Rocky Flats Environmental Technology Site

RECONNAISSANCE LEVEL CHARACTERIZATION REPORT (RLCR)

Group D CLUSTER CLOSURE PROJECT

(Buildings 280, 281, S281, 282, 284, 442W, T551A, T900D, T886B, and T886C)

REVISION 0

July 16, 2001

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June 16, 2001

Reviewed by: _____ Date: 7/27/01
Steve Luker, Quality Assurance

Reviewed by: SM Nash for M. Chritton Date: 7/27/01
Michael Chritton, RISS ESH&Q Manager

Approved by: FE Hibbs for Vern Guthrie Date: 7/27/01
Vern Guthrie, K-H Project Manager

Approved by: FE Hibbs for Kent Dorr Date: 7/27/01
Kent Dorr, K-H Project Manager

2

TABLE OF CONTENTS

ATTACHMENTS

3

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 DPP (10/8/98) and compliant disposition and waste management of facilities 280, 281, S281, 282, 284, 442W, T551A, T900D, T886B and T886C (a.k.a. Group D Cluster). 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 of the facilities (i.e., floors (slabs), walls, ceilings and roofs). Since outstanding issues prevented the completion of the RLC of Building 442L, Building 442L RLC results will be included in a future RLC Report (RLCR). 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 PDSP prescribed release limits. No asbestos containing materials were identified. Fluorescent light ballasts may contain PCBs. Any PCB ballasts and asbestos containing materials will be removed and disposed of in compliance with Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) regulations. All demolition debris will be managed in accordance with Environmental Compliance Guidance #27, *Lead-Based Paint (LBP) and Lead-Based Paint Debris Disposal,* as applicable.

Based upon this RLCR and subject to concurrence by the CDPHE, the Group D Cluster 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.

5

1 INTRODUCTION

A Reconnaissance Level Characterization (RLC) was performed to enable compliant disposition and waste management of facilities 280, 281, S281, 282, 284, 442W, T551A, T900D, T886B and T886C (a.k.a. Group D Cluster). 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). Since outstanding issues prevented the completion of the RLC of Building 442L, Building 442L RLC results will be included in a future RLCR. 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 D Cluster facilities. The locations of these facilities are shown in Attachment A. These facilities no longer support the RFETS mission and need to 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 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 D Cluster 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 or the Environmental Restoration RFCA Standard Operating Protocol for Routine Soil Remediation. Both facilities and environmental media will be dispositioned pursuant to the Rocky Flats Cleanup Agreement (RFCA).

6

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.

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 Reports, for copies of the Group D Cluster HSARs. In summary, the HSARs identified some potential for radiological and chemical hazards.

3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS

The Group D Cluster was characterized for radiological hazards per the PDSP. Section 3.1 describes the radiological characterization process that was performed, and Section 3.2 summarizes the radiological hazards that were identified, if any.

3.1 Radiological Characterization

Radiological characterization was performed to define the nature and extent of radioactive materials that may be present on or in the facilities. Measurements were performed to evaluate the contaminants of concern. Based on facility histories, building walkdowns, and MARSSIM guidance, the facilities were broken down into survey areas, survey units, and classifications. Radiological Characterization Packages (refer to Attachment C) were developed during the planning phases that describes how the facilities were broken-down into survey units, the justification for the survey unit classifications, and the minimum measurement requirements per survey unit.

Radiological survey unit packages were developed for each survey unit in accordance with Radiological Safety Practices (RSP) 16.01, *Radiological Survey/Sampling Package Design, Preparation, Control, Implementation and Closure*. Total Surface Activity (TSA), removable 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 throughout the survey and sampling process in accordance with RSP 16.05, *Radiological Survey/Sample Quality Control*.

Radiological data, statistical analysis results, and survey locations are presented in Attachment E, Radiological Data Summaries and Survey Maps. Radiological survey packages are maintained in the Group D Cluster Characterization Project files.

3.2 Radiological Hazards Summary

Due to a small elevated scan survey location in B442W, further explanation is necessary to address the initial elevated reading at this location. Initial scan surveys performed with the Bartlett Final Survey Monitor (FSM) indicated an isolated area, roughly one inch in diameter in size, on the floor of B442W that demonstrated elevated total surface activity (600–900 dpm/100 cm^2) in excess of the transuranic $DCGL_W$ (100 dpm/100 cm^2). No removable contamination was detected. Upon investigation with the SAIC Alpha Analyzer Model AP-2 per the operating procedure 3-PRO-113-RSP-03.02, isotopic identification determined that the elevated activity was from uranium isotopes and not from transuranic isotopes.

Since all of the elevated activity was from uranium isotopes and not transuranic isotopes, the uranium DCGLs were utilized for comparison to the elevated activity location. The uranium DCGLs are 5,000 dpm/100 cm^2 averaged over a square meter ($DCGL_W$) and 15,000 dpm/100 cm^2 maximum for any hot spot within the square meter ($DCGL_{EMC}$), as specified in Table 7-1 of the RFETS Pre-Demolition Survey Plan for D&D Facilities. An additional 5% of the floor surfaces were scanned with the FSM, and no other areas were identified as having surface contamination above the transuranic or uranium limits. This investigation verified that the facility surfaces did not contain radiological contamination above the uranium DCGLs. FSM and AP-2 investigation data are maintained in the Group D Cluster Characterization Project files.

No other areas within the Group D Cluster had any radiological contamination above the transuranic DCGLs. The RLC (serving also as the PDS) confirmed that the Group D Cluster facilities (i.e., all interior and exterior facility surfaces) do not contain radiological contamination above the surface contamination guidelines provided in the PDSP. Isolation control postings are displayed at all entrances to the Group D Cluster facilities to ensure no radioactive materials are introduced.

4 CHEMICAL CHARACTERIZATION AND HAZARDS

The Group D Cluster was characterized for chemical hazards per the PDSP. Section 4.1 describes the chemical characterization process that was performed, and Section 4.2 summarizes the chemical hazards that were identified.

4.1 Chemical Characterization

Chemical characterization was performed to determine the nature and extent of chemical contamination that may be present on or in the Group D Cluster facilities. Based upon a review of historical and process knowledge, visual inspections, and PDSP DQOs, additional sampling needs were determined. Chemical Characterization Packages (refer to Attachment D) were 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 F, Chemical Summary Data and Sample Maps, for details on sample results and sample locations.

8

4.1.1 Asbestos

Based on limited historical asbestos inspection data, an asbestos inspection and sampling of suspect asbestos containing material (ACM) was required for the PDS. A CDPHE-certified asbestos inspector conducted the inspection and sampling in accordance with PRO-563-ACPR, *Asbestos Characterization Protocol,* Revision 1. Potential ACM was identified for sampling at the discretion of the inspector.

4.1.2 Beryllium (Be)

Based on the HSARs, there was no record of beryllium operations in facilities 280, 281, S281, 282, and 284. There was adequate historical and process information to conclude the absence of beryllium in the facilities. These facilities were built in the 1990s and never put into operation. The facilities have never been used to store any equipment or materials (except for a non-hazardous fire department truck). Site personnel who have been onsite and familiar with these facilities since their construction have confirmed that there is no potential for Be contamination. Therefore, Be sampling was not performed in the 280, 281, S281, 282, and 284 facilities.

For the remaining facilities in Group D (442W, T551A, T900D, T886B and T886C), there was not adequate information to conclude the absence of beryllium, therefore limited biased sampling was performed in each of these facilities.

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

Based on the HSARs and facility walkdowns of the Group D Cluster, there was no record of RCRA/CERCLA constituent operations, storage or spills, therefore RCRA/CERCLA constituent sampling was not performed in these facilities.

Sampling for lead in paint in the Group D Cluster was not required. 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.

4.1.4 Polychlorinated Biphenyls (PCBs)

Based on the HSARs and facility walkdowns of the Group D Cluster facilities, there was no record of PCB operations or storage, therefore PCB sampling was not performed in these facilities. The Group D Cluster facilities 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 buildings, historical data, and process knowledge, there is no reason to suspect that any specialized paints or coatings containing PCBs were applied to any of the painted surfaces within the Group D Cluster facilities. Current plans are to dispose of demolition debris from the Group D Cluster in an off-site, non-hazardous solid waste landfill, or re-sell the facilities.

4.2 Chemical Hazards Summary

The following sections summarize the chemical hazards identified during the PDS.

4.2.1 Asbestos

ACM was not present in any Group D Cluster facility. Asbestos sample data and sample location maps are contained in Attachment F, Chemical Summary Data and Sample Maps.

Buildings 280 & 282

Buildings 280 and 282 had several different suspect ACM, including drywall and joint compound, silver reflective tape on HVAC, 2' x 4' white speckled drop-ceiling tiles, gray baseboard with brown mastic, and 12" x 12" white and turquoise floor tiles with brown mastic. Analytical results of bulk samples indicate that no asbestos was detected in any of these building materials.

Buildings 281, S281, & 284

No suspect ACM was identified in Buildings 281, S281, and 284.

Building 442W

Building 442W had several different suspect ACM, including drywall with joint compound, 2' x 4' white-tan ceiling tiles, 12" x 12" white with blue streak floor tiles and black mastic, and white baseboard with tan mastic. Analytical results of bulk samples indicate that no asbestos was detected in any of these building materials.

Trailer T551A

Suspect ACM in Trailer T551A included two different types of 12" x 12" floor tile and tan mastic, white-tan ceiling drywall, pink fibrous duct insulation, and black tar. Analytical results of bulk samples indicate that no asbestos was detected in any of these building materials.

Trailer T900D

Trailer T900D exterior walls are sheet metal siding with fiberglass batt insulation, and wood paneling on the interior. Floor is vinyl linoleum with no backing or adhesive. Sub-floor is construction-grade plywood. Ceiling is drywall with no joint compound and a white texture coating. Baseboard is wood without adhesive, only nails. Suspect ACM included linoleum, drywall, and skim coat. Analytical results of bulk samples indicate that no asbestos was detected in any of these building materials.

Trailer T886B

T886B is a modular office trailer approximately 75' wide x 80' long x 14' high with approximately 6,000 SF of floor space. The exterior is corrugated metal siding and roof with four entrances. The interior is a cubical layout with paper-covered wallboard on metal studs. The ceiling is 2' x 4' acoustical drop-ceiling tiles with recessed lighting. The floor is carpeted, except in the bathrooms, which are covered with sheet vinyl tile and vinyl baseboards with yellow mastic. The acoustical drop-ceiling tiles, sheet vinyl linoleum, and yellow mastic were considered suspect building materials, and were tested for asbestos by PLM analysis. Analytical results of bulk samples indicate that no asbestos was detected in any of these building materials.

Trailer T886C

T886C is a double-wide trailer approximately 30' x 70' x 14' high, and approximately 2,000 SF of floor space. The exterior is corrugated metal siding and roof with two entrances. The interior is a cubical layout with paper-covered wallboard on metal studs. The ceiling is 2' x 4' acoustical drop-ceiling tiles with recessed lighting. The floor is carpeted, except in the Telecommunications Room, which is covered with sheet vinyl tile and vinyl baseboards with yellow mastic. The acoustical drop-ceiling tiles, sheet vinyl linoleum, and yellow mastic were considered suspect building materials, and were tested for asbestos by PLM analysis. Analytical results of bulk samples indicate that no asbestos was detected in any of these building materials.

4.2.2 Beryllium

Beryllium sample results of the Group D Cluster facilities were all less than 0.1 $\mu g/100cm^2$. Beryllium sample data and sample location maps are contained in Attachment F, Chemical Summary Data and Sample Maps.

4.2.3 RCRA/CERCLA Constituents

Based on the HSARs and facility walkdowns of the Group D Cluster, there was no record of RCRA/CERCLA constituent operations, storage or spills. Therefore, there are no RCRA/CERCLA constituent hazards in these facilities.

4.2.4 PCBs

Based on the HSARs and facility walkdowns of the Group D facilities, no PCB sampling was necessary or performed. PCB ballasts may be found in the Group D Cluster and will be removed and disposed of in accordance with site procedures prior to building demolition. It is not suspected that any specialized paints or coatings containing PCBs were applied to painted surfaces within the Group D Cluster. Plans are to dispose of demolition debris in an off-site, non-hazardous solid waste landfill, or re-sell the facilities.

5 PHYSICAL HAZARDS

Physical hazards associated with the Group D Cluster 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 the Group D Cluster, and consequent waste management, are of adequate quality to support the decisions documented in this report. The data presented in this report (Attachments A – G) 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 H.

7 DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES

The demolition and disposal of the Group D Cluster will generate a variety of wastes. Attachment G presents the estimated waste types and waste volumes 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.

8 FACILITY CLASSIFICATION AND CONCLUSIONS

Based on the analysis of radiological, chemical and physical hazards, the Group D Cluster facilities (i.e., 280, 281, S281, 282, 284, 442W, T551A, T900D, T886B and T886C) 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 D Cluster 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.

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

ANSI-N323A-1997, Radiation Protection Instrumentation Test and Calibration.

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

DOE Order 414.1A, "Quality Assurance."

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

K-H, 1997. "Kaiser-Hill Team Quality Assurance Program", Rev. 5, December, 1997.

K-H, 1998. Facility Disposition Program Manual, MAN-076-FDPM, Rev. 1, September 1999.

K-H, 1999. Decontamination and Decommissioning Characterization Protocol, MAN-077-DDCP, Rev. 1, June 19, 2000.

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

K-H, 2000. Pre-Demolition Survey Plan, MAN-127-PDSP, Rev. 0, March 26, 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, September 30, 1999.

PRO-476-RSP-16.02, Radiological Surveys of Surfaces and Structures, September 30, 1999.

PRO-477-RSP-16.03, Radiological Samples of Building Media, September 30, 1999.

PRO-478-RSP-16.04, Radiological Survey/Sample Data Analysis, September 30,1999.

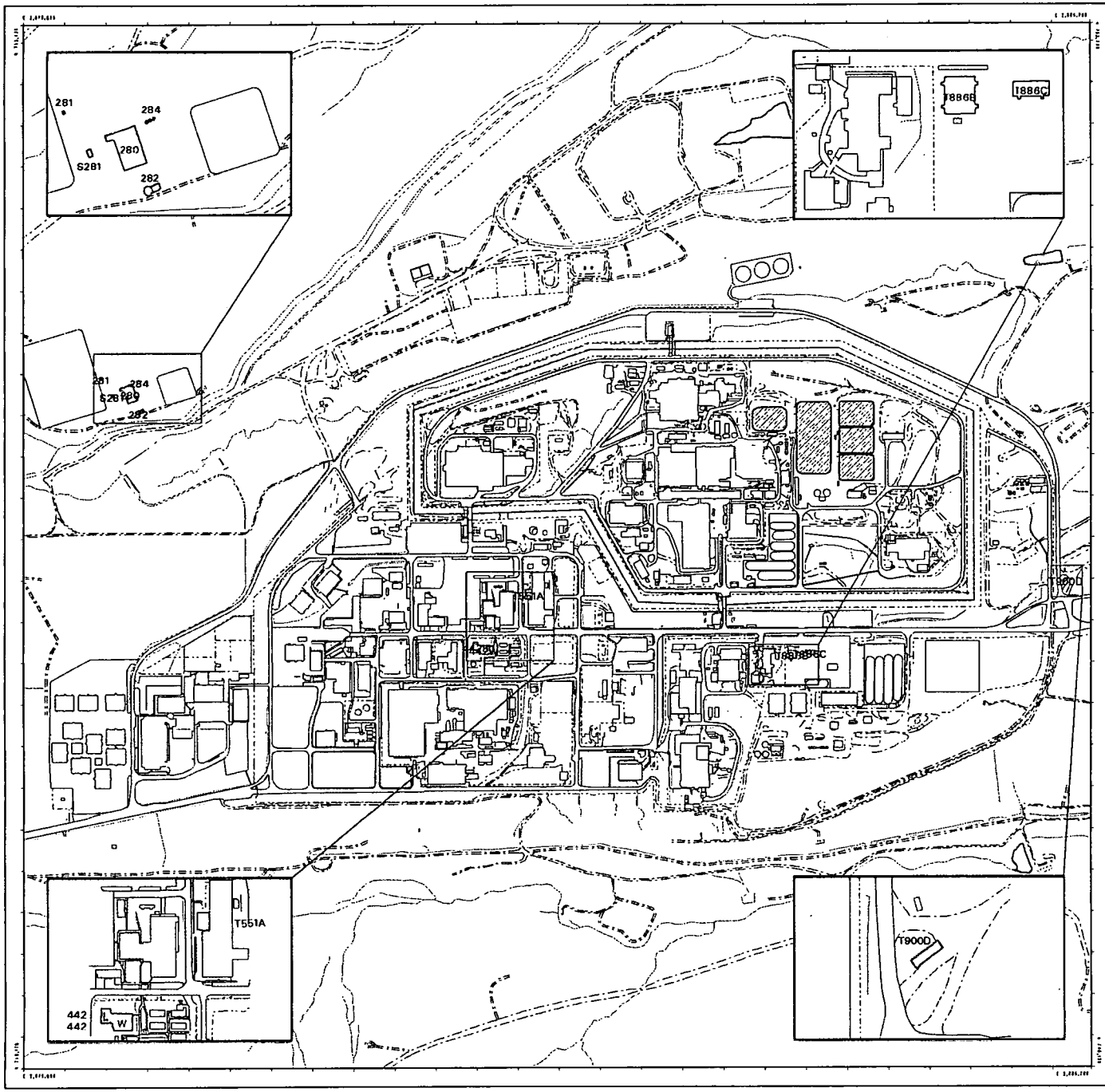
PRO-479-RSP-16.05, Radiological Survey/Sample Quality Control, September, 30, 1999

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

RFETS, Historical Site Assessment Reports for Buildings 280, 281, S281, 282, 284, 442W, T551A, T900D, T886B and T886C.

ATTACHMENT A

Facility Location Map



Group D

(As of June 18, 2001)

EXPLANATION

Buildings & Tanks

Standard Map Features

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

DATA SOURCE BASE FEATURES:
Buildings, tanks, roads, and other structures from 1994 aerial photography compiled by EG&G, Las Vegas. Digitized from orthophotographs.

Scale = 1 : 13340
1 inch represents approximately 1112 feet

250 0 500 1000 ft

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

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

GIS Dept. 303-966-7707

Prepared by:
DynCorp
THE ART OF TECHNOLOGY

Prepared for:
KAISER-HILL

MAP ID: 01-0137

June 18, 2001

NT_Svr w:/projects/fy2001/01-0616/d2_area.aml

16

ATTACHMENT B

Historical Site Assessment Reports

D&D RISS Facility Characterization
Historical Site Assessment Report

Facility ID: B280 Landfill Support Facility, B281 Sanitary Landfill Leachate Valve Building, S281 Landfill Bale Storage, B282 Water Tank, B284 Landfill Storage Tank Farm

Anticipated Facility Type (1, 2, or 3):): B280 = Type 1, B281 = Type 1, S281= Type 1, B282 = Type 1, and B284 = 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

B280 Landfill Support Facility is a single-story, pre-engineered, metal-frame building on a concrete foundation and floor. The walls are constructed of enamel-covered steel panels over insulation. B280 is an L-shaped facility with one section approximately 75' X 97' X 25' high at the roof peak and the other section 33.5' X 37' X 20' high at the roof eve. The square footage of B280 is approximately 8,500 square feet. B280 is divided into the following rooms: Room 101, office area hall; Room 102, multi-purpose room (lunch/break room); Room 103, a large office and building observation room; Room 104, women's locker room; Room 105, women's restroom; Room 106, men's restroom; Room 107, men's locker room; Room 108, mechanical room; Room 109, storage room/garage; Room 110, tipping floor room; and Room 111, loading area. The office area is partitioned with drywall and steel-stud construction. Room 110 has two drywall walls, the north and west ones. All the walls in these rooms are painted, and the color is a light beige. All of the walls are insulated, and Room 111 has corrugated metal inside covering the first 8' of height all around the loading area room. B280 has tiled floors in the hallways of the office area and in all offices, lunch/break room, locker rooms, and restrooms. B280 has 5 personnel entry doors, two entry doors on the west side, and one each on the other three sides of the building. B280 is equipped with three steel-insulated rollup doors, two of them are 16' wide and 20' high, and the third one is 12' wide by 12' high. This door leads to a garage-type room, Room 109, which is a garage for a Plant Fire Department Fire Truck that is being stored in the facility.

The entire B280 is heated by ceiling electric heaters. Mechanical Room 108 and Storage Room 109 have two exhaust air louvers/fans on the north wall. Mechanical Room 108 has three power transformers and a large bank of Motor Control Centers on the north wall, as well as a domestic water supply tank, a water-pressure pump, an air compressor, and a diesel tank, which supplies the emergency generator outside directly north of Room 108. The B280 high-bay area, Rooms 110 and 111, has two roof exhaust/vent fans and two inlet louvers that work in conjunction with the exhaust/vent fans. The office area of B280 has two inlet air fans equipped with refrigerated cooling coils, and the air-conditioning unit sits outside on the north transformer/emergency generator concrete pad. B280 is protected by a fire sprinkler system, which is connected to B282, and a fire alarm system, which is tied into the Plant Fire Alarm System. B280 has a LSDW system with speakers in all areas of the facility. LSDW System speakers are also outside on the exterior of B280. B280 has six battery powered emergency lighting units throughout the facility.

B280 has one floor drain/sump pump, which is located in the Room 110 trash-receiving/conveyor pit in the northwest corner. The conveyor pit is located in the north half of the large high-bay Room 110/111 area. The conveyor pit is approximately 40' long X 12' wide X approximately 8' deep. The sump pump discharges to the leachate tanks. B280 also has six roof drain downspouts, four on the west side and two on the east side of the building.

B281 Sanitary Landfill Leachate Valve Building is a small 10' X 8' X 8' high all fiberglass valve and instrumentation building located northwest of B280 near the east bank of Cell 1. The building was designed to control leachate flows from the landfill to the leachate tanks. B281 sits on an 11' X 9' X 2' concrete pad. The all fiberglass building does not have any paint on the floors or walls.

18

Physical Description (Con't)

S281 Landfill Bale Storage consists of a concrete pad, a west wall, and roof, is approximately 17' X 26' X 20' high, and is located directly west of B280. The west wall and roof of S281 are constructed from corrugated metal, and the roof drains to the west without any roof downspouts. The facility has three mercury-vapor lights designed for nighttime operation. The concrete floor/pad slopes to the center, probably for stacking bales. The sloping concrete floor also allows for stormwater to collect until it can evaporate. The floor is not painted.

B282 Water Tank and Fire Suppression Building for B280 is located directly south of B280 and consists of a pre-engineered, metal-frame, metal-covering, and metal-roof building on a concrete foundation and floor. B282 is approximately 30' X 20' X 12' high at the roof peak for approximately 600 square feet of floor space. The walls and roof are constructed of enamel-covered steel panels with insulation on the walls and ceiling. Building B282 has electric heat. B282 also has diesel storage tank in the SE corner of the building, and it is partitioned off with separate exterior access doors for maintenance and tank refueling. The partitioned diesel storage room is constructed with drywall and steel studs having a one-hour fire rating. These walls are painted a light beige. In addition, B282 is protected with a fire sprinkler system and fire alarm system. The B282 fire suppression system equipment consists of a diesel engine driven pump, valves, approximately 130 feet of 8" firewater piping, a firewater supply tank, and approximately 600 feet of underground firewater piping to B280.

The west wall of B282 is the east wall of the 120,000 gallon firewater tank. The firewater tank was originally covered with 4" of metal-covered fiberglass insulation, but high winds have ripped off all of the tank insulation except approximately the bottom 6' of the 30' diameter X 22' high tank. The firewater tank has a recirculating water heating system (in-line pump and Chromlox® Electric Water Heater) to prevent the tank from freezing.

B284 Landfill Storage Tank Farm is located directly northeast of B280 and consists of three leachate process tanks, an in-line pump, and a control panel with alarms. Leachate Tanks D-501, D-502, and D-503 are approximately 11' in diameter (including heat trace and insulation) and 10' tall. The three tanks are mounted on three 12' X 12' X 1' concrete pads. All of the process piping leading to the leachate tanks is heat-traced, insulated and labeled Asbestos Free. The insulated, heat-traced leachate tanks are not labeled Asbestos Free. The process tanks sit in a concrete bermed area approximately 15' X 50' X 2' deep with concrete walls and berm floor 8" thick. The concrete walls and floor of the berm have been painted to protect the concrete, and the paint color is gray.

B284 has a concrete slab directly north of the tank farm, and the slab measures 15' X 20' X 0.5' thick. The slab may have been designed as a wash-down station for trash bales and/or equipment. The water from the pad drains into the tank farm berm.

Historical Operations

All five of the B280 Landfill Support Facilities were constructed in the 1994 to 1997 time frame. None have ever been used for their intended purpose. According to personnel interviews and records, only B280 has ever been used, and that was for miscellaneous storage (e.g., equipment and supplies) by various Plant groups, including Construction, PU&D, and the Plant Fire Department. No hazardous substances have ever been stored in B280, except nitric acid on a flat-bed. truck for six days.

None of the five B280 Landfill Facilities are included in the Site Historical Release Report. B280 Landfill Support Facilities do not have their own Safety Analysis Report (SAR), but the B280 Landfill Site is included in Site SAR. The B280 Landfill Facility does not have a WSRIC, and it does not have any tanks or areas on the Master Listing of RCRA Units. The B280 Landfill Facilities are not on the List of Known Be Areas. Engineering Drawings exist for the B280 Landfill Facilities.

19

Current Operational Status

Three interviews of personnel familiar with the facilities' history agreed that only B280 has ever been used and that was for miscellaneous storage (e.g., equipment and supplies) by various Plant groups, including Construction, PU&D, and the Plant Fire Department. No hazardous substances have ever been stored in B280, except nitric acid on a flat-bed. truck for six days. None of the five B280 Landfill Facilities are included in the Site Historical Release Report. B280 Landfill Support Facilities do not have their own Safety Analysis Report (SAR), but the B280 Landfill Site is included in Site SAR. The B280 Landfill Facility does not have a WSRIC, and it does not have any tanks or areas on the Master Listing of RCRA Units. The B280 Landfill Facilities are not on the List of Known Be Areas.

Contaminants of Concern

Asbestos

Describe any potential, likely, or known sources of Asbestos: None of the five B280 Landfill Facilities are posted as having asbestos containing materials (ACM). The heat traced insulated process piping lines at B284 are posted with signs stating "Asbestos Free". The people interviewed said they did not believe that any ACM was used during the construction of the B280 Landfill Support Facilities. Walkdown observations did not find any suspect ACM in any of the B280 Landfill Support Facilities. There are no known building-specific asbestos reports for any of the B280 Landfill Support Facilities. Refer to the B280 Characterization Package and RLC/PDSR for any asbestos information that may have been ascertained after this report was written.

Note: This information should be evaluated/verified by a State Certified Asbestos Building Inspector. SME may need to review additional documents and perform additional interviews.

Beryllium (Be)

Describe any potential, likely, or known Be production or storage locations: There is no SAR for the B280 Landfill Support Facilities, but B280 is briefly mentioned in the Site SAR that states the Landfill Facility does not contain any hazardous materials. There is not WSRIC for the B280 Landfill Facilities. There are not any postings referring to Be areas anywhere on or in any of the B280 Facilities. Interviewees said that they had no knowledge of any Be being anywhere in any of the B280 Landfill Facilities. The B280 Landfill Facilities do not appear on the List of Known Present or Historical Be Areas. The Be characterization SME may want to sample to verify that Be does not exist in any of the B280 Landfill Support Facilities.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

Summarize any recent Be sampling results: None of the people interviewed knew of any Be sampling that was ever conducted at the B280 Landfill Support Facilities.

Refer to Characterization Package and RLC/PDSR.

20

Lead

Describe any potential, likely, or known sources of Lead (e.g., paint, shielding, etc.): B280 and B282 have beige paint on the drywall partition walls, and the facility was constructed in the 1994-1996 time frame. Therefore, lead-based paints are not expected to have been used. There is no lead shielding (no need for it) in B280. The B284 tank farm berm has been painted with gray paint, and the facility was constructed in the 1994-1996 time frame. Therefore, lead-based paints are not expected to have been used. There is no lead shielding (no need for it) in B284. Lead solder may have been used in electrical connections in any of the B280 Landfill Support Facilities.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

RCRA/CERCLA Constituents

Describe any potential, likely, or known sources of RCRA/CERCLA constituents (e.g., chemical storage, waste storage, processes): The interviewees had no knowledge of sources of RCRA/CERCLA constituents, with the one exception of the flat-bed semi-trailer truck being stored inside B280 for six days (less than one week), which contained sealed drums and containers of nitric acid.

The B280 Landfill Support Facilities have sodium vapor lighting, mercury vapor lighting (all exterior), fluorescent lighting, and some incandescent lighting. The exterior mercury lighting lamps are known to contain mercury. Interviewees did not believe that the ballasts in the fluorescent lighting fixtures contain any PCBs. None of the B280 Landfill Support Facilities have any tanks or areas that are listed on the Master Listing of RCRA Units. None of the B280 Landfill Support Facilities have equipment that is listed in the Appendix 1 – Idle Equipment With Hazardous Materials Inventory. None of the B280 Landfill Support Facilities have equipment that is listed in the Appendix 1A – Idle Equipment With Non-Hazardous Materials Inventory.

None of the interviewees knew of any mercury except in the previously described exterior mercury vapor lighting. Again the B280 Landfill Support Facilities do not have a SAR, but the B280 Landfill is briefly mention in the Site SAR.
A WSRIC was never written for the B280 Landfill Support Facilities. There is no information in the Site HRR concerning any of the B280 Landfill Support Facilities.

Walkdowns revealed a tremendous amount of spent and unspent blank ammunition cartridges that indicate that many Plant Security Terrorists Attack Exercises must have been performed both inside and outside the B280 Landfill Support Facilities.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

Describe any potential, likely, or known spill locations (and sources, if any): None of the interviewees had any knowledge of any spills of any kind that occurred at any of the B280 Landfill Support Facilities. Also, no information was found to indicate that any spills ever occurred at any of the B280 Landfill Support Facilities.

Describe methods in which spills were mitigated, if any: None of the interviewees had any information of any chemical-type spills ever occurring at any of the B280 Landfill Support Facilities, therefore, spill mitigation was never required.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

21

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 B280 Landfill Support Facilities potentially could contain PCBs, but the interviewees did not feel that this would be likely, because the B280 Landfill Site is a newer facility. None of the transformers, both inside and outside the B280 Landfill Support Facilities, are posted as containing 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 was never required.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

Radiological Contaminants

Describe any potential, likely, or known radiological production or storage locations: Interviewees had no knowledge of any radiological production or storage areas at the B280 Landfill Support Facilities. Two radioactively internally contaminated semi-tanker trailers are stored outside at the B280 Landfill Facilities, but the trailers are used elsewhere at the Site. The interviewees believe that the two internally contaminated trailers were/are always empty when stored at the B280 Site. No information was found in any of the Site documents to indicate any radioactive material or radioactive solutions were ever stored anywhere at the B280 Site. The only radioactive postings found at the B280 Site were the small internally radioactive stickers found on the front of the above-mentioned semi-tanker trailers.

Describe any potential, likely, or known spill locations (e.g., known leaking sealed radioactive sources, leaking waste drums, potentially contaminated drains, etc.): Interviewees had no knowledge of any radioactive materials of any kind stored at the B280 Site, therefore the likelihood of a spill was non-existent.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

Radiological Contaminants (Con't)

Describe methods in which spills were mitigated, if any: NA Interviewees had no knowledge of any radioactive materials of any kind used or stored at the B280 Site, therefore, spill mitigation was never required.

Describe any potential, likely, or known isotopes of concern (e.g., weapons grade plutonium, uranium isotopes, pure beta emitters, mixed fission products, etc.): NA Interviewees had no knowledge of any radioactive materials of any kind used or stored at the B280 Site.

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.): NA Interviewees had no knowledge of any radioactive materials of any kind used or stored at the B280 Site.

Describe any process waste lines associated with the facility, if any (Are any abandoned? Capped?) The B280 Landfill Support Facilities have no process waste lines, therefore, there are no abandoned and/or capped process waste lines.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

Environmental Restoration Concerns

Describe any ER concerns that could affect facility characterization (e.g., IHSSs, PACs, UBCs): Interviewees had no knowledge of any ER concerns for the B280 Site that could affect facility characterization. In addition, Nick Demos, ER Program, does not have any IHSS, PAC or UBC concerns for any facility at the B280 Site.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

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 no HRR or WSRIC data concerning any facility at the B280 Site.

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: Site SAR, HRR, IHSS/PAC/UBC Site Maps, Listing of Present & Historical Be Locations, B130 Asbestos Inventory Library, B280 Landfill Support Engineering Drawings, Master Listing of RCRA Units, Appendix 1 of Idle Equipment With Hazardous Materials Inventory, and Appendix 1A of Idle Equipment With Non-Hazardous Materials Inventory.

23

Waste Volume Estimates and Material Types B280						
Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM	Other Waste
40, 216	120	7,384	3,190	686	Unknown	Glass 30 cu ft Floor Tile 300 cu ft Ceiling Tile 300 cu ft Insulation 4930 cu ft Mercury vapor lights 12 cu ft Sodium vapor lights 12 cu ft
Waste Volume Estimates and Material Types B281						
200	0	42	0	0	Unknown	2"-thick rigid construction fiberglass 60 cu ft PVC 20 cu ft Mercury vapor lights 3 cu ft
Waste Volume Estimates and Material Types S281						
442	0	260	346	0	Unknown	Mercury vapor lights 3 cu ft
Waste Volume Estimates and Material Types B282						
1,245	0	700	448	32	Unknown	Insulation 700 cu ft Mercury vapor lights 3 cu ft Fluorescent Lights 10 cu ft
Waste Volume Estimates and Material Types B284						
1,150	0	2,556	0	0	Unknown	Insulation 500 cu ft

Further Actions

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

Interviewees had no further actions or recommendations concerning the characterization of the B280 Landfill Support Facilities. The author of this RISS HSA Report has no further actions or recommendations concerning the characterization of the B280 Landfill Support Facilities.

Note:

This HSA was performed prior to SME walkdowns, and chemical and radiological characterization package preparations. 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.

24

Prepared By:	Bob Sheets	Bob Sheets	5/3/2001
	Print Name	Signature	Date
Reviewed By:	Gerard Kelly	G M Kelly	5/7/01
	Print Name	Signature	Date

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

Facility ID: B280 Landfill Support Facility, B281 Sanitary Landfill Leachate Valve Building, S281 Landfill Bale Storage, B282 Water Tank, B284 Landfill Storage Tank Farm
Anticipated Facility Type (1, 2, or 3): B280 = Type 1, B281 = Type 1, S281= Type 1, B282 = Type 1, B284 = 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)
Charles J. Ferg (Charley), Property Manager and Facility Manager for the B280 Landfill Facility

What time frame did the interviewee work in the facility? What was his/her function(s)?
Interviewee did not work in the facility, but has been the B280 Landfill Facility Manager for approximately 8 months. Mr. Ferg was very knowledgeable about the various items of PU&D equipment that were temporarily stored in B280 Support Facility (none of the other B280 Support facilities stored PU&D equipment) prior to release from RFETS.

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? Yes. The construction on the Building 280 Landfill Support Facility was never completed and the trash compactor/baler and conveyor have been excessed and removed. All of the equipment in the other B280 Support Facilities is still in place. S281 Facility has a covered Fire Department Emergency Shoring Trailer being stored on the slab of the storage facility. S281 has no installed equipment.

What operations/processes were conducted in the building during the interviewee's time in the facility?
None of the Landfill Facilities ever went operational. Excess equipment from PU &D was staged/stored there until it could be excessed and/or sold. Interviewee was very helpful and gave addition names of B280 Landfill knowledgeable individuals. Mr. Ferg agreed with the interview information that was given by Mr. Link of the B280 Landfill Site.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)
The trash compactor/baler and conveyor were located in the tipping floor/ loading area of B280 (these items have been excessed and removed). Other PU&D equipment items were also stored in the loading area of B280. Many equipment items were, and still are, stored in cargo containers and fenced in areas outside of B280 to the south and to the west. S281 – no installed equipment, B282 – installed valves, piping, instrumentation, etc., B282 – Water Tank, Diesel Engine/Pump Fire Suppression System for B280/282 Support Facilities, B284 Landfill Leachate Storage Tank Farm with three tanks, control panel, pump tank farm concrete berm, and alarm panel. The northeast corner is a garage and a full sized RFETS Fire Department fire truck is stored there and could be used to support the B280 Landfill Support Facilities in the event of a fire and/or could be used anywhere on Site as necessary to fight fires. The interviewee, Mr. Ferg, was very familiar with every facility (all five) at the B280 Landfill Site.

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? According to the interviewee, no known radioactive materials or equipment were ever stored in B280. However semi-tanker trailers are parked and stored outside to the northwest of B280.

26

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? According to the interviewee. no known Research & Development areas were ever located at the B280 Landfill Support Facilities.
Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where? Yes, a flatbed semi-trailer (the interviewee, Mr. Ferg said the sem-trailer was actually a semi-box trailer, not a semi-trailer flat-bed) containing sealed nitric acid drums and containers was stored in the loading area of B280 for approximately 6 days (less than 1 week). The interviewee, Mr. Ferg was not aware of any Be or PCBs being handled in any of the B280 Landfill facilities. Mr. Ferg was not knowledgeable of whether or not if the wall paints in B280 would have contained PCBs or whether they were lead-based paints were used. Mr. Ferg did not think that lead-based or PCB containing paints would have been used on the fairly new facility.
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)? The interviewee, Mr. Ferg does not feel that the power transformers in and outside B280 contain PCBs. The floors of B280 are not painted. There is no visible lead shielding in any of the B280 Landfill Support Facilities.
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? According to the interviewee, Mr. Ferg, no known radioactive material or chemical spills ever occurred in any of the B280 Landfill Support Facilities.
Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? According to the interviewee, no known spills/releases ever occurred, so cleanup/mitigation were never required.
Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Interviewee, Mr. Ferg, does not know if any additional issues, concerns or process knowledge that could affect facility characterization.

Prepared By: Bob Sheets / Bob Sheets / 5/7/2001

Print Name / Signature / Date

27

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

Facility ID: B280 Landfill Support Facility, B281 Sanitary Landfill Leachate Valve Building, S281 Landfill Bale Storage, B282 Water Tank, B284 Landfill Storage Tank Farm
Anticipated Facility Type (1, 2, or 3): B280 = Type 1, B281 = Type 1, S281= Type 1, B282 = Type 1, B284 = 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)?
Interviewee did not work in the facility, but was very knowledgeable about the various items of PU&D equipment that were temporarily stored in the B280 Support Facility (none of the other B280 support facilities stored PU&D equipment) prior to release from RFETS. Interviewee, Mr. Link, is the Radiological Engineer to sign off for Property Releases of equipment being removed from B280 Landfill.

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? Yes. The construction on the Building 280 Landfill Support Facility was never completed; and the trash compactor/baler and conveyor have been excessed and removed. All of the equipment in the other B280 Support Facilities are still in place. S281 Facility has a covered Fire Department Emergency Shoring Trailer being stored on the slab of the storage facility. S281 has no installed equipment.

What operations/processes were conducted in the building during the interviewee's time in the facility?
None of the Landfill Facilities ever went operational. Excess equipment from PU &D were staged/stored there until they could be excessed and/or sold. Interviewee signed off on the Property Release Forms of the equipment and in some cases chemicals that were moved into and out of B280.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)
The trash compactor/baler and conveyor were located in the tipping floor/ loading area of B280 (these items have been excessed and removed). Other PU&D equipment items were also stored in the loading area of B280. Many equipment items were, and still are, stored in cargo containers and fenced in areas outside of B280 to the south and to the west. The interviewee, Mr. Link, was not that familiar with the rest of the B280 Landfill Support Facilities

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? According to the interviewee, no known radioactive materials or equipment were ever stored in B280. However, interviewee, Mr. Link, was aware of the semi-tanker trailers are parked and stored outside to the northwest of B280 and two of them are labeled radioactively contaminated internally.

28

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? Interviewee, Mr. Link, had no knowledge of any Research & Development areas ever located at the B280 Landfill Support Facilities.
Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where? Yes, a flat-bed semi-trailer (it is not known if the truck was also stored inside B280) containing sealed nitric acid drums and containers was stored in the loading area of B280 for approximately 6 days (less than 1 week). Mr. Link was not familiar with whether or lead-based paints might or might not have been used; Mr. Link also did not know if any of the paints had any trace of PCBs. Mr. Link was not familiar with the other B280 Landfill facilities, only the B280 Facility where the PU&D equipment items were stored.
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)? Interviewee, Mr. Link was not aware of any asbestos containing materials, transite wall board, ceiling tiles, and floor tiles or PCB oils in B280. Mr. Link was not aware of any lead shielding at the facility.
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? According to the interviewee, no known radioactive material or chemical spills ever occurred in any of the B280 Landfill Support Facilities.
Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? According to the interviewee, no known spills/releases ever occurred, so cleanup/mitigation were never required.
Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Interviewee does not know if any additional issues, concerns or process knowledge that could affect facility characterization.

Prepared By: Bob Sheets / Bob Sheets / 5/7/2001

Print Name / Signature / Date

29

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

Facility ID: B280 Landfill Support Facility, B281 Sanitary Landfill Leachate Valve Building, S281 Landfill Bale Storage, B282 Water Tank, B284 Landfill Storage Tank Farm
Anticipated Facility Type (1, 2, or 3): B280 = Type 1, B281 = Type 1, S281= Type 1, B282 = Type 1, B284 = 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)
C. L. Guthrie (Vern),100/300/500/900 Area Manager & Landlord, Manager of Project Management, and D&D Projects Manager

What time frame did the interviewee work in the facility? What was his/her function(s)?
Interviewee did not work in the facility, but was the Manager of Project Management and oversaw the B280 Landfill Project from conceptual design through construction (from 1992-2000). Mr. Guthrie was very knowledgeable about the various items of PU&D equipment that was temporarily stored in B280 Support Facility (none of the other B280 Support facilities stored PU&D equipment) prior to release from RFETS.

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? Yes. The construction on the Building 280 Landfill Support Facility was never completed; and the trash compactor/baler and conveyor have been excessed and removed. All of the equipment in the other B280 Support Facilities are still in place. S281 Facility has a covered Fire Department Emergency Shoring Trailer being stored on the slab of the storage facility. S281 has no installed equipment.

What operations/processes were conducted in the building during the interviewee's time in the facility?
None of the Landfill Facilities ever went operational. Excess equipment from PU &D were staged/stored there until they could be excessed and/or sold. Interviewee was very helpful and gave addition names of B280 Landfill knowledgeable individuals. Mr. Guthrie agreed with the interview information that was given by Mr. Link of the B280 Landfill Site.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)
The Trash Compactor/Baler and conveyor were located in the Tipping Floor/ Loading Area of B280 (these items have been excessed and removed). Other PU&D equipment items were also stored in the Loading Area of B280. Many equipment items were, and still are, stored in cargo containers and fenced in areas outside of B280 to the south and to the west. S281 – no installed equipment, B282 – installed valves, piping, instrumentation, etc., B282 – Water Tank, Diesel Engine/Pump Fire Suppression System for B280/282 Support Facilities, B284 Landfill Storage Tank Farm with three tanks, control panel, pump tank farm concrete berm, and alarm panel. The northeast corner is a garage and a full sized RFETS Fire Department Fire Truck is stored there and could be used to support the B280 Landfill Support Facilities in the event of a fire and/or could be used anywhere on Site as necessary to fight fires.

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? According to the interviewee, no known radioactive materials or equipment items were ever stored in B280. However semi-tanker trailers are parked and stored outside to the northwest of B280 and one or two of them are labeled radioactively contaminated internally.

30

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? According to the interviewee, no known Research & Development areas were ever located at the B280 Landfill Support Facilities.
Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where? Yes, a flatbed semi-trailer containing sealed nitric acid drums and containers was stored in the Loading Area of B280 for approximately 6 days (less than 1 week). No known beryllium materials were ever stored in B280, B281, S281, B282, or B284. The power transformers in and outside B280 are the newer type and should not contain PCBs. The floors of B280 are not painted. Wall areas, doors, and doorways that are painted should not have been painted with lead-based paints or PCB containing paints. The office areas, restrooms, locker rooms that have floor tile should have the newer floor tile that does not contain asbestos.
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)? The power transformers in and outside B280 are the newer type and should not contain PCBs. The floors of B280 are not painted. Wall areas, doors, and doorways that are painted should not have been painted with lead-based paints or PCB containing paints. The office areas, restrooms, locker rooms that have floor tile should have the newer floor tile that does not contain asbestos. The wallboard, ceiling tiles, and floor tiles should be the newer type and are not expected to contain asbestos. There is no visible lead shielding in any of the B280 Landfill Support Facilities.
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? According to the interviewee, no known radioactive material or chemical spills ever occurred in any of the B280 Landfill Support Facilities.
Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? According to the interviewee, no known spills/releases ever occurred, so cleanup/mitigation would not have been required.
Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Interviewee does not know if any additional issues, concerns or process knowledge that could affect facility characterization.

Prepared By: Bob Sheets / Bob Sheets / 5/7/2001

Print Name Signature Date

31

HISTORICAL FACILITY OVERVIEW
FOR BUILDING 442W, WAREHOUSE RAD OPS/ TRAINING CENTER

Building 442W, Warehouse and RAD OPS/Training Center was constructed in 0 1984-1985. Building 442W is located south of Central Avenue at Fifth Street. Building 442L is attached facility on the west side. Building 442W is approximately 68' wide X 86' long X '20 high at the eave and 24' high at the roof peak. Building 442W accounts for approximately 5754 square feet of floor space. Building 442W is constructed from corrugated metal sandwiched over insulation. The corrugated metal walls and corrugated metal roof are attached to steel I-beam supports. The roof has galvanized metal rain gutters with ten 21-foot long galvanized rain down spouts. The metal roof of Building 452W has 15 lightning-arresting rods all around the roof perimeter. Building 442W in constructed on steel reinforced concrete wall/footings that extent approximately 6' below grade; a concrete slab floor has been poured approximately 3' to 5' above the ground depending on the grade. Lead-based paints, which may have contained trace amounts of PCBs, may have been used during the construction of this facility. Also asbestos may have been used during the construction of Building 442W. The four partitioned rooms/offices, inside the Building 442W Warehouse, have dropped, acoustical tile ceilings, which have been insulated from the rest of the warehouse.

Utilities for Building 442W include electricity, steam supply, condensate return, overhead steam heaters, and a Plant Fire Sprinkler System and Fire Alarm System. The four partitioned rooms/offices each have dedicated refrigerated air conditioning units setting on their insulated roofs directly above each ceiling. Building 442W has a power transformer, which is new enough it should not contain PCBs.

Building 442W was originally constructed as a Plant HEPA Filter Warehouse and the facility is still used for that. Building 452W also stores many other related supplies such as pre-filters for the HEPA Filters, gaskets, silicone vacuum sealing grease, etc. There are some vacuum cleaners, vacuum cleaner hose, a couple of new process tanks, and one portable glovebox presumably for some kind of glovebox training probably for the group located in Building 442L.

Dioctylphthalate (DOP) chemical (a suspect carcinogen or cancer-causing substance) was used for HEPA filter and respirator filter testing in Building 442L was probably stored in Building 442W. It is not known of other chemicals were used or stored in Building 442W. The soils or land where Building 442W is constructed sits or IHSS/PACs 400-7 and 400-157.1. There is no information that indicates any radioactive materials were ever stored in Building 442W. Building 442W has a classroom training that is used for Waste Generator Training and Certification. Building 452 also has a couple areas that are used for Waste Generator hands-on training. Building 442L is presently configured and used as a HEPA Warehouse, Waste Generator and other miscellaneous training and certification.

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

Facility ID: Building 442W
Facility Type (1, 2, or 3): Type 2

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)
Jan K. Fretthold, Senior Principal Engineer, X8239, P-212-5234, B130, Cubicle 225, K-H, in charge of testing and certification of HEPA filters in B442L and storing the certified HEPA filters in Building 442W

What time frame did the interviewee work in the facility?
From 1994 until 2000 the interviewee worked as the Senior Principal Engineer in charge of testing/certification of HEPA filters in B442L. Interviewee revealed that B442L originally was built as a Plant laundry facility. The facility was then converted to HEPA testing/certification facility. Interviewee then stated B442W was constructed to become a warehouse for HEPA filters to be tested and certified. The warehouse also stored filters after testing/certification.

Has the building configuration changed since you worked in the building? Yes. If so, in what way? B442L was stripped of all Plant laundry equipment and HEPA filter testing and certification equipment was installed. The facility operated a number of years as the Plant's HEPA filter testing and certification facility. The HEPA filter testing/certification equipment was then stripped out and glovebox, tank, hood, and tent training equipment was then installed. B442W was constructed and attached to the east end of ~~B772L~~ B442L. B442W currently is a storage warehouse for HEPA filters and related supplies/equipment. B442W is also a Training Center of Waste Generator Qualification.

What types of equipment were in the building during the interviewee's time in the facility? The HEPA filter equipment described above and the filters and related equipment was stored on warehouse shelves and storage racks in B442W.

Where was the equipment located? (specific rooms/areas) Room 105 and Office 1, 2, and Office 3. (Offices 1, 2, and Office 3 are located in Room 105) Other training classrooms are located on the north and east walls of Room 105, within B442W.

Were any radioactive materials or equipment handled in the building? No, but radioactively contaminated clothing was laundered in the facility when it was the Plant Laundry Facility (attached to the west side of B442W). If so, what types and where? Radioactively contaminated clothing was washed/processed throughout B442L, which is attached to the west side of ~~B772W~~ B442W. Washed clothing from B442L may have been stored in B442W. No known other radioactive materials were ever handled in 442W

Were any chemicals (e.g., Asbestos, Beryllium, Lead, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? No, none. If so, what types and where? Asbestos insulation materials were used during the construction of B442W. Power transformers in B442L may have contained PCBs. Lead-based paints may have been used during construction and maintenance of B442W. The paints may have contained PCBs as well.

Did any spills or uncontrolled release of radioactive materials or chemicals occur while you worked in the building? No, none. If so, what types and where?. N/A, none.

Were these spills/releases cleaned up? N/A If so, how were cleaned up? No known spills ever occurred in B442W.

Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Yes, B442W falls under building contamination, UBC-442, because it is attached to B442L. Building 442W also sits on IHSS/PACs 400-7 and 400-157.1.

Prepared By: Bob Sheets / Bob Sheets / 3/6/2001
Print Name / Signature / Date

33

HISTORICAL FACILITY OVERVIEW
FOR OFFICE TRAILER T- 551A

This trailer was constructed/assembled at this site, Central Avenue and Sixth Street, directly west of Building 551, in1989. The size of this trailer is approximately 48' wide X 70' long and it is assembled from 4 trailer units of approximately 12' wide X 70' long. There are four doors leading into this trailer, two on the north, one on the south, and one on the east leading into Building 551. All of the entry doors are covered; the entry covers range in size from 4' X 4' to 4' X 8'. The siding and the skirting, which is approximately 28" high, around the bottom of the trailer are enamel on aluminum. Structurally the trailer is sound both inside and outside. The tie-down method for the unit is unknown because the trailer skirting covers the footing/foundation. The interior outside walls are wood paneling over insulation, the interior partition walls are wood paneling on stud framing, and the floor is carpet and vinyl-type floor tile on wood. The ceiling is a drop type with acoustical tile 4' X 12-foot panels. Three doors on this trailer office facility have cipher locks on them, the fourth door, the one leading into Building 551, has a key lock which prevents T-551A personnel from going into Building 551 when it is locked.

The trailer's Conference Room was used daily by Contractors for their POD/Pre-Evolution Briefing Meetings. Originally T-551A was installed as Contractor Offices with a War Room type large Conference Room; the trailer was also originally used by Contractor New Hires while awaiting training, clearances, jobs to start, etc. The trailer has Men and Women restroom facilities. The trailer contains approximately 80 lockers, seven hard wall offices, two office cubicles, and a large open area for a Conference Room that was also used for a break area. The utilities for this trailer consist of electric heat pumps (4 total) for both heating and air conditioning and there is an auxiliary air conditioner unit on the south wall. T-551A is connected to the Plant Fire Sprinkler System.

There are no engineering drawings for this trailer. A room layout sketch for this unit is available. Radiological surveys may have been done, but the old data is not available. This trailer will have to be resurveyed to meet present standards for unrestricted release. There is no reason to believe that radioactive materials were ever stored in this office facility. The Plant stopped the use of lead based paint in1989, this trailer, if painted before this date, may have been painted with lead-based paint. The paint may also contain trace amounts of PCBs. The T-551A Trailer is hooked to the Plant PA System. The T-551A Trailer sits on IHSS #500-158 area land. No asbestos characterization data exists for the T-551A Unit, but the office trailer is old enough asbestos may have been used during its construction/assembly. No known chemicals, other than janitorial cleaning chemicals, were ever stored in this trailer. No WSRIC has been done on this trailer. There are no Plant Action Tracking System items outstanding on this trailer.

D&D Facility Characterization Interview Checklist

ID No.: T-551A

Date: 05/27/99

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-551A, Group B Type 1 Facility, Trailer Office Building

Personnel Interviewed (Name & Title/Function) Joe D. Rivera, X2177, P212-3636, T-551A, RFCSS/Safety

-- 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? ..... Y**

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. This unit will have to be resurveyed to meet present standards for unrestricted release. Y** **The T-551A Trailer is sitting on IHSS #500-158 area land, as per,** Nick Demos, ER Characterization/HRR Manager, X4605, Therefore, the T-551A land/soils has CERCLA concerns. Engineering drawings, as-builts, do not exist for the T-551A facility, but a Facility Planning sketch does exist. The Plant quit using lead based paints for office buildings in 1989, if this office facility was painted prior to 1989, lead based paints may have been used.

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 N* No 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: J. R. Sheets / J.R. Sheets / 05/24/99

Print Name / Signature / Interview Date

35

ID No.: T -551A

Date: 05/27/99

Groups B & C Series

D&D Facility Characterization – Interview Checklist

What timeframe did the interviewee work in the facility? From 1997 until the present (for approximately 18 months).

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

No, the facility is still an office building.

What types of equipment were in the building during the interviewee's time there?
Refrigerator, computer, printer, other office equipment such as desks, 12 chairs, 3 tables, bookcases, 8 file cabinets, 3 document safes, etc. Approximately 80 employee lockers are in this facility. There are 4 conference room type tables in this facility.

Where was the equipment located? (specific rooms/areas) In the conference room, the hard wall offices, and at either end of the trailer. The refrigerator, full size is sitting against the east wall of T-551A. The employee lockers are in the large open area, in the Men's Rest Room, and in the Women's Rest Room.

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: J. R. Sheets / J R Sheets / 05/24/99

Print Name / Signature / Interview Date

36

D&D RISS Facility Characterization
Historical Site Assessment Report

Facility ID: Office Trailers T-886B and T-886C
Anticipated Facility Type (1, 2, or 3): T-886B = Type 1, T-886C = 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

T-886B is a general office trailer and was purchased and installed in 1991. This modular trailer is approximately 75' wide X 80' long X 14' high, with approximately 6000 square feet of floor space. The exterior is corrugated metal siding with a 3' high corrugated metal skirting (which is included in the 14' height). This office trailer has a corrugated metal roof that is slightly peaked east to west with drainage to the north and south. This trailer has a total of four entrances, two entrances on the east side of the trailer and two entrances on the west side of the trailer. The two entrances on the west side and one entrance on the east side are constructed of wooden steps and a 5' X 5' deck leading to the entry door; the other east entrance has an U-shaped handicapped ramp approximately 4.5' wide X 70' long, with a 5' x 5' deck leading to the entry door. All four T-886B entries have a wood-constructed weather enclosure.

The interior is primarily a cubical layout, but has a few hard walled offices, a telecommunications room, a Men's Restroom, a Women's Restroom, and a conference room. Interior walls are paper-covered wallboard on metal studs. The ceiling is a drop ceiling with 2' X 4' acoustical tiles and recessed lights. The floor is primarily covered with carpeting except in the restrooms, which are covered with vinyl tile. The door jams in this office trailer are painted a light brown, and the metal trim on the office cubicle divider walls is painted a cream or beige color. Based on the age of the trailer, these paints should not contain lead or PCBs.

T-886B has electrical heat and electrical air conditioning. The fire suppression system is overhead sprinkler system with hand-held fire extinguishers in some areas. The overhead sprinkler system has a flow alarm, which will alarm at the Plant Fire Department. This trailer is connected to the Plant water system and the Plant sanitary system. Engineering Drawings for T-886B could not be found, but floor plan layout sketches are attached.

T-886C is an approximately 2000 square foot double-wide trailer, which was purchased and installed in 1991 and always used as a general office trailer. This trailer is approximately 30' wide X 70' long X 14' high. The exterior of the trailer has corrugated metal siding with a 3' corrugated metal skirting (which is included in the 14' height).). This office trailer has a corrugated metal roof that is slightly peaked east to west with drainage to the north and south. T-886C has two entrances on the south side of the structure. One entrance has wooden steps and a 4 ' X 4' deck leading to the entry door. The other entrance has a wooden handicapped ramp approximately 4.5' wide X 40' long connected to a 4' X 4' deck leading to the entry door. Both T-886C entrances have a wood-constructed weather enclosure.

The interior walls are vinyl-covered wallboard with metal studs. The ceiling is a drop ceiling with 2' X 4' acoustical tiles and recessed lights. The floors are carpeted. The door jams in this office trailer are painted a light brown and the metal trim on the office cubicle divider walls is painted a cream or beige color. Based on the age of the trailer, these paints should not contain lead or PCBs.

T-886C has electrical heat and electrical air conditioning. T-886C is not connected to the Plant water or sanitary systems. Fire protection is provided by hand held fire extinguishers. Engineering Drawings for T-886C could not be found, but floor plan layout sketches are attached.

Historical Operations

Office Trailers T-886B and T-886C have been used from March 1991 until the present as office trailers.
T-886B has historically been used as a general office trailer and currently houses Criticality Engineering. T-886C Office Trailer currently houses Nuclear Safety and 800 Area D&D management support personnel. These office trailers had no known radiological or hazardous operations.

37

D&D RISS Facility Characterization
Historical Site Assessment Report

Current Operational Status

Office Trailers T-886B and T-886C are fully operational and have always been used as office facilities. T-886B and T-886C do not have WSRICs, and they do not have any tanks or areas on the Master Listing of RCRA Units. T-886B and T-886C are not on the List of Known Be Areas. T-886B and T-886C do not have any radiological postings. T-886B and T-886C do not have any asbestos postings on the entrance doors or anywhere within the office facilities. T-886B and T-886C do not have any Be postings on the entrance doors or anywhere within the office facilities.

Contaminants of Concern

Asbestos

Describe any potential, likely, or known sources of Asbestos: T-886B and T-886C have no known or suspected sources of asbestos. Trailers T-886B and T-886C were purchased new in March 1991 and should not have any ACM in wallboard material, floor tile material, or in ceiling tile materials. No known asbestos surveys exist.

The asbestos SME may want to verify if there is any ACM in the two office facilities.

Beryllium (Be)

Describe any potential, likely, or known Be production or storage locations: There is no SAR for Office Trailers T-886B and T-886C. There is no WSRIC for Trailers T-886B and T886C. There are not any postings referring to Be areas anywhere on or in Trailers T-886B and T-886C. Interviewees said that they had no knowledge of any Be being anywhere in either Trailer T-886B or T-886C. Trailers T-886B and T-886C do not appear on the List of Known Present or Historical Be Areas.

The Be characterization SME may want to sample to verify that Be does not exist in Trailers T-886B and T-886C

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

Summarize any recent Be sampling results: None of the people interviewed knew of any Be sampling that was ever conducted in the Trailers T-886B and T-886C. The Building 130 Industrial Hygiene Database for Be sampling at RFETS does not have any analytical information for Trailers T-886B and T-886C.

Refer to Characterization Package and RLC/PDSR.

Lead

Describe any potential, likely, or known sources of Lead (e.g., paint, shielding, etc.):
Office Trailers T-886B and T-886C were purchased and installed in March 1991; therefore, lead-based paints are not expected to have been used. There is no lead shielding (no need for it) anywhere in Trailers T-886B and T-886C. Lead solder may have been used in electrical connections in Trailers T-886B and T-886C.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

38

D&D RISS Facility Characterization
Historical Site Assessment Report

RCRA/CERCLA Constituents

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

There are no known sources of RCRA/CERCLA constituents, chemical, or waste storage in Trailers T-886B and T-886C. A WSRIC was never written for Trailers T-886B and T-886C.

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

There is no interview or other information to indicate that there were any spills in Trailers T-886B or T-886C.

Describe methods in which spills were mitigated, if any:

There are no known spills that have occurred in Trailers T-886B or T-886C. Trailers T-886B and T-886C do not have equipment that is listed in the Appendix 1 – Idle Equipment With Hazardous Materials Inventory. Trailers T-886B and T-886C do not have equipment that is listed in the Appendix 1A – Idle Equipment With Non-Hazardous Materials Inventory. There is no information in the Site HRR concerning Trailers T-886B or T-886C.

PCBs

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

Light ballasts and paints used in T-886B and T-886C should not contain PCBs because these office facilities were purchased and installed in 1991. Based on the Plant Power Equipment Records, the transformer located outside of these office facilities is the dry-type transformer, and therefore, never contained 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 was never required.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

39

D&D RISS Facility Characterization
Historical Site Assessment Report

Radiological Contaminants

Describe any potential, likely, or known radiological production or storage locations:
Interviewees had no knowledge of any radiological production or storage areas in T-886B and T-886C.

Describe any potential, likely, or known spill locations (e.g., known leaking sealed radioactive sources, leaking waste drums, potentially contaminated drains, etc.):
Interviewees had no knowledge of any radioactive materials of any kind stored in T-886B and T-886C; therefore the likelihood of a spill was non-existent.

Describe methods in which spills were mitigated, if any: NA. Interviewees had no knowledge of any radioactive materials of any kind used or stored or spilled in T-886B and T-886C, therefore, spill mitigation was never required.

Describe any potential, likely, or known isotopes of concern (e.g., weapons grade plutonium, uranium isotopes, pure beta emitters, mixed fission products, etc.):
NA. Interviewees had no knowledge of any radioactive materials of any kind used or stored in T-886B and T-886C.

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.):
NA. Interviewees had no knowledge of any radioactive materials of any kind used or stored in T-886B and T-886C.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

Environmental Restoration Concerns

Describe any ER concerns that could affect facility characterization (e.g., IHSSs, PACs, UBCs):
Interviewees had no knowledge of any ER concerns for T-886B and T-886C that could affect facility characterization. In addition, Nick Demos, ER Program does not have any IHSS, PAC or UBC concerns for T-886B and T886C. No IHSSs, PACs, or UBCs are located near the trailers.

Note: SME should evaluate and/or verify this information during the RLC/PDS process. SME may need to review additional documentation and perform additional interviews.

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.):

See Jerry E. Hick's HSA Interview Checklist for his concerns about mice infestation in T-886B and the potential for Hantavirus disease exposure to characterization and/or D&D workers.

See Arthur R. Stithem's HSA Interview Checklist for his concerns about the potential for uranium contamination from worker's clothing that visited T-886B during the time he was a resident in the office trailer (1993-1995).

40

D&D RISS Facility Characterization
Historical Site Assessment Report

References:
Provide all sources of information utilized to gather data for facility history (e.g., documents, files, and interviews). Attach all applicable supporting documentation:
Site SAR, HRR, IHSS/PAC/UBC Site Maps, Listing of Present & Historical Be Locations, B130 Asbestos Inventory Library, Master Listing of RCRA Units, Appendix 1 of Idle Equipment With Hazardous Materials Inventory, and Appendix 1A of Idle Equipment With Non-Hazardous Materials Inventory.

Waste Volume Estimates and Material Types

Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM	Other Waste
147	923	704	4869	6720	Unknown	Insulation 6480 cu ft

Further Actions
Recommend any further actions, if any (e.g., characterization, decontamination, special handling, etc.):
None

Note:
This HSA was performed prior to SME walkdowns, and chemical and radiological characterization package preparations. 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.
Special Note: Office Trailers T-886B and T-886C, after they are empty (office equipment, etc. removed), would be expected to be put up for bid and sold; the only waste categories expected would be the concrete and wood (wood entrance steps, landings, coverings, handicap ramps, etc.).

Prepared By: Bob Sheets / Bob Sheets / 6/4/2001
Print Name / Signature / Date

Reviewed By: Gerard Kelly / Gerard Kelly / 6/4/01
Print Name / Signature / Date

41

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

Facility ID: T-886C, Office Trailer
Anticipated Facility Type (1, 2, or 3): T-886C = 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)
C. L. Guthrie (Vern), 100/300/500/900 Area Manager & Landlord, Manager of Project Management, and D&D Projects Manager

What time frame did the interviewee work in the facility? What was his/her function(s)?
Mr. Guthrie has worked in T-886C for approximately 4 months. Mr. Guthrie is 100/300/500/900 Area Manager and Landlord. Mr. Guthrie is also a D&D Projects Manager.

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. Guthrie said no, the configuration of T-886C has not changed, and he was not aware of any historical renovations.

What operations/processes were conducted in the building during the interviewee's time in the facility?
Mr. Guthrie said T-886C has no operations/processes, only D&D Projects Management and Nuclear Safety Engineering functions are performed in the facility.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)
Mr. Guthrie said that only office equipment, such as computers, desks, chairs, a copy machine, a fax machine, etc. are used in T-886C. Mr. Guthrie said T-886C does not have domestic water or restroom facilities. Mr. Guthrie said T-886C has two hard-wall offices, a hard-wall telecommunications/copier room, and several office cubicles, most of which contain an office desk/chair and a computer.

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. Guthrie said that he did not believe any radioactive materials or equipment had ever been in T-886C. Mr. Guthrie said that he was not aware of any sealed radioactive sources ever being in T-886C.

Were there any Research & Development area (past or present) located in the facility or area? If so, where?
Mr. Guthrie said he was not aware of any Research & Development areas that were ever located in T-886C.

Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where? Mr. Guthrie said that only copier and cleaning supplies have been in T-886C since he has occupied the facility. Mr. Guthrie said he was not aware of any Be, RCRA/CERCLA constituents, or PCBs that were ever in T-886C office trailer. Mr. Guthrie said that the lighting ballasts potentially could contain PCBs, but he did not believe so.

42

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

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. Guthrie said that T-886C does not have floor tile, only carpeting on all the floor areas. Mr. Guthrie said he did not believe T-886C contained any ACM in the wallboard or ceiling tiles. Mr. Guthrie said there is no equipment containing PCB oils or any other chemical hazards that he is aware of. Mr. Guthrie said there is no lead shielding in T-886C. Mr. Guthrie said that the painted areas such as door jams and office cubicle wall trim were probably not painted with lead-based paints because the office trailer is fairly new.
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? According to Mr. Guthrie, no known radioactive material or chemical spills ever occurred in T-886C.
Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? According to the interviewee, no known spills/releases ever occurred, so cleanup/mitigation would not have been required.
Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Interviewee does not know if any additional issues, concerns or process knowledge that could affect facility characterization.

Prepared By: Bob Sheets / Bob Sheets / 5/29/2001

Print Name / Signature / Date

43

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

Facility ID: Trailer T-886C, Office Trailer

Anticipated Facility Type (1, 2, or 3): T-886C = 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)
Sharon K. Watson, Document Control Administrator, performs Controlled Distribution of Plant Safety Documents

What time frame did the interviewee work in the facility? What was his/her function(s)?
Ms Watson worked in Trailer T-886C from March 1991 until September 2000. Ms Watson performs Controlled Distribution of Plant Safety Documents

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? No, Ms Watson said that Office Trailer T-886C have always been used as such. Ms. Watson said that T-886C has no restrooms or running water. Ms Watson said that T-886C had to be rewired because of electrical breaker problems shortly after the new trailer was occupied in 1991. T-886C does not have a Plant Fire Sprinkler System or Fire Alarm System, but the facility does have a LSDW System. T-886C has two fire extinguishers available for trailer residents and/or Plant Fire Department use.

What operations/processes were conducted in the building during the interviewee's time in the facility?
Ms Watson said T-886C has been an office facility since it was new in March 1991. Only office type functions were performed in T-886C. No operations or processes were ever performed in the facility.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)
Ms Watson said T-886C contains only office equipment, furniture, computers, desks, chairs, a fax machine, a copy machine, etc.

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 Watson has no knowledge of radioactive materials of any kind ever being in T-886C.

Were there any Research & Development area (past or present) located in the facility or area? If so, where?
Ms Watson said she was not aware of any R&D areas ever located in T-886C.

Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where? Ms Watson said that she had no knowledge of any Be, or RCRA/CERCLA constituents ever being in the office trailer. Ms Watson said that the lighting ballasts in both T-886C may contain PCBs, even though it was purchased and installed in 1991, the lighting ballasts may have been much older. Ms Watson said that no chemicals were ever stored in T-886C, except the items for the photocopiers (toner, developer, etc.) for which the trailer had Material Safety Data Sheets.

44

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

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 Watson said Trailer T-886C may contain ACM materials in the wallboard, ceiling tiles, and floor tiles. Ms Watson said she does not believe that any equipment or power transformers in T-886C contain PCB oils. Ms Watson was not aware of any lead shielding in T-886C. Ms Watson said T-886C was purchased new in March 1991 and lead-based paints should not have been used to paint any of the office areas.
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 Watson said she had no knowledge of any chemical or radioactive spills of any kind ever occurring in T-886C.
Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? Ms Watson had no knowledge of spills in T-886C; therefore mitigation was not required.
Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Ms Watson had no other knowledge that may affect facility characterization.

Prepared By: Bob Sheets / Bob Sheets / 5/29/2001

Print Name Signature Date

45

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

Facility ID: T-886B Office Trailer

Anticipated Facility Type (1, 2, or 3): T-886B = 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)
Arthur R. Stithem, Nuclear Safety Engineer, Nuclear Safety Analysis Support

What time frame did the interviewee work in the facility? What was his/her function(s)?
Mr. Stithem has worked in T-886B from March 1993 until November 1995. Mr. Stithem's function is Nuclear Safety Analysis Engineering Support (theoretical) for all buildings on Plant Site that work with radioactive materials.

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. Stithem said that he did not remember any configuration changes in T-886B Office Trailer.

What operations/processes were conducted in the building during the interviewee's time in the facility?
Mr. Stithem said that no operations or processes were ever performed in T-886B, only criticality engineering work, nuclear safety analysis work, and meetings related to these types of work.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)
Mr. Stithem said the equipment used in T-886B included miscellaneous office equipment, desks, office furniture, computers, chairs, a fax machine, and a copy machine. Mr. Stithem said T-886B is equipped with an overhead fire suppression/sprinkler system that is hooked up to the Plant Fire Department Flow 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?
Mr. Stithem said that to the best of his knowledge, no radioactive materials or sources of any kind were ever in T-886B. Mr. Stithem said he has no knowledge that radioactive contamination was brought in from a radioactively contaminated facilities on Site, such as Buildings 881, 883 and 886, but has concerns that it potentially could have happened. If any contamination was present, Mr. Stithem felt it probably would be uranium contamination potentially brought in on worker's clothing from a contaminated area in one of these buildings.

Were there any Research & Development area (past or present) located in the facility or area? If so, where?
Mr. Stithem said that to his knowledge only Criticality Engineering and Nuclear Safety work and functions were all that was ever performed in Office Trailer T-886B. Mr. Stithem said he was not aware of any R&D areas ever located in either office trailer.

Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where? Mr. Stithem said that the only chemicals he was aware of were cleaning chemicals. Mr. Stithem said he did not believe that the lighting ballasts contained PCBs because it was a newer office trailer.

46

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

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. Stithem said that he did not believe T-886B contained any ACM materials in the wallboard, ceiling tiles, and floor tiles.
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. Stithem said he did not believe that T-886B ever had any chemical or radioactive spills of any kind.
Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? Mr. Stithem said he did not believe that T-886B ever had any chemical or radioactive spills of any kind; therefore cleanup or mitigation would not have been necessary.
Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Mr. Stithem said that he felt that the potential uranium contamination should be thoroughly investigated because, workers from contaminated areas were in T-886B Office trailer almost daily during his two years plus in the facility.

Prepared By: Bob Sheets / Bob Sheets / 5/29/2001

Print Name Signature Date

47

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

Facility ID: Trailers T-886B Office Trailer

Anticipated Facility Type (1, 2, or 3): T-886B = 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)
Jerry E. Hicks, Criticality Engineer, Criticality Engineering Support

What time frame did the interviewee work in the facility? What was his/her function(s)?
Mr. Hicks has worked in T-886B from 1995 until the present. Mr. Hicks' function is Criticality Engineering Support for all buildings on Plant Site that work with radioactive materials.

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. Hicks said that the configuration changes in T-886B were only some minor office cubicle changes.

What operations/processes were conducted in the building during the interviewee's time in the facility?
Mr. Hicks said that no operations or processes were ever performed in T-886B, only criticality engineering work and meetings related to that type of work.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)
Mr. Hicks said the equipment used in T-886B is what you see including miscellaneous office equipment, desks, office furniture, computers, chairs, a fax machine, and a copy machine. Mr. Hicks said T-886B is equipped with an overhead fire suppression/sprinkler system that is hooked up to the Plant Fire Department Flow 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?
Mr. Hicks said that to the best of his knowledge, no radioactive materials of any kind were ever in T-886B. To Mr. Hick's knowledge, no radioactive sources were ever used or stored in T-886B. Mr. Hicks said he was not aware of any radioactive contamination being brought in from another radioactively contaminated facility on Site, such as Buildings 881, 883, 886, 707, 771, 371, and/or 776.

Were there any Research & Development area (past or present) located in the facility or area? If so, where?
Mr. Hicks said he was not aware of any R&D areas ever located in either office trailer. Mr. Hicks said that to his knowledge only Criticality Engineering and Nuclear Safety work and functions were all that was ever performed in Office Trailer T-886B.

Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where? Mr. Hicks said that he had no information to indicate that Be, or RCRA/CERCLA constituents were ever in T-886B. Mr. Hicks said that as new (1991-purchase date) as T-886B was, he did not believe that the lighting ballasts contained PCBs.

48

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

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. Hicks said that as new (1991 purchase date) as T-886B was, he did not believe that it contains ACM materials in the wallboard, ceiling tiles, and floor tiles.
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. Hicks said he did not believe that T-886B ever had any chemical or radioactive spills of any kind.
Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? Mr. Hicks said he did not believe that T-886B ever had any chemical or radioactive spills of any kind; therefore cleanup or mitigation would not be necessary.
Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Mr. Hicks said that T-886B has mice and potentially Hantivirus might be a problem when the facility is characterized and/or is taken apart for removal from the Plant.

Prepared By: Bob Sheets / Bob Sheets / 5/29/2001

Print Name Signature Date

49

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

Facility ID: Trailers T-886B and T-886C, Office Trailers

Anticipated Facility Type (1, 2, or 3): T-886B = Type 1, T-886C = 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)?
Mr. Link has never worked in Trailers T-886B and T-886C. Mr. Link thought that offices-trailers were installed in approximately 1985, however, this is inaccurate; the Projects Facility list shows 1991. Mr. Link supports various groups throughout the Plant Site in the area of Radiological Support.

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 Office Trailers T-886B and T-886C have always been used as office trailers. Mr. Link was not aware of any trailer renovations.

What operations/processes were conducted in the building during the interviewee's time in the facility?
Mr. Link said the two trailers have always been office facilities.

What types of equipment were used, and where was the equipment located? (specific rooms/areas)
Mr. Link said the trailers contain only office equipment, desks, office furniture, computers, chairs, a fax machine, and a copy machine.

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 said that to the best of his knowledge, no radioactive materials of any kind were ever in either office trailer.

Were there any Research & Development area (past or present) located in the facility or area? If so, where?
Mr. Link said he was not aware of any R&D areas ever located in either office trailer.

Were any chemicals (e.g., Beryllium, RCRA/CERCLA Constituents, PCBs, etc.) handled in the building? If so, what types and where? Mr. Link said that he had no information to indicate that Be, or RCRA/CERCLA constituents were ever in either office trailer. Mr. Link said that the lighting ballasts in both T-886B and T-886C may contain PCBs.

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 said Trailers T-886B and T-886C may contain ACM materials in the wallboard, ceiling tiles, and floor tiles. Mr. Link said he did not know if any lead-based paints were used in Trailers T-886B and T-886C. Mr. Link said he does not believe that any equipment or power transformers in either trailer contain PCB oils. Mr. Link said that he did not know of any chemical hazards in either office trailer.

50

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

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 said he did not believe that the offices-trailers ever had any chemical or radioactive spills of any kind.
Were these spills/releases cleaned up or mitigated? If so, how, and to what extent? N/A
Do you know of any additional issues, concerns, or process knowledge that could affect facility characterization? Mr. Link said he was not aware of any IHSSs or PACs near either office-trailer

Prepared By: Bob Sheets / Bob Sheets / 6/4/2001

Print Name Signature Date

51

HISTORICAL FACILITY OVERVIEW
FOR TRAILER T-900D

Trailer T-900D is designated as OU-2 Office Trailer/Surface Water Treatment on the Closure Projects Facility List. OU-2, was the former Operable Unit 2 for Surface Water Treatment which is located to the east and north/south of T-900D. Trailer T-900D was placed in service, at its present location in 1990 (the office trailer appears to be older, but the actual age is unknown), which is approximately 25 yards north of the Central Avenue and east of the Northeast Perimeter Road, outside the Plant Perimeter Fence. This trailer is approximately 60' long, 10' wide and 9 high with a 2' skirt, which is mostly, corrugated metal, but approximately 40' of the trailer skirt on the north side is plywood. T-900D has approximately 600 square feet of office area. There are two entrances to the trailer, both on the south side. The entrances have wooden steps leading up to the entrance doors. T-900D has corrugated metal siding and a slightly rounded metal covered roof. The interior consists of three rooms, an office on the east and west ends, a large center room for offices and/or a large conference or meeting room. The interior walls are wood paneling over insulation. The ceiling is made from 4' X 10' acoustical tile panels over roof insulation. The entire floor T-900D is plywood covered with linoleum.

The tie-down method for T-900D is six 10' long X 1.5' wide X 3' high concrete road barriers, two at each end and two at the center of the facility with steel cables tied to the trailer frame at the six different locations. Utilities for T-900D include a heating and cooling unit mounted outside on the east wall. The office trailer, T-900D, has its own dedicated power transformer mounted outside on the trailer tongue.

Radiological surveys may have done on T-900D in the past, but this data is not available. The office facility appears to be old enough that it may contain asbestos insulating materials. Due to the age of the office facility lead-based paints may have been used and the paints may contain trace amounts of PCBs. Various chemicals, used for preserving samples, were stored in this field/operations office trailer. Rad sources used for instrument calibration were also stored in T-900D. The samples stored in this field/operations office trailer were low-level radioactive water and soil samples. There is a WISRIC, Process OUOPSXX-02, PADC-1996-01782, for the area/land where T-900D is located. There are no Plant Action Tracking System items outstanding for T-900D.

Office Trailer T-900D currently has electric power and is heated, but it does not appear to have any occupants. T-900D has 15 4-foot fluorescent lighting fixtures; the ballasts in the lighting fixtures may contain PCBs. The facility still has 1 phone, two fire extinguishers, 3 desks, 2 tables, and one sample-analyzing computer. Currently T-900D appears to be used as a bottled water station, as there is a collection of approximately 25 empty water bottles stacked on the south wall.

52

ATTACHMENT C

Radiological Characterization Packages

Rocky Flats Environmental Technology Site

RADIOLOGICAL CHARACTERIZATION PACKAGE

GROUP 6 (280 AREA & T900D) CLOSURE PROJECT

REVISION 0

May 7, 2001

Prepared by: _____ 5/3/01
Jay Britten / Radiological Engineer — Date

Reviewed by: _____ 5/3/01
Duane Parsons / Facility Characterization Coordinator — Date

Reviewed by: _____ 5/3/01
Steve Luker / Quality Assurance — Date

Approved by: _____ 5/8/01
Vern Guthrie / Closure Project Facility Manager — Date

54

Radiological Characterization Package
Group 6 (B280, B281, S281, B282, 284 Tank Slab, & T900D)

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols(07/26/00), and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities (02/14/01).
* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s).
11. All radiological surveys shall be conducted in accordance with the sampling and instruction forms included in Group 6 (280 Area) Package Identification numbers 01-0019, 01-0020, and 01-0021. Sample locations are denoted on scaled maps attached to each survey package.

Class 1 Areas

Survey Area	Survey Unit	Class	Description	Total m²	Floor m²	Scan m²	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 1 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Class 1 Totals	0	0	0	0	0	0	

55

Radiological Characterization Package
Group 6 (B280, B281, S281, B282, 284 Tank Slab, & T900D)

Class 2 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 2 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Class 2 Totals	0	0	0	0	0	0	

5/6

Radiological Characterization Package
Group 6 (B280, B281, S281, B282, 284 Tank Slab, & T900D)

Class 3 Areas

Survey Area	Survey Unit	Class	Description	Total m²	Floor m²	Scan m²	FSA	Smears	Media	Class Justification
A	GR6-A-001	3	Interiors of B280, B281, S281, B282, & associated exterior sidewalks and pads	3372	1187	338	**18-random 42-biased 3-QC**	**18-random 42-biased**	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination. Additional biased measurements have been prescibed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
A	GR6-B-002	3	Exteriors of B280, B281, S281, B282, & 284 Tank Slab	1002	883	101	**15-random 25-biased 2-QC**	**15-random 25-biased**	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination. Additional biased measurements have been prescibed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
B	GR6-C-003	3	Interior and Exterior of T900D	415	46	42	**15-random 15-biased 2-QC**	**15-random 15-biased**	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment of this unit provides a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination. Additional biased measurements have been prescibed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
			Class 3 Totals	**4789**	**2116**	**481**	**130**	**130**	**0**	
All Class Areas			**All Class Totals**	**4789**	**2116**	**481**	**130**	**130**	**0**	

57

Radiological Characterization Package
Group 6 (B280, B281, S281, B282, 284 Tank Slab, & T900D)

Non-Impacted Areas

Survey Area	Survey Unit	Class	Description	Total m²	Floor m²	Scan m²	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Non-Impacted Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Non-Impacted Totals	0	0	0	0	0	0	

58

Rocky Flats Environmental Technology Site

RADIOLOGICAL CHARACTERIZATION PACKAGE

GROUP 5 CLOSURE PROJECT

REVISION 0

March 6, 2001

Prepared by: Jay M. Britten / Jay M Britten 3/5/01.
Radiological Engineer

Reviewed by: Duane Parsons / 3/5/01.
RISS Facility Characterization Coordinator

Reviewed by: Steve Luker / 3/5/01.
Quality Assurance

Approved by: Vern Guthrie / 3/7/01.
Closure Project Facility Manager

59

Radiological Characterization Package
Group 5 (442W, 442L, T551A)

Building:	442L&W, T551A	Last Updated:	Date:	3/5/01	Time:	900	Initials:	JMB

- This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols (07/26/00), and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities (02/14/01).
- PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s).
11. All radiological surveys shall be conducted in accordance with the sampling and instruction forms included in Group 5 Package Identification numbers 01-0009, 01-0010, 01-0012, 01-0013, 01-0014, and 01-0015. Sample locations are denoted on scaled maps attached to each survey package.

Class 1 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 1 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Class 1 Totals	0	0	0	0	0	0	

Radiological Characterization Package
Group 5 (442W, 442L, T551A)

Class 2 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 2 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Class 2 Totals	0	0	0	0	0	0	

Radiological Characterization Package
Group 5 (442W, 442L, T551A)

Class 3 Areas

Survey Area	Survey Unit	Class	Description	Total m²	Floor m²	Scan m²	TSA	Smears	Media	Class Justification
A	442-A-001	3	Interior of B442L (floor, walls, and ceiling)	948	259	95	**15-random 15-biased**	**15-random 15-biased**	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination (e.g., floors and lower walls). Also, two biased TSA and removable sample locations will be collected.
B	442-B-002	3	Exterior of 442L (walls and roof)	447	0	45	**15-random**	**15-random**	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination.
A	442-A-003	3	Interior of 442W (floor, walls, and ceiling)	1875	571	188	**15-random 2-biased**	**15-random 2-biased**	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination (e.g., floors and lower walls). Also, two biased TSA and removable sample locations will be collected.
B	442-B-004	3	Exterior of 442W (walls and roof)	1066	0	107	**15-random**	**15-random**	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination.

62

Radiological Characterization Package
Group 5 (442W, 442L, T551A)

Class 3 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
C	551-C-005	3	Interior of T551A (floor, walls, and ceiling)	1124	295	113	15-random 2-biased	15-random 2-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination (e.g., floors and lower walls). Also, two biased TSA and removable sample locations will be collected.
D	551-D-006	3	Exterior of T551A (walls and roof)	586	12	59	15-random	15-random	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 10% scan will be biased towards areas of greater potential for contamination.
			Class 3 Totals	**6046**	**1137**	**607**	**96**	**96**	**0**	

All Class Areas			**All Class Totals**	**6046**	**1137**	**607**	**96**	**96**	**0**	

63

Radiological Characterization Package
Group 5 (442W, 442L, T551A)

Non-Impacted Areas

Survey Area	Survey Unit	Class	Description	Total m²	Floor m²	Scan m²	TSA m²	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Non-Impacted Areas Identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Non-Impacted Totals	0	0	0	0	0	0	

64

Rocky Flats Environmental Technology Site

RECONNAISSANCE LEVEL CHARACTERIZATION

RADIOLOGICAL CHARACTERIZATION PLAN (PACKAGE)

GROUP 8 CLOSURE PROJECT (T886B & T886C)

REVISION 0

May 31, 2001

Prepared by: _____ Date: 5/31/01
Jay Britten, Radiological Engineer

Reviewed by: _____ Date: 5/31/01
Duane Parsons, Facility Characterization Coordinator

Reviewed by: _____ Date: 5/31/01
Steve Luker, Quality Assurance

Approved by: _____ Date: 6/12/01
Kent Dorr, Closure Project Facility Manager

65

Radiological Characterization Package
Group 8 (T886B & T886C)

Notes and Assumptions:

- This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols (07/26/00), and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities (02/14/01).
- PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s).
11. All radiological surveys shall be conducted in accordance with the sampling and instruction forms included in Group 8 (T886B & T886C) Survey Package numbers GR8-A-001 and GR8-B-002. Sample locations are denoted on scaled maps attached to each survey package.

Radiological Characterization Package
Group 8 (T886B & T886C)

Non-Impacted Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Non-Impacted Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Non-Impacted Totals	0	0	0	0	0	0	

Class 1 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 1 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Class 1 Totals	0	0	0	0	0	0	

Class 2 Areas

Survey Area	Survey Unit	Class	Description	Total m^2	Floor m^2	Scan m^2	TSA	Smears	Media	Class Justification
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 2 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.
			Class 2 Totals	0	0	0	0	0	0	

Radiological Characterization Package Group 8 (T886B & T886C)										
Class 3 Areas										
Survey Area	Survey Unit	Class	Description	Total m²	Floor m²	Scan m²	TSA	Smears	Media	Class Justification
A	GR8-A-001	3	Interiors & Exterior of T886B	1072	164	54	15-random 15-biased 2-QC	15-random 15-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 5% scan will be biased towards areas of greater potential for contamination. A 5% scan in this survey unit is justified due to the historical process knowledge of the facility. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP and will not be used in any statistical analysis (i.e., MARSSIM Sign Test).
B	GR8-B-002	3	Interior & Exterior of T886C	1928	366	97	15-random 15-biased 2-QC	15-random 15-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the $DCGL_W$. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the $DCGL_W$. A 5% scan will be biased towards areas of greater potential for contamination. A 5% scan in this survey unit is justified due to the historical process knowledge of the facility. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP and will not be used in any statistical analysis (i.e., MARSSIM Sign Test).
			Class 3 Totals	**3000**	**530**	**151**	**64**	**60**	**0**	
All Class Areas			**All Class Totals**	**3000**	**530**	**151**	**64**	**60**	**0**	

* Biased measurement locations include high traffic areas such as building entrances, exits, and hallways; HVAC intakes and exhaust ducts; storage areas; areas of frequent personnel contact such as doors and door frames; and horizontal surfaces.

68

ATTACHMENT D

Chemical Characterization Packages

Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PLAN (PACKAGE)

Group 6 CLOSURE PROJECT

(Buildings 280, S281, 281, 282, 284 Tank Pad, and T900D)

REVISION 0

May 4, 2001

Prepared by: _____ **Date:** 5/4/01
André Gonzalez, Industrial Hygiene

Prepared by: _____ **Date:** 5/4/01
Greg Sollner, Environmental Compliance

Prepared by: _____ **Date:** 5/4/01
Shaun Knapp, Environmental Compliance

Reviewed by: _____ **Date:** 5/8/01
Steve Luker, Quality Assurance

Reviewed by: _____ **Date:** 5/8/01
Duane Parsons, Characterization Coordinator

Approved by: _____ **Date:** 5/9/01
Vern Guthrie, KH Closure Project Manager

70

CHEMICAL CHARACTERIZATION PACKAGE

BUILDING(s): Group 6 Cluster (280, S281, 281, 282, and 284 Tank Pad)

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.
* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory.

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
280 Area - All	8	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed. Suspect materials such as floor tile & mastic, drywall & ceiling tile, and base cove will be sampled for asbestos.
T900D	7	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed. Suspect materials such as floor tile & mastic, drywall & ceiling tile, and base cove will be sampled for asbestos.
Total Samples:	15	The exact sample numbers and locations cannot be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

71

BERYLLIUM		
Sample Location	**Number of Samples (smears)**	**Sample location and justification/rational**
280 Area - All	0	Based on the 280 Area Historical Site Assessment Report and Interview Checklists, there is adequate historical and process knowledge to conclude that beryllium was not used or stored in these buildings. Therefore, sample is not required.
T900D	5 – biased	There is no documented supporting data or process history that proves beryllium was not used or stored in this building. Therefore, five biased samples will be obtained.
Total Samples:	5	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
Group 6 Cluster, all locations	0	Lead sampling is not required in the Group 6 Cluster. The only potential for a lead hazard would be in the paint. All paint will remain a part of the infrastructure during demolition and/or disposal, and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
280 Area - all	0	Based on the 280 Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns, no hazardous activities resulting in a release of RCRA or CERCLA constituents occurred in these buildings, therefore sampling for RCRA/CERCLA constituents is not required. Note: These buildings contain components that may need to be managed as Regulated Waste during D&D activities including mercury thermostats, fluorescent light bulbs, circuit boards, and lead acid batteries. Care will need to be taken to ensure these wastes are managed properly.
280	0	Visual observation revealed two areas with small stains. Both stained areas are clearly in locations where vehicles have been parked just inside the vehicle access doors. Based upon the stain locations and the history of the facility, the stains are in all likelihood motor oil, and do not necessitate any samples.
T900D	0	According to historical documents, T900D was classified as a general use office facility and did not contain any hazardous chemicals greater than RQ quantities. Chemicals that may have been present for sample preservation would have likely been various types of acids which are commonly used for this purpose, and which would not present a historical RCRA hazard if spilled. Therefore, no sampling is necessary. All other indicated materials in the historical documents would have been office or janitorial type materials.
Total Samples:	0	

72

PCBs*		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
280 Area - all locations	0	The 280 Area buildings were constructed in 1994 through 1997. 280 Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns of this area indicate PCB contamination in the structural debris is not probable. Therefore, no sampling is required. These buildings will be disposed of as PCB Bulk Product Waste or sold for re-use.
T900D	0	T900D Historical Site Assessment Report, Interview Checklists, and facility walkdowns of this building indicate no potential for PCB contamination; therefore no sampling is required. This building will be disposed of as PCB Bulk Product Waste or sold for re-use.
Total Samples:	0	Note: These buildings do contain materials that may need to be managed as Regulated Waste during D&D activities, such as light ballasts. Care will need to be taken to ensure these wastes are managed properly.

* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

13

Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PACKAGE

400/500/~~900~~ BUILDING CLUSTER CLOSURE PROJECT

DRP 2/26/01

REVISION 1

FEBRUARY 20, 2001

Prepared by: _____
Industrial Hygiene

Prepared by: _____
Environmental Compliance

Reviewed by: _____
Quality Assurance

Reviewed by: _____ 2/21/01
RISS Facility Characterization Coordinator

Approved by: FE Tuble 2-26-01
Closure Project Facility Manager

74

CHEMICAL CHARACTERIZATION PACKAGE

BUILDING(s): 400/500/900 CLUSTER – (T551A, 442W, 442L, ~~T900D~~) DAP 2/26/01

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.

* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
10. Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory.

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
442 L&W	37	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure
~~T900D~~ removed DAP 2/26/01	~~7~~	~~Asbestos inspection has not been performed. As a result a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure~~.
T551A	20	Asbestos inspection has not been performed. As a result a comprehensive invasive inspection must be performed in accordance with PRO-563-ACPR, Asbestos Characterization Procedure.
Total Samples:	64	The exact sample numbers and locations will not be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

75

BERYLLIUM		
Sample Location	**Number of Samples (Smears)**	**Sample location and justification/rational**
442 L&W	Room 101 – 15 random, 2 biased Room 105 – 36 random, 4 biased All other Facility areas 5 – biased	Process history indicates B442W, Rooms 101 and 105 may have been used as a beryllium storage areas, no documented supporting data or process history proves otherwise. Therefore, random and biased sampling will be performed in Rooms 101 and 105. Room 101 and 105 are approximately 1900 sq. ft, and 5400 sq. ft respectively. There is no documented supporting data or process history that proves beryllium was not used or stored in the remaining portions of B442 L&W. Therefore, two biased samples per building will be obtained in areas other than B442W, Rooms 101 and 105.
T551A	5 – biased	No historical association with Beryllium. Sample locations will be biased and will be determined at the time of sampling.
~~T900D~~	~~5 – biased~~	~~No historical association with Beryllium. Sample locations will be biased and will be determined at the time of sampling.~~
Total Samples:	72	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

Removed BHP 2/26/01

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
400, 500, ~~900~~ Cluster, all locations DHP 2/26/01	0	Lead sampling is not required in the 400, 500, 900 Cluster. All paint will remain a part of the infrastructure during demolition and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
442L & 442W	0	A walk-down of the building, review of building historical documents and conversations with personnel assigned to the building, with historical knowledge of the processes in the building, indicate that no major spills of concern occurred within the building. Dioctyl phthalate was used in the building in vacuum pumps, and while some material was probably dripped on the floor during the course of operations, it was in small quantities that were immediately cleaned up. The only incident that appears to have occurred at the building involved a spill of oil in the soil outside the building. It was remediated at the time of the spill, and turned out to be regular oil, not dioctyl phthalate, as suspected, therefore no sampling is required.
T551A	0	Process knowledge and a walk-down of this building indicates that no RCRA/CERCLA constituents of concern or historical spills exist in the trailer, therefore no sampling is required.

76

~~T900D~~	~~0~~	~~Process knowledge and a walk-down of this building indicates that no RCRA/CERCLA constituents of concern or historical spills exist in the trailer, therefore no sampling is required.~~
Total Samples:	0	

Removed DM 2/26/01

PCBs		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
442L, steam pump	4 (3 + duplicate)	There is visible staining on the concrete pad surrounding the steam pump from oil used to lubricate the pump (approximately 25 sqft). This oil could have been contained PCBs at one time. Core sampling (2" diameter, 2" depth) in the number indicated should be conducted to determine the presence or absence of PCBs. (Deeper samples will be taken in the unlikely event that contamination appears to have migrated farther than 2" into the slab.) Disposal of the entire slab as PCB bulk remediation waste would likely be more expensive, and would require soil sampling to determine any migration under the slab.
T551A	0	Process knowledge and a walk-down of this building indicates no potential for PCB contamination, therefore no sampling is required.
~~T900D~~	~~0~~	~~Process knowledge and a walk-down of this building indicates no potential for PCB contamination, therefore no sampling is required.~~
Total Samples:	4	

Removed DM 2/26/01

* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

77

Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PLAN (PACKAGE)

Group 8 CLOSURE PROJECT
(Buildings T886B and T886C)

REVISION 0

June 25, 2001

Prepared by: _____ **Date:** 6/25/01
David Babbs, Industrial Hygiene

Prepared by: _____ **Date:** 6/25/01
Kimberly Myers, Environmental Compliance

Reviewed by: _____ **Date:** 6/26/01
Steve Luker, Quality Assurance

Reviewed by: _____ **Date:** 6/26/01
Duane Parsons, Characterization Coordinator

Approved by: _____ **Date:** 6/26/01
Kent Dorr, KH Closure Project Manager

78

CHEMICAL CHARACTERIZATION PLAN (PACKAGE)

BUILDING(s): Group 8 (Buildings T886B and T886C)

Notes:

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities.
* PDSP Data Quality Objectives were used to develop this characterization package.

Instructions:

1. Verify characterization activities are on the Plan-of-the-Day (POD).
2. Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
3. Verify personnel have appropriate training for the applicable tasks they will be performing.
4. Comply with RWP requirements, if applicable.
5. Comply with JHA and facility PPE requirements, as applicable.
6. Inform the Facility Manager, or designee prior to starting characterization activities.
7. Follow applicable characterization and sampling procedures.
8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
9. Prior to any intrusive or invasive survey or sampling activities, contact IH and Radiological Operations to determine requirements and/or restrictions during sampling activities.
10. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
11. Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory.

79

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
T886B	10	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed. Suspect materials such as sheet vinyl flooring, backing, and adhesive, acoustical ceiling tiles, and baseboards with adhesive will be sampled for asbestos.
T886C	5	Asbestos inspection has not been performed. As a result, a comprehensive invasive inspection must be performed. Suspect materials such as sheet vinyl flooring, backing, and adhesive, acoustical ceiling tiles, and baseboards with adhesive will be sampled for asbestos.
Total Samples:	15	The exact sample numbers and locations cannot be determined until a comprehensive, invasive inspection is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample maps during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.

BERYLLIUM		
Sample Location	**Number of Samples (smears)**	**Sample location and justification/rational**
T886B	5 – Biased	There is no documented supporting data or process history that proves beryllium was not used or stored in this building. Therefore, five biased samples will be obtained.
T886C	5 – Biased	There is no documented supporting data or process history that proves beryllium was not used or stored in this building. Therefore, five biased samples will be obtained.
Total Samples:	10	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
T886B and T886C	0	Lead sampling is not required in the Group 8. The only potential for a lead hazard would be in the paint. All paint will remain a part of the infrastructure during demolition and/or disposal, and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.
Total Samples:	0	

80

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
T886B	0	Based on the Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns, no hazardous activities resulting in a release of RCRA or CERCLA constituents occurred in these buildings, therefore sampling for RCRA/CERCLA constituents is not required. Note: These buildings contain components that may need to be managed as Regulated Waste during D&D activities including mercury thermostats, fluorescent light bulbs, circuit boards, and lead acid batteries. Care will need to be taken to ensure these wastes are managed properly.
T886C	0	Based on the Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns, no hazardous activities resulting in a release of RCRA or CERCLA constituents occurred in these buildings, therefore sampling for RCRA/CERCLA constituents is not required. Note: These buildings contain components that may need to be managed as Regulated Waste during D&D activities including mercury thermostats, fluorescent light bulbs, circuit boards, and lead acid batteries. Care will need to be taken to ensure these wastes are managed properly.
Total Samples:	0	

PCBs*		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
T886B and T886C	0	These two buildings were installed in 1991. The Area Historical Site Assessment Report, Interview Checklists, and facility walkdowns of these trailers indicate PCB contamination in the structural debris is not probable. Therefore, no sampling is required. These buildings will be disposed of as sanitary waste or sold for re-use.
Total Samples:	0	Note: These buildings do contain materials that may need to be managed as Regulated Waste during D&D activities, such as light ballasts. Care will need to be taken to ensure these wastes are managed properly.

* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition.

81

ATTACHMENT E

Radiological Data Summaries and Survey Maps

SURVEY UNIT DATA SUMMARY: GR6-A-001

Survey Unit Description:

INTERIOR OF B280, B281, S281, B282, & ASSOCIATED SIDEWALKS AND PADS

83

Survey Unit GR6-A-001 Data Summary

Total Surface Activity Measurements

70	70
Number Required	Number Obtained

MIN	-10.5	dpm/100 cm^2
MAX	49.0	dpm/100 cm^2
MEAN	11.7	dpm/100 cm^2
STD DEV	12.6	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2

Removable Activity Measurements

70	70
Number Required	Number Obtained

MIN	-1.2	dpm/100 cm^2
MAX	8.5	dpm/100 cm^2
MEAN	0.5	dpm/100 cm^2
STD DEV	1.9	dpm/100 cm^2
TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

84

Survey Unit GR6-A-001 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9	10	11	12	19	20	21	22	23	24
Serial #:	1136	1665	1665	1420	1136	1136	1420	1136	1665	1665	1136	1665
Cal Due Date:	8/13/01	8/26/01	8/26/01	8/28/01	8/13/01	8/13/01	8/28/01	8/13/01	8/26/01	8/26/01	8/13/01	8/26/01
Analysis Date:	5/17/01	5/17/01	5/18/01	5/18/01	5/23/01	5/24/01	5/24/01	6/4/01	6/4/01	6/14/01	6/15/01	6/15/01
Alpha E/f (c/d):	0.208	0.212	0.212	0.220	0.208	0.208	0.220	0.208	0.212	0.212	0.208	0.212
Alpha Bkgd (cpm)	3.3	1.3	1.3	1.3	1.3	1.3	0.7	1.3	1.3	1.3	3.3	0.7
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	42.8	29.9	29.9	28.8	30.4	30.4	23.5	30.4	29.9	29.9	42.8	24.4

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	9	2.0	1.3	-4.3
2	8	4.7	7.3	8.4
3	10	4.0	1.3	4.9
4	7	7.3	4.0	21.1
5	22	6.1	3.1	15.0
6	12	8.7	2.7	27.8
7	21	5.3	2.7	11.2
8	22	5.3	5.0	11.2
9	10	3.3	2.7	1.7
10	9	4.7	2.0	8.4
11	23	2.0	3.3	-4.4
12	8	2.0	4.0	-4.3
13	21	6.0	2.3	14.5
14	12	7.3	2.7	21.1
15	22	6.0	5.3	14.5
16	20	5.3	5.3	11.5
17	9	10.0	2.0	33.4
18	12	9.3	0.0	30.7
19	7	8.0	1.3	24.4
20	9	5.3	2.7	11.2
21	9	1.3	4.7	-7.6
22	9	4.7	7.3	8.4
23	9	1.3	3.3	-7.6
24	8	2.0	4.0	-4.3
25	7	5.3	3.3	11.5
26	7	5.3	5.3	11.5
27	8	2.7	4.7	-1.0
28	8	3.3	2.0	1.8
29	7	3.3	1.3	1.8
30	8	3.3	1.3	1.8
31	7	4.0	3.3	5.2
32	8	0.7	3.3	-10.5
33	7	4.7	1.3	8.6
34	11	6.7	2.0	18.2
35	11	2.0	0.7	-4.4
36	11	6.0	2.7	14.8
37	11	2.0	2.3	-4.4
38	21	6.7	2.0	17.8
39	9	8.7	3.3	27.3
40	10	3.3	3.3	1.7
41	10	2.0	2.7	-4.2
42	9	1.3	3.3	-7.6
43	10	3.3	1.3	1.7
44	9	2.7	2.0	-1.0
45	10	7.3	2.7	19.9
46	7	2.7	5.3	-1.0
47	9	4.0	3.3	5.1
48	9	10.0	2.0	33.4
49	10	4.7	3.3	8.1
50	21	9.3	5.3	30.1

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
51	11	5.3	6.7	11.5
52	11	8.0	4.7	24.4
53	11	6.0	2.3	14.8
54	11	3.3	2.0	1.8
55	11	7.3	6.0	21.1
56	12	6.7	0.7	18.2
57	12	8.0	0.0	24.4
58	19	4.0	1.3	4.9
59	23	4.7	2.3	8.6
60	23	9.3	2.7	30.7
61	23	6.0	1.3	14.8
62	24	8.7	3.3	27.3
63	24	5.3	5.3	11.2
64	23	4.7	1.3	8.6
65	24	13.3	0.7	49.0
66	23	6.0	2.7	14.8
67	19	8.7	4.0	26.3
68	9	8.7	1.3	27.3
69	12	10.0	1.3	34.1
70	19	5.3	0.7	10.8
			Average LAB	2.9
			MIN	-10.5
			MAX	49.0
			MEAN	11.7
			SD	12.6
			Transuranic DCGL$_w$	100

QC 58	23	9.3	3.3	30.7
QC 57	24	9.3	1.3	30.1
QC 59	24	4.0	4.0	5.1
QC 60	24	8.0	2.0	24.0
			Average LAB	2.7
			MIN	5.1
			MAX	30.7
			MEAN	22.5
			SD	12.0
			Transuranic DCGL$_w$	100

PS

Survey Unit GR6-A-001 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	13	14	15	16	17	18	25	26	27	28	29	30
Serial #:	830	833	1157	770	1157	770	830	833	1157	770	830	833	1157	770	830	833
Cal Due Date:	8/12/01	7/23/01	8/27/01	7/18/01	8/27/01	7/18/01	8/12/01	7/23/01	8/27/01	7/18/01	8/12/01	7/23/01	8/27/01	7/18/01	8/12/01	7/23/01
Analysis Date:	5/18/01	5/18/01	5/18/01	5/18/01	5/23/01	5/23/01	5/24/01	5/24/01	5/24/01	5/24/01	6/4/01	6/4/01	6/4/01	6/4/01	6/15/01	6/15/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.0	0.3	0.3	0.0	0.2	0.3	0.2	0.0	0.4	0.3	0.1	0.0	0.2	0.0	0.0
Sample Time (min)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
MDC (dpm/100cm^2)	7.0	4.5	8.8	8.8	4.5	8.0	8.8	8.0	4.5	9.4	8.8	7.0	4.5	8.0	4.5	4.5

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	3	0	-0.9
2	26	0	-0.3
3	2	0	0.0
4	26	1	2.7
5	30	0	0.0
6	18	0	-1.2
7	28	0	-0.6
8	29	0	0.0
9	1	1	2.7
10	3	1	2.1
11	30	1	3.0
12	25	0	-0.9
13	27	0	0.0
14	16	0	-0.6
15	29	0	0.0
16	28	3	8.5
17	1	0	-0.3
18	17	0	0.0
19	26	0	-0.3
20	2	0	0.0
21	3	0	-0.9
22	4	0	-0.9
23	25	0	-0.9
24	27	0	0.0
25	28	0	-0.6
26	25	0	-0.9
27	26	0	-0.3
28	25	0	-0.9
29	27	0	0.0
30	28	1	2.4
31	25	0	-0.9
32	27	1	3.0
33	28	0	-0.6
34	3	1	2.1
35	4	0	-0.9
36	13	0	0.0
37	14	0	-0.6
38	27	0	0.0
39	2	0	0.0
40	1	0	-0.3
41	1	1	2.7
42	1	0	-0.3
43	2	2	6.1
44	4	0	-0.9
45	4	1	2.1
46	26	0	-0.3
47	3	0	-0.9
48	2	0	0.0
49	4	0	-0.9
50	25	0	-0.9

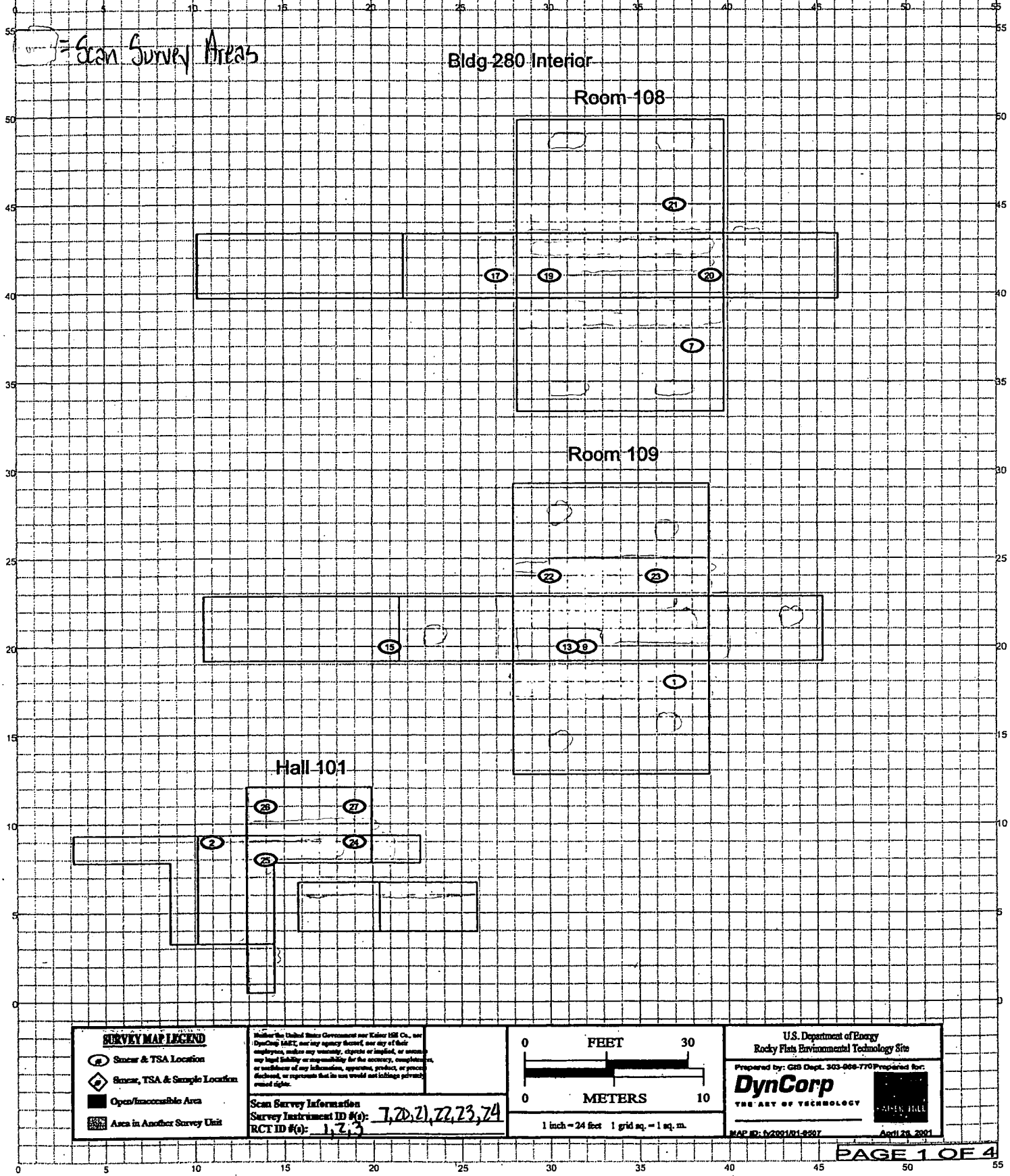
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
51	3	1	2.1
52	4	1	2.1
53	13	0	0.0
54	14	1	2.4
55	4	1	2.1
56	18	0	-1.2
57	15	0	-0.9
58	15	0	-0.9
59	29	0	0.0
60	29	0	0.0
61	30	0	0.0
62	30	0	0.0
63	29	0	0.0
64	17	2	6.1
65	18	0	-1.2
66	15	1	2.1
67	15	1	2.1
68	16	0	-0.6
69	17	1	3.0
70	16	0	-0.6
		MIN	-1.2
		MAX	8.5
		MEAN	0.5
		SD	1.9
		Transuranic DCGL$_w$	20

86

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **Classification: 3**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads
Total Area: 3372 sq. m. **Total Floor Area: 1187 sq. m.**

= Scan Survey Areas



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): 7,20,21,22,23,24
RCT ID #(s): 1,2,3

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

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0507 April 25, 2001

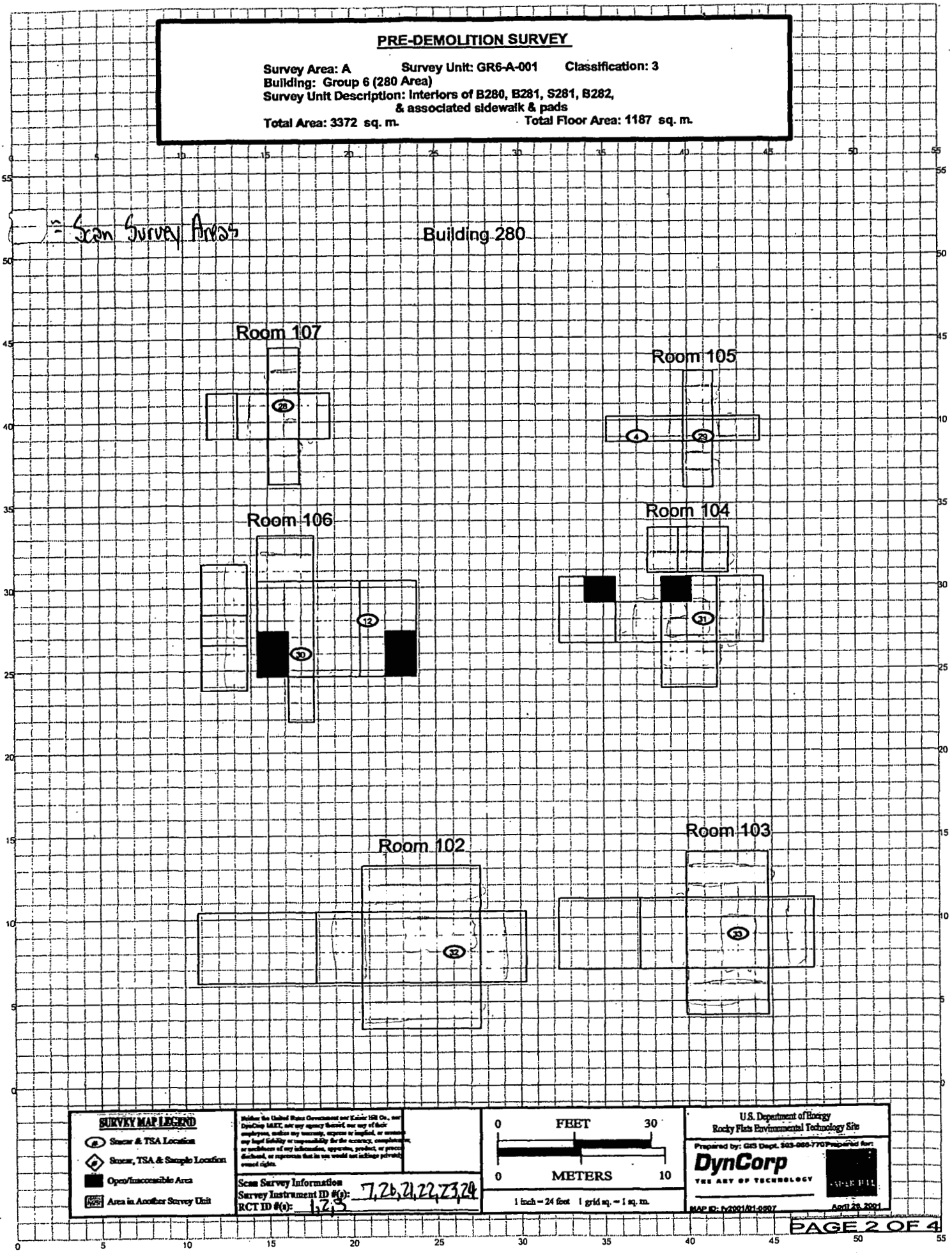
87

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **Classification: 3**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads
Total Area: 3372 sq. m. **Total Floor Area: 1187 sq. m.**

= Scan Survey Areas

Building 280



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): 7,26,21,22,23,24
RCT ID #(s): 1,23

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

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Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7700 Prepared for:
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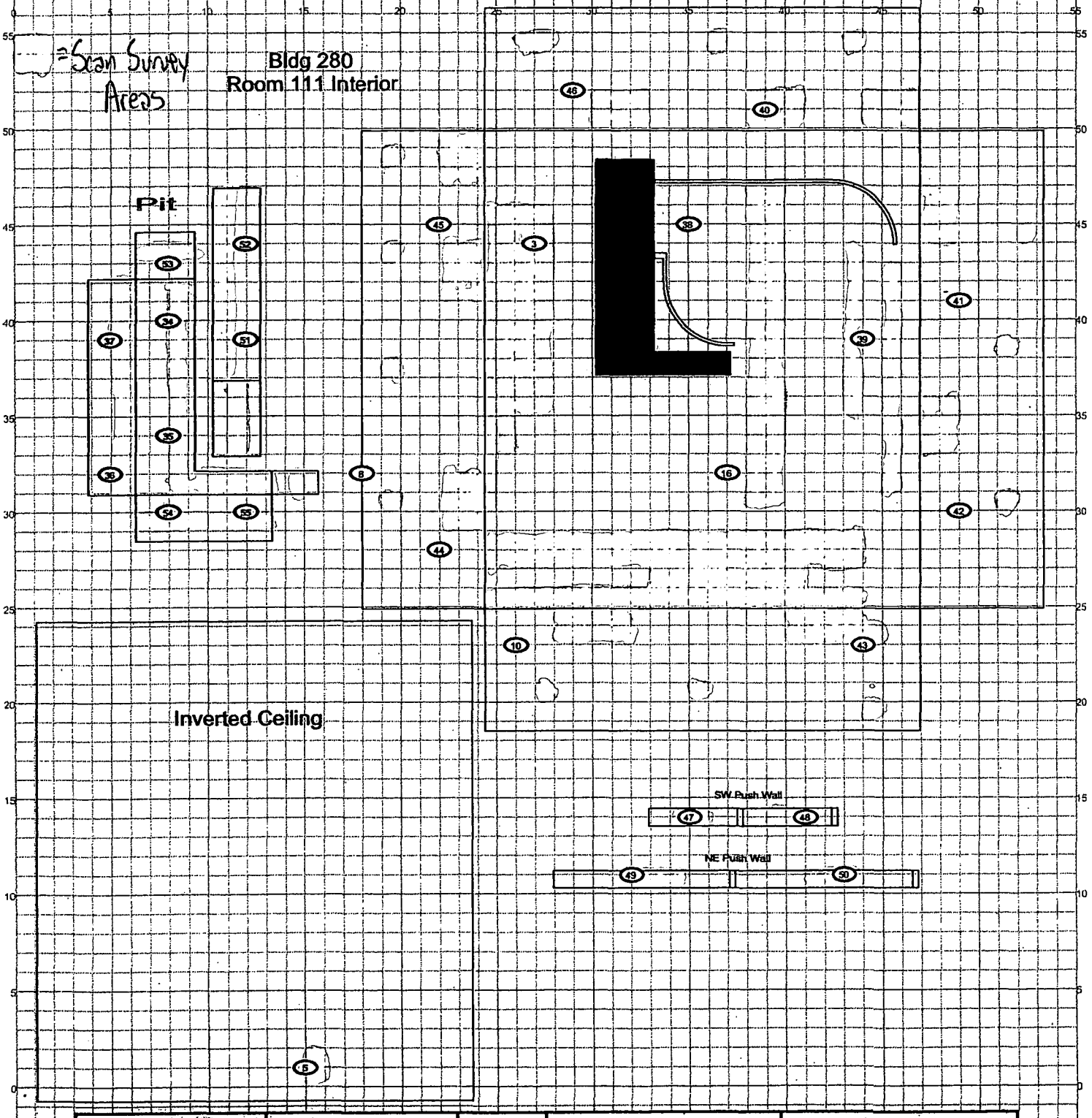
THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0907
April 23, 2001

88

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **Classification: 3**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads
Total Area: 3372 sq. m. **Total Floor Area: 1187 sq. m.**



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

Scan Survey Information
Survey Instrument ID #(s): 7, 20, 21, 22, 23, 24
RCT ID #(s): 1, 2, 3

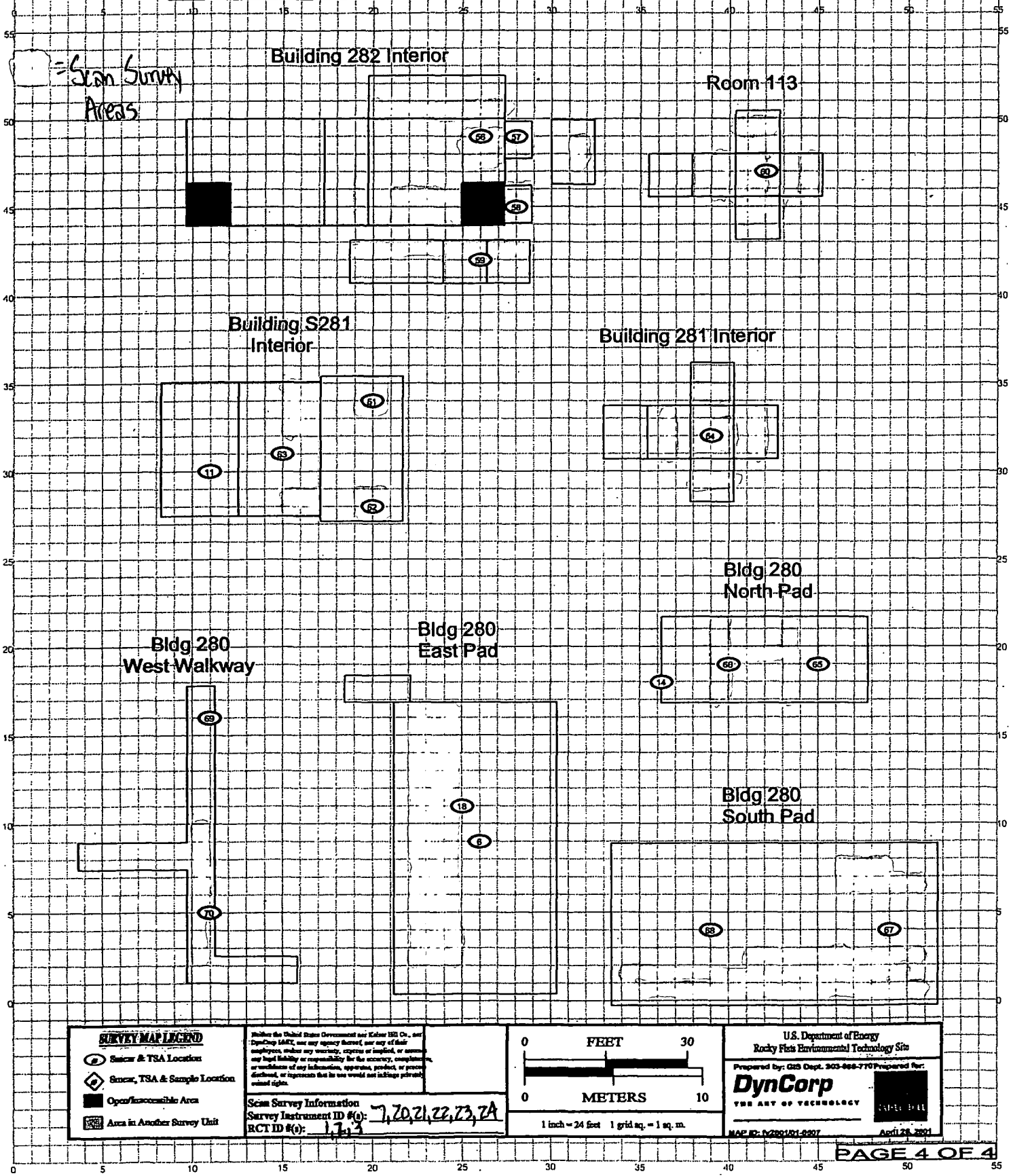
0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0501 April 28, 2001

89

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **Classification: 3**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads
Total Area: 3372 sq. m. **Total Floor Area: 1187 sq. m.**



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

Scan Survey Information
Survey Instrument ID #(s): 7, 20, 21, 22, 23, 24
RCT ID #(s): 1, 2, 3

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

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: h/280/01-0307
April 28, 2001

90

SURVEY UNIT DATA SUMMARY: GR6-B-002

Survey Unit Description:

EXTERIORS OF B280, B281, S281, B282, & 284 TANK PAD

91

Survey Unit GR6-B-002 Data Summary

Total Surface Activity Measurements

40	40
Number Required	Number Obtained

MIN	-11.4	dpm/100 cm^2
MAX	58.9	dpm/100 cm^2
MEAN	14.4	dpm/100 cm^2
STD DEV	16.7	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2

Removable Activity Measurements

40	40
Number Required	Number Obtained

MIN	-1.2	dpm/100 cm^2
MAX	9.1	dpm/100 cm^2
MEAN	1.4	dpm/100 cm^2
STD DEV	2.6	dpm/100 cm^2
TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

92

Survey Unit GR6-B-002 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	10	11	12	19
Serial #:	1420	1136	1136	1513	1136	1665
Cal Due Date:	8/28/01	8/13/01	8/13/01	9/29/01	8/13/01	8/28/01
Analysis Date:	5/22/01	5/24/01	5/30/01	5/30/01	6/15/01	6/15/01
Alpha Eff. (c/d):	0.220	0.208	0.208	0.211	0.208	0.212
Alpha Bkgd (cpm)	0.7	1.3	2.0	0.7	3.3	0.7
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	23.5	30.4	33.4	24.5	42.8	24.4

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	10	2.7	4.0	-11.4
2	7	10.7	3.3	25.6
3	10	6.7	7.3	7.9
4	11	17.5	4.6	58.9
5	10	3.3	4.7	-8.5
6	7	10.3	2.0	23.8
7	11	10.0	1.3	23.4
8	8	4.0	5.3	-5.1
9	10	4.0	4.7	-5.1
10	11	8.0	4.0	13.9
11	19	4.7	4.0	-1.7
12	8	6.0	4.0	4.5
13	7	8.0	8.0	13.4
14	7	11.3	11.3	28.4
15	7	2.7	11.3	-10.7
16	8	10.7	6.0	27.1
17	8	8.7	5.3	17.5
18	8	6.7	4.0	7.9
19	8	8.0	4.7	14.1
20	8	6.7	1.3	7.9
21	10	4.0	10.0	-5.1
22	10	7.3	6.0	10.8
23	10	8.0	2.7	14.1
24	10	10.7	6.7	27.1
25	10	3.0	3.3	-9.9

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
26	10	8.0	5.3	14.1
27	10	5.3	6.0	1.1
28	10	8.0	4.0	14.1
29	10	6.0	4.7	4.5
30	10	6.7	6.7	7.9
31	8	6.0	2.7	4.5
32	10	10.0	4.0	23.7
33	12	15.3	6.0	49.2
34	11	12.3	4.7	34.3
35	11	7.3	2.0	10.6
36	8	10.0	6.7	23.7
37	8	15.3	7.3	49.2
38	8	6.7	3.3	7.9
39	8	10.0	6.0	23.7
40	8	12.7	3.3	36.7
			Average LAB	5.1
			MIN	-11.4
			MAX	58.9
			MEAN	14.4
			SD	16.7
			Transuranic DCGL$_w$	100

QC 25	10	8.7	4.0	20.6
QC 15	10	10.0	4.7	26.8
			Average LAB	4.4
			MIN	20.6
			MAX	26.8
			MEAN	23.7
			SD	4.4
			Transuranic DCGL$_w$	100

93

Survey Unit GR6-B-002 Smear Results

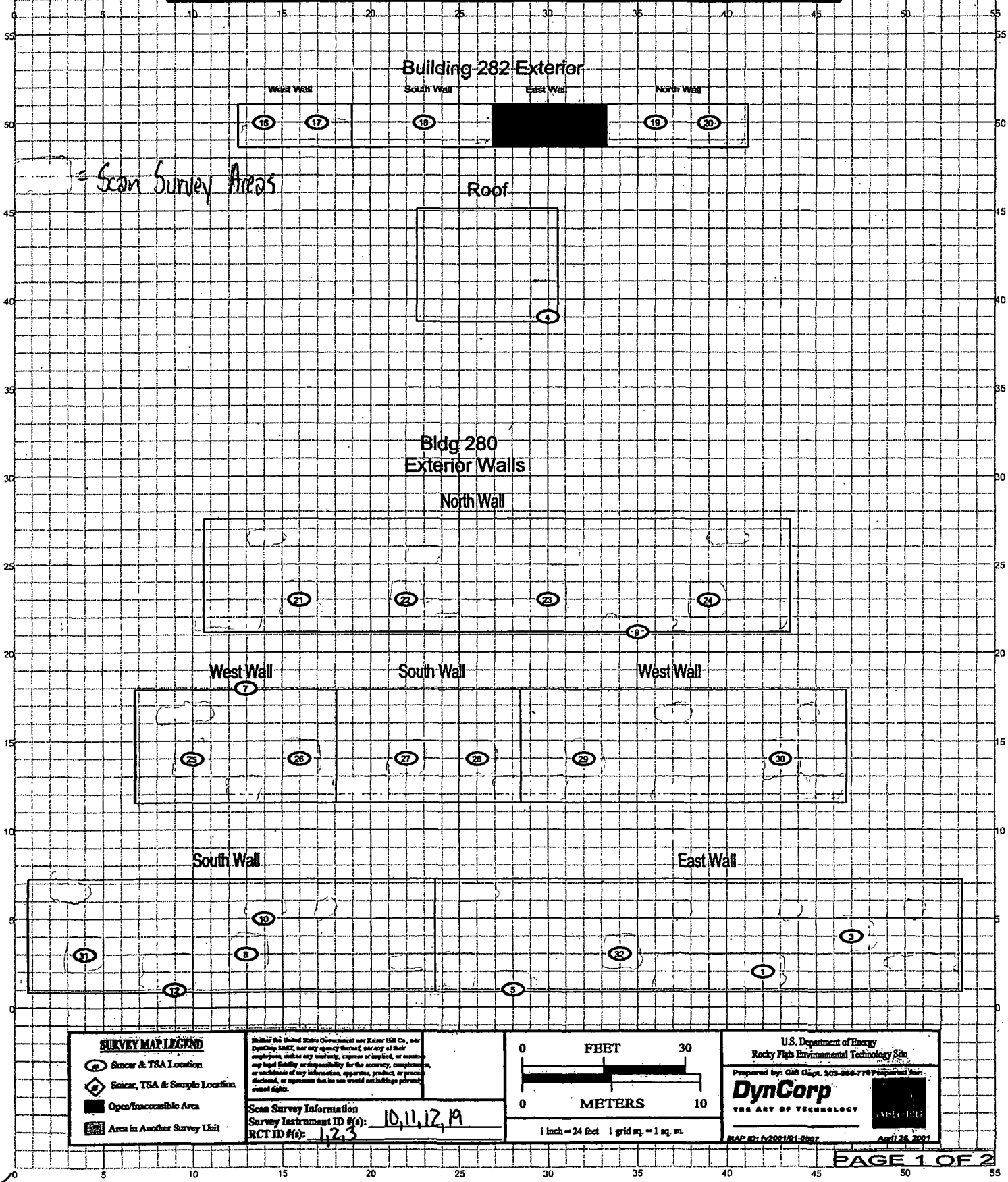
Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	5	6	13	14	15	16	17	18	25	28	29
Serial #:	833	1157	770	830	833	1157	770	830	833	830	833
Cal Due Date:	7/23/01	8/27/01	7/18/01	8/12/01	7/23/01	8/27/01	7/18/01	8/12/01	7/23/01	8/12/01	7/23/01
Analysis Date:	5/24/01	5/24/01	5/24/01	5/30/01	5/30/01	5/30/01	5/30/01	6/1/01	6/1/01	6/15/01	6/15/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.2	0.0	0.4	0.1	0.4	0.1	0.3	0.0	0.1	0.0	0.0
Sample Time (min)	2	2	2	2	2	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10	10	10	10	10	10
MDC (dpm/100cm^2)	8.0	4.5	9.4	7.0	9.4	7.0	8.8	4.5	7.0	4.5	4.5

Sample Location Number	Instrument ID#	Gross Counts (cpm)	(dpm/100 cm^2)
1	14	0	-0.3
2	18	0	0.0
3	15	2	4.8
4	17	2	5.2
5	16	0	-0.3
6	25	0	-0.3
7	14	2	5.8
8	5	0	-0.6
9	16	1	2.7
10	17	0	-0.9
11	28	0	0.0
12	13	3	7.9
13	28	1	3.0
14	29	0	0.0
15	18	0	0.0
16	5	0	-0.6
17	6	1	3.0
18	13	0	-1.2
19	6	1	3.0
20	5	1	2.4
21	16	0	-0.3
22	15	1	1.8
23	14	0	-0.3
24	17	0	-0.9
25	15	0	-1.2
26	14	0	-0.3
27	16	0	-0.3
28	17	1	2.1
29	14	0	-0.3
30	15	0	-1.2
31	6	3	9.1
32	17	0	-0.9
33	29	0	0.0
34	15	2	4.8
35	16	0	-0.3
36	6	1	3.0
37	5	0	-0.6
38	6	0	0.0
39	13	2	4.8
40	5	1	2.4
		MIN	-1.2
		MAX	9.1
		MEAN	1.4
		SD	2.6
		$DCGL_w$	20

94

PRE-DEMOLITION SURVEY

Survey Area: B **Survey Unit: GR6-B-002** **Classification: 3**
Building: Group 6 (280 Area)
Survey Unit Description: Exterior of B280, B281, S281, & 284 Tank Slab
Total Area: 1002 sq. m. **Total Roof Area: 883 sq. m.**



SURVEY MAP LEGEND
- Linear & TSA Location
- Linear, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

Scan Survey Information
Survey Instrument ID #(s): 10, 11, 12, 19
RCT ID #(s): 1, 2, 3

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

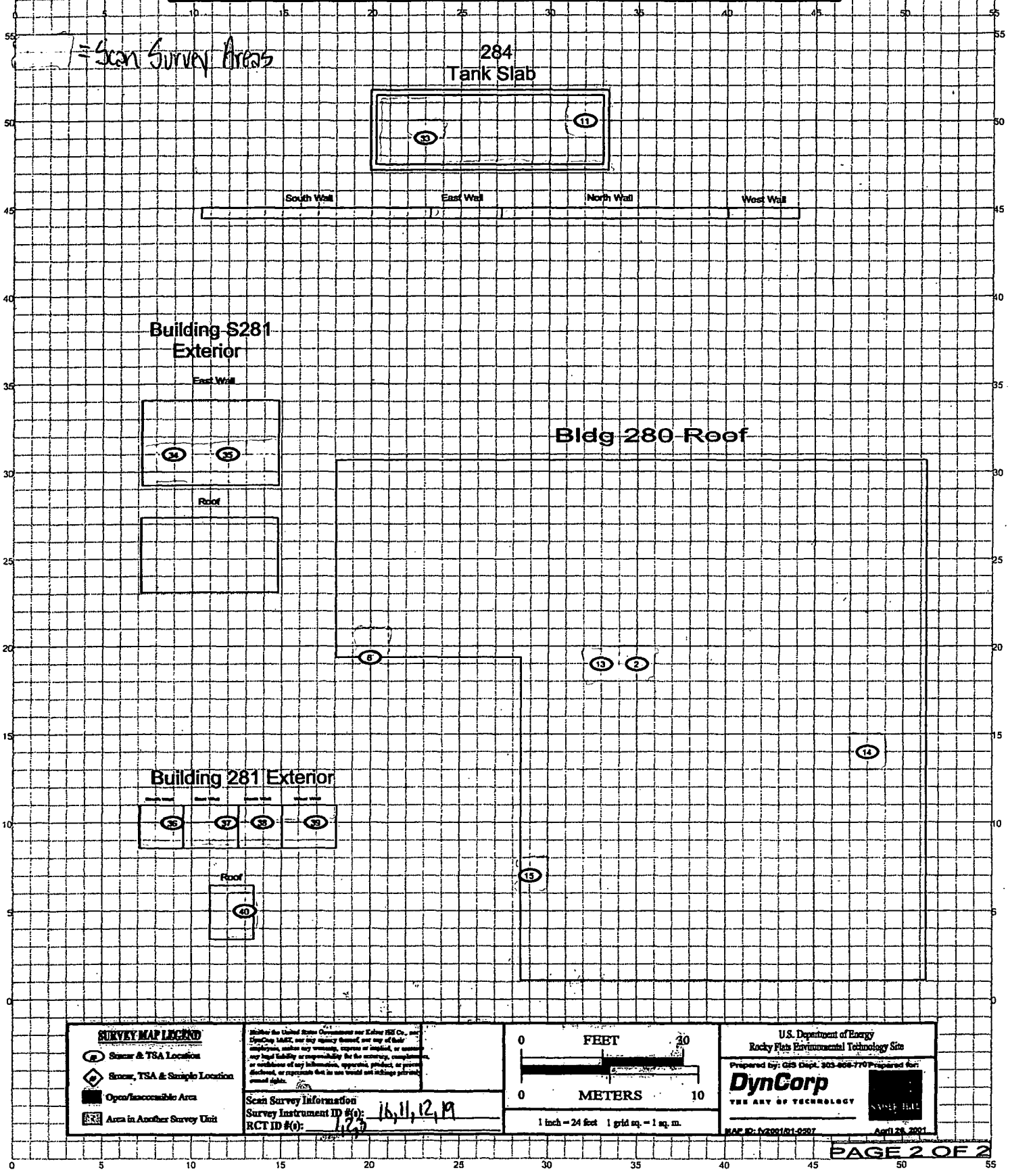
U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: (V2001/01-0307 April 28, 2001

95

PRE-DEMOLITION SURVEY

Survey Area: B **Survey Unit: GR6-B-002** **Classification: 3**
Building: Group 6 (280 Area)
Survey Unit Description: Exterior of B280, B281, S281, & 284 Tank Slab
Total Area: 1002 sq. m. **Total Roof Area: 883 sq. m.**

= Scan Survey Areas



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): 16, 11, 12, 19
RCT ID #(s): 1123

0 FEET 20
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
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THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0207 April 26, 2001

96

SURVEY UNIT DATA SUMMARY: 442-A-003

Survey Unit Description:

Interior of 442W

97

Survey Unit 442-A-003 Data Summary

Total Surface Activity Measurements

17	17
Number Required	Number Obtained

MIN	-10.5	dpm/100 cm^2
MAX	46.3	dpm/100 cm^2
MEAN	10.8	dpm/100 cm^2
STD DEV	12.9	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2

Removable Activity Measurements

17	17
Number Required	Number Obtained

MIN	-0.9	dpm/100 cm^2
MAX	6.1	dpm/100 cm^2
MEAN	1.5	dpm/100 cm^2
STD DEV	2.6	dpm/100 cm^2
TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

98

Survey Unit 442-A-003 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	1136	1665	1665
Cal Due Date:	8/13/01	8/26/01	8/26/01
Analysis Date:	6/11/01	6/11/01	6/12/01
Alpha Eff. (c/d):	0.208	0.212	0.212
Alpha Bkgd (cpm)	3.3	2.7	2.0
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm^2)	42.8	38.9	34.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	8	5.3	2.7	8.5
2	8	2.0	4.0	-7.0
3	9	4.7	2.7	5.7
4	7	4.7	2.7	5.8
5	7	8.7	2.0	25.0
6	8	5.3	4.0	8.5
7	8	4.7	6.0	5.7
8	7	1.3	1.3	-10.5
9	9	4.7	0.7	5.7
10	8	8.0	4.7	21.3
11	8	13.3	2.7	46.3
12	8	6.0	5.3	11.8
13	7	8.0	2.0	21.7
14	8	5.3	8.0	8.5
15	8	5.3	5.3	8.5
16	7	4.0	3.3	2.4
17	7	6.7	2.0	15.4
			Average LAB	3.5
			MIN	-10.5
			MAX	46.3
			MEAN	10.8
			SD	12.9
			Transuranic DCGL$_w$	100

QC 13	8	5.3	4.7	9.2
QC 17	8	6.0	2.0	12.5
			Average LAB	3.4
			MIN	9.2
			MAX	12.5
			MEAN	10.8
			SD	2.3
			Transuranic DCGL$_w$	100

99

Survey Unit 442-A-003 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	5	6
Serial #:	830	833	1157	770	830	833
Cal Due Date:	8/12/01	7/23/01	8/27/01	7/18/01	8/12/01	7/23/01
Analysis Date:	6/11/01	6/11/01	6/11/01	6/11/01	6/12/01	6/12/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.0	0.2	0.0	0.3	0.0	0.0
Sample Time (min)	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10
MDC (dpm/100cm^2)	4.5	8.0	4.5	8.8	4.5	4.5

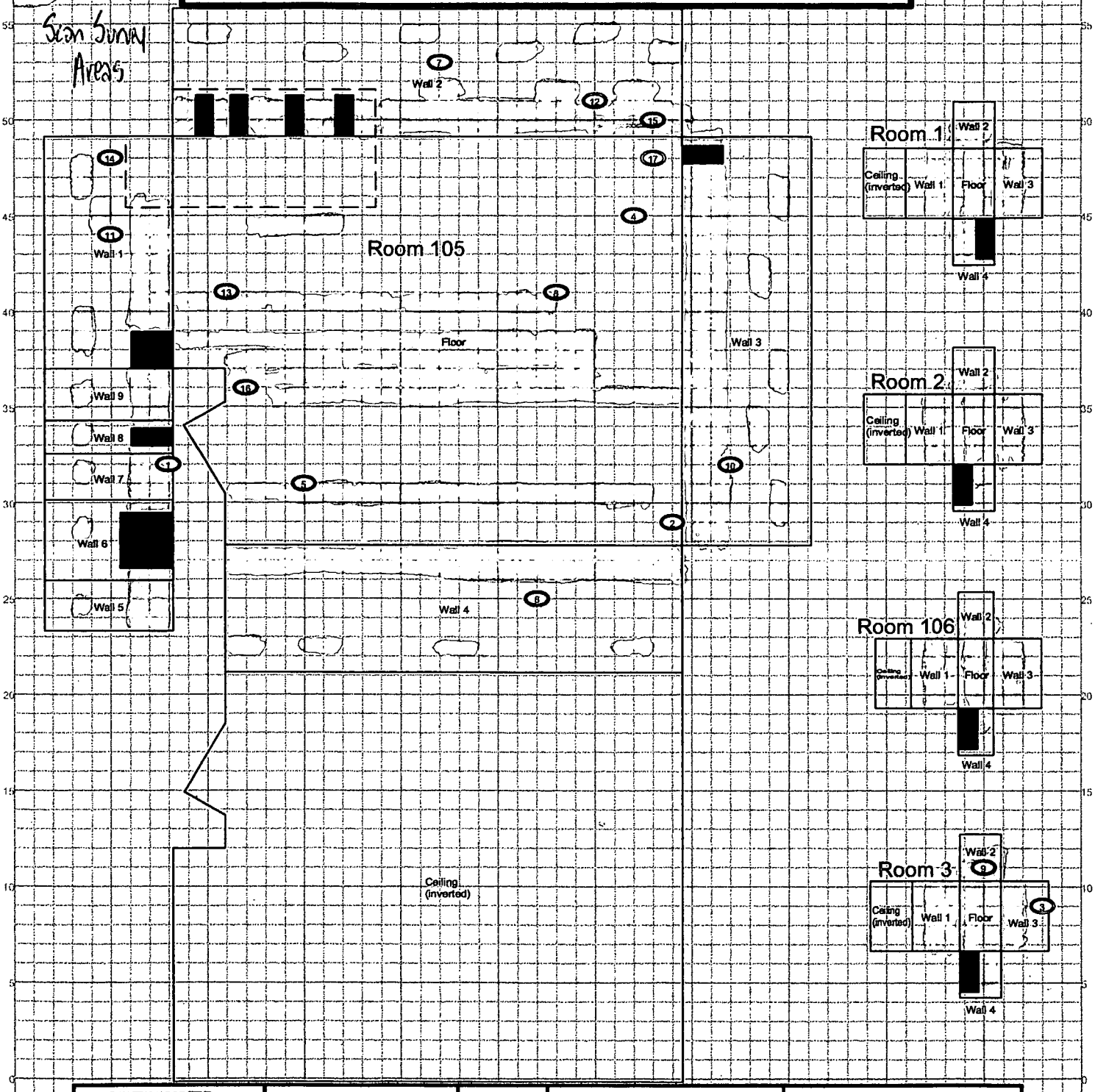
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	0	0.0
2	3	0	0.0
3	5	2	6.1
4	2	1	2.4
5	4	0	-0.9
6	3	1	3.0
7	4	0	-0.9
8	3	0	0.0
9	6	0	0.0
10	2	0	-0.6
11	3	0	0.0
12	4	0	-0.9
13	2	0	-0.6
14	1	2	6.1
15	2	1	2.4
16	1	2	6.1
17	1	1	3.0
		MIN	-0.9
		MAX	6.1
		MEAN	1.5
		SD	2.6
		Transuranic DCGL$_w$	20

100

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: A **Survey Unit: 442-A-003** **Classification: 3**
Building: 442W
Survey Unit Description: Interior of B442W
Total Area: 1875 sq. m. **Total Floor Area: 571 sq. m.**

Scan Survey Areas



SURVEY MAP LEGEND

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

N

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

Scan Survey Information
Survey Instrument ID #(s): 8,9,10
RCT ID #(s): 1,2,3

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7707 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER-HILL
MAP ID: D/2001/01-0303 March 8, 2001

442-A-003

101

SURVEY UNIT DATA SUMMARY: 442-B-004

Survey Unit Description:

Exterior of 442W

102

Survey Unit 442-B-004 Data Summary

Total Surface Activity Measurements

15	15
Number Required	Number Obtained

MIN	-11.8	dpm/100 cm^2
MAX	95.1	dpm/100 cm^2
MEAN	36.2	dpm/100 cm^2
STD DEV	35.2	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	0.4	dpm/100 cm^2
STD DEV	1.1	dpm/100 cm^2
TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

103

Survey Unit 442-B-004 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	1420	1665	1136
Cal Due Date:	8/28/01	8/26/01	8/13/01
Analysis Date:	5/22/01	6/7/01	6/7/01
Alpha Eff. (c/d):	0.212	0.212	0.208
Alpha Bkgd (cpm)	0.7	1.3	1.3
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm^2)	24.4	29.9	30.4

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	9	2.0	4.0	-11.8
2	9	2.7	2.7	-8.4
3	7	7.3	2.6	13.5
4	9	5.3	1.3	4.1
5	7	23.7	8.6	90.8
6	9	10.7	4.0	30.1
7	7	24.6	9.7	95.1
8	9	12.7	7.3	39.7
9	7	14.6	2.7	47.9
10	7	20.1	6.4	73.8
11	8	14.6	2.0	47.9
12	9	4.7	6.0	1.2
13	9	5.3	1.3	4.1
14	7	18.5	2.6	66.3
15	7	14.7	5.5	48.4
			Average LAB	4.4
			MIN	-11.8
			MAX	95.1
			MEAN	36.2
			SD	35.2
			Transuranic $DCGL_w$	100

QC 6	8	6.0	4.7	8.0
QC 8	8	7.3	3.9	14.2
			Average LAB	4.3
			MIN	8.0
			MAX	14.2
			MEAN	11.1
			SD	4.3
			Transuranic $DCGL_w$	100

104

Survey Unit 442-B-004 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	5	6
Serial #:	830	833	1157	830	833	1157
Cal Due Date:	8/12/01	7/23/01	8/27/01	8/12/01	7/23/01	8/27/01
Analysis Date:	5/22/01	5/22/01	5/22/01	6/7/01	6/7/01	6/7/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.3	0.1	0.0	0.0	0.0
Sample Time (min)	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10
MDC (dpm/100cm^2)	7.0	8.8	7.0	4.5	4.5	4.5

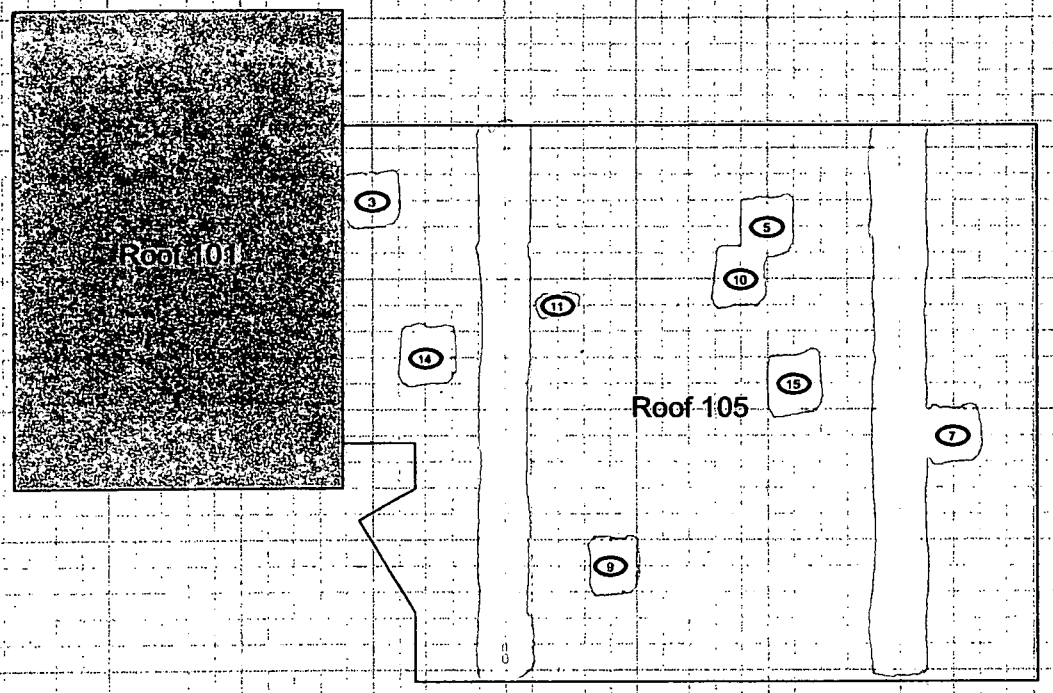
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	1	2.7
2	2	0	-0.9
3	4	0	0.0
4	2	1	2.1
5	5	0	0.0
6	1	0	-0.3
7	6	0	0.0
8	3	0	-0.3
9	4	0	0.0
10	5	0	0.0
11	6	0	0.0
12	1	0	-0.3
13	3	1	2.7
14	4	0	0.0
15	5	0	0.0
		MIN	-0.9
		MAX	2.7
		MEAN	0.4
		SD	1.1
		Transuranic $DCGL_w$	20

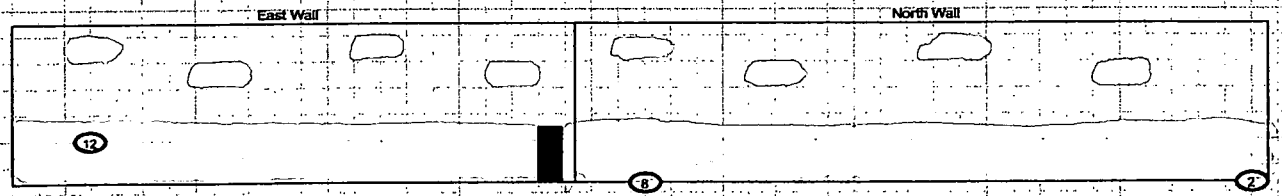
105

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: B **Survey Unit: 442-B-004** **Classification: 3**
Building: 442W
Survey Unit Description: Exterior of B442W
Total Area: 1066 sq. m. **Total Floor Area: 0 sq. m.**

= Scan Survey Areas





SURVEY MAP LEGEND

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

N

0 FEET 30
0 METERS 10

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

Scan Survey Information
Survey Instrument ID #(s): B, 9, 10
RCT ID #(s): 123

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

Prepared by: GIS Dept. 303-966-7770 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER-HILL COMPANY

MAP ID: fy2001/01-0303 March 6, 2001

442-B-004

NO

SURVEY UNIT DATA SUMMARY: 551-C-005

Survey Unit Description:

Interior of T551A

107

Survey Unit 551-C-005 Data Summary

Total Surface Activity Measurements

	17 Number Required	17 Number Obtained	
MIN	-9.0		dpm/100 cm^2
MAX	26.2		dpm/100 cm^2
MEAN	2.9		dpm/100 cm^2
STD DEV	9.5		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	17 Number Required	17 Number Obtained	
MIN	-0.9		dpm/100 cm^2
MAX	5.8		dpm/100 cm^2
MEAN	0.6		dpm/100 cm^2
STD DEV	2.1		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

108

Survey Unit 551-C-005 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	1254	1546	1366
Cal Due Date:	5/20/01	5/3/01	5/6/01
Analysis Date:	4/10/01	4/10/01	4/10/01
Alpha Eff. (c/d):	0.227	0.228	0.204
Alpha Bkgd (cpm)	2.0	0.7	2.7
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm^2)	32.5	22.7	40.4

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	7	4.0	4.0	8.6
2	7	2.7	1.3	2.8
3	7	4.0	1.3	8.6
4	8	0.7	1.3	-6.0
5	8	0.0	2.0	-9.0
6	7	1.3	4.7	-3.3
7	7	2.7	2.3	2.8
8	7	4.0	0.7	8.6
9	7	6.0	2.7	17.4
10	7	1.3	2.7	-3.3
11	7	4.0	0.7	8.6
12	7	2.0	2.7	-0.3
13	7	1.3	2.0	-3.3
14	7	8.0	1.3	26.2
15	7	0.7	3.3	-6.0
16	8	0.0	0.0	-9.0
17	8	3.3	2.0	5.4
			Average LAB	2.1
			MIN	-9.0
			MAX	26.2
			MEAN	2.9
			SD	9.5
			Transuranic $DCGL_w$	100

QC 17	7	3.3	2.0	2.9
QC 3	8	3.3	3.3	2.9
			Average LAB	2.7
			MIN	2.9
			MAX	2.9
			MEAN	2.9
			SD	0.0
			Transuranic $DCGL_w$	100

109

Survey Unit 551-C-005 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	830	833	1157	770
Cal Due Date:	8/12/01	7/23/01	8/27/01	7/18/01
Analysis Date:	4/10/01	4/10/01	4/10/01	4/10/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.3	0.0	0.0	0.1
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm^2)	8.8	4.5	4.5	7.0

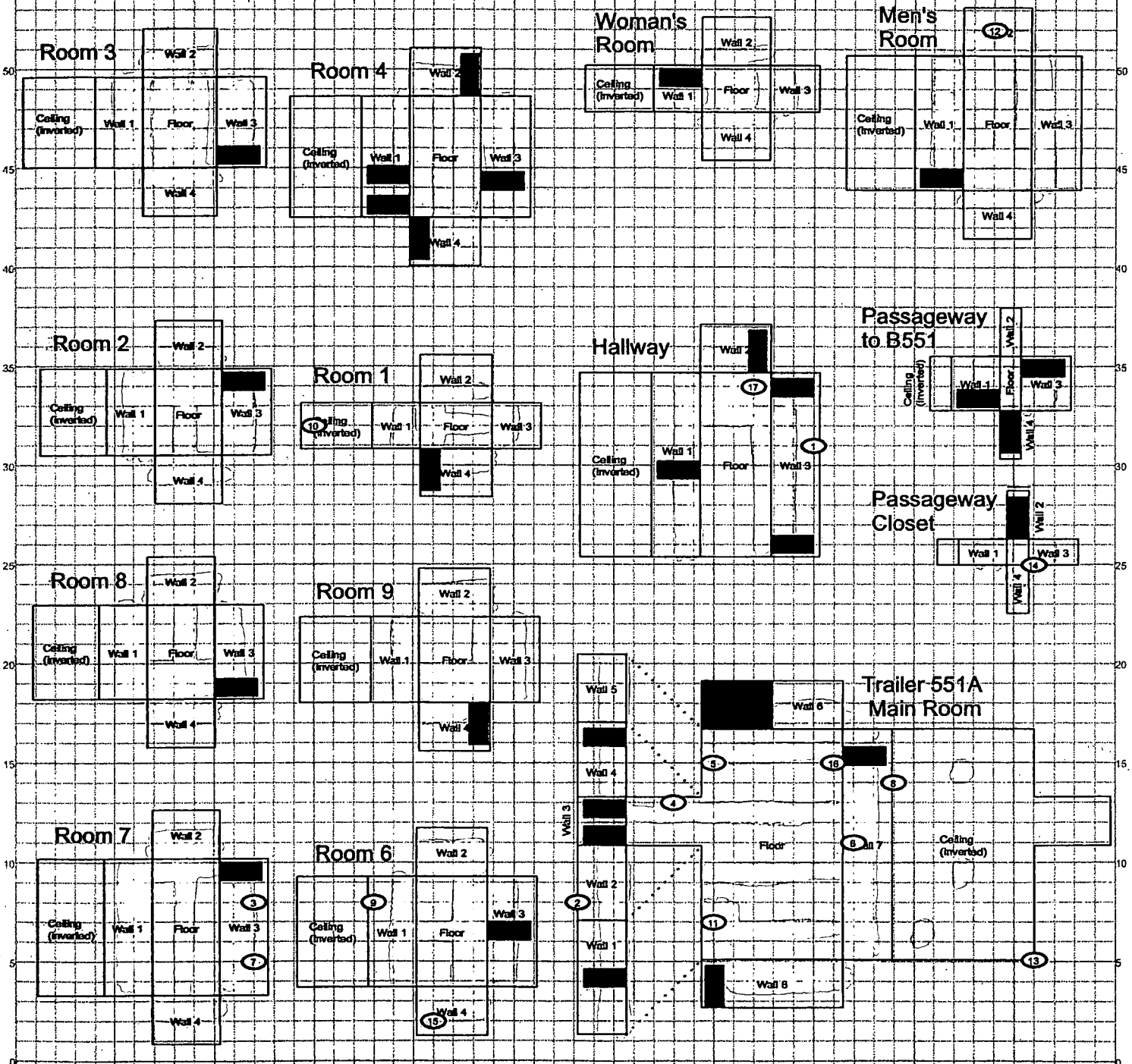
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	0	-0.9
2	2	0	0.0
3	3	0	0.0
4	4	2	5.8
5	1	0	-0.9
6	2	0	0.0
7	3	0	0.0
8	4	2	5.8
9	1	0	-0.9
10	2	0	0.0
11	3	0	0.0
12	4	0	-0.3
13	1	0	-0.9
14	2	0	0.0
15	3	0	0.0
16	4	0	-0.3
17	1	1	2.1
		MIN	-0.9
		MAX	5.8
		MEAN	0.6
		SD	2.1
		Transuranic DCGL$_W$	20

110

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: C **Survey Unit: 551-C-005** **Classification: 3**
Building: Trailer 551A
Survey Unit Description: Interior of T551A
Total Area: 1124 sq. m. **Total Floor Area: 295 sq. m.**

= Scan Survey Areas



SURVEY MAP LEGEND

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

N

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

Scan Survey Information
Survey Instrument ID #(s): 7,8,9
RCT ID #(s): 1,2,3

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL
MAP ID: ly2001/01-0303 March 6, 2001

551-C-005

SURVEY UNIT DATA SUMMARY: 551-D-006

Survey Unit Description:

Exterior of T551A

112

Survey Unit 551-D-006 Data Summary

Total Surface Activity Measurements

	15 Number Required	15 Number Obtained	
MIN	-3.5		dpm/100 cm^2
MAX	64.6		dpm/100 cm^2
MEAN	20.1		dpm/100 cm^2
STD DEV	26.6		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	15 Number Required	15 Number Obtained	
MIN	-0.9		dpm/100 cm^2
MAX	5.8		dpm/100 cm^2
MEAN	1.3		dpm/100 cm^2
STD DEV	2.5		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

113

Survey Unit 551-D-006 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 #:	1420	1136	1420	1136
Cal Due Date:	8/28/01	8/13/01	8/28/01	8/13/01
Analysis Date:	5/14/01	5/14/01	5/15/01	5/15/01
Alpha Eff. (c/d):	0.220	0.208	0.220	0.208
Alpha Bkgd (cpm)	2.0	3.3	1.3	0.7
Sample Time (min)	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	33.5	42.8	28.8	24.9

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	8	12.0	3.3	44.3
2	7	6.0	4.7	14.6
3	8	8.0	5.3	25.1
4	7	2.0	0.7	-3.5
5	7	2.7	0.7	-0.4
6	9	16.7	5.3	63.3
7	9	17.0	3.7	64.6
8	7	9.3	2.0	29.6
9	7	2.7	2.0	-0.4
10	7	2.7	1.3	-0.4
11	7	2.0	3.3	-3.5
12	7	2.7	0.7	-0.4
13	7	2.7	2.7	-0.4
14	9	16.7	5.3	63.3
15	7	4.0	0.7	5.5
			Average LAB	2.8
			MIN	-3.5
			MAX	64.6
			MEAN	20.1
			SD	26.6
			Transuranic DCGL$_w$	100
QC 9	8	4.0	2.0	11.3
QC 12	10	3.0	1.3	6.5
			Average LAB	1.7
			MIN	6.5
			MAX	11.3
			MEAN	8.9
			SD	3.4
			Transuranic DCGL$_w$	100

114

Survey Unit 551-D-006 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4
Serial #:	830	833	1157	770
Cal Due Date:	8/12/01	7/23/01	8/27/01	7/18/01
Analysis Date:	5/14/01	5/14/01	5/14/01	5/14/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.2	0.3	0.1
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm^2)	7.0	8.0	8.8	7.0

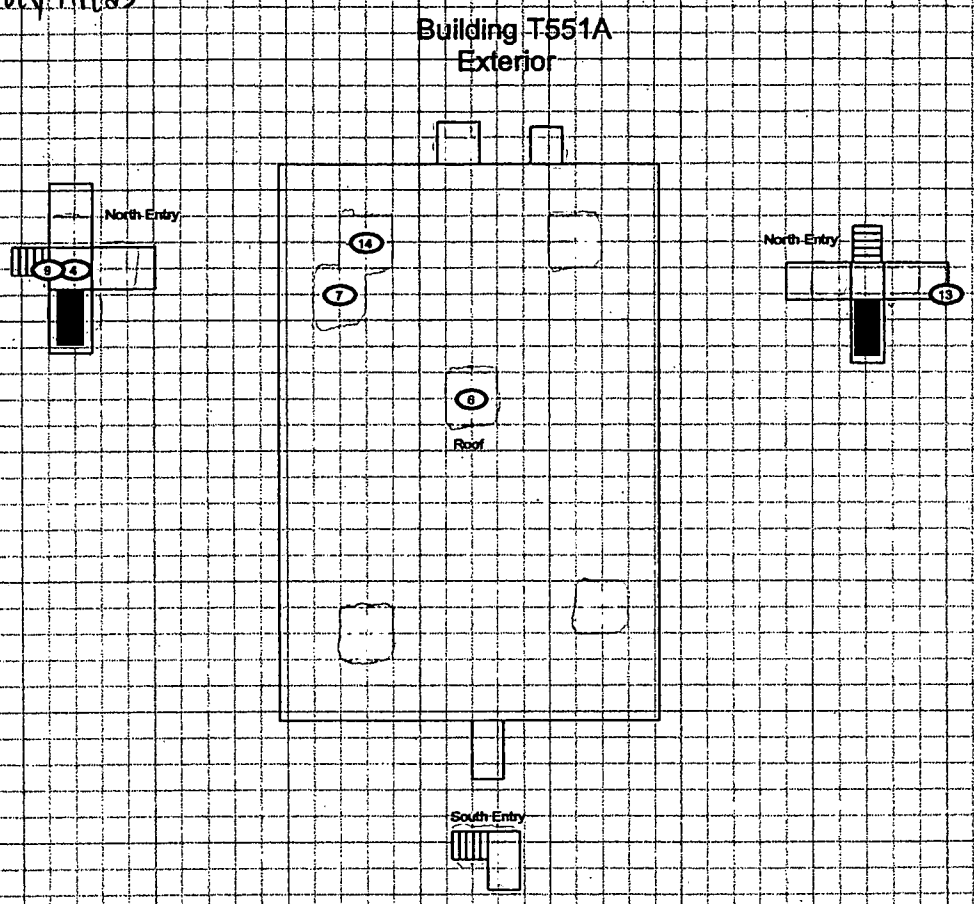
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	2	5.8
2	3	0	-0.9
3	3	1	2.1
4	2	0	-0.6
5	2	2	5.5
6	1	1	2.7
7	3	0	-0.9
8	1	0	-0.3
9	4	0	-0.3
10	3	2	5.2
11	4	0	-0.3
12	1	1	2.7
13	4	0	-0.3
14	2	0	-0.6
15	2	0	-0.6
		MIN	-0.9
		MAX	5.8
		MEAN	1.3
		SD	2.5
		Transuranic DCGL$_W$	**20**

115

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: D **Survey Unit: 551-D-006** **Classification: 3**
Building: Trailer 551A
Survey Unit Description: Exterior of T551A
Total Area: 586 sq. m. **Total Floor Area: 12 sq. m.**

= Scan Survey Areas



SURVEY MAP LEGEND

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

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N

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

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0303
March 8, 2001

Scan Survey Information
Survey Instrument ID #(s): 8,9,10
RCT ID #(s): 1,2,3

551-D-006

116

SURVEY UNIT DATA SUMMARY: GR8-A-001

Survey Unit Description:

Interior & Exterior of T886B

117

Survey Unit GR8-A-001 Data Summary

Total Surface Activity Measurements

30	30
Number Required	Number Obtained

MIN	-7.6	dpm/100 cm^2
MAX	69.2	dpm/100 cm^2
MEAN	9.2	dpm/100 cm^2
STD DEV	20.5	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2

Removable Activity Measurements

30	30
Number Required	Number Obtained

MIN	-0.3	dpm/100 cm^2
MAX	8.5	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

118

Survey Unit GR8-A-001 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9	10	11	12
Serial #:	1665	1665	1136	1420	1136	1136
Cal Due Date:	8/26/01	8/26/01	8/13/01	8/28/01	8/13/01	8/13/01
Analysis Date:	6/27/01	6/29/01	7/2/01	7/9/01	7/9/01	7/10/01
Alpha Eff. (c/d):	0.212	0.212	0.208	0.22	0.208	0.208
Alpha Bkgd (cpm)	1.3	0	2	1.3	3.3	3.3
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	29.9	9.4	35.4	28.8	42.8	42.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	7	2.7	4.7	-1.0
2	12	2.7	4.0	-1.0
3	7	1.3	3.3	-7.6
4	8	3.3	0.0	1.8
5	8	4.7	2.7	8.4
6	9	15.3	6.0	59.6
7	7	1.3	2.0	-7.6
8	7	10.7	1.3	36.7
9	7	3.3	0.0	1.8
10	8	2.7	2.0	-1.0
11	9	12.0	3.3	43.7
12	7	3.3	4.0	1.8
13	7	3.3	4.0	1.8
14	7	2.7	4.7	-1.0
15	8	4.0	2.7	5.1
16	7	2.7	0.0	-1.0
17	7	2.7	3.3	-1.0
18	7	3.3	2.7	1.8
19	7	1.3	2.7	-7.6
20	7	1.3	1.3	-7.6
21	8	3.3	1.3	1.8
22	7	2.0	3.3	-4.3
23	9	17.3	2.7	69.2
24	9	12.7	2.7	47.1
25	7	4.0	5.3	5.1
26	7	7.3	2.0	20.7
27	7	4.0	2.7	5.1
28	7	3.3	2.7	1.8
29	7	3.3	5.3	1.8
30	7	4.7	4.7	1.4
			Average LAB	2.9
			MIN	-7.6
			MAX	69.2
			MEAN	9.2
			SD	20.5
			Transuranic $DCGL_W$	100

QC 27	10	4.7	3.3	4.8
QC 26	10	4.7	4.0	4.8
			Average LAB	3.7
			MIN	4.8
			MAX	4.8
			MEAN	4.8
			SD	0.0
			Transuranic $DCGL_W$	100

119

Survey Unit GR8-A-001 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	5	6	13	14	15	16
Serial #:	830	833	767	770	830	833	830	767	835	830
Cal Due Date:	8/12/01	7/23/01	11/9/01	7/18/01	8/12/01	7/23/01	8/12/01	11/9/01	11/8/01	8/12/01
Analysis Date:	6/27/01	6/27/01	6/27/01	6/27/01	6/29/01	6/29/01	7/2/01	7/2/01	7/2/01	7/10/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.2	0.1
Sample Time (min)	2	2	2	2	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10	10	10	10	10
MDC (dpm/100cm^2)	7.0	7.0	7.0	4.5	7.0	7.0	8.0	7.0	8.0	7.0

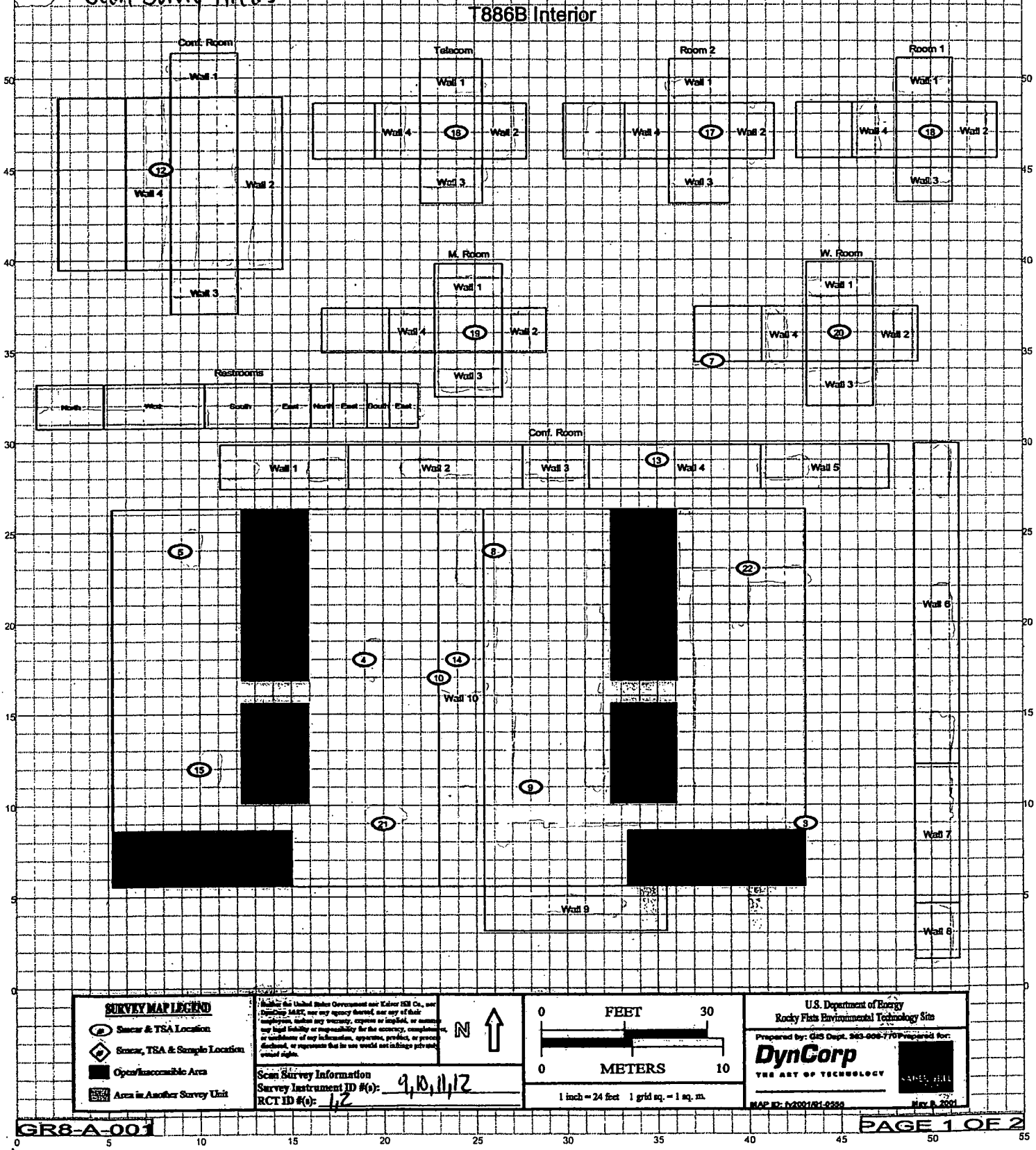
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	0	-0.3
2	16	0	-0.3
3	4	1	3.0
4	5	1	2.7
5	6	0	-0.3
6	13	3	8.5
7	3	0	-0.3
8	2	0	-0.3
9	3	0	-0.3
10	5	0	-0.3
11	14	2	5.8
12	3	0	-0.3
13	2	1	2.7
14	4	0	0.0
15	5	0	-0.3
16	4	0	0.0
17	1	2	5.8
18	1	1	2.7
19	2	0	-0.3
20	4	1	3.0
21	6	1	2.7
22	1	0	-0.3
23	15	2	5.5
24	13	3	8.5
25	3	0	-0.3
26	4	0	0.0
27	1	1	2.7
28	2	0	-0.3
29	3	1	2.7
30	2	1	2.7
		MIN	-0.3
		MAX	8.5
		MEAN	1.5
		SD	2.8
		Transuranic DCGL$_w$	20

120

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR8-A-001** **Classification: 3**
Building: T886B
Survey Unit Description: Interior & Exterior of T886B
Total Area: 1928 sq. m. **Total Floor Area: 366 sq. m.**

= Scan Survey Areas



SURVEY MAP LEGEND

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

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N

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

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

Prepared by: GIS Dept. 963-006-7/0 Prepared for:
DynCorp
THE ART OF TECHNOLOGY

MAP ID: fv2001/01-0350 May 8, 2001

Scan Survey Information
Survey Instrument ID #(s): 9,10,11,12
RCT ID #(s): 12

GR8-A-001

121

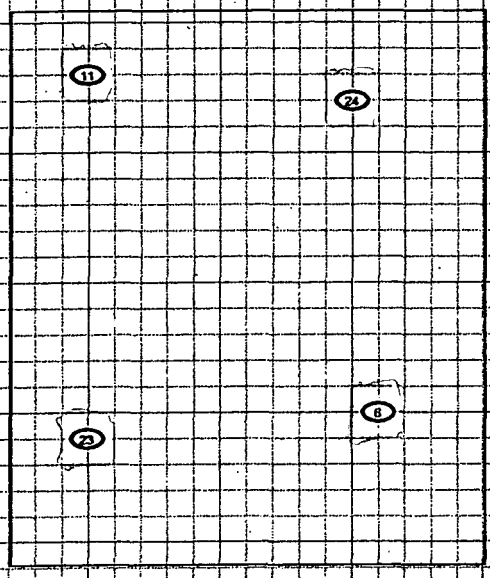
PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR8-A-001** **Classification: 3**
Building: T886B
Survey Unit Description: Interior & Exterior of T886B
Total Area: 1928 sq. m. **Total Floor Area: 366 sq. m.**

= Scan Survey Areas

T886B Exterior

Roof



North Wall

East Wall

South Wall

West Wall

SURVEY MAP LEGEND

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

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N

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

Scan Survey Information
Survey Instrument ID #(s): 9,10,11,12
RCT ID #(s): 1,2

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

Prepared by: GIS Dept. 303-966-7701 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

MAP ID: 0/2001/01-0255 May 8, 2001

GR8-A-001

122

SURVEY UNIT DATA SUMMARY: GR8-B-002

Survey Unit Description:

Interior & Exterior of T886C

123

Survey Unit GR8-B-002 Data Summary

Total Surface Activity Measurements

30	30
Number Required	Number Obtained

MIN	-19.2	dpm/100 cm^2
MAX	63.9	dpm/100 cm^2
MEAN	12.3	dpm/100 cm^2
STD DEV	21.3	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2

Removable Activity Measurements

30	30
Number Required	Number Obtained

MIN	-0.3	dpm/100 cm^2
MAX	8.8	dpm/100 cm^2
MEAN	1.1	dpm/100 cm^2
STD DEV	2.7	dpm/100 cm^2
TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

124

Survey Unit GR8-B-002 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9	10	11
Serial #:	1136	1665	1136	1665	1136
Cal Due Date:	8/13/01	8/26/01	8/13/01	8/26/01	8/13/01
Analysis Date:	6/26/01	6/27/01	6/28/01	6/29/01	7/10/01
Alpha Eff. (c/d):	0.208	0.212	0.208	0.212	0.208
Alpha Bkgd (cpm)	2.0	1.3	4.0	0.0	3.3
Sample Time (min)	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	35.4	29.9	46.1	9.4	42.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	11	8.7	6.0	22.6
2	7	8.0	6.7	19.2
3	7	4.0	3.3	0.0
4	7	6.7	2.7	13.0
5	11	6.0	2.7	9.6
6	7	3.3	6.0	-3.4
7	9	16.7	2.7	61.1
8	7	5.3	5.3	6.3
9	7	3.3	4.0	-3.4
10	9	13.3	3.3	44.7
11	11	6.0	4.0	9.6
12	9	10.7	2.7	32.2
13	7	8.0	7.3	19.2
14	10	2.7	2.0	-6.1
15	9	14.7	4.0	51.4
16	10	2.7	2.7	-6.1
17	7	1.3	4.7	-13.0
18	7	4.0	3.3	0.0
19	7	2.0	6.0	-9.6
20	7	0.0	3.3	-19.2
21	7	6.0	6.0	9.6
22	7	1.3	3.3	-13.0
23	7	2.7	1.3	-6.3
24	9	17.3	2.0	63.9
25	7	7.3	2.7	15.9
26	7	4.7	4.7	3.4
27	7	6.0	6.0	9.6
28	7	8.0	2.7	19.2
29	7	9.3	5.3	25.5
30	7	6.7	3.3	13.0
			Average LAB	4.0
			MIN	-19.2
			MAX	63.9
			MEAN	12.3
			SD	21.3
			Transuranic DCGL$_w$	100

QC 3	8	6.0	2.7	18.9
QC 18	8	2.0	1.3	0.0
			Average LAB	2.0
			MIN	0.0
			MAX	18.9
			MEAN	9.4
			SD	13.3
			Transuranic DCGL$_w$	100

125

Survey Unit GR8-B-002 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	5	6
Serial #:	830	833	767	830	833
Cal Due Date:	8/12/01	7/23/01	11/9/01	8/12/01	7/23/01
Analysis Date:	6/29/01	6/29/01	6/29/01	7/10/01	7/10/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.1	0.1	0.1	0.1
Sample Time (min)	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10
MDC (dpm/100cm^2)	7.0	7.0	7.0	7.0	7.0

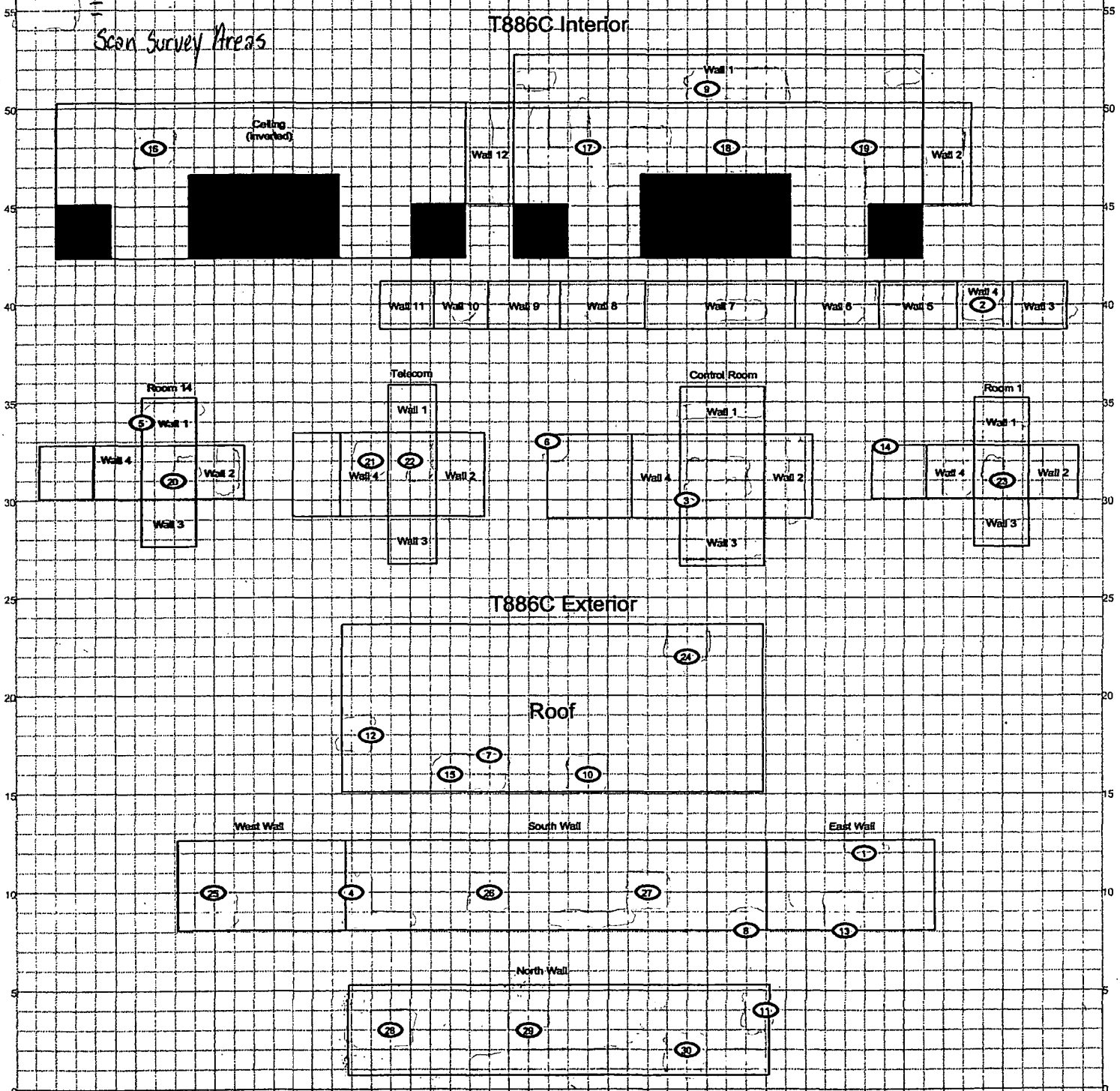
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	6	0	-0.3
2	3	0	-0.3
3	2	0	-0.3
4	1	0	-0.3
5	6	0	-0.3
6	2	0	-0.3
7	1	2	5.8
8	2	0	-0.3
9	3	0	-0.3
10	3	1	2.7
11	5	0	-0.3
12	3	0	-0.3
13	3	1	2.7
14	2	0	-0.3
15	2	3	8.8
16	1	0	-0.3
17	2	1	2.7
18	3	0	-0.3
19	1	1	2.7
20	3	0	-0.3
21	2	0	-0.3
22	1	0	-0.3
23	3	0	-0.3
24	2	2	5.8
25	1	0	-0.3
26	1	0	-0.3
27	2	0	-0.3
28	2	0	-0.3
29	1	0	-0.3
30	3	0	-0.3
		MIN	-0.3
		MAX	8.8
		MEAN	1.1
		SD	2.7
		Transuranic DCGL$_w$	20

126

PRE-DEMOLITION SURVEY

Survey Area: B **Survey Unit: GR8-B-002** **Classification: 3**
Building: T886C
Survey Unit Description: Interior & Exterior of T886C
Total Area: 1072 sq. m. **Total Floor Area: 164 sq. m.**

Scan Survey Areas



SURVEY MAP LEGEND
- Sensor & TSA Location
- Sensor, TSA & Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

N

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

Scan Survey Information
Survey Instrument ID #(s): 9,10,11
RCT ID #(s): 12

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0553 May 8, 2001

GR8-B-002

127

SURVEY UNIT DATA SUMMARY: GR6-C-003

Survey Unit Description:

Interior and Exterior of T900D

128

Survey Unit GR6-C-003 Data Summary

Total Surface Activity Measurements

	30	30	
	Number Required	Number Obtained	
MIN	-8.4		dpm/100 cm^2
MAX	80.0		dpm/100 cm^2
MEAN	11.8		dpm/100 cm^2
STD DEV	22.4		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	30	30	
	Number Required	Number Obtained	
MIN	-0.6		dpm/100 cm^2
MAX	5.8		dpm/100 cm^2
MEAN	0.9		dpm/100 cm^2
STD DEV	2.1		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

129

Survey Unit GR6-C-003 Total Surface Activity Results

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	10
Serial #:	1665	1136	1136
Cal Due Date:	8/26/01	8/13/01	8/13/01
Analysis Date:	6/5/01	6/5/01	6/15/01
Alpha Eff. (cpm/dpm):	0.212	0.208	0.208
Alpha Bkgd (cpm)	1.3	3.3	3.3
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm^2)	29.9	42.8	42.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	LAB Gross Counts (cpm)	Sample Net Activity (dpm/100cm2)
1	8	2.7	3.3	-1.7
2	8	4.0	2.7	4.6
3	8	10.0	2.0	33.4
4	8	2.0	2.0	-5.1
5	8	7.3	3.3	20.4
6	8	8.0	4.7	23.8
7	7	16.7	3.3	64.4
8	8	2.0	2.0	-5.1
9	7	1.3	2.7	-8.3
10	8	2.7	7.3	-1.7
11	7	3.3	2.3	1.2
12	7	2.0	4.0	-5.0
13	8	2.7	1.3	-1.7
14	10	16.0	1.3	62.2
15	10	19.7	4.0	80.0
16	8	1.3	4.0	-8.4
17	7	4.7	2.7	7.8
18	7	2.0	1.3	-5.0
19	7	3.3	0.7	1.2
20	7	1.3	2.7	-8.3
21	7	2.0	1.3	-5.0
22	7	6.7	2.0	17.2
23	7	6.0	2.7	13.9
24	7	6.0	1.3	13.9
25	7	4.7	4.0	7.8
26	8	7.3	7.3	20.4
27	8	2.7	2.7	-1.7
28	8	6.7	2.0	17.5
29	8	6.0	4.7	14.2
30	7	4.7	6.0	7.8
			Average LAB	3.1
			MIN	-8.4
			MAX	80.0
			MEAN	11.8
			SD	22.4
			Transuranic DCGL$_w$	100

QC 19	8	0.7	1.3	-9.4
QC 3	7	8.0	4.0	25.2
			Average LAB	2.7
			MIN	-9.4
			MAX	25.2
			MEAN	7.9
			SD	24.5
			Transuranic DCGL$_w$	100

130

Survey Unit GR6-C-003 Smear Results

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	5	6	13
Serial #:	830	833	1157	770	830	833	1157
Cal Due Date:	8/12/01	7/23/01	8/27/01	7/18/01	8/12/01	7/23/01	8/27/01
Analysis Date:	6/5/01	6/5/01	6/5/01	6/5/01	6/6/01	6/6/01	6/6/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.1	0.2	0	0.2	0	0.1	0.3
Sample Time (min)	2	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10	10
MDC (dpm/100cm^2)	7.0	8.0	4.5	8.0	4.5	7.0	8.8

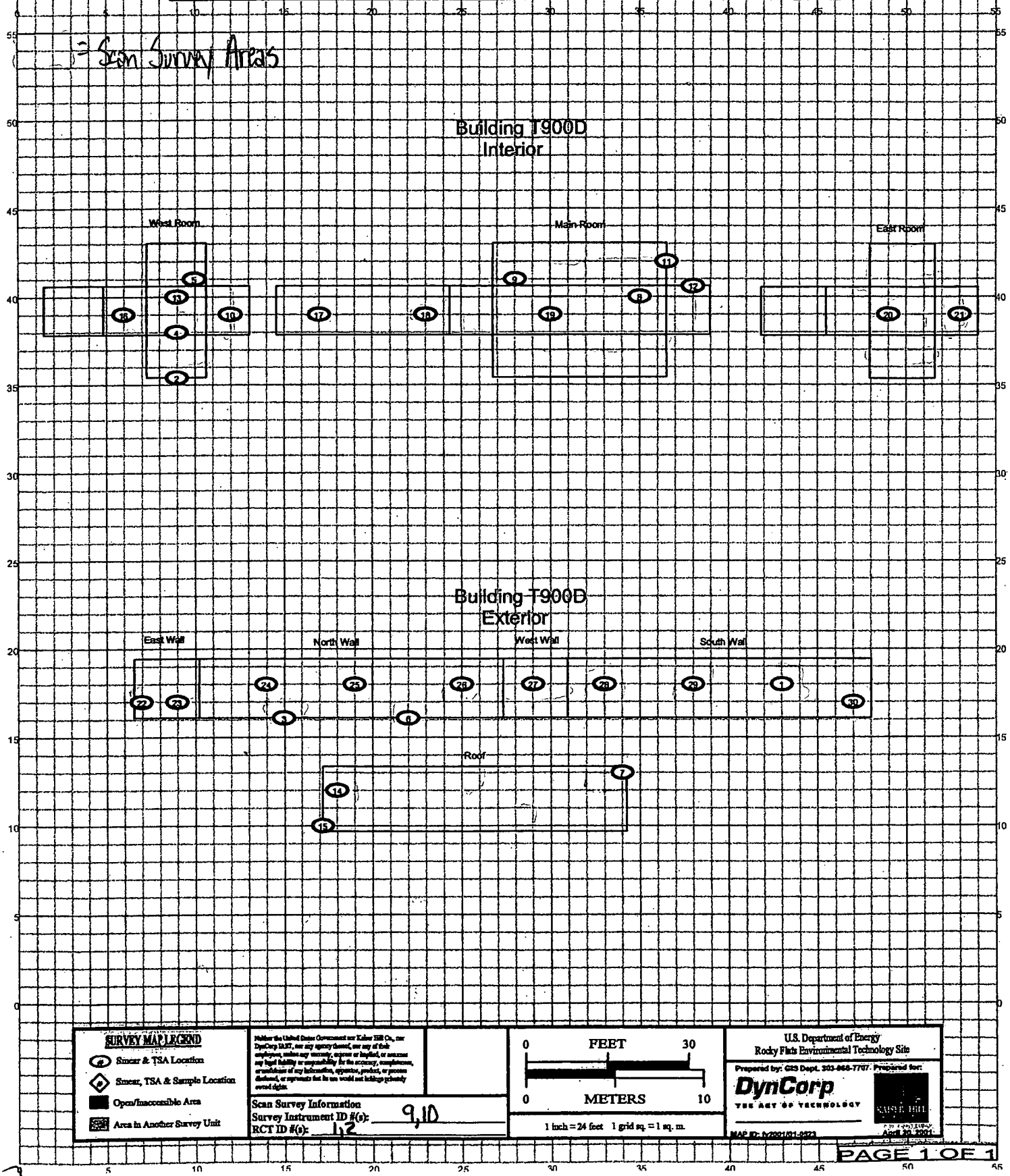
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	2	5.8
2	3	1	3.0
3	4	0	-0.6
4	1	0	-0.3
5	4	1	2.4
6	2	1	2.4
7	13	1	2.1
8	4	0	-0.6
9	3	0	0.0
10	2	0	-0.6
11	3	0	0.0
12	2	2	5.5
13	3	1	3.0
14	5	1	3.0
15	6	2	5.8
16	4	0	-0.6
17	2	0	-0.6
18	1	0	-0.3
19	2	0	-0.6
20	4	0	-0.6
21	1	0	-0.3
22	3	0	0.0
23	2	0	-0.6
24	1	0	-0.3
25	3	0	0.0
26	1	0	-0.3
27	4	1	2.4
28	3	0	0.0
29	2	0	-0.6
30	1	0	-0.3
		MIN	-0.6
		MAX	5.8
		MEAN	0.9
		SD	2.1
		$DCGL_W$	20

131

PRE-DEMOLITION SURVEY

Survey Area: C **Survey Unit: GR6-C-003** **Classification: 3**
Building: Group 6 (T900D)
Survey Unit Description: Interior & Exterior of T900D
Total Area: 415.2 sq. m. **Total Floor Area: 45.7 sq. m.**

= Scan Survey Areas



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): 9,10
RCT ID #(s): 12

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

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7707 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
KAISER HILL
April 20, 2001
MAP ID: tv2001401-0273

132

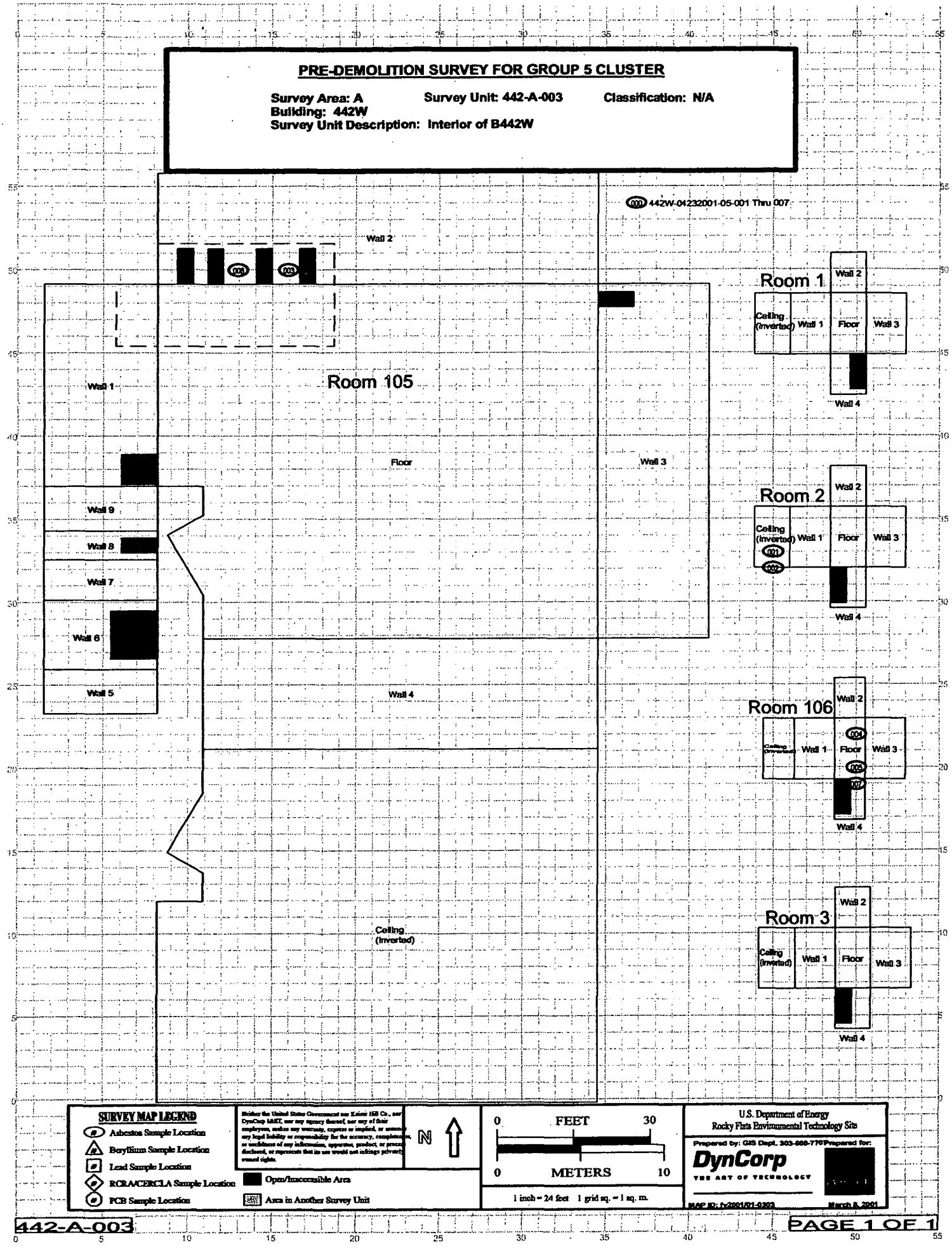
ATTACHMENT F

Chemical Data Summaries and Sample Maps

Asbestos Data Summary

Sample Number	Material Sampled & Location	Analytical Results
T551A-04182001-05-001	T551A, Entrance to Men's Room – 12" x 12" White/Tan tile with Tan Mastic	None Detected
T551A-04182001-05-002	T551A, Center of Main Room – 12" x 12" White/Tan tile with tan Mastic	None Detected
T551A-04182001-05-003	T551A, Center of Main Room – 12" x 12" White w/ blue streak tile with tan mastic	None Detected
T551A-04182001-05-004	T551A, Hallway to Rooms 7 & 8 – 12" x 12" White w/ blue streak tile with tan mastic	None Detected
T551A-04182001-05-005	T551A, Center of Main Room – White/tan ceiling drywall with vinyl covering, no mud	None Detected
T551A-04182001-05-006	T551A, Hall entrance to Rooms 7 & 8 – White/tan ceiling drywall with vinyl covering, no mud, with white granular paint	None Detected
T551A-04182001-05-007	T551A, Room 8 -- White/tan ceiling drywall with vinyl covering and white granular paint, no mud	None Detected
T551A-04182001-05-008	T551A, Main Room – Pink fibrous duct insulation	None Detected
T551A-04182001-05-009	T551A, Roof – Black tar	None Detected
442W-04232001-05-001	442W, Room 2 – 2' x 4' deep-grooved, white/tan ceiling tile	None Detected
442W-04232001-05-002	442W, Room 2 – 2' x 4' white/tan small dot with groove ceiling tile	None Detected
442W-04232001-05-003	442W, Entrance to 106 – White/tan drywall with white paint and mud	None Detected
442W-04232001-05-004	442W, Room 106 – 12" x 12" white w/ blue streak floor tile with black mastic	None Detected
442W-04232001-05-005	442W, Room 106 – 12" x 12" white w/ blue streak floor tile with black mastic	None Detected
442W-04232001-05-006	442W, Entrance to Room 2 – White/tan drywall with white tape, mud, and paint	None Detected
442W-04232001-05-007	442W, Room 106 – White cove base with tan mastic	None Detected
280-05222001-05-001	280, Room 102 – Silver reflective tape w/ white compound	None Detected
280-05222001-05-002	280, Room 102 – 2'x4' white ceiling tiles with speckles	None Detected
280-05222001-05-003	280, Room 102 – drywall and tape joint compound	None Detected
280-05222001-05-004	280, Room 102 – 2'x4' white ceiling tile w/ speckles	None Detected
280-05222001-05-005	280, Room 102 – gray baseboard w/ brown mastic	None Detected
280-05222001-05-006	280, Room 108 – drywall and tape joint compound	None Detected

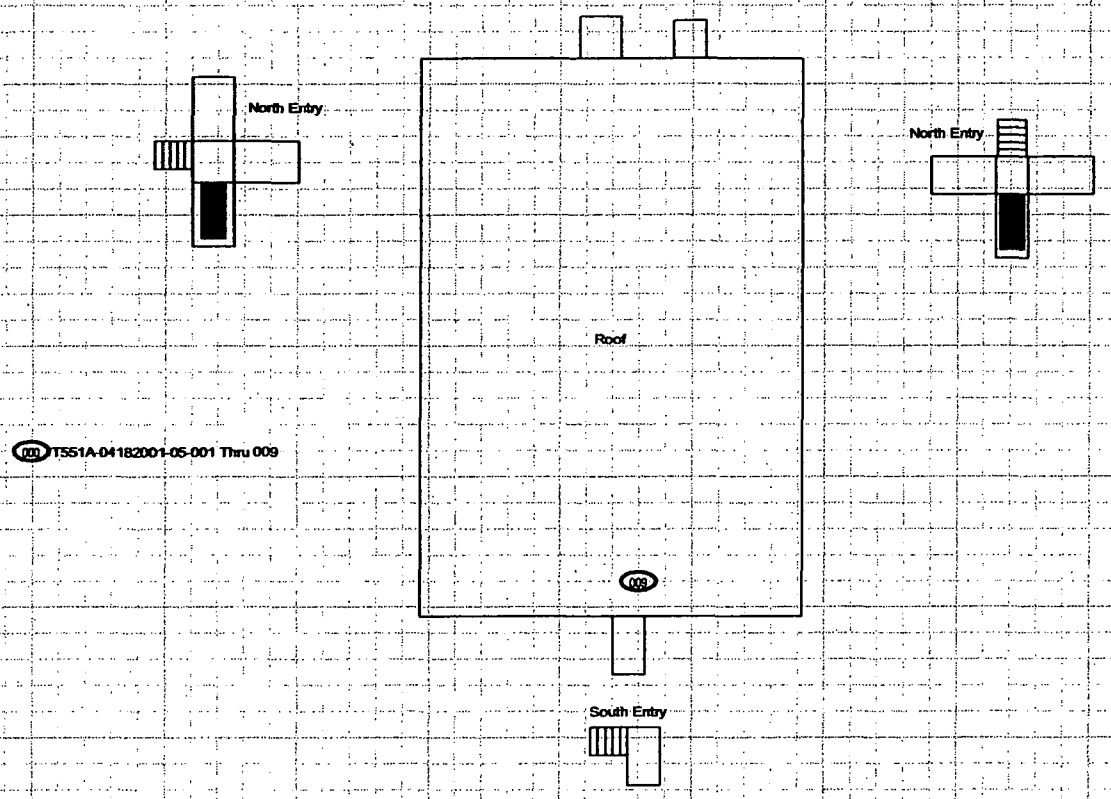
Sample Number	Material Sampled & Location	Analytical Results
280-05222001-05-007	280, Room 102 – 12"x12" white floor tile w/turquoise specks & yellow mastic	None Detected
280-05222001-05-008	280, Room 104 -- 12"x12" white floor tile w/turquoise specks & yellow mastic	None Detected
282-05222001-05-001	280, Main Room – drywall and tape joint compound	None Detected
282-05222001-05-002	280, Main Room -- gray baseboard	None Detected
T900D-05222001-05-01	T900D, Main Room – White linoleum w/tan specks & 6"x6" squares	None Detected
T900D-05222001-05-01	T900D, West Room -- White linoleum w/tan specks & 6"x6" squares	None Detected
T900D-05222001-05-01	T900D, West Room – White drywall ceiling w/ white skim texture	None Detected
T900D-05222001-05-01	T900D, Main Room -- White drywall ceiling w/ white skim texture	None Detected
T900D-05222001-05-01	T900D, East Room -- White drywall ceiling w/ white skim texture	None Detected
T886C-06072001-315-101	T886C, FAX Room – White/tan drop ceiling tile	None Detected
T886C-06072001-315-102	T886C, NW Corner – White/tan drop ceiling tile	None Detected
T886C-06072001-315-103	T886C, Tele Com – White/tan drop ceiling tile	None Detected
T886C-06072001-315-104	T886C, Control Room – White/tan drop ceiling tile	None Detected
T886C-06072001-315-105	T886C, East End – White/tan drop ceiling tile	None Detected
T886C-06072001-315-106	T886C, Tele Com – Tan/white sheet vinyl linoleum	None Detected
T886C-06072001-315-107	T886C, Tele Com – Tan vinyl baseboard with yellow mastic	None Detected
T886B-06072001-315-108	T886B, West of Men's Room – White/tan drop ceiling tile	None Detected
T886B-06072001-315-109	T886B, Conference Room – White/tan drop ceiling tile	None Detected
T886B-06072001-315-110	T886B, Hall outside Conference Room – White/tan drop ceiling tile	None Detected
T886B-06072001-315-111	T886B, Copy Room – White/tan drop ceiling tile	None Detected
T886B-06072001-315-112	T886B, Outside Tele Com – White/tan drop ceiling tile	None Detected
T886B-06072001-315-113	T886B, SW Corner – White/tan drop ceiling tile	None Detected
T886B-06072001-315-114	T886B, NW Hallway – White/tan drop ceiling tile	None Detected
T886B-06072001-315-115	T886B, Men's Room – Tan vinyl baseboard with yellow mastic	None Detected
T886B-06072001-315-116	T886B, Men's Room – Tan/white sheet vinyl linoleum with tan mastic	None Detected


PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER
Survey Area: A
Survey Unit: 442-A-003
Classification: N/A
Building: 442W
Survey Unit Description: Interior of B442W
000 442W-04232001-05-001 Thru 007
Wall 2
Room 105
Wall 1
Floor
Wall 3
Wall 9
Wall 8
Wall 7
Wall 6
Wall 5
Wall 4
Ceiling (Inverted)
Room 1
Ceiling (Inverted)
Wall 1
Floor
Wall 3
Wall 4
Room 2
Room 106
Room 3
SURVEY MAP LEGEND
Asbestos Sample Location
Beryllium Sample Location
Lead Sample Location
RCRA/CERCLA Sample Location
PCB Sample Location
Open/Inaccessible Area
Area in Another Survey Unit
N
0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.
U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0303
March 8, 2001
442-A-003
PAGE 1 OF 1

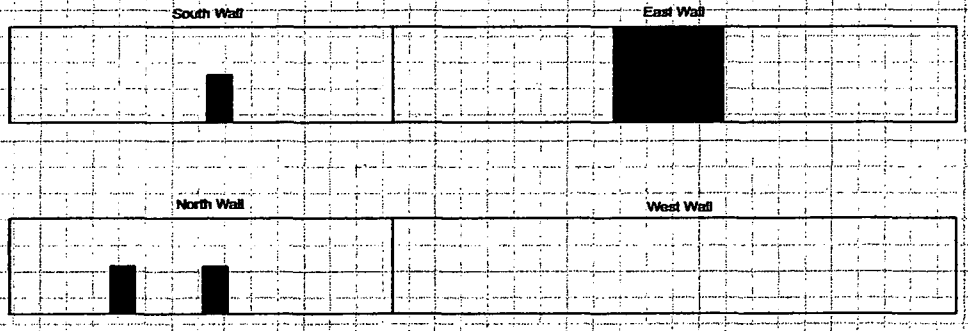
136

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: D **Survey Unit: 551-D-006** **Classification: N/A**
Building: Trailer 551A
Survey Unit Description: Exterior of T551A



009 T551A-04182001-05-001 Thru 009



SURVEY MAP LEGEND

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

N

0 FEET 30
0 METERS 10

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

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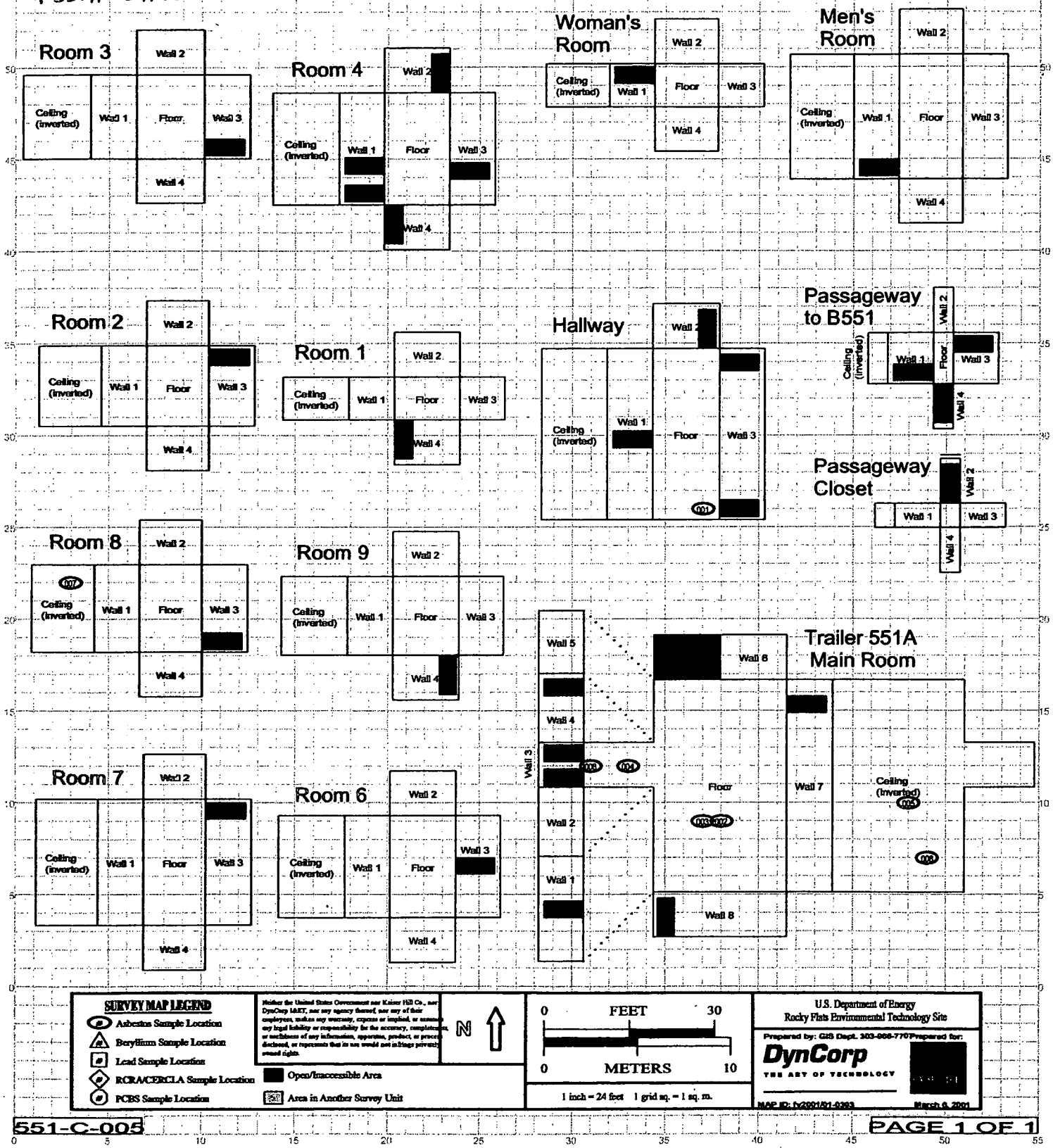
551-D-006

137

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: C **Survey Unit: 551-C-005** **Classification: N/A**
Building: Trailer 551A
Survey Unit Description: Interior of T551A

T551A-04182001-05-001 Thru 009



SURVEY MAP LEGEND

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

N

0 FEET 30
0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707 Prepared for:
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THE ART OF TECHNOLOGY

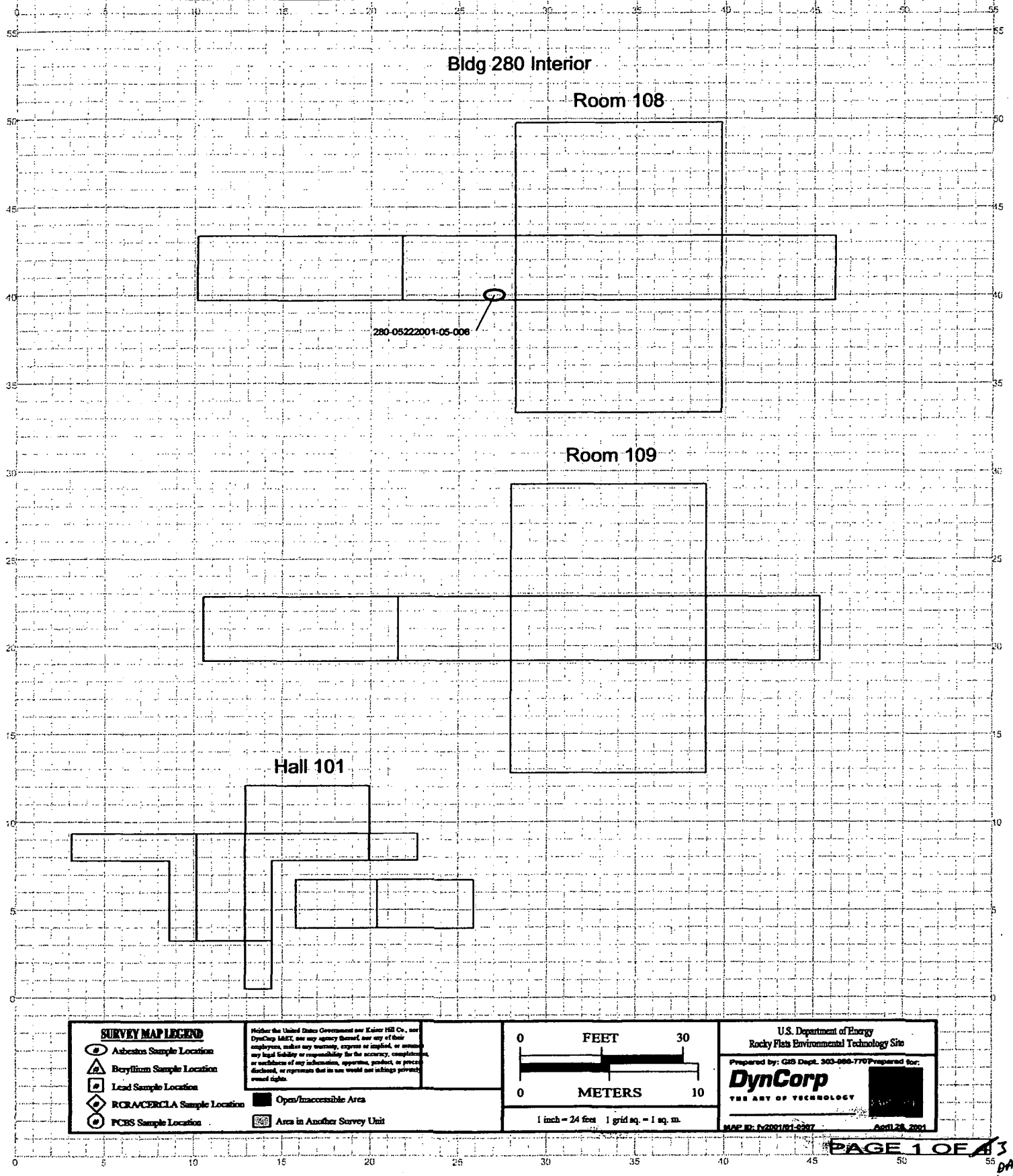
MAP ID: fy2001/01-0393 March 6, 2001

551-C-005

138

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **C** **Classification: N/A**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads



SURVEY MAP LEGEND

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

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

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THE ART OF TECHNOLOGY

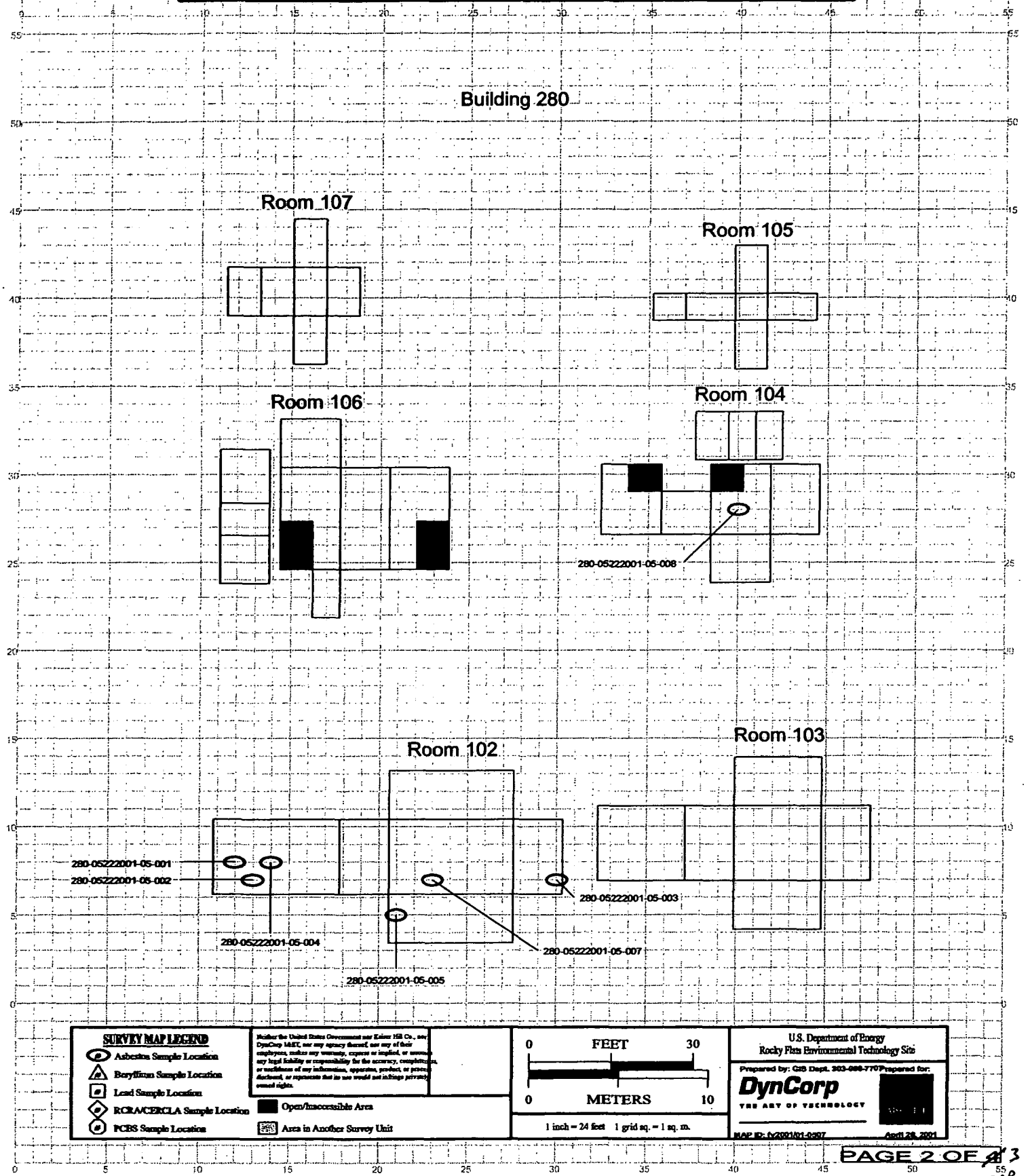
MAP ID: fy2001/01-0397 April 26, 2001

BAP 7/30/01

139

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **C** **Classification: N/A**
Building: *Group 6 (280 Area)*
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads



SURVEY MAP LEGEND

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

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

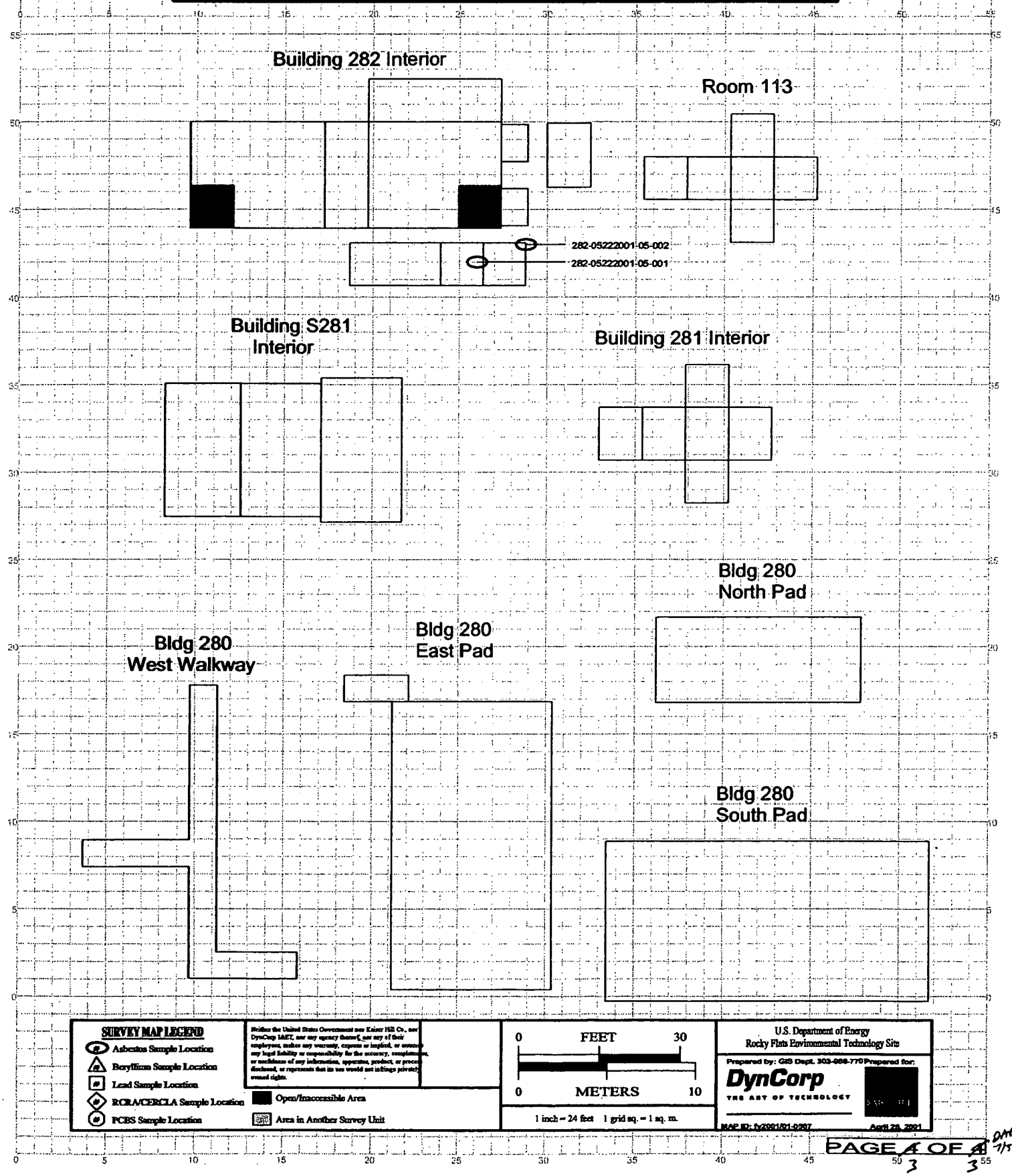
U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7707 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: fy2001/01-0307 April 28, 2001

DAP 7/30/01

140

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR6-A-001** **C** **Classification: N/A**
Building: Group 6 (280 Area)
Survey Unit Description: Interiors of B280, B281, S281, B282, & associated sidewalk & pads



SURVEY MAP LEGEND

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

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

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

Prepared by: GIS Dept. 303-966-7701 Prepared for:
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THE ART OF TECHNOLOGY

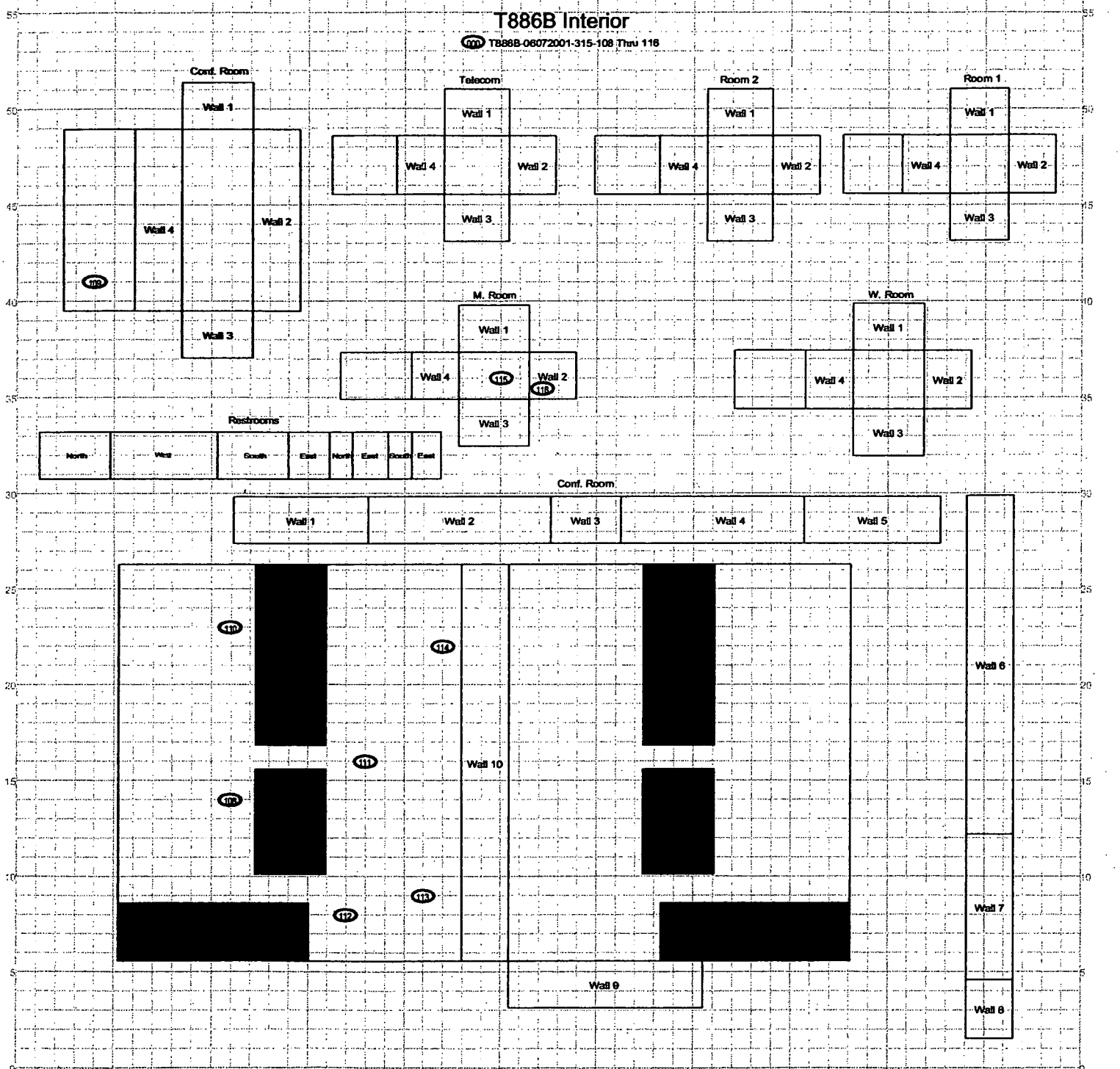
MAP ID: fy2001/01-0207 April 23, 2001

DAP 7/5/01

141

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR8-A-001** **Classification: 3**
Building: T886B
Survey Unit Description: Interior & Exterior of T886B
Total Area: 1928 sq. m. **Total Floor Area: 366 sq. m.**



SURVEY MAP LEGEND

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

N

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

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
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THE ART OF TECHNOLOGY
MAP ID: 0/2001/01-0336 May 8, 2001

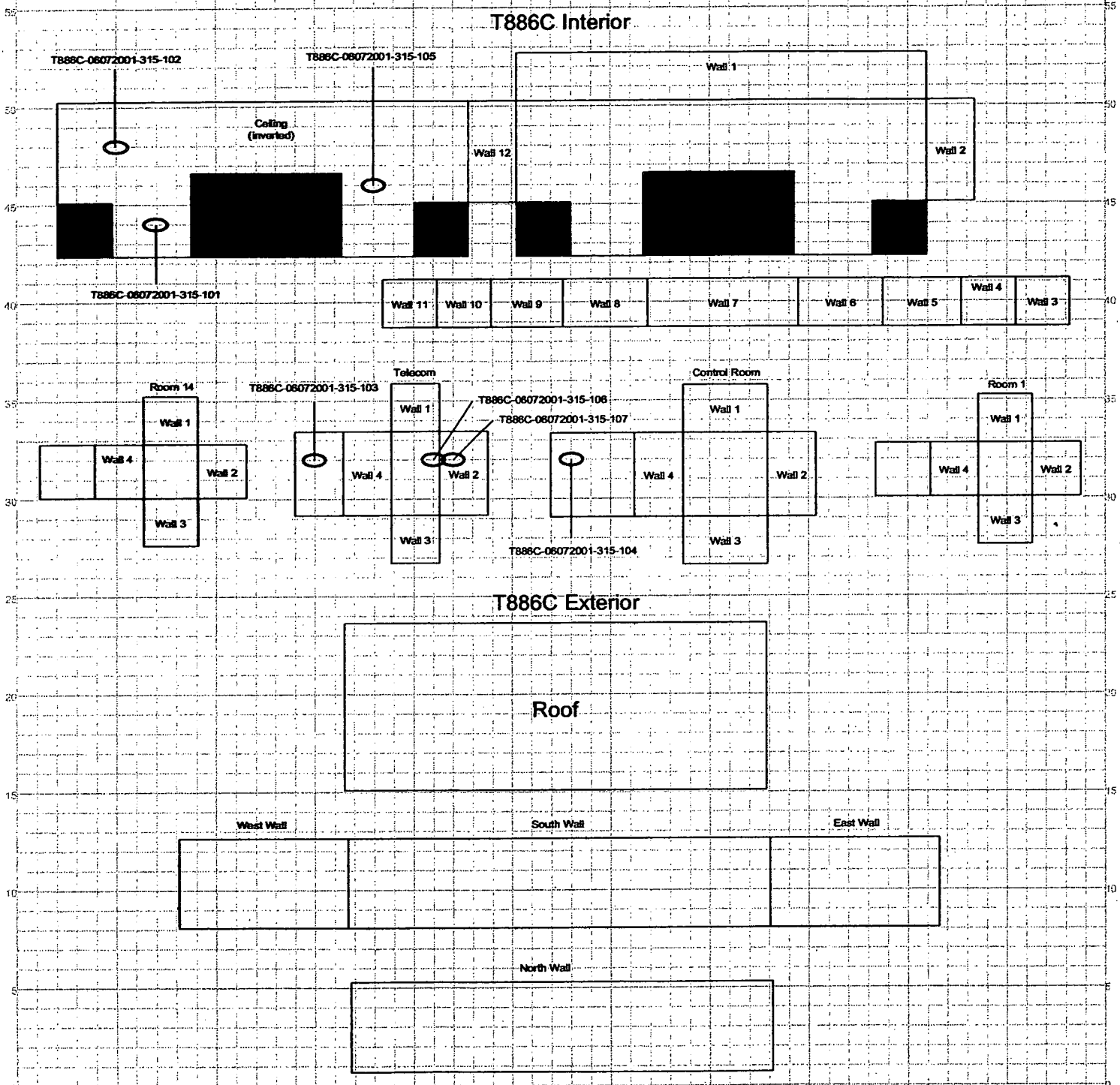
GR8-A-001

142

AMP 7/30/01

PRE-DEMOLITION SURVEY

Survey Area: B **Survey Unit: GR8-B-002** **Classification: 3**
Building: T886C
Survey Unit Description: Interior & Exterior of T886C
Total Area: 1072 sq. m. **Total Floor Area: 164 sq. m.**



SURVEY MAP LEGEND

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

N

0 FEET 30
0 METERS 10

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

U.S. Department of Energy
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Prepared by: GIS Dept. 303-966-7707 Prepared for:

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THE ART OF TECHNOLOGY

MAP ID: fy2001/01-0355 May 9, 2001

GR8-B-002

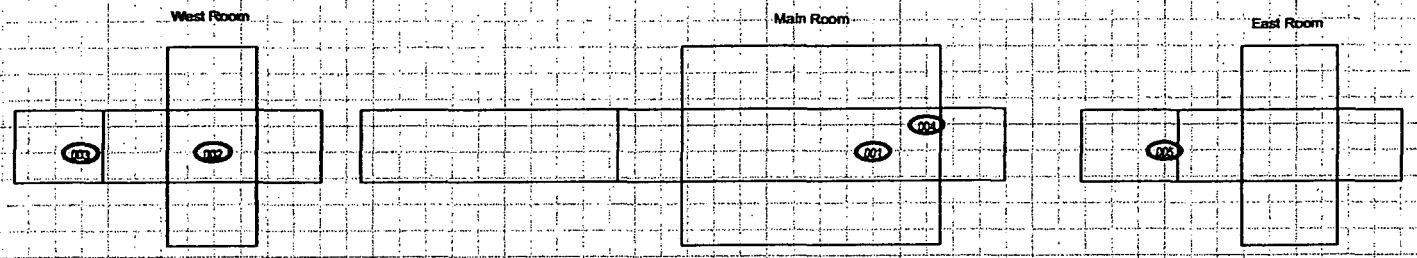
143

PRE-DEMOLITION SURVEY

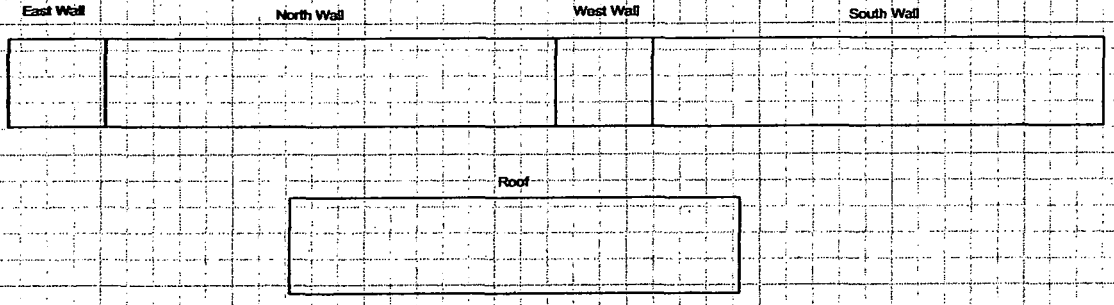
Survey Area: C **Survey Unit: GR6-C-003** **Classification: N/A**
Building: Group 6 (T900D)
Survey Unit Description: Interior & Exterior of T900D
Total Area: 415.2 sq. m. **Total Floor Area: 45.7 sq. m.**

Building T900D Interior

000 T900D-05222001-05-001 Thru 005



Building T900D Exterior



SURVEY MAP LEGEND

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

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

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7701 Prepared for:
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THE ART OF TECHNOLOGY
MAP ID: tv2001/01-0323 April 30, 2001

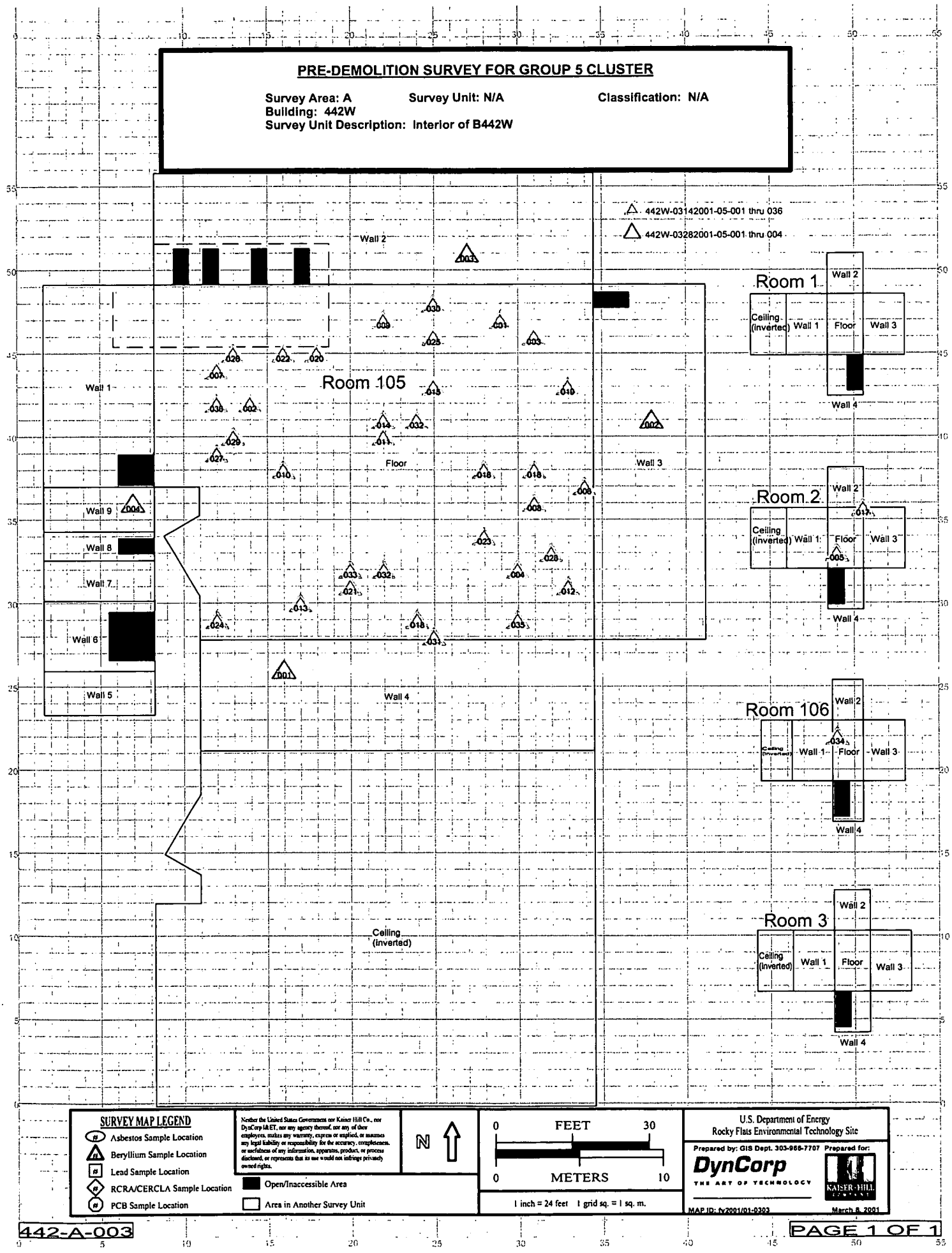
144

Beryllium Data Summary

Sample Number	Sample Location	Result ($\mu g/100\ cm^2$)
T551A-04182001-05-001	T551A, Men's Room floor	< 0.1
T551A-04182001-05-002	T551A, Main Room SW corner floor	< 0.1
T551A-04182001-05-003	T551A, Room 7, Wall 1 window sill	< 0.1
T551A-04182001-05-004	T551A, Main Room floor by Wall 3	< 0.1
T551A-04182001-05-005	T551A, Hallway floor by Wall 2	< 0.1
T551A-04182001-05-006	T551A, Women's Room floor	< 0.1
T551A-04182001-05-007	T551A	< 0.1
T551A-04182001-05-008	T551A, Room 3 Wall 1 window sill	< 0.1
T551A-04182001-05-009	T551A, Room 2, Wall 1	< 0.1
T551A-04182001-05-010	T551A, Room 8, Wall 1 window sill	< 0.1
442W-03142001-05-001	442W, Room 105, concrete floor: 7' s. of Wall 2 and 21'4" w. of wall 3	< 0.1
442W-03142001-05-002	442W, Room 105, concrete floor: 11'2" s. of #2 & 20' e. of #1	< 0.1
442W-03142001-05-003	442W, Room 105, conc. flr: 10'3" s. of #2 & 18"1" w. of #3	< 0.1
442W-03142001-05-004	442W, Room 105, conc. flr: 13'9" n. of #4 & 24'8" w. of #3	< 0.1
442W-03142001-05-005	442W, Room 002, floor by door	< 0.1
442W-03142001-05-006	442W, Room 105, conc. flr: 30'3" n. of #4 & 1'8" w. of #3	< 0.1
442W-03142001-05-007	442W, Room 105, conc. flr: 4'7" s. of #2 b/t Rooms 002 & 106	< 0.1
442W-03142001-05-008	442W, Room 105, conc. flr: 26'11" s. of #4 & 18'1" w. of #3	< 0.1
442W-03142001-05-009	442W, Room 105, conc. flr: 7' s. of #2 & 41'1" w. of #3	< 0.1
442W-03142001-05-010	442W, Room 105, conc. flr: 28'9" e. of #1 & 24'3" s. of #2	< 0.1
442W-03142001-05-011	442W, Room 105, conc. flr: 30' s. of #2 & 41'1" w. of #3	< 0.1
442W-03142001-05-012	442W, Room 105, conc. flr: 10'6" n. of #4 & 9'3" w. of #3	< 0.1
442W-03142001-05-013	442W, Room 105, conc. flr: 7'3" n. of #4 & 19'11" e. of # 7	< 0.1
442W-03142001-05-014	442W, Room 105, conc. flr: 26'8" s. of #2 & 41'1" w. of #3	< 0.1
442W-03142001-05-015	442W, Room 105, conc. flr: 20'1" s. of #2 & 31'2" w. of #3	< 0.1
442W-03142001-05-016	442W, Room 105, conc. flr: 18'1" w. of #3 & 33'6" n. of # 4	< 0.1
442W-03142001-05-017	442W, Room 002, floor in NE corner	< 0.1
442W-03142001-05-018	442W, Room 105, conc. flr: 39'7" e. of #7 & 3' n. of #4	< 0.1
442W-03142001-05-019	442W, Room 105, conc. flr: 20'1" s. of #2 & 11'6" w. of #3	< 0.1

Sample Number	Sample Location	Result ($\mu g/100\ cm^2$)
442W-03142001-05-020	442W, Room 105, conc. flr in front of Room 003	< 0.1
442W-03142001-05-021	442W, Room 105, conc. flr: 29'9" e. of #7 & 7'3" n. of #4	< 0.1
442W-03142001-05-022	442W, Room 105, conc. flr by door to Room 003	< 0.1
442W-03142001-05-023	442W, Room 105, conc. flr: 20'4" n. of #4 & 27"11" w. of #3	< 0.1
442W-03142001-05-024	442W, Room 105, conc. flr: 3'11" n. of #4 & 3'6" e. of #6	< 0.1
442W-03142001-05-025	442W, Room 105, conc. flr: 10'3" s. of #2 & 31'2" w. of #3	< 0.1
442W-03142001-05-026	442W, Room 105, juncture of wall & floor by Room 106	< 0.1
442W-03142001-05-027	442W, Room 105, conc. flr: 15'7" e. of #1 & 17'9" s. of #2	< 0.1
442W-03142001-05-028	442W, Room 105, conc. flr: 17'1" n. of #4 & 11'6" w. of #3	< 0.1
442W-03142001-05-029	442W, Room 105, conc. flr: 18'10" e. of #1 & 17'9" s. of #2	< 0.1
442W-03142001-05-030	442W, Room 105, conc. flr: 3'8" s. of #2 & 31'2" w. of #3	< 0.1
442W-03142001-05-031	442W, Room 105, conc. flr: 8" n. of #4 & 34'6" w. of #3	< 0.1
442W-03142001-05-032	442W, Room 105, conc. flr: 26'8" s. of #2 & 34'6" w. of #3	< 0.1
442W-03142001-05-033	442W, Room 105, conc. flr: 36'3" e. of #7 & 10'6" n. of #4	< 0.1
442W-03142001-05-034	442W, Room 106, Tile floor in Unisex Bathroom	< 0.1
442W-03142001-05-035	442W, Room 105, conc. flr: 7'3" n. of #5 & 24'8" w. of #3	< 0.1
442W-03142001-05-036	442W, Room 105, conc. flr: 15'7" e. of #1 & 11'2" s. of #2	< 0.1
442W-03142001-05-037	442W, Room 105, Field Blank	< 0.1
442W-03142001-05-038	442W, Room 105, Field Blank	< 0.1
442W-03142001-05-039	442W, Room 105, Field Blank	< 0.1
442W-03282001-05-001	442W, Room 105, south wall, Pillar A Section 38 (vertical) >6' high	< 0.1
442W-03282001-05-002	442W, Room 105, east wall, on top of blue panel (horizontal) >6' high	< 0.1
442W-03282001-05-003	442W, Room 105, north wall, first pillar from east end (vertical) >6' high	< 0.1
442W-03282001-05-004	442W, Room 105, west wall, pillar next to bulletin board, (vertical) >6' high	< 0.1
T886C-06072001-315-201	T886C, FAX Room – Horizontal surface of HVAC diffuser	< 0.1
T886C-06072001-315-202	T886C, NW Corner – Horizontal surface of HVAC diffuser	< 0.1
T886C-06072001-315-203	T886C, Tele Com Room – Horizontal surface of light fixture	< 0.1
T886C-06072001-315-204	T886C, Control Room – Horizontal surface of light fixture	< 0.1

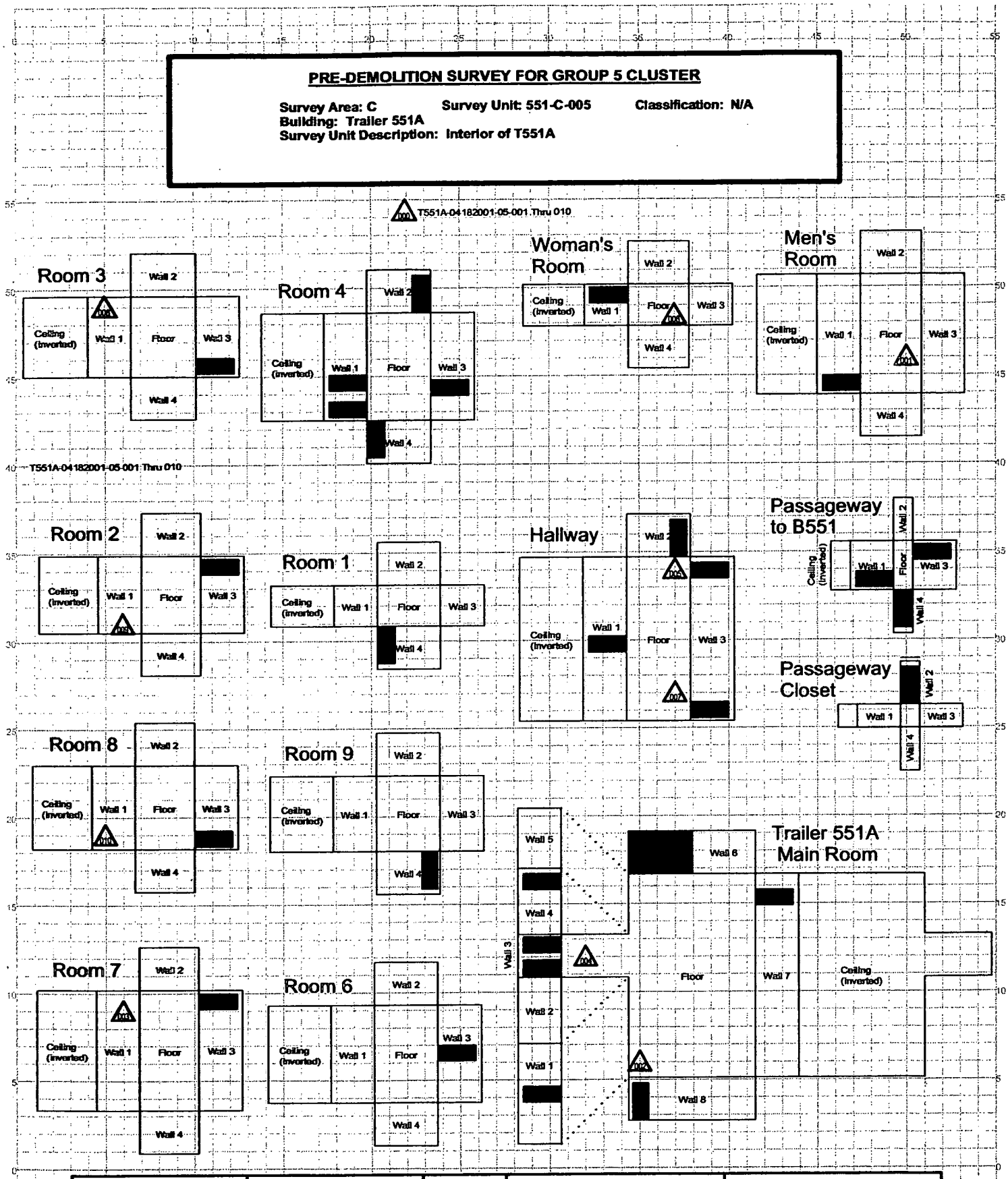
Sample Number	Sample Location	Result ($\mu g/100\ cm^2$)
T886C-06072001-315-205	T886C, East End – Horizontal surface of light fixture	< 0.1
T886B-06072001-315-206	T886B, East of Men's Room – Horizontal surface of light fixture	< 0.1
T886B-06072001-315-207	T886B, Conference Room – Horizontal surface of light fixture	< 0.1
T886B-06072001-315-208	T886B, East of Conference Room – Top of abandoned wall channel	< 0.1
T886B-06072001-315-209	T886B, West of hall b/t Conference Room & Men's Room – Top of water supply pipe to fire suppression system.	< 0.1
T886B-06072001-315-210	T886B, West of Tele Com Room – Top of light fixture	< 0.1
T900D-05302001-05-100	T900D, West Room – Horizontal surface of shelf, NW corner	< 0.1
T900D-05302001-05-101	T900D, Main Room – Side of ceiling light fixture, NW corner	< 0.1
T900D-05302001-05-102	T900D, Main Room – Floor in front of SE entry door	< 0.1
T900D-05302001-05-103	T900D, Main Room – Top edge of ink board, south wall	< 0.1
T900D-05302001-05-104	T900D, East Room – Side of ceiling light fixture, east side	< 0.1



148

PRE-DEMOLITION SURVEY FOR GROUP 5 CLUSTER

Survey Area: C **Survey Unit: 551-C-005** **Classification: N/A**
Building: Trailer 551A
Survey Unit Description: Interior of T551A



SURVEY MAP LEGEND

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

N

0 FEET 30
0 METERS 10

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

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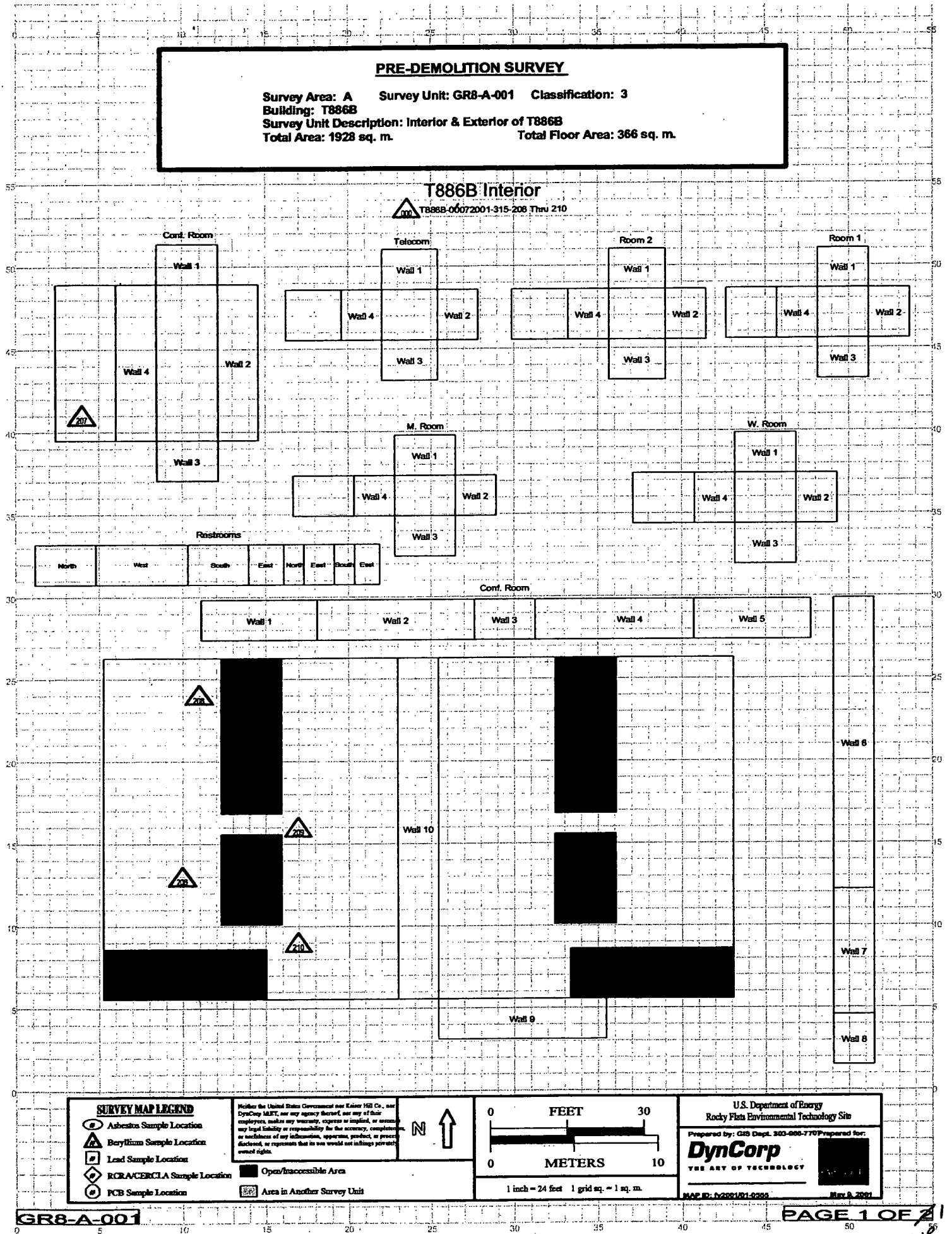
551-C-005

149

PRE-DEMOLITION SURVEY

Survey Area: A **Survey Unit: GR8-A-001** **Classification: 3**
Building: T886B
Survey Unit Description: Interior & Exterior of T886B
Total Area: 1928 sq. m. **Total Floor Area: 366 sq. m.**



SURVEY MAP LEGEND

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

N

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

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MAP ID: DY2001/01-0355 May 9, 2001

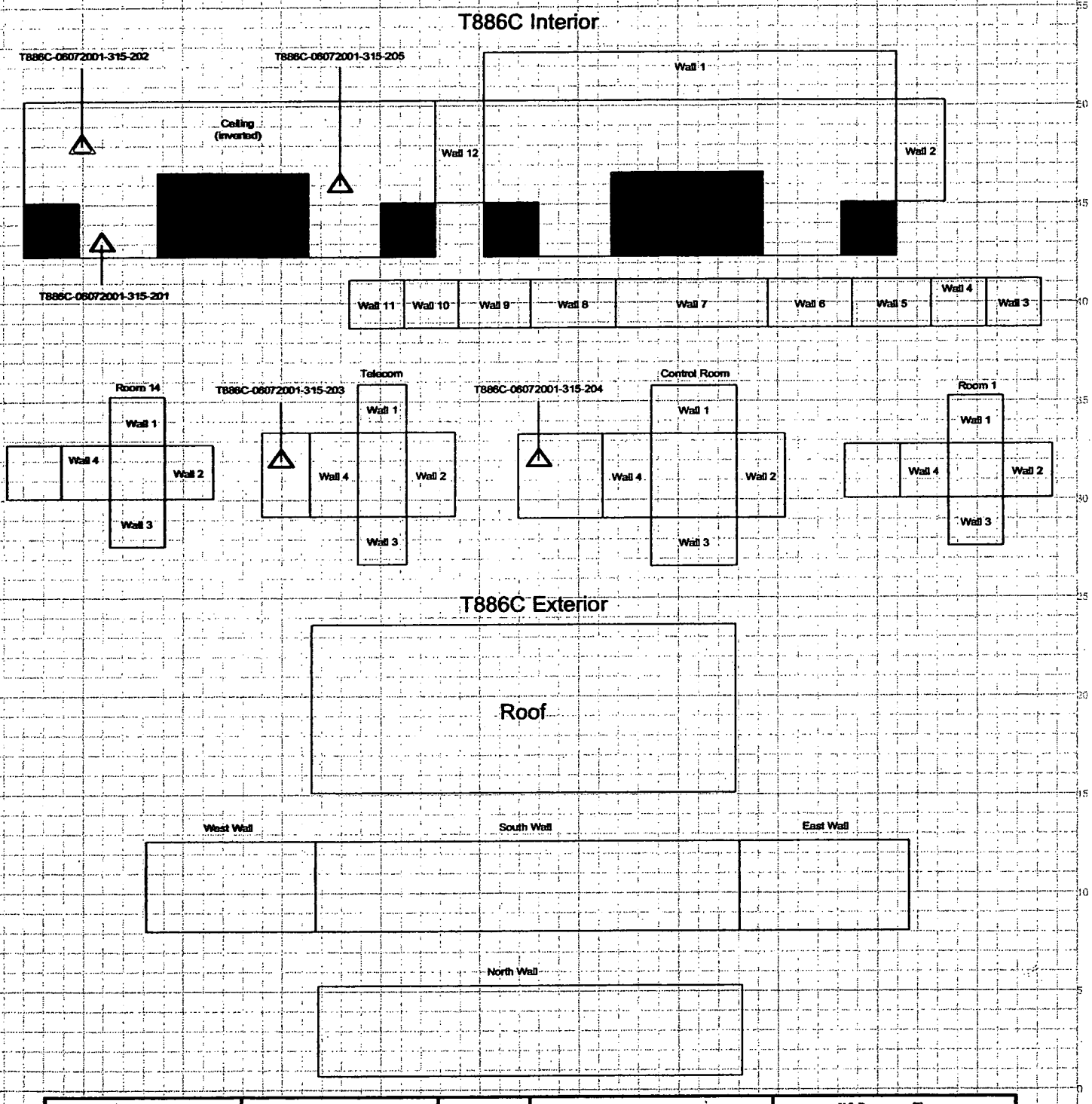
GR8-A-001

150

BMP 7/30/01

PRE-DEMOLITION SURVEY

Survey Area: B **Survey Unit: GR8-B-002** **Classification: 3**
Building: T886C
Survey Unit Description: Interior & Exterior of T886C
Total Area: 1072 sq. m. **Total Floor Area: 164 sq. m.**



SURVEY MAP LEGEND

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

N

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

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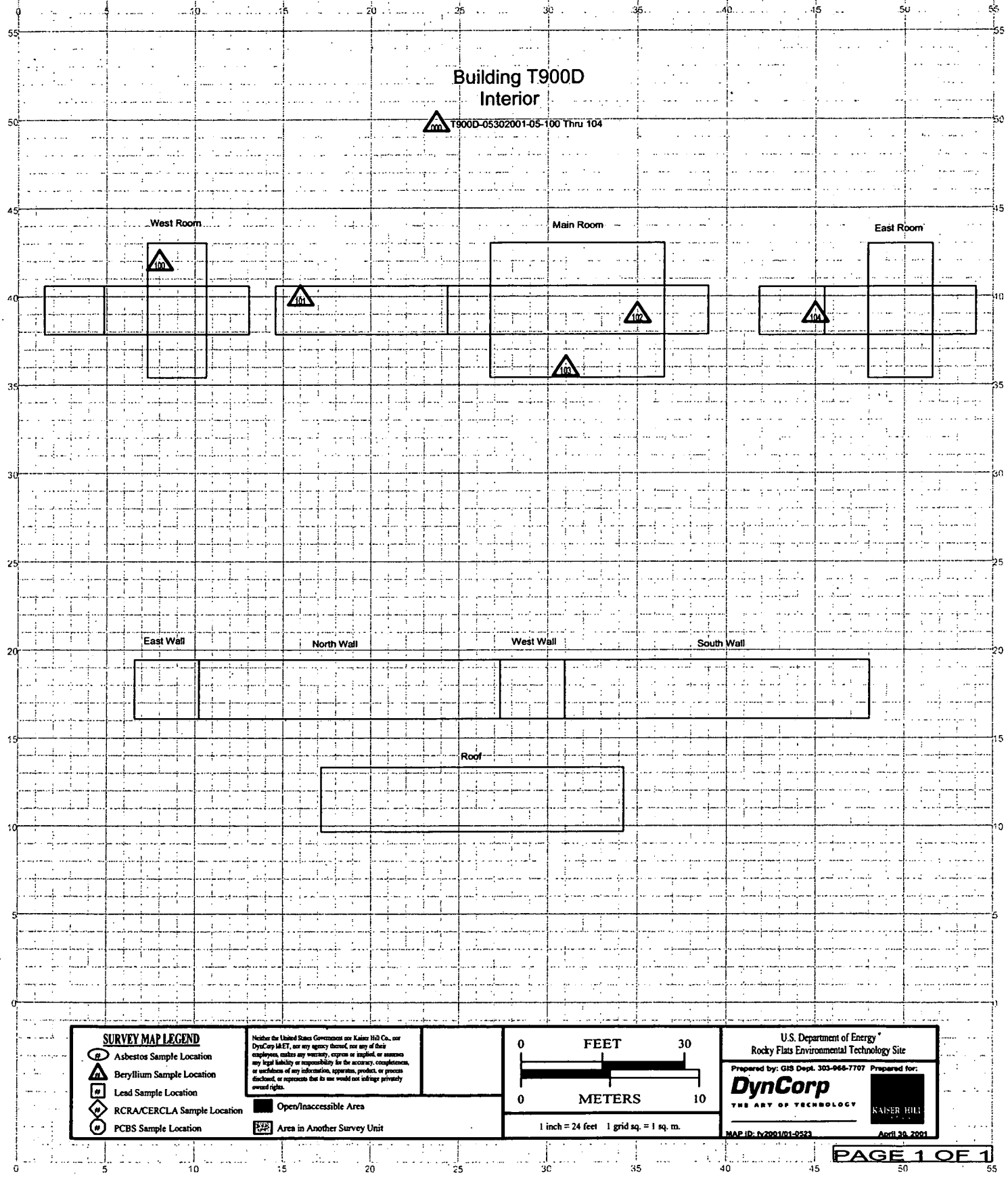
GR8-B-002

152

PRE-DEMOLITION SURVEY

Survey Area: C **Survey Unit: N/A** **Classification: N/A**
Building: Group 6 (T900D)
Survey Unit Description: Interior & Exterior of T900D
Total Area: 415.2 sq. m. **Total Floor Area: 45.7 sq. m.**



SURVEY MAP LEGEND

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

0 FEET 30
0 METERS 10

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

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KAISER HILL

MAP ID: fy2001/01-0523 April 30, 2001

153

ATTACHMENT G

Decommissioning Waste Types and Volume Estimates

Attachment G – Decommissioning Waste Types and Volumes Estimates

Facility	Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated/ Sheet Metal (cu ft)	Wall Board (cu ft)	ACM (cu ft)	Other Waste (cu ft)
280	40, 216	120	7,384	3,190	686	None	Glass 30 cu ft Floor tile 300 cu ft Ceiling tile 300 cu ft Insulation 4,930 cu ft Mercury vapor lights 12 cu ft Sodium vapor lights 12 cu ft
281	200	0	42	0	0	None	2"-thick rigid construction fiberglass 60 cu ft PVC 20 cu ft Mercury vapor lights 3 cu ft
S281	442	0	260	346	0	None	Mercury vapor lights 3 cu ft
282	1,245	0	700	448	32	None	Insulation 700 cu ft Mercury vapor lights 3 cu ft Fluorescent lights 10 cu ft
284	1,150	0	2,556	0	0	None	Insulation 500 cu ft
442W	10,757	100	1,282	4,545	450	None	Glass 40 cu ft Insulation 800 cu ft Ceiling tile 132 cu ft
T551A	120	2,230	518	1,940	2,000	None	Glass 30 cu ft Insulation 2,220 cu ft Carpet 60 cu ft Ceiling tile 800 cu ft
T886B and T886C	147	923	704	4,869	6,720	None	Insulation 6,480 cu ft
T900D	210	698	250	760	0	None	Linoleum 50 cu ft Glass 30 cu ft Insulation 900 cu ft Ceiling tile 50 cu ft

ATTACHMENT H

Data Quality Assessment (DQA) Detail

DATA QUALITY ASSESSMENT (DQA)

VERIFICATION & VALIDATION 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 H-1, asbestos in H-2, and beryllium in H-3. A completeness summary for all results is given in Table H-4.

All relevant Quality records supporting this report are maintained in a Project File. This 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 sample number and corresponding sample location.

No beta/gamma survey designs were implemented for the 886 Cluster 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 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 satisfactory without qualification. All media surveyed and sampled yielded results less than their associated action levels, and all with acceptable uncertainties. Therefore, the Survey Units and buildings in question meet the unrestricted-release criteria with the confidences stated in this section and throughout the Group D RLCR

Table H-1 V&V of Radiological Surveys

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	
	local area background	Field	<MDL	≥1	all local area backgrounds were within expected ranges (i.e., none anomalouosly high)
PRECISION	field duplicate measurements for TSA		all results ≤ MDA	≥10% of reals	
REPRESENTATIVENESS	MARSSIM gridding methodology		statistical and biased	NA	random w/ statistical confidence; biased to improve confidence; due to a sample standard deviation exceeding 0.3, Survey Unit 442-B-004 attained a 95% confidence by taking into consideration the extra 3 survey points factored into the MARSSIM tables (beyond the number of surveys required to achieve 95% confidence).
	Survey Maps			NA	random and biased measurement locations documented to ±0.2ft
	Controlling Documents (Characterization Pkg; RSPs)		qualitative	NA	see original 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 attachment E for details
SENSITIVITY	detection limits		TSA: ≤50 dpm/100cm^2 RA: ≤10 dpm/100cm^2	all measures	MDAs ≤ ½ DCGLw per MARSSIM guidelines

Table H-2 V&V of Chemical Results-Asbestos

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		
ASBESTOS	METHOD: EPA 600/R-93/116	LAB ---->	Reservoirs Environmental, Inc	
QUALITY REQUIREMENT		RIN ---->	various (Table H-4)	
		Measure	Frequency	COMMENTS
ACCURACY		below detectable amounts	≥1	Semi-quantitative, per (microscopic) visual estimation
PRECISION		all below detectable amounts	≥40 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
	Sample Maps	Quantitative	per area	
	Controlling Documents (Plans, Procedures, etc.)	Qualitative	NA	See Table H-1 for analytical methods; original 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 H-3; final number of samples at Certified Inspector's discretion
SENSITIVITY	Detection limits	<1% by volume	all measures	

Table H-3 V&V of Chemical Results-Beryllium

V&V CRITERIA, CHEMICAL ANALYSES			DATA PACKAGE		
BERYLLIUM	METHOD: OSHA ID-125G		LAB ---->	Johns Manville, Denver	
QUALITY REQUIREMENTS			RIN ---->	various (Table H-4)	
			measure	frequency	COMMENTS
ACCURACY	calibrations	initial	r^2 >0.99	≥1	
		continuing	80%<%R<120%	≥1	as above
	LCS		80%<%R<120%	≥1	Accuracy of beryllium results was adequate based on acceptable percent recoveries of LCS performed on a laboratory batching basis (spike @ 10 ug).
	blanks	lab & field	<MDL	≥1	Because no chemical results exceeded detection limits, evaluation of blank data was not required; field blanks yielded nondetect values.
	interference check std (ICP)			NA	not necessary, in absence of analysis for other metals
PRECISION	LCSD		80%<%R<120% (RPD<20%)	≥1	Intralaboratory precision was adequate based on acceptable percent recoveries of LCSD performed on a laboratory batching basis (%R ± 20% @ 10 ug).
	field duplicate		all results < RL	≥1	Repeatability of beryllium results was not evaluated through field duplicates, based on the removable nature of the sampling process; this is consistent with radiological survey methodology, where repeatability is only evaluated relative to TSA measurements (fixed activity), and not removable activity. Overall repeatability within the sample set was evident based on all sample results less than the detection limit (0.1µg/100cm^2).
REPRESENTATIVENESS	COC		qualitative	NA	Chain-of-Custody intact:: completed paperwork, containers w/ custody seals
	hold times/preservation		qualitative	NA	not applicable
	maps				several smears taken on ceiling, which are not particularly representative of a dust-settling deposition mechanism; future random samples should be limited to horizontal surfaces facing upward.

V&V CRITERIA, CHEMICAL ANALYSES			DATA PACKAGE		
BERYLLIUM	METHOD: OSHA ID-125G		LAB ---->	Johns Manville, Denver	
QUALITY REQUIREMENTS			RIN ---->	various (Table H-4)	
			measure	frequency	COMMENTS
	Controlling Documents (Plans, Procedures, etc.)		qualitative	NA	standardized analytical method; original Characterization Package (planning document) refers to field/sampling procedures; thorough documentation of the planning, sampling/analysis process; data reduction into clear and usable formats
COMPARABILITY	measurement units		ug/100cm^2	NA	Use of standardized engineering units in the reporting of measurement results;
COMPLETENESS	Plan vs. Actual samples usable results vs. unusable		>95% >95%	NA	see Table H-4.
SENSITIVITY	detection limits		0.012 ug/100cm^2	all measures	Method detection limits (MDL) for beryllium were 0.012 ug/100cm^2, well less than the investigative limit of 0.1 ug/100cm^2, and the contamination level of 0.2 ug/100cm^2.

Table H-4. Data Completeness Summary for the Group D Cluster.

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]	(biased/reals)	(no QC)	No ACM	40 CFR 763.86; 5 CCR 1001-10; EPA 600/R-93/116
• Bldg 442 W	37	7 interior		RIN 01D0713
• T551A	20	8 int 1ext		RIN 01D0712
• 280 Area	8	10 interior		RIN 01D0882
• T900D	7	5 interior		RIN 01D0882
• T886B	10	9 interior		RIN 01D0942
• T886C	5	7 interior		RIN 01D0942 (NOTE: "No ACM" is <1% by volume)
Beryllium (swipes)	(total, biased, reals)		No contamination at any location	OSHA ID-125G
• Bldg 442W, Rm 101 Rm 105	 15 rand, 2 bias 36 rand, 2 bias	 same 36 rand, 4 bias		RIN 01D0632, 01D0654
• T551A	5 rand, interior	10 random		pending
• T900D	5 rand, interior	same		RIN 01D0892
• T886B	5 rand, interior	same		RIN 01D0941
• T886C	5 rand, interior	same		RIN 01D0941 (No results above action level (0.2µg/100cm^2) or investigative level (0.1 µg/100cm^2))

(continued on next page)

ANALYTE	# Samples Required (incl. Media; Real & QC Samples)	# Taken (Real & QC Samples)[B]	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological				
• Survey Unit: 442-A-003	17 TSA & 17 Smears (15 random + 2 biased) ≥5% QC TSA 10% Scan	same	No contamination at any location; all values below unrestricted release levels	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. NOTE: Scans discovered elevated alpha activity in Survey Unit 442-A-003, but results were determined to be due to Uranium isotopes, not transuranics, and were well below the Uranium unrestricted release levels (~900 dpm/100cm^2, <<5000 dpm/100cm^2 limit)
• Survey Unit: 442-B-004	15 TSA & 15 Smears (15random) ≥5% QC TSA 10% Scan	same		
• Survey Unit: 551-C-005	17 TSA & 17 Smears (15 random + 2 biased) ≥5% QC TSA 10% Scan	same		
• Survey Unit: 551-D-006	15 TSA & 15 Smears (15random) ≥5% QC TSA 10% Scan	same		
• Survey Unit: GR6-A-001	70 TSA & 70 Smears (15 random + 55 biased) ≥5% QC TSA 10% Scan	same		
• Survey Unit: GR6-B-002	40 TSA & 40 Smears (15 random + 25 biased) ≥5% QC TSA 10% Scan	same		
• Survey Unit: GR6-C-003	30 TSA & 30 Smears (15 random + 15 biased) ≥5% QC TSA 10% Scan	same		

ANALYTE	# Samples Required (incl. Media; Real & QC Samples)	# Taken (Real & QC Samples)[B]	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
• Survey Unit: GR8-A-001	30 TSA & 30 Smears (15 random + 15 biased) ≥5% QC TSA 10% Scan	same		
• Survey Unit: GR8-B-002	30 TSA & 30 Smears (15 random + 15 biased) ≥5% QC TSA 10% Scan	same		

[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