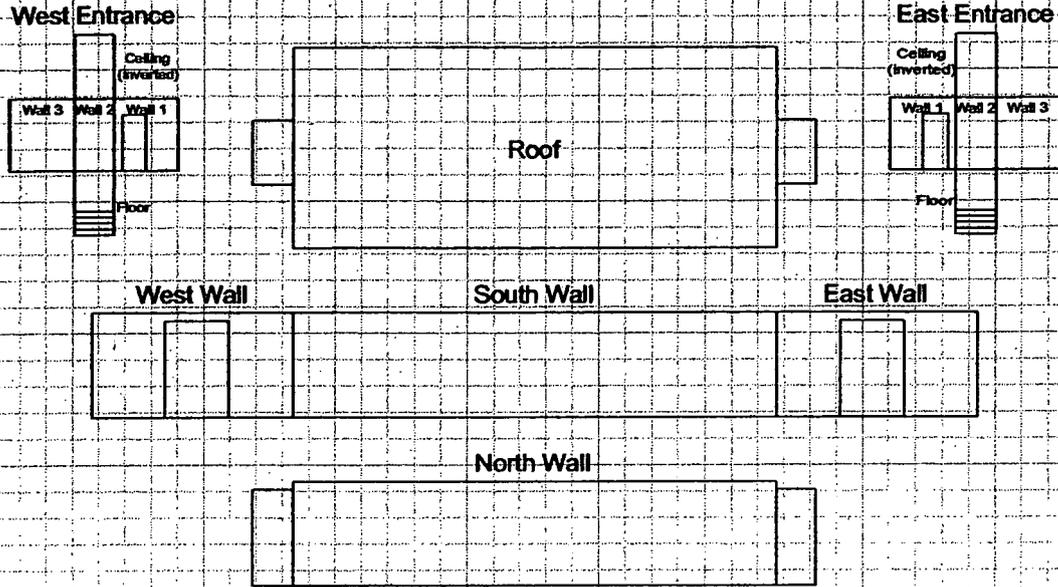


<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p><small>Notwithstanding to the United States Government and Edison I&E Co., our DynCorp I&E, nor any agency thereof, nor 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, reporting products, or processes disclosed, or represents that its use would not infringe privately owned rights.</small></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: C&E Dept. 303-686-7779 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: A02-0048/452D-BE November 28, 2001</p>
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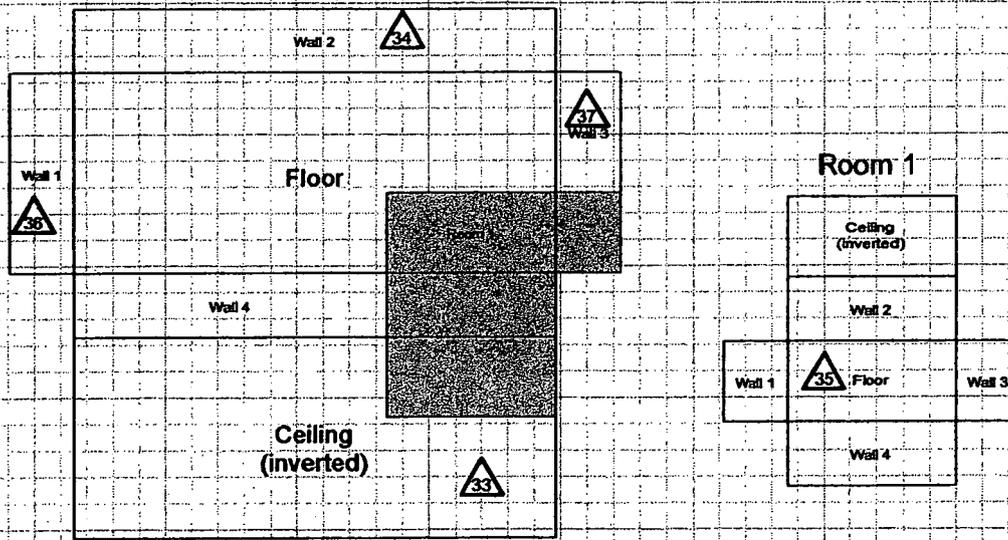
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-004 Classification: 3
 Building: T452B
 Survey Unit Description: Group 12 Total Roof Area: 147 sq. m.
 Total Area: 842 sq. m. Total Floor Area: 147 sq. m.

T452B Exterior



T452B Interior



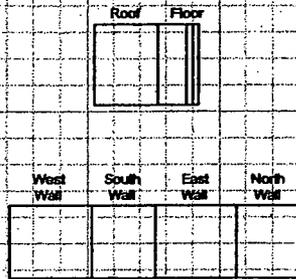
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location Open/Inaccessible Area Area in Another Survey Unit 	<p>Neither the United States Government nor either IBM Co., nor DynCorp MEX, 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: GRS Dept. 303-008-779/Prepared for: DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: W02-004B/T452B-BE November 28, 2001</p>
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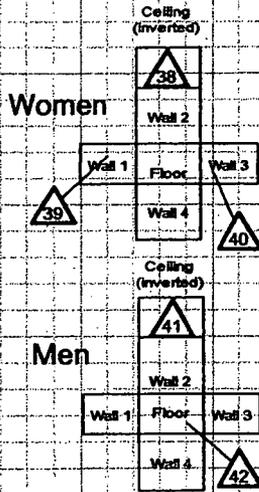
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-007 Classification: 3
 Building: T452E
 Survey Unit Description: Group 12 Total Roof Area: 147 sq. m.
 Total Area: 835 sq. m. Total Floor Area: 147 sq. m.

T452E Exterior



T452E Interior



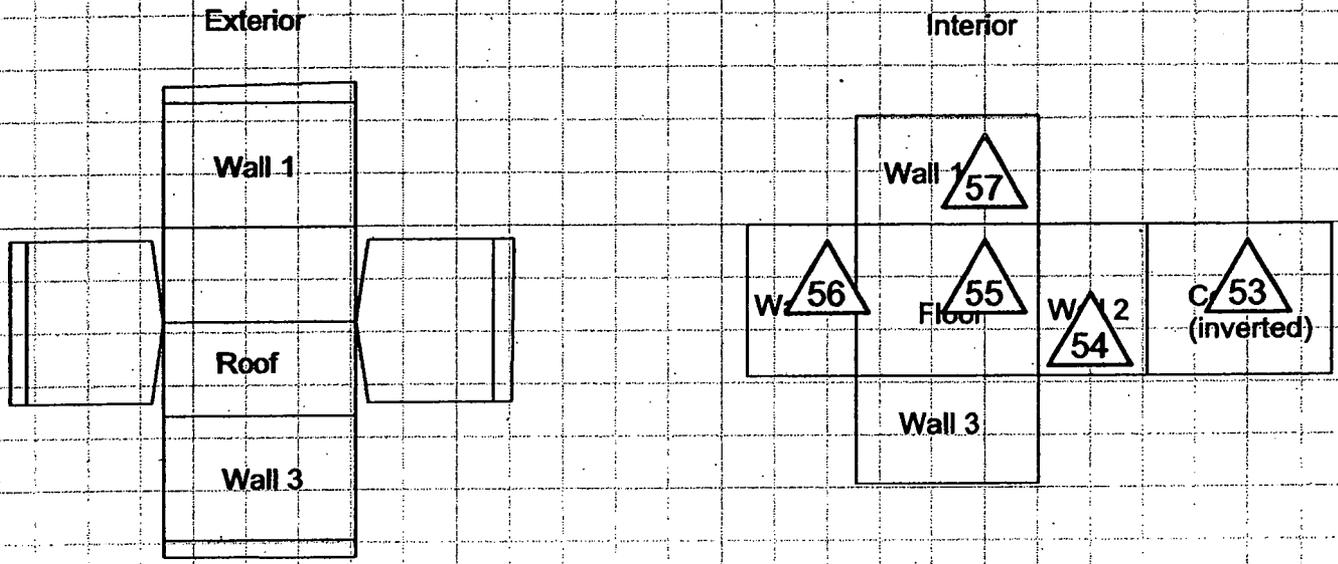
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p><small>Neither the United States Government nor Edgewood Chemical and Energy Company (ECC), nor any agency thereof, nor 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.</small></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: GHS Dept. 203-968-770/Prepared for: DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: fv02-9048/432E-SE November 23, 2001</p>
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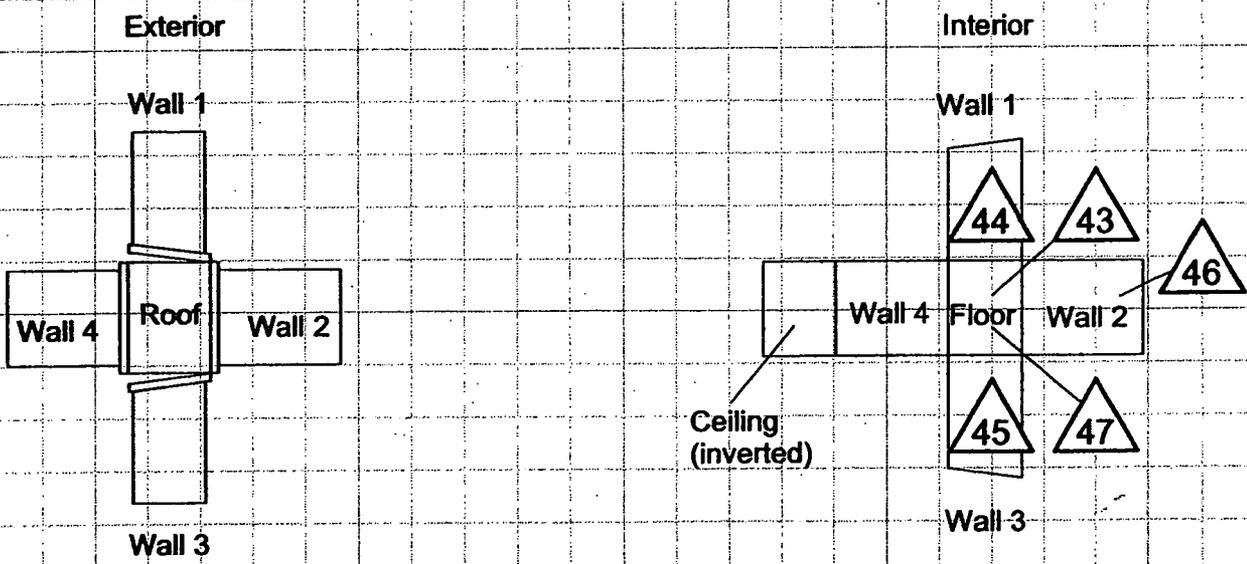
CHEMICAL SAMPLE MAP FOR GROUP 12

Survey Area: A Survey Unit: G12-A-002 Classification: 3
 Building: T428B & S452
 Survey Unit Description: Interior and Exterior Total Roof Area: 16 sq. m.
 Total Area: 134 sq. m. Total Floor Area: 13 sq. m.

T428B



S452



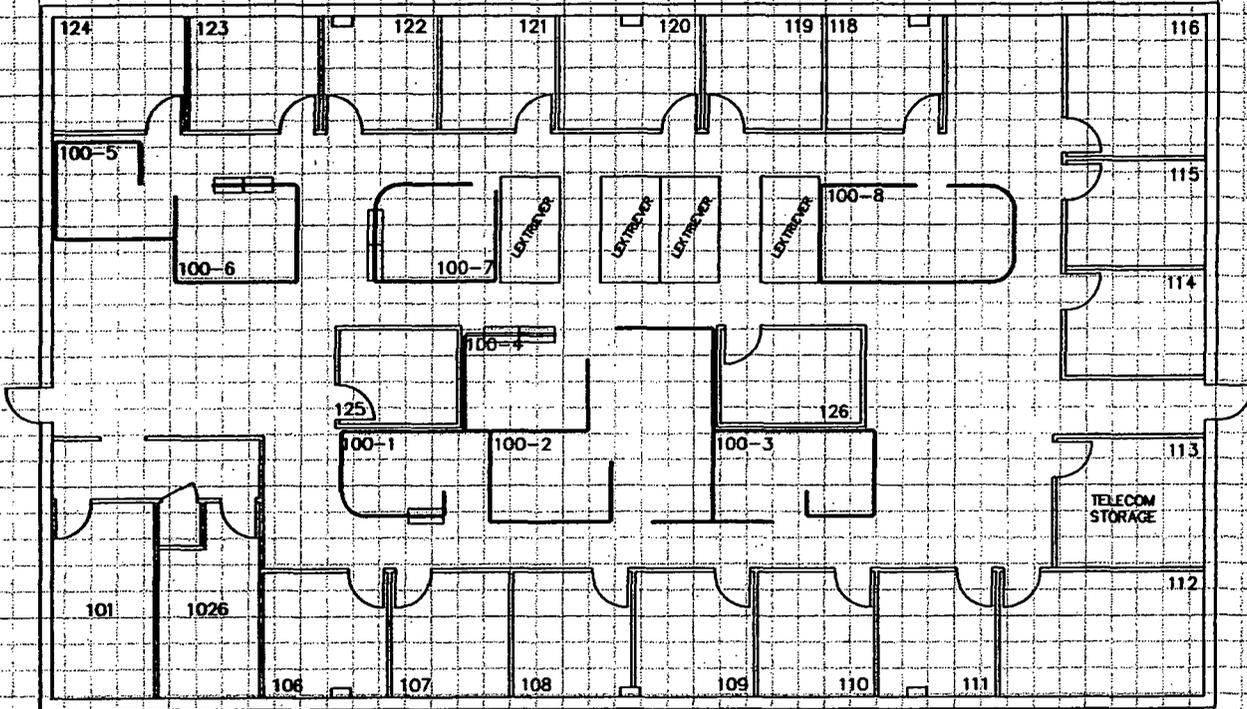
<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Benzofuran Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p>Neither the United States Government nor either IBM Co., nor DynCorp MBE, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, system, 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>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: G12 Dept. 363-006-779 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: G12-0048/B42B-BE November 28, 2001</p>
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PRE-DEMOLITION SURVEY

Survey Area: A Survey Unit: G12-A-001 Classification: 3
 Building: 452
 Survey Unit Description: Floor Plan of Building 452
 Total Area: xxx sq. m. Total Floor Area: xxx sq. m.

Building 452



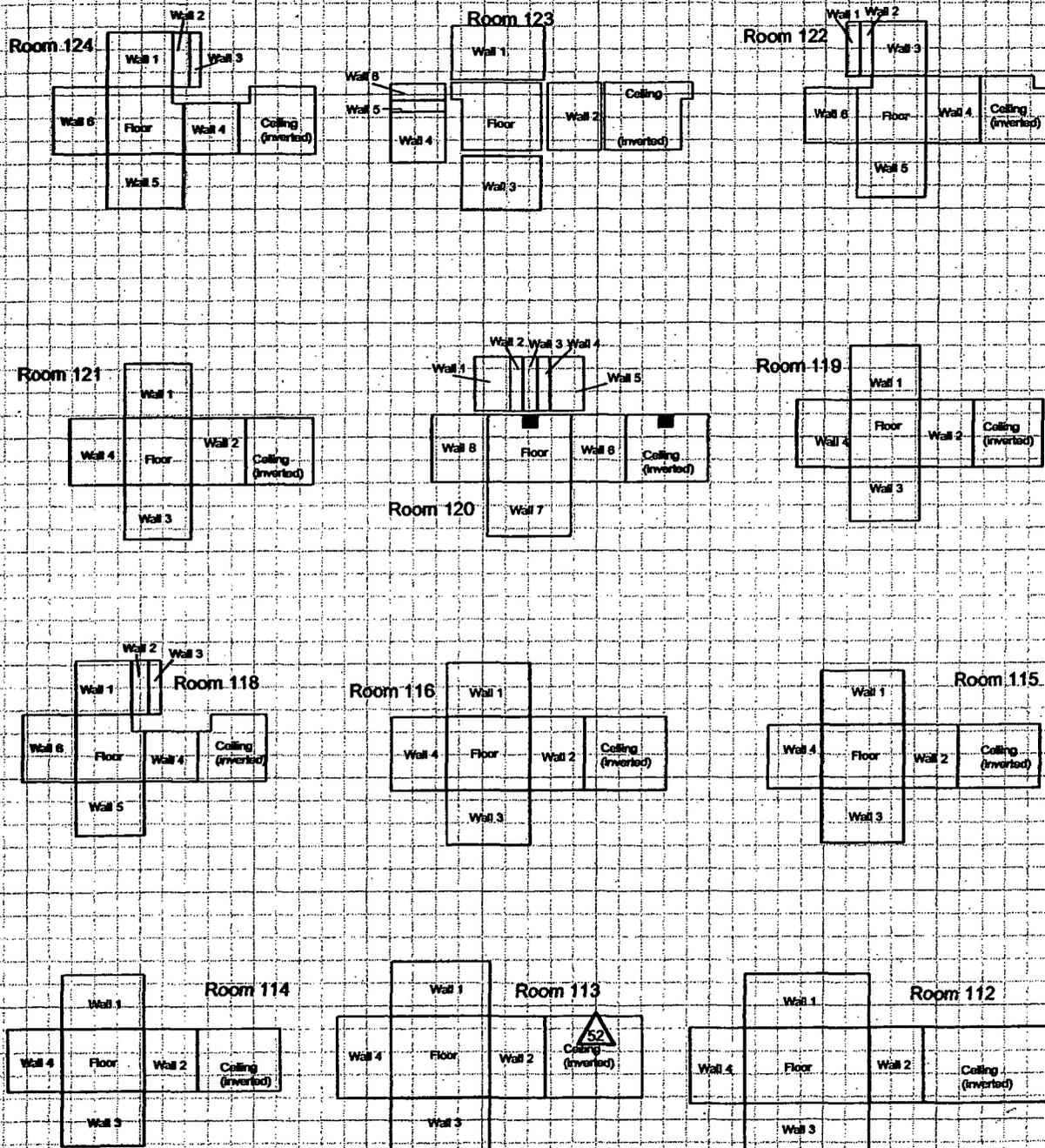
Drawing Not To Scale

<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 ■ Open/Inaccessible Area ▨ Area in Another Survey Unit 	<p><small>Neither the United States Government nor Kinross Inc. Co., nor DynCorp 1452Z, 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, system, product, or process disclosed, or represents that its use would not infringe privately owned rights.</small></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 Prepared by: GRS Dept. 903-990-7797 Prepared For: DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: NY2002/02-0048/8452-FP October 18, 2001</p>
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CHEMICAL SAMPLE MAP

Survey Area: A **Survey Unit: G12-A-001** **Classification: 3**
Building: 452
Survey Unit Description: Interior of Building 452
Total Area: 1867 sq. m. **Total Floor Area: 475 sq. m.**

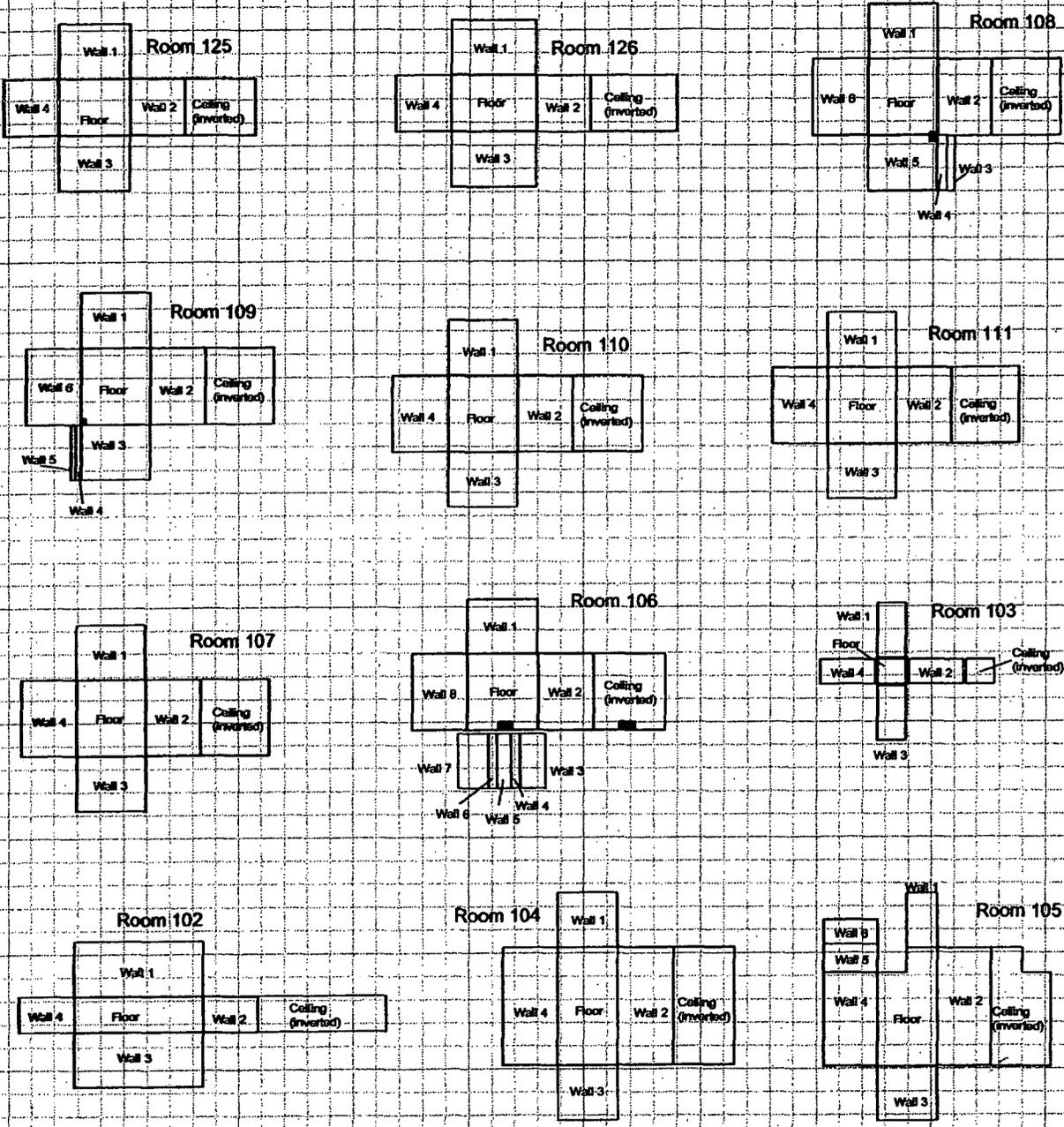


<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location NCR/CERCLA Sample Location PCB Sample Location 	<p>Neither the United States Government nor E.ON Energy Development Center, nor DynCorp LLC, nor any agency thereof, nor 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: G12 Dept. 903-008-770 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: 902-0048/452-Int-1-9E November 28, 2001</p>
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PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: G12-A-001** **Classification: 3**
Building: 452
Survey Unit Description: Interior of Building 452
Total Area: 1867 sq. m. **Total Floor Area: 475 sq. m.**

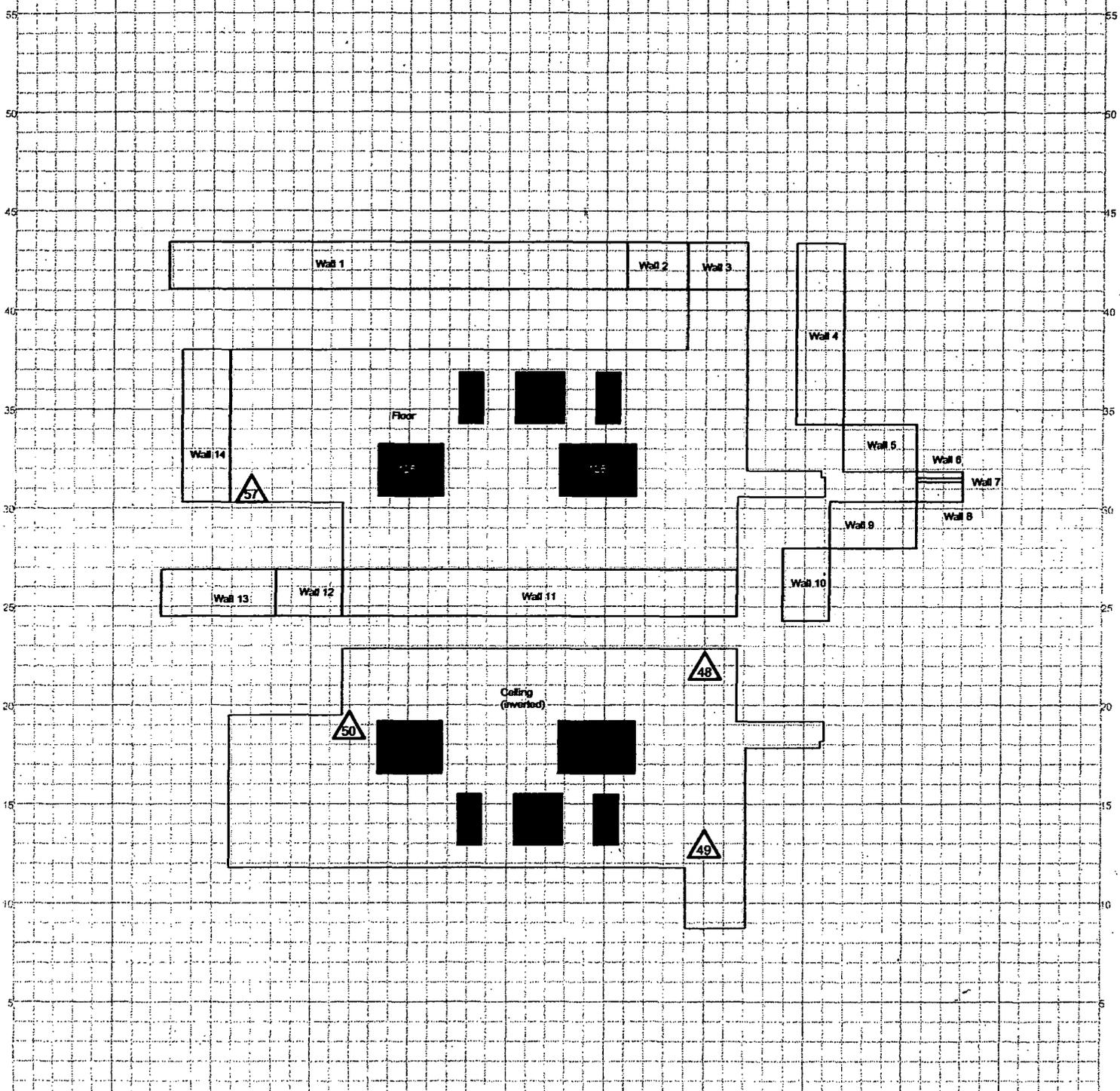


<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRA/CERCLA Sample Location PCB Sample Location 	<p><small>Neither the United States Government nor Kaiser I&E Co., nor DynCorp 1822, nor any agency thereof, nor any of 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.</small></p> <p> Open/Inaccessible Area Area in Another Survey Unit </p>	<p>N ↑</p>	<p>0 30 FEET</p> <p>0 10 METERS</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: G12 Dept. 393-000-770 Prepared For:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: fy2002/02-0042/BAS2-Int-2 October 18, 2001</p>
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CHEMICAL SAMPLE MAP

Survey Area: A **Survey Unit: G12-A-001** **Classification: 3**
Building: 452
Survey Unit Description: Interior of Building 452
Total Area: 1867 sq. m. **Total Floor Area: 475 sq. m.**

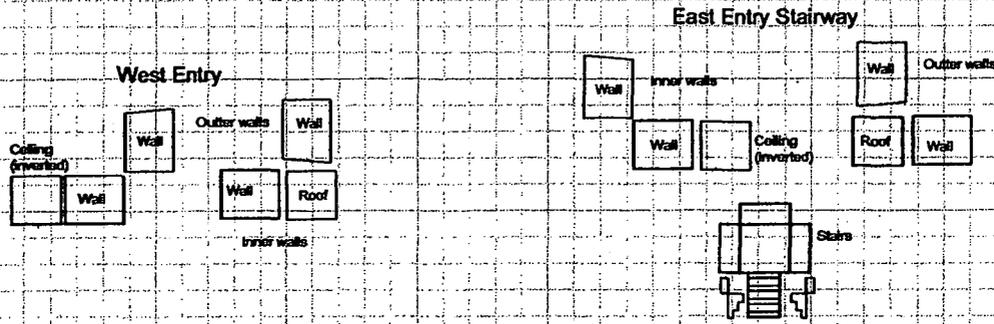
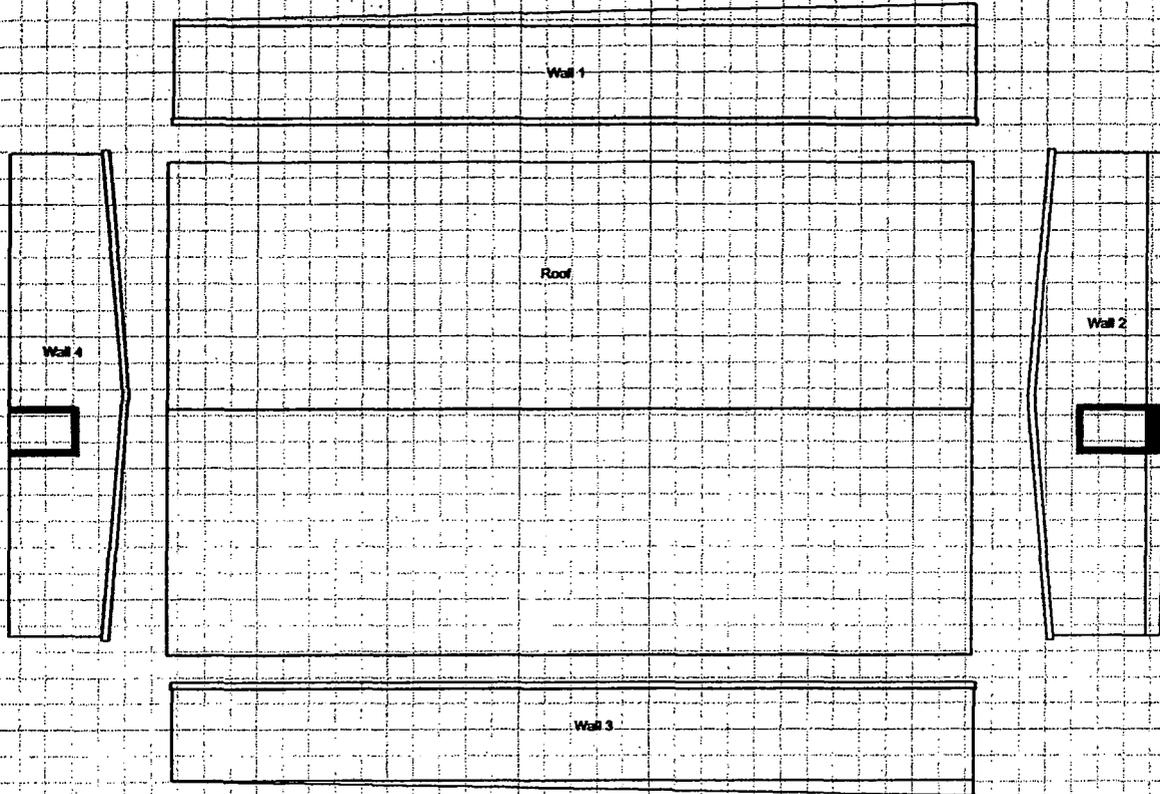


<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> Asbestos Sample Location Beryllium Sample Location Lead Sample Location RCRACERCLA Sample Location PCB Sample Location 	<p>Includes the United States Government and either IBM Co., or DynCorp INC, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or timeliness 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: G12 Dept. 903-000-7709 Prepared For:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: RY02-0048/452-Int-3-BE November 28, 2001</p>
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CHEMICAL SAMPLE MAP

Survey Area: A Survey Unit: G12-A-001 Classification: 3
 Building: 452
 Survey Unit Description: Exterior of Building 452
 Total Area: 1048 sq. m. Total Roof Area: 572 sq. m.



<p>SURVEY MAP LEGEND</p> <ul style="list-style-type: none"> ⊙ Asbestos Sample Location ⚠️ Benzenes Sample Location □ Lead Sample Location ◇ PCB/ACEN/CLA Sample Location ⊙ PCB Sample Location 	<p><small>Neither the United States Government nor Edger MR Co., nor DynCorp M&E, 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.</small></p> <p>  N  Open/Inaccessible Area  Area in Another Survey Unit </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: G25 Dept. 303-008-770 Prepared for:</p> <p>DynCorp THE ART OF TECHNOLOGY</p> <p>MAP ID: N2002/02-0048/B452-Ext October 18, 2001</p>
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ATTACHMENT E

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 asbestos.)

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 E-1, asbestos in E-2, and beryllium in E-3. A data completeness summary for all results is given in Table E-4.

All relevant Quality records supporting this report are maintained in a 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.

No beta/gamma survey designs were implemented for Group 12 facilities based on the conservatism of the transuranic limits used as DCGLs in the unrestricted release decision process. Stated differently, based on the well-established suite of actinides historically used at the RFETS, all of these actinides would emit alpha radiation in exceedance of the applicable transuranic DCGLs before other DCGLs would be exceeded for their respective Uranium species – Technical Basis Document 00162, Rev. 0, *Technical Justification for Types of Surveys Performed During Reconnaissance Level Characterization Surveys and Pre-Demolition Surveys in RISS Facilities*, corroborates the use of this approach.

Consistent with EPA's G-4 DQO process, the radiological survey design (for those survey units performed per PDS requirements) was optimized by checking actual measurement results (acquired during pre-demolition surveys) against 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.

SUMMARY

In summary, the data presented in this report have been verified and validated relative to quality requirements and the 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 uncertainties except 2 samples of non-friable asbestos containing materials identified in B452. The black mastic adhesive beneath the 2" x 12" white and black floor tiles in the Men's Restroom (15% and 9% Chrysotile) were > 1% ACM (non-friable) and will be managed in accordance with 29 CFR 1926.1101 and CDHPE Colorado Regulation Number 8 during building decommissioning and demolition activities. In summary, Group 12 facilities meet the unrestricted release criteria with the confidences stated herein.

Table E-1 V&V of Radiological Surveys – Group 12

V&V CRITERIA, RADIOLGICAL SURVEYS		K-H RSP 16.00 Series MARSSIM (NUREG-1575)			
QUALITY REQUIREMENTS					
	Parameters		Measure	frequency	COMMENTS
ACCURACY	initial calibrations		90%<x<110%	≥1	multi-point calibration through the measurement range encountered in the field
	daily source checks		80%<x<120%	≥1/day	No comment
	local area background	Field	Typically < 10 dpm	≥1/day	all local area backgrounds were within expected ranges (i.e., none anomalously high)
PRECISION	field duplicate measurements for TSA		≥5% of real survey points	≥10% of reals	No comment
REPRESENTATIVENESS	MARSSIM gridding methodology		statistical and biased	NA	random w/ statistical confidence; biased to improve confidence
	Survey Maps			NA	random and biased measurement locations documented to ± 1m.
	Controlling Documents (Characterization Pkg; RSPs)		qualitative	NA	See original Radiological Characterization Package (planning document) for field/sampling procedures; thorough documentation of the planning, sampling/analysis process, and data reduction into formats
COMPARABILITY	units of measure		dpm/100cm ²	NA	Use of standardized engineering units in the reporting of measurement results
COMPLETENESS	Plan vs. Actual surveys usable results vs. unusable		>95% >95%	NA	see Table E-4 for details
SENSITIVITY	detection limits		TSA: ≤50 dpm/100cm ² RA: ≤10 dpm/100cm ²	all measures	MDAs ≤ ½ DCGLw per MARSSIM guidelines

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Table E-2 V&V of Chemical Results-Asbestos Group 12

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		
ASBESTOS	METHOD: EPA 600/R-93/116	LAB ---->	Reservoirs Environmental, Inc	
QUALITY REQUIREMENT		RIN ---->	02D0321	
		Measure	Frequency	COMMENTS
ACCURACY		below detectable amounts	≥1	Semi-quantitative, per (microscopic) visual estimation
PRECISION		all below detectable amounts	≥73 samples	Semi-quantitative, per (microscopic) visual estimation
REPRESENTATIVENESS	COC	Qualitative	NA	Chain-of-Custody intact: completed paperwork, containers w/ custody seals
	Hold times/preservation	Qualitative	NA	Not applicable
	Controlling Documents (Plans, Procedures, etc.)	Qualitative	NA	See original Chemical Characterization Package (planning document); for field/sampling procedures; thorough documentation of the planning, sampling/analysis process, and data reduction into formats
COMPARABILITY		% by bulk volume	NA	Use of standardized engineering units in the reporting of measurement results
COMPLETENESS	Plan vs. Actual samples Usable results vs. unusable	Qualitative	NA	See Table E-4; final number of samples at Certified Inspector's discretion
SENSITIVITY	Detection limits	<1% by volume	all measures	

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Table E-3 V&V of Chemical Results-Beryllium- Group 12

V&V CRITERIA, CHEMICAL ANALYSES			DATA PACKAGE		
BERYLLIUM	Preparation: NMAM 7300 METHOD: OSHA ID-125G		LAB ---->	Data Chem	
	QUALITY REQUIREMENTS			RIN ---->	
			Measure	frequency	
ACCURACY	calibrations	initial	Linear calibration	≥1	No qualifications significant enough to change project decisions i.e. Classification of Type 1 Facility confirmed. All results were < 0.1ug/100cm ² .
		continuing	80%<%R<120%	≥1	
	LCS/MS		80%<%R<120%	≥1	
	blanks	lab & field	<MDL	≥1	
	interference check std (ICP)		Qualitative	NA	
PRECISION	LCSD		80%<%R<120% (RPD<20%)	≥1	
	field duplicate		all results < RL	≥1	
REPRESENTATIVENESS	COC		Qualitative	NA	
	hold times/preservation		Qualitative	NA	
	maps		NA	NA	
	Controlling Documents (Plans, Procedures, etc.)		Qualitative	NA	
COMPARABILITY	measurement units		ug/100cm ²	NA	
COMPLETENESS	Plan vs. Actual samples usable results vs. unusable		>95% >95%	NA	
SENSITIVITY	detection limits		MDL of 0.012 ug/100cm ²	all measures	

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Table E-4 Data Completeness Summary for Group 12

ANALYTE	# Samples Planned (incl. Media; Real & QC Samples)	# Taken (Real & QC Samples) ^B	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Asbestos ^A • Bldg. 452 • T428B • T452A • T452B • T452D • T452E • T452F • T452G	(biased/reals) 12 biased 1 biased 13 biased 11 biased 10 biased 2 biased 11 biased 13 biased	(No QC) 12 interior 1 interior 13 interior 11 interior 10 interior 1 interior 1 exterior 11 interior 13 interior	ACM present > 1% by volume No ACM present, all results < 1% by volume Same Same Same Same Same Same	40 CFR763.86; 5 CCR 1001-10; EPA 600/R-93/116; Type 1 Facility Status confirmed. RIN02D0321 9% and 15% Chrysolite – black mastic (non-friable)

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Table E-4 Data Completeness Summary for Group 12

ANALYTE	# Samples Planned (incl. Media; Real & QC Samples)	# Taken (Real & QC Samples) ^B	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Beryllium (swipes) <ul style="list-style-type: none"> • Bldg. 452 • T428B S452 • T452A • T452B • T452D • T452E • T452F • T452G 	(total, biased, reals) <ul style="list-style-type: none"> 5 biased (interior) 5 biased (interior) 5 biased (interior) 5 biased (interior) 5 biased (interior) 5 biased (interior) 5 biased (interior) 12 biased (interior) 5 biased (interior) 	(9 QC) <ul style="list-style-type: none"> 5 real 5 real 5 real 5 real 5 real 5 real 5 real 12 real 5 Real 	No contamination found at any location <ul style="list-style-type: none"> Same Same Same Same Same Same Same Same 	OSHA ID-125G No results above action level (0.2ug/100cm ²) or investigative level (0.1ug/100cm ²) RIN02D0322
Radiological - Survey Area A Survey Units: <ul style="list-style-type: none"> • G12-A-001 Bldg. 452 	(random, biased) <ul style="list-style-type: none"> 30 & TSA (16 random & 14 biased) 2 QC TSA 30 & Smears (16 random & 14 biased) 5% scan 	(real, QC) <ul style="list-style-type: none"> 60 real, 2 QC 48 int./12 ext. 	No contamination at any location; all values below unrestricted release levels <ul style="list-style-type: none"> Same 	No results above DCGL _W or DCGL _{EMC} action level (20 dpm/100cm ² removable, 100 dpm/100cm ² average, and 300 dpm/100cm ² maximum.

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Table E-4 Data Completeness Summary for Group 12

ANALYTE	# Samples Planned (incl. Media; Real & QC Samples)	# Taken (Real & QC Samples) ^B	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
<p>Radiological – Survey Area A</p> <p>Survey Units:</p> <ul style="list-style-type: none"> • G12-A-002 T428B and S452 • G12-A-003 T452A • G12-A-004 T452B • G12-A-006 T452D 	<p>(random, biased)</p> <p>15 α TSA & 15 α Smears (random) 2 QC TSA 5% scan</p> <p>25 α TSA (15 random & 10 biased) 2 QC TSA 14 (int.) 16 (ext.) 25 α Smears (15 random & 10 biased) 5% scan</p> <p>25 α TSA (15 random & 10 biased) 2 QC 25 α Smears (15 random & 10 biased) 5% scan</p> <p>25 α TSA (15 random & 10 biased) 2 QC 25 α Smears (15 random & 10 biased) 5% scan</p>	<p>(real, QC)</p> <p>30 real, 2 QC 22 int./8 ext.</p> <p>50 real, 2 QC 20 int./30 ext.</p> <p>50 real, 2 QC 26 int./24 ext.</p> <p>50 real, 2 QC 28 int./22 ext.</p>	<p>No contamination at any location; all values below unrestricted release levels</p> <p>Same</p> <p>Same</p> <p>Same</p> <p>Same</p>	<p>No results above DCGL_w or DCGL_{EMC} action level (20 dpm/100cm² removable, 100 dpm/100cm² average, and 300 dpm/100cm² maximum).</p>

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Table E-4 Data Completeness Summary for Group 12

ANALYTE	# Samples Planned (incl. Media; Real & QC Samples)	# Taken (Real & QC Samples) ^B	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological – Survey Area A Survey Units: • G12-A-007 T452E • G12-A-008 T452F • G12-A-009 T452G	(random, biased) 15 α TSA & 15 α Smears (random) 2 QC 5% scan 25 α TSA (15 random & 10 biased) 2 QC 25 α Smears (15 random & 10 biased) 5% scan 25 α TSA (15 random & 10 biased) 2 QC 25 α Smears (15 random & 10 biased) 5% scan	(real, QC) 30 real, 2 QC 18 int./12 ext. 50 real, 2 QC 26 int./24 ext. 50 real, 2 QC 28 int./22 ext.	No contamination at any location; all values below unrestricted release levels Same Same Same	No results above DCGL _w or DCGL _{EMC} action level (20 dpm/100cm ² removable, 100 dpm/100cm ² average, and 300 dpm/100cm ² maximum).

^A # of samples required is estimate only, based on miscellaneous material types; final # of samples at discretion of IH

^B int – building interior, ext – building exterior

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