Rocky Flats Environmental Technology Site

RECONNAISSANCE LEVEL CHARACTERIZATION REPORT (RLCR)

GROUP 11 AND GROUP 15 CLOSURE PROJECTS

B850, B890, 881C (CT2, South Tower and CT3, East Tower), 883C (881CT4, North Tower), 881G, 881H, C-865 and T690N; and T891D, T891E, T891F, T893A, T893B, T900E and T904A

REVISION 0

February 22, 2002

APR 2002

CLASSIFICATION REVIEW NOT REQUIRED PER EXCEMPTION NUMBER CEX-005-02

1/222

ADMIN RECORD

IA-A-000931

RECONNAISSANCE LEVEL CHARACTERIZATION REPORT (RLCR)

GROUP 11 AND GROUP 15 CLOSURE PROJECTS

B850, B890, 881C (CT2, South Tower and CT3, East Tower), 883C (881CT4, North Tower), 881G, 881H, C-865 and T690N; and T891D, T891E, T891F, T893A, T893B, T900E and T904A

REVISION 0

February 22, 2002

Reviewed by: _____ Date: 3/7/02
Paul Miles, Quality Assurance

Reviewed by: _____ Date: 3/7/02
Duke Synder, RISS ESH&Q Manager

Approved by: _____ Date: 3/7/02
Kurt Kehler, K-H Project Manager

TABLE OF CONTENTS

ABBREVIATIONS/ACRONYMS IV

EXECUTIVE SUMMARY V

1 INTRODUCTION 1
- 1.1 PURPOSE 1
- 1.2 SCOPE 1
- 1.3 DATA QUALITY OBJECTIVES 2

2 HISTORICAL SITE ASSESSMENT 2

3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS 2

4 CHEMICAL CHARACTERIZATION AND HAZARDS 3
- 4.1 ASBESTOS 3
- 4.2 BERYLLIUM (BE) 4
- 4.3 RCRA/CERCLA CONSTITUENTS [INCLUDING METALS AND VOLATILE ORGANIC COMPOUNDS (VOCS)] 4
- 4.4 POLYCHLORINATED BIPHENYLS (PCBS) 5

5 PHYSICAL HAZARDS 5

6 DATA QUALITY ASSESSMENT 5

7 DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES 6

8 FACILITY CLASSIFICATION AND CONCLUSIONS 8

9 REFERENCES 9

ATTACHMENTS

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

3

ABBREVIATIONS/ACRONYMS

ACM	Asbestos containing material
Be	Beryllium
CDPHE	Colorado Department of Public Health and the Environment
CERCLA	Comprehensive Emergency Response, Compensation and Liability Act
$DCGL_{EMC}$	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

4

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 Group 11 and Group 15 facilities (i.e., B850, B890, 881C, 883C, T881G, T881H, C-865 and T690N; and T891D, T891E, T891F, T893A, T893B, T900E and T904A). Because these facilities were anticipated to be Type 1 facilities, the characterization was performed in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP). All facility surfaces were characterized in this RLC, including the interior and exterior surfaces [i.e., floors (slabs), walls, ceilings and roofs]. Environmental media beneath and surrounding the facilities were not within the scope of this RLCR and will be addressed at a future date using the Soil Disturbance Permit process and in compliance with RFCA.

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

Results indicate that no radiological contamination exists in excess of the PDSP unrestricted release limits of DOE Order 5400.5. Non-friable asbestos containing materials were identified in Buildings 890, 881G, 850, and T891F. The black, brown, and gray fibrous, tar, roofing materials sampled from Building 890 tested positive for Chrysotile by PLM analysis – 12 to 65 % by volume. The brown, resin adhesive sampled from Room 211 in Building 850 also tested positive for Chrysotile – 1.25 % by *Point Counting*. The silver paint associated with the black tar roofing of 881G was 5% Chrysotile by volume. The brown caulking around the toilet vent pipe in the restroom of T891F was 10% Chrysotile. All samples of suspect friable materials were negative for asbestos. All beryllium sample results were less than 0.1 $\mu g/100cm^2$. Fluorescent light ballasts may contain PCBs. Any PCB ballasts and asbestos containing materials will be managed and disposed of in compliance with Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) regulations. All demolition debris will be managed in compliance with regulations governing PCBs (40 CFR 761), and Environmental Compliance Guidance #27, *Lead-Based Paint (LBP) and Lead-Based Paint Debris Disposal,* as applicable. All concrete associated with these facilities meet the criteria for recycling concrete per the RFCA RSOP for Recycling Concrete.

Based upon this RLCR and subject to concurrence by the CDPHE, all of the Group 11 and Group 15 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.

1 INTRODUCTION

A Reconnaissance Level Characterization (RLC) was performed to enable compliant disposition and waste management of Group 11 and Group 15 facilities [i.e., B850, B890, 881C (CT2 and CT3), 883C (881CT4), T881G, T881H, C-865 and T690N; and T891D, T891E, T891F, T893A, T893B, T900E and T904A]. Because these facilities were anticipated to be Type 1 facilities, a PDS characterization was performed. All facility surfaces were characterized in this RLC, including the interior and exterior surfaces of the facilities [i.e., floors (slabs), walls, ceilings and roofs] Environmental media beneath and surrounding the facilities were not within the scope of this RLC Report (RLCR) and will be addressed at a future date using the Soil Disturbance Permit process and in compliance with RFCA.

As part of the Rocky Flats Environmental Technology Site (RFETS) Closure Project, numerous facilities will be removed. Among these are the Group 11 and Group 15 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 11 and Group 15 facilities. Building 827 and the 881 Tunnel were originally part of Group 11 but now will be addressed in future characterization efforts. Likewise, Building 880 and Trailers 891B and 891P were originally part of Group 15 but now will be addressed in future characterization efforts. Environmental media beneath and surrounding the facilities are not within the scope of this RLCR and will be addressed using the Soil Disturbance Permit process and in compliance with RFCA.

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 numerous facility-specific Historical Site Assessment Reports (HSARs). Refer to Attachment B, Historical Site Assessment Reports, for copies of the B850 HSAR; the B880 and 891 and 893 Trailers HSAR; and the T900E and T904A HSAR; and the locations of the other HSARs. In summary, the HSARs identified no potential for radiological and chemical hazards, except the potential for asbestos containing materials and PCBs in paint and light ballasts.

3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS

The Group 11 and Group 15 facilities were characterized for radiological hazards per the PDSP. Radiological characterization was performed to define the nature and extent of radioactive materials that may be present on the facility surfaces. Measurements were performed to evaluate the contaminants of concern. Based upon a review of historical and process knowledge, building walk-downs, and MARSSIM guidance, Radiological Characterization Plans were developed during the planning phases that describe the minimum survey requirements (refer to the RISS Characterization Project files)

Seventeen radiological survey packages were developed: ten for the interior and exterior of the Group 11 facilities, and seven for the interior and exterior of the Group 15 facilities. The seventeen survey packages were developed in accordance with Radiological Safety Practices (RSP) 16.01, *Radiological Survey/Sampling Package Design, Preparation, Control, Implementation and Closure*. Total surface activity (TSA), removable surface activity (RSA), and scan measurements were collected in accordance with RSP 16.02 *Radiological Surveys of Surfaces and Structures*. Radiological survey data were verified, validated and evaluated in accordance with RSP 16.04, *Radiological Survey/Sample Data Analysis*. Quality control measures were implemented relative to the survey process in accordance with RSP 16.05, *Radiological Survey/Sample Quality Control* Radiological survey data, statistical analysis results, and survey locations are presented in Attachment C, Radiological Data Summary and Survey Maps. The radiological survey unit packages are maintained in the RISS Characterization Project files.

TSA measurements, RSA measurements, and scan surveys were performed on the fifteen Group 11 and Group 15 facilities. Three measurements indicated elevated activity above the appropriate $DCGL_w$ values. Elevated readings (TSA) were identified on the C865 roof, 2 locations, and the T904A roof, one location. However, roof coupon samples

7

analyzed by gamma spectroscopy confirmed no DOE-added materials at these three elevated locations (refer to Attachment C) Therefore, the PDS confirmed that the Group 11 and Group 15 facilities do not contain radiological contamination above the surface contamination guidelines provided in the PDSP.

Due to the inaccessibility of the interior surfaces of Cooling Towers C865, 883C (881CT4) and 881C (CT2 and CT3), 15 additional biased TSA and smear measurements will be obtained per Cooling Tower during the demolition phase using the Waste Release Evaluation process. Isolation control postings are displayed on affected structures to ensure no radioactive materials are introduced.

4 CHEMICAL CHARACTERIZATION AND HAZARDS

The Group 11 and Group 15 facilities were characterized for chemical hazards per the PDSP. Chemical characterization was performed to determine the nature and extent of chemical contamination that may be present on or in the 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 RISS Characterization Project files) 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 D, Chemical Data Summaries and Sample Maps, for details on sample results and sample locations.

4.1 Asbestos

A survey of building materials suspected of containing asbestos was conducted in the aforementioned buildings in accordance with the PDSP. A CDPHE-certified asbestos inspector conducted the inspection and sampling in accordance with the *Asbestos Characterization Protocol, PRO-563-ACPR, Revision 1.* Building materials suspected of containing asbestos were identified for sampling at the discretion of the inspector.

Non-friable asbestos containing materials were identified in Buildings 890, 881G and 850 of the Group 11 Cluster. The black, brown, and gray fibrous, tar, roofing materials sampled from Building 890 tested positive for Chrysotile by PLM analysis – 12 to 65 % by volume. The brown resin adhesive sampled from Room 211 in Building 850 also tested positive for Chrysotile – 1.25 % by *Point Counting*. The brown caulking around the vent pipe in the restroom of T891F of Group 15 was 10% Chrysotile. All samples of suspect friable materials were negative for asbestos. After visual and tactile inspections of Buildings C865, 881CT1 and T900E, no building materials suspected of containing asbestos were located. Therefore, no samples were taken, and no data were entered in Attachment D. Asbestos laboratory analysis data and location maps are contained in Attachment D, "Chemical Data Summaries and Sample Maps." Maps that did not contain any sample locations were not included in this report.

8

4.2 Beryllium (Be)

Based on the HSAR and personnel interviews, these buildings were anticipated Type 1 facilities. There was not, however, adequate historical and process knowledge to conclude that beryllium was not used or stored in these buildings Therefore, biased beryllium sampling was performed in accordance with the PDSP and the *Beryllium Characterization Procedure, PRO-536-BCPR, Revision 0, September 9, 1999* Biased sample locations corresponded with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition. Based upon process knowledge, it is reasonable to conclude that beryllium was not used or stored in the louvered, closed-loop cooling towers. Therefore, beryllium smear sampling was not performed in 881C (i.e., 881CT2 and 881CT4), 883C (i.e , 881CT3), and C865.

All beryllium smear sample results were less than 0.1 $\mu g/100cm^2$. Beryllium laboratory sample data and location maps are contained in Attachment D, "Chemical Data Summaries and Sample Maps." Maps that did not contain any sample locations were not included in this report.

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

Based on the HSAR, interviews and facility walkdowns of the Group 11 and Group 15 facilities, with the exception of the film developing process in B850, there was no record of operations using materials that could lead to RCRA/CERCLA concerns None of the buildings have a history of spills or releases of RCRA/CERCLA regulated materials and there were no observations to suggest contamination. Therefore, RCRA/CERCLA constituent sampling was not performed in these facilities.

Sediment from the C865 Cooling Tower was analyzed for metals to determine if the concrete containment beneath the sludge could be contaminated. Had the sludge sampling results indicated the presence of RCRA constituents, the underlying slab would have been sampled. Because the analytical results were all non-detect (see Attachment D), further sampling of the cooling tower was not initiated. Several past sampling efforts have been performed on RFETS cooling tower sediment with similar results, the sediment in the cooling towers is windblown soil and debris. C865 sediment is representative of sediment in cooling towers 881C and 883C, therefore sampling was not necessary in 881C and 883C.

Sampling for lead in paint in the Group 11 and Group 15 facilities was not performed. Environmental Waste Compliance Guidance #27, *Lead-based Paint (LBP) and Lead-based paint Debris Disposal*, states that LBP debris generated outside of currently identified high contamination areas shall be managed as non-hazardous (solid) wastes, and additional analysis for characteristics of hazardous waste derived from LBP is not a requirement for disposal.

4.4 Polychlorinated Biphenyls (PCBs)

Based on the HSARs, interviews and facility walkdowns of the Group 11 facilities, only Building 890 required sampling for PCBs A small oil stain that most likely originated from pumps stored in the building was core-sampled. The results were negative. Paint suspected of containing PCBs was not observed in any of the Group 11 Buildings.

Based on the HSARs, interviews and facility walkdowns of the Group 15 facilities, no PCB-containing equipment were ever present in any of the buildings, making the potential for PCB contamination resulting from spills highly unlikely. Therefore, PCB sampling was not performed in these facilities. Based on the age of the Group 15 facilities (constructed after 1980), paints used on the facilities are not expected to contain PCBs, and painted surfaces can be disposed of as sanitary waste.

Because some facilities may contain fluorescent light ballasts containing PCBs, 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

5 PHYSICAL HAZARDS

Physical hazards associated with the Group 11 and Group 15 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 11 and Group 15 facilities, and consequent waste management, are of adequate quality to support the decisions documented in this report. The data presented in this report (Attachments C and D) were verified and validated relative to DOE quality requirements, applicable EPA guidance, and original DQOs of the project.

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

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

Details of the DQA are provided in Attachment E

10

7 DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES

The demolition and disposal of the Group 11 and Group 15 facilities will generate a variety of wastes. Estimated waste types and waste volumes are presented below by facility. All wastes can be disposed of as sanitary waste, except asbestos containing material and PCB Bulk Product Waste. There is no radioactive or hazardous waste. Asbestos and PCB ballasts will be managed pursuant to Site asbestos and PCB abatement and waste management procedures.

11

Waste Volume Estimates and Material Types, Group 11 and Group 15							
Facility	Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM (cu ft)	Other Waste
B850	10,600	0	24,500	0	6,800	540	Built-up Roofing 4,800 cu ft
B890	1,060	0	0	0	0	135	Built-up Roofing 4,800 cu ft
881CT2	100	0	2,400	0	0	0	Insulation 300 cu ft
881CT3	100	0	2,400	0	0	0	Insulation 300 cu ft
883C	100	0	2,400	0	0	0	Insulation 300 cu ft
T881G	2,190	0	200	0	0	135	Built-up Roofing 375 cu ft
T881H	1,400	0	990	0	0	0	Built-up Roofing 725 cu ft
C-865	410	0	10	0	0	0	Plastic 760 cu ft
T690N	0	100	500	1,200	800	0	0
T891D	0	800	250	0	450	0	50
T891E	0	1,400	500	0	800	0	200
T891F	0	800	250	0	450	27	75
T893A	0	350	1500	3000	4500	0	400
T893B	0	350	1500	3000	4500	0	400
T900E	0	0	2000	350	0	0	80 – rubber tires
T904A	Waste volumes not estimated; trailer is expected to be sold.						

12

8 FACILITY CLASSIFICATION AND CONCLUSIONS

Based on the analysis of radiological, chemical and physical hazards, Group 11 and Group 15 facilities (i e., B850, B890, 881C, 883C, T881G, T881H, C-865 and T690N, and T891D, T891E, T891F, T893A, T893B, T900E and T904A) 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 11 and Group 15 facilities was performed in accordance with the DDCP and PDSP, all PDSP DQOs were met, and all data satisfied the PDSP DQA criteria. These facilities do not contain radiological or hazardous wastes. Any PCB ballasts and asbestos containing materials will be managed and disposed of in compliance with Environmental Protection Agency (EPA) and Colorado Department of Public Health and Environment (CDPHE) regulations. All demolition debris will be managed in compliance with regulations governing PCBs (40 CFR 761), and Environmental Compliance Guidance #27, *Lead-Based Paint (LBP) and Lead-Based Paint Debris Disposal,* as applicable. All concrete associated with these facilities meet the criteria for recycling concrete per the RFCA RSOP for Recycling Concrete. 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

13

9 REFERENCES

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

DOE Order 5400.5, "Radiation Protection of the Public and the Environment."

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

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

MAN-131-QAPM, *Kaiser-Hill Team Quality Assurance Program*, Rev. 0, November 15, 2000.

MAN-076-FDPM, *Facility Disposition Program Manual*, Rev. 1, September 1999.

MAN-077-DDCP, *Decontamination and Decommissioning Characterization Protocol*, Rev. 3, April 23, 2001.

MAN-127-PDSP, *Pre-Demolition Survey Plan for D&D Facilities*, Rev. 0, April 23, 2001.

MARSSIM - Multi-Agency Radiation Survey and Site Investigation Manual, December 1997 (NUREG-1575, EPA 402-R-97-016).

PRO-475-RSP-16 01, *Radiological Survey/Sampling Package Design, Preparation, Control, Implementation, and Closure*, Rev. 1, May 22, 2001.

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

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

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

PRO-479-RSP-16 05, *Radiological Survey/Sample Quality Control for Final Status Survey*, Rev. 1, May 22, 2001.

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

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

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

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

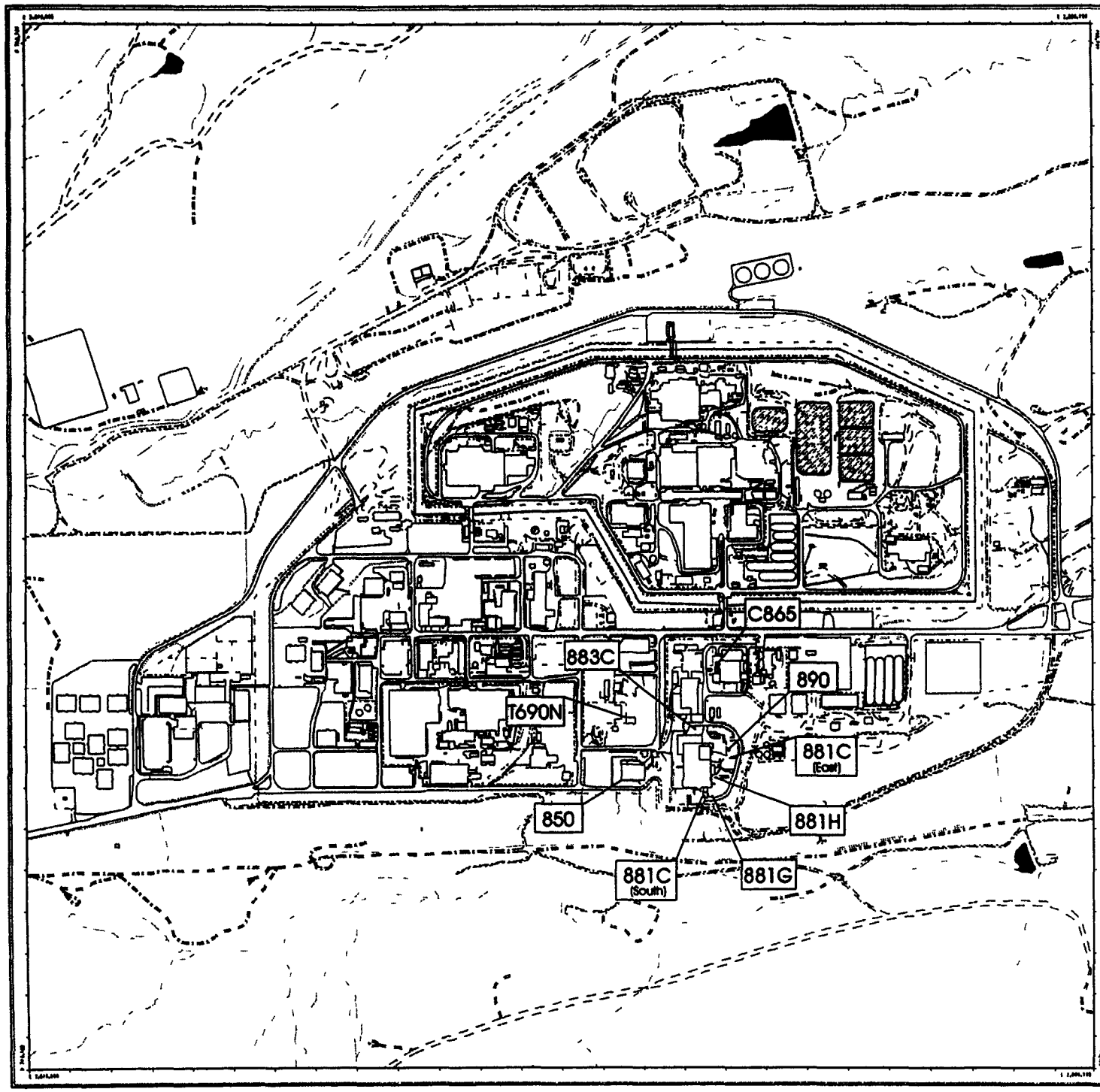
RFCA Standard Operation Protocol for Recycling Concrete, September 28, 1999.

RFETS, Historical Site Assessment for Building 850, October 2001.

14

ATTACHMENT A

Facility Location Map



Group 11 Cluster

Standard Map Features

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

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

N

Scale = 1 12450
1 inch represents approximately 1038 feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U S Department of Energy
Rocky Flats Environmental Technology Site

GIS Dept. 303-966-7767

Prepared by:
DynCorp
THE ART OF TECHNOLOGY

Prepared for
KAISER-HILL

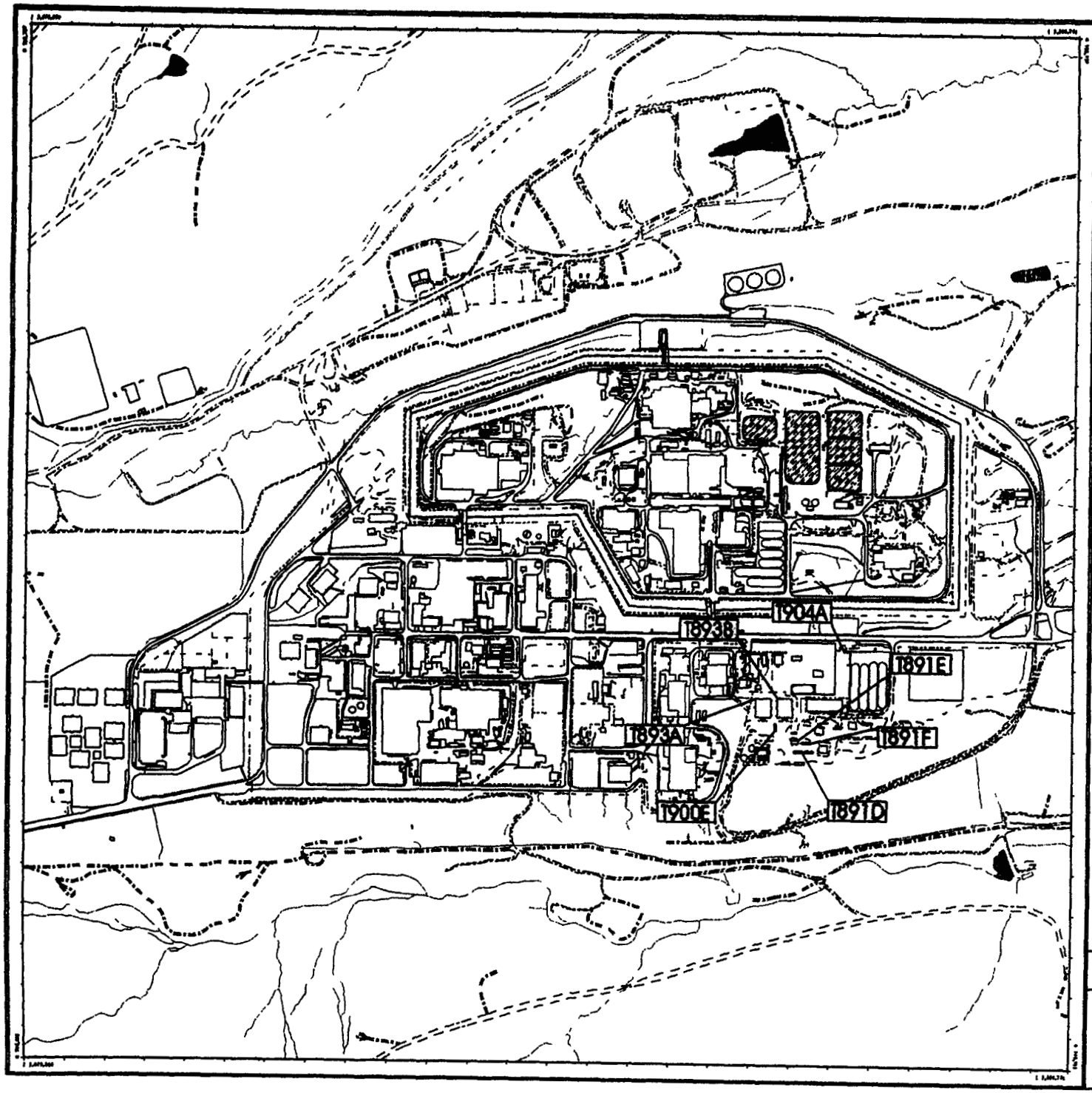
MAP ID: FY 2002

November 26 2001

NT Svr w:/projects/fy2002/fy2002-0102.cdr

Best Available Copy

16



Group 15 Cluster

Standard Map Features

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

DATA SOURCE BASE FEATURES:
Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G RSL, Las Vegas.
Digitized from the orthophotographs. 1/96

Scale – 1 : 12480
1 inch represents approximately 1038 feet

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 COMPANY

MAP ID FY 2002

November 27 2001

ATTACHMENT B

Historical Site Assessment Reports

18

Group 11 HSA and Interview Form Locations

850	Refer to attached Group 11 HSA
890	Refer to HSA in RISS 881 Cluster Characterization Project file
881C	Refer to HSA in RISS 881 Cluster Characterization Project file
881G	Refer to HSA in RISS 881 Cluster Characterization Project file
881H	Refer to HSA in RISS 881 Cluster Characterization Project file
883C	Refer to HSA in RISS 883 Cluster Characterization Project file
C865	Refer to HSA in RISS 865 Cluster Characterization Project file
T690N	Refer to attached Group 11 HSA

Note: The HSAs in the files include several facilities not within the scope of this RLCR. Ignore the facilities not included in this RLCR.

19

D&D RISS Facility Characterization
Historical Site Assessment Report
October, 2001 Rev. 0

Facility ID: **Building 850**

Anticipated Facility Type (1, 2, or 3): Building 850 is an anticipated Type 1 facilities

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

Physical Description

Building 850 is a two-story structure with a partial basement. The building is a general administrative building and was built in 1984. Building 850 has approximately 39,800 square feet of floor space and measures approximately 117-feet wide by 175-feet long by 28-feet high. The structure is a pre-fabricated building attached to approximately 50 concrete pillars, which extend down to bedrock. The floor of Building 850 is a 4-inch concrete slab. The below-grade walls in the partial basement are constructed of 12-inch-thick concrete. The above-grade exterior walls are constructed of insulation-filled aluminum panels attached to a steel frame. The roof is constructed of metal decking with built-up roofing and has three large skylights running the length of the building. Since the building was constructed as an office building, there are a large number of windows on all sides of the structure.

Building 850 is configured with approximately 25 % of the space as hard-walled offices and 75 % of the space as cubical offices. The first and second floors are predominantly covered with carpet, but have ceramic tile in the restrooms and janitorial areas, and 12-inch-square floor tiles in the record retention areas. The basement flooring is mostly sealed concrete with some 12-inch-square floor tile in the hallway The internal walls on the first and second floors are predominantly plasterboard on metal studs. The interior walls in the basement are predominantly plasterboard over concrete. The ceilings are 2-foot by 4-foot acoustical panels with recessed light fixtures. The building has an elevator that services all three floors.

Building 850 has no process drains Fire suppression is provided by a water sprinkler system and wall-mounted fire extinguishers. Heat is provided by the plant steam system, and cooling is provided by an evaporative cooler located in the basement. Building 850 is connected to plant water and sanitary systems The building is connected the site fire alarm and the LSDW system

Historical Operations

The first floor of Building 850 houses the CERCLA administrative record, RFETS waste records, accounting, payroll, and photography. The northeast corner of the first floor was originally a cafeteria, but was converted to office space in the mid 1990s. The cafeteria provided food service to personnel from Buildings 850, 881 and 883. In early 2001 the photography department was moved from Building 111 to Building 850. The second floor houses the procurement department. The partial basement has the telecommunications room, a buildings computer network control room, and the HVAC system

Building 850 has always been an administrative office building and had no known radiological or hazardous operations other than the photography department, which was moved from Building 111 in early 2001.

Current Operational Status

Building 850 is currently active as a general administrative office building with an active photograph department.

Contaminants of Concern

Asbestos

Describe any potential, likely, or known sources of Asbestos: No asbestos surveys exist related to Building 850

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

20

Beryllium (Be)

Describe any potential, likely, or known Be production or storage locations: Building 850 is not on the RFETS list of known Be locations and never housed any Be operations or Be storage areas.

Summarize any recent Be sampling results. No recent Be samples have been collected.

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.

Lead

Describe any potential, likely, or known sources of Lead (e g., paint, shielding, etc.) Building 850 may contain lead-based paints, lead in wiring, and lead solder No lead processing occurred and no lead shielding was used in Building 850

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, and processes): The only operation that involved hazardous substances in Building 850 is the photography development that occupies Rooms 102C, 102D, 108 and 110. The photography department was moved from Building 111 to Building 850 in early 2001. Two satellite accumulation areas (in Rooms 110 and 108) and a RCRA 90 Day Pad (in the hall outside Room 110) was established to manage photographic solutions and spent silver-oxide batteries. The photographic solution contains low concentrations of silver. The silver-oxide batteries used in some of the photo equipment contain low concentrations of silver and mercury. The total volume of waste generated annually is approximately 110 gallons

Describe any potential, likely, or known spill locations (and sources, if any): There are no known spill of RCRA/CERCLA constituents in Building 850

Describe methods in which spills were mitigated, if any: No spills.

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.

PCBs

Describe any potential, likely, or known sources of PCBs (e.g., light ballasts, paints, equipment, etc.) Building 850 may contain light ballasts with PCBs. Building 850 has never housed any PCB-containing process equipment. The transformer that supplies Building 850 with power is located on the north side of the building. This transformer is labeled as a non-PCB transformer

Describe any potential, likely, or known spill locations (and sources, if any): No PCB spills occurred in Building 850

Describe methods in which spills were mitigated, if any: No PCB spills occurred in Building 850.

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

Radiological Contaminants

Describe any potential, likely, or known radiological production or storage locations No radiological operations or radiological storage were housed in Building 850.

Describe any potential, likely, or known spill locations (e.g., known leaking sealed radioactive sources, leaking waste drums, potentially contaminated drums, etc): No spills.

Describe methods in which spills were mitigated, if any· No Spills.

Describe any potential, likely, or known isotopes of concern (e.g., weapons grade plutonium, uranium isotopes, pure beta emitters, mixed fission products, etc.)· None.

Describe any potential, likely, or known external facility contamination (e.g., stack release points, unfiltered ventilation, facility's physical location to known site releases, etc.) None

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): Building 850 has no IHSSs, PACs, or UBCs

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): Building 850 has a WISRC to address the photo developing solution and the silver-oxide batteries that are used in some of the photo equipment.

References

Provide all sources of information utilized to gather data for facility history (e g., documents, files, interviews). Sources reviewed to complete this HSA were the RFETS Facility List, the Historical Release Report, Site Master List of RCRA Units, Site IHSS, PAC, and UBC databases, and the Building 850 WSRIC. In addition, a facility walkdown and interviews were performed.

Waste Volume Estimates and Material Types

Facility	Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM (cu ft)	Other Waste
Building 850	10,600	0	24,500	0	6,800	TBD	Built-up Roofing 4,800 cu ft.

Further Actions

Recommend any further actions, if any (e g., characterization, decontamination, special handling, etc): Begin the RLC/PDS process.

22

D&D RISS Facility Characterization
Historical Site Assessment Report
October, 2001 Rev. 0

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. SME may need to review additional documentation and perform additional interviews

Prepared By:	Doug Bryant	Doug Bryant	10-22-01
	Name	Signature	Date

23

D&D RISS Facility Characterization
Historical Site Assessment Report
October, 2001 Rev. 0

Facility ID: Building 884, 666, 663, T690N, Tank 018 and Tank 019
Anticipated Facility Type (1, 2, or 3): Building 884, 666, 663, Tank 018 and Tank 019 are type 2 facilities. Trailer T690N is a Type 1 facility.

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

Physical Description

Building 884

Building 884 is a single-story, single-room structure built in 1958. Building 884 has approximately 3200 square feet of floor space and measures approximately 35-feet wide by 92-feet long by 16-feet high. Building 884 is constructed of non-insulated corrugated metal mounted on a steel frame The roof is also constructed of non-insulated corrugated metal mounted on a steel frame, with a large vent in the center. The roof has no gutters. The building is built on an estimated 6-inch -thick concrete slab, which does not have a berm. The floor has been coated with a ¼-inch-thick sealant. This building has a metal man entry door on the east side of the building and another on the south side of the building. The south side of the structure also has two double sliding doors for adding or removing containers The roof and walls are not painted. However, there are miscellaneous small parts of the structure that are painted.

The building is not heated and does not have plant water or sanitary hook-ups. Fire suppression is provided by wall-mounted fire extinguishers. Building 884 originally had electrical and fire sprinkler systems, but they were disconnected sometime in the late 1980s. The building is not connected to the LDSW system or to the plant fire alarm system

Building 666

Building 666 is a single-story, single-room structure built in 1957. This building has approximately 1600 square feet of floor space and measures approximately 35-feet wide by 45-feet long by 20-feet high. Building 666 has non-insulated corrugated metal walls mounted to a metal frame. The roof is also constructed of non-insulated corrugated metal mounted to a steel frame. The roof has no gutters. The building has a man entrance and a roll-up door on the east side of the building. The building is built on an estimated 6-inch-thick concrete slab, and the floor is not sealed. The roof and exterior walls are painted.

Building 666 has no electricity, heat, air conditioning, water or sanitary hook-ups. Fire protection is provided by wall-mounted fire extinguishers The building has no LDSW system or fire alarm system

2Y

Building 663

Building 663 is a single-story structure built in 1961 on an existing concrete slab The building has approximately 4500 square feet of floor space and measures approximately 25-feet wide by 100-feet long by 19-feet high. The walls are constructed of non-insulated sheet metal siding (not painted) mounted on a steel frame. The roof is also constructed of non-insulated sheet metal (not painted) with skylights as supplemental lighting, and no gutters The building was constructed on an existing concrete pad, which was poured in the 1950s. The floor slab is estimated to be 12-inches thick and is painted. The south side of the building has a metal man entry and a large metal sliding truck door The north side has a dock with a roll-up door and concrete stairs leading to a man entry There is an 8-feet wide by 6-feet long by 8-feet high wood shed built on the southeast side of the building. The shed was built to house a compressor for operating power tools during the 1980s and was later used to house an ice machine for construction field personnel in the early 1990s. The compressor was removed in the early 1990s and the ice machine was removed sometime in the mid 1990s

The building has a large storage area on the south side and two small offices on the northeast side of the building. The office area is constructed of painted wallboard. The building has electricity, but had no plant water or sanitary connections The shed on the east side of the building had a temporary water connection, which has been disconnected Electric heaters mounted to the roof struts provide heat. Cooling is provided by window air conditioners mounted through the walls in several of the offices. The building is not connected to the LSDW system or the fire alarm system. Fire protection is provided by wall-mounted fire extinguishers.

Trailer T690N

Trailer T690N is an approximately 1400 square foot trailer acquired in 1990 and is located north of the Building 881 parking lot This trailer is approximately 30-feet wide by 45-feet long by 12-feet high with two entrance doors on the south side of the trailer and two entrance doors on the north side of the trailer Each door has wooden steps leading to a 5-foot by 5-foot covered wooden deck T690N has several hard-walled offices, 2 restrooms, and a main work area divided into cubical office space The trailer has painted aluminum siding and skirting. The roof is metal with no gutters. Trailers of this age are commonly insulated, but wall cavities and ceiling cavities were not accessed during this walkdown The ceiling is a drop ceiling with 2-foot by 4-foot acoustical tiles with recessed lighting The floors are carpeted, and the restrooms have vinyl flooring. The walls in this trailer are a vinyl-covered wallboard and are commonly constructed with steel studs

The fire suppression is provided by wall-mounted fire extinguishers. T690N uses electrical heat and electrical air conditioning This trailer has hook ups to plant water and plant sanitary systems T690N is connected to the LSDW system and the fire alarm system.

Tank 018 And Tank 019

Tank 018 and Tank 019 are each 1000-gallon, concrete, underground waste storage tanks. Tank 018 and Tank 019 share a metal access vault, which provides access to the tanks and their pumps. The access vault measures approximately 7-feet wide by 12-feet long and 7-feet deep. Both tanks received decontamination wastewater from Building 889 and are located south of Building 884 Tank 018 and Tank 019 were decontaminated, and the vault and tanks were foamed in place in accordance with the Accelerated Action Plan, 95-RF-09501

25

Historical Operations

Building 884

Building 884, also known as RCRA Unit 13, is permitted to store low-level radioactive mixed waste and will be closed in accordance with RCRA Part B Permit No CO-97-05-30-01, Part X This building has been a permitted mixed waste storage facility since the late 1980s Building 884 was originally built in 1958 to store maintenance equipment and supplies for Building 883 On occasion, Building 884 stored equipment prior to being decontaminated in Building 889 The building was later permitted as RCRA Unit 13 in the 1980s The original permit included liquids waste storage, which were stored in large metal secondary containment pans During the mid 1990s the permit was modified to only allow the storage of solid waste

The floor in Building 884 was sealed in the late 1980s when the building became a permitted low-level mixed waste storage facility Since that time the floors have been re-sealed 2 times during to mid 1990s to seal cracks that developed The area around Building 884 (not Building 884) is an IHSS and is documented in IHSS 800-164 3 " Radioactive Site 800 Area #2, Building 889 Storage Pad

Building 663

During the original construction of the plant in the early 1950s, a temporary building was constructed to receive and store construction material In 1954 this temporary building was removed, but the concrete floor slab remained In 1954 the slab and the area around it were used to store non-combustible low-level radioactive waste generated throughout the plant site Due to the poor record-keeping practices in the 1950s and 1960s, it is not known whether the waste stored in this area would qualify as a RCRA waste by today's regulations Buildings that sent waste to the storage area around Building 663 include, but are not limited to, Building 444, 881, 771 and 777 Both liquid and solid wastes were believed to be stored in this area The waste was stored in both drums and wooden crates See IHSS 600-1001 for more release information

In 1961, the current Building 663 structure was erected on an existing concrete slab and the building continued to be used to store plant waste from various locations In the 1980s the function of the facility changed to receiving and storing non-hazardous construction and carpentry materials The floor in Building 663 has been documented as being cracked and stained in IHSS 600-1001 In the mid 1990s the floor was painted to contain and fix the contamination Over the past three years the building has been used to sort clean PPE and has been set up to act as a substitute PAC for PAC 2 This building still has a security scanner installed in one of the rooms on the east side of the building

Building 666

Building 666 became a TSCA waste storage area in the late 1980s Prior to storing TSCA waste, Building 666 was used as a maintenance storage facility Only radiological and non-radiologically contaminated TSCA wastes is stored in this building No RCRA mixed waste were known to have been stored here Building 666 receives and stores both liquid and solid TSCA wastes Liquid waste containers are placed in large metal secondary containment pans There are no documented releases from this facility

Trailer T690N

Trailer T690N has historically been used as an office trailer for the United Steelworkers Union T690N was not known to have stored any hazardous material

26

Tank 018 and Tank 019

Tanks 018 and 019 are each 1000-gallon underground concrete waste storage tanks used to hold decontamination waste from the Building 889 Decontamination Facility These tanks held decontamination waste from Building 889 prior to discharge to the plant waste process system These tanks were decontaminated and abandoned in 1982 This tank was foamed in place in approximately 1995 These tanks are part of the Building 889 UBC because of potential release from the tanks

Current Operational Status

Building 884 is currently an operational radiological mixed waste RCRA storage unit (Unit 13) Building 663 is currently vacant and not in use Building 666 is currently operational and is storing radiological and non-radiological contaminated TSCA waste Trailer T690N is currently operational as an office trailer for the Steelworkers Union. Tank 018 and Tank 019 were decontaminated and abandoned in accordance with Accelerated Action Plan 95-RF-09501

Contaminants of Concern

Asbestos

Describe any potential, likely, or known sources of Asbestos Building 884 and 663 are posted as potentially containing asbestos No comprehensive asbestos surveys exist for any of the facilities addressed in this HSA

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

Beryllium (Be)

Describe any potential, likely, or known Be production or storage locations None of the facilities addressed in this HSA are on the RFETS list of Be locations Building 884 and 666 occasionally store waste that contained Be Building 663 may have stored Be waste, but there is a lack of historical information to determine this

Summarize any recent Be sampling results No recent Be sampling has been performed in any of the facilities addressed in this HSA

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

Lead

Describe any potential, likely, or known sources of Lead (e g., paint, shielding, etc). All of these facilities may contain lead-based paints, lead wiring, and lead solder None of these facilities were known to have used lead shielding

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

27

RCRA/CERCLA Constituents

Describe any potential, likely, or known sources of RCRA/CERCLA constituents (e g , chemical storage, waste storage, processes) Building 884 is a permitted mixed waste storage unit (Unit 13) and will be closed in accordance with RCRA/CERCLA Part B Permit No CO-97-05-30-01, Part X Building 666 is a permitted TSCA (PCB) waste storage unit and was never used to store RCRA waste See IHSS 600-1001 for release information Building 663 has a history of storing a variety of wastes from around the plant, some of which, may have contained RCRA/CERCLA constituents T690N has no history of RCRA/CERCLA hazardous waste operations Tanks 018 and 019 held RCRA constituents See the Accelerated Action Plan 95-RF-09501 for more detail

Describe any potential, likely, or known spill locations (and sources, if any) Building 884 and 666 has had no documented spills However, prior to the early 1980s record-keeping practices were poor Building 663 has had several releases in and around the building, these releases have been documented in IHSS 600-1001 T690N has had no documented spills

Describe methods in which spills were mitigated, if any Spills were cleaned-up to the standards of the day This usually included using an absorbent and a detergent

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

PCBs

Describe any potential, likely, or known sources of PCBs (e g , light ballasts, paints, equipment, etc) All of the facilities in this cluster may contain PCB-based paint, as well as, PCBs in electrical equipment and light ballasts No process equipment containing PCBs were located in any of these facilities Building 666 is currently a TSCA storage area. Building 884 was also a TSCA storage area in the early 1990s Building 663 has stored low-level waste, but it is not clear whether that waste may have contained PCBs See IHSS 600-1001 for more release information Tanks 018 and 019 did not have PCBs as part of the contaminant of concern list See the Accelerated Action Plan 95-RF-09501 for more details

Describe any potential, likely, or known spill locations (and sources, if any) Building 884 and 666 have stored TSCA waste The concrete slabs from both buildings can not be evaluated until the waste containers have been removed IHSS 600-1001documents the release history and staining of the concrete floors in Building 663 (the floor was painted in the mid 1990s, which covered the stains) Tanks 018 and 019 are concrete tanks, concrete tanks have had water infiltration problems

Describe methods in which spills were mitigated, if any Spills were cleaned-up to the standards of the day This usually included using an absorbent and a detergent.

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

28

Radiological Contaminants

Describe any potential, likely, or known radiological production or storage locations Building 884 is radiological mixed waste storage area and is radiologically posted Building 666 is a TSCA storage building with a radiological posting Building 663 has a fixed contamination posting T690N has no radiological posting The foamed vault, which provided access to Tanks 018 and 019, is radiologically posted, see the Accelerated Action Plan 95-RF-09501for more information

Describe any potential, likely, or known spill locations (e g , known leaking sealed radioactive sources, leaking waste drums, potentially contaminated drains, etc) Buildings 884, 666 and 663 have housed radiological waste management activities Tanks 018 and 019 are concrete tanks and are suspected of having leaked No sealed sources were stored in any of the facilities in this cluster

Describe methods in which spills were mitigated, if any Spills were cleaned-up to the standards of the day This usually included using an absorbent and detergent, and fixing with paint as required

Describe any potential, likely, or known isotopes of concern (e g , weapons grade plutonium, uranium isotopes, pure beta emitters, mixed fission products, etc) Isotopes of concern include, but are not limited to, uranium, and possible plutonium

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) See section below for information on IHSS, PACs and UBCs

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) Building 663 is in IHSS 600-1001 "Temporary Waste Storage Building 663" The area around Building 884 (not Building 884) is an IHSS documented in IHSS 800-164 3 " Radioactive site 800 Area #2, Building 889 Storage Pad" Tanks 018 and 019 are part of UBC-889 Buildings 666 and T690N have no IHSSs, PACs, or UBCs associated with them

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) Building 884 has a WSRIC that addresses sampling waste and waste repackaging activities It should be noted that waste sampling and waste repackaging activities were seldom performed in the building Building 666 has a WSRIC that addresses operational and maintenance waste generated by Building 666 Building 663 has a WSRIC that addresses carpentry waste and D&D waste from the demolition of the building (Building 663)

References

Provide all sources of information utilized to gather data for facility history (e g , documents, files, interviews) Sources reviewed to complete this HSA were the RFETS Facility list, the Historical Release Report, Site Master List of RCRA Units, and the Site IHSS, PAC, and UBC databases Only Building 666 has a Facility Safety Analysis Report. Only Building 884, 666 and 663 have a WSRIC In addition, a facility walkdown and interviews were performed

Waste Volume Estimates and Material Types

Facility	Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM	Other Waste
Building 884	1600	30	600	1300	0	TBD	0
Building 666	800	0	450	950	0	TBD	0
Building 663	2200	250	800	1600	350	TBD	0
Trailer T690N	None	100	500	1200	800	TBD	0
Tank 018	1300	0	125	5	0	TBD	0
Tank 019	1300	0	125	5	0	TBD	0

Further Actions

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

Begin the RLC/PDS process

Note·

This HSA was performed prior to SME walkdowns, and chemical and radiological characterization package preparations 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. SME may need to review additional documentation and perform additional interviews

Prepared By: Doug Bryant / Doug Bryant / October 5 2001

Name Signature Date

30

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

Facility ID: Trailers T891B, T891D, T891E, T891F, T891G, T891O, T891P, T891R, T891V, T893A and T893B
Anticipated Facility Type (1, 2, or 3): All of the trailers in this cluster are anticipated Type 1 facilities

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

Trailer T891B

T891B is an approximately 975 square-foot wide office trailer, which was acquired in 1993 and is located east of the B891 Consolidated Water Treatment Facility. This trailer is approximately 14-feet wide and 65-feet long with two entrance doors on the north side of the structure. One entry has a wooden stair attached to a 4-foot x 4-foot deck leading to the entry door. The other entry has a wooden handicapped ramp attached to a 4-foot x 4-foot deck leading to the entry door The trailer has aluminum siding, and the skirting is painted pressboard. T891B has a hard-walled office on the east end of the trailer, another hard-walled office on the west end, and a large work area in the center. The ceiling is a drop ceiling with 2-foot by 4-foot acoustical tiles with recessed lighting. The floor is 12-inch vinyl tile. The walls in this trailer are a vinyl-covered wallboard and are commonly constructed with steel studs An inspection of the roof could not be made from the ground-level walkdown. This trailer does not have roof drains or down spouts Trailer walls were not accessible, but likely have insulation.

T891B uses electrical heat and electrical air conditioning This trailer is not hooked up to plant water or plant sanitary systems Fire protection is provided by individual wall-mounted fire extinguishers. T891B is not connected to the LSDW system or the fire alarm system

Trailer T891D

T891D is an approximately 720 square-foot general field office trailer, which was acquired in 1993 and is located in the 800-Area contractor support yard. This trailer measures approximately 15-feet by 48-feet and has 2 entrance doors on the north side of the trailer Both entries have wooden stairs attached to a 4-foot x 4-foot deck leading the entry door Both entrances have wooden enclosures. The siding and skirting for the trailer are painted wood. An inspection of the roof could not be made from the ground-level walkdown. This trailer does not have roof drains or down spouts. Trailer walls were not accessible, but likely have insulation.

T891D is configured with an office at each end of the trailer and a large work area in the center, which is divided into partitioned work areas The interior walls and ceilings are constructed of plasterboard, and the lights are surface mounted on the plasterboard ceilings. Trailer construction during this time period commonly used medal studs. The floors are 12-inch vinyl tiles. The fire suppression is provide by wall-mounted fire extinguishers T891D uses electrical heat and electrical air conditioning. This trailer has hook ups to plant water and plant sanitary systems and has a restroom T891D is not connected to the LSDW system or the fire alarm system.

Trailer T891E

T891E is an approximately 1440 square-foot general field office trailer, which was acquired in 1991 and is located in the 800-Area contractor support yard. This trailer is approximately 30-feet wide x 48-feet long. The exterior is painted wood siding with painted wood skirting The trailer has two entrances on the south side of the structure. One entrance has wooded steps connected to a 4-foot x 4-foot deck, which leads to the entry door. The other entrance has wooden steps connected to a 4-foot x 8-foot deck, which also acts as a dock. Both entrances have wooden enclosures An inspection of the roof could not be made from the ground-level walkdown. This trailer does not have roof drains or down spouts. Trailer walls were not accessible, but likely have insulation.

31

T891E is configured with two offices on each end of the trailer with two large work areas in the center The interior walls and ceiling are constructed of plasterboard with the light fixture surface mounted on the plasterboard Trailer construction during this time frame commonly uses metal studs The floors are 12-inch vinyl tiles The fire suppression is wall-mounted fire extinguishers T891E uses electrical heat and electrical air conditioning T891E has plant water and plant sanitary hook ups and has a restroom T891E is not connected to the LSDW system or the fire alarm system

Trailer T891F

T891F is an approximately 720 square-foot field office trailer, which was acquired in 1991 and is located in the 800-Area contractor support yard The Site Facility List said this trailer was acquired in 1993 The RFETS Facility List states this trailer was purchased in 1993 A visual inspection indicated that the trailer was likely constructed some time in the late 1970's or early 1980's This trailer is approximately 15-feet wide and 48-feet long The exterior is painted wood siding with painted wood skirting T891F has two entries on the south side of the building Both of the entries have wooden stairs attached to a 4-foot x 4-foot deck, which leads to the entry door The roof is asphalt shingle This trailer does not have roof drains or down spouts Trailer walls were not accessible, but likely have insulation

The interior is configured with an office on each end of the trailer and a large work area in the center The interior walls are wood paneling and the floors were 12-inch vinyl tiles Trailers manufactured during the 1970's and 1980's have either wood or steel wall studs The ceiling is 4-foot x 12-foot vinyl-covered wallboard with surface mounted light fixtures T891F has electric heat and air conditioning T891F has plant water and plant sanitary hook ups and has a restroom Fire suppression is provided by wall-mounted fire extinguishers T891F is not connected to the LSDW system or the fire alarm system

Trailer T891G

T891G is an approximately 720 square-foot field office trailer, which was acquired in 1993 This trailer is approximately 15-feet wide by 48-feet long and is located in the 891 contractor yard The exterior is painted wood siding with a painted wood skirting The trailer has two entrances on the north side of the structure Both entrances have wooded steps connected to a 4-foot x 4-foot deck, which leads to the entry door An inspection of the roof could not be made from the ground-level walkdown This trailer does not have roof drains or down spouts. Trailer walls were not accessible, but likely have insulation

This trailer could not be entered for an internal walkdown The interior is configured with an office on each end of the trailer and a large work area in the center The interior wall is vinyl-covered wallboard, and the floor is 12-inch vinyl tile The ceiling is 2-foot x 4-foot acoustical tile ceiling with recessed lighting Trailer construction during this time period commonly used medal studs The building has propane heat and the air conditioning. The building is not connected to plant water or plant sanitary hook ups Fire suppression is provided by wall-mounted fire extinguishers T891G is not connected to the LSDW system or the fire alarm system

Trailer T891O

Trailer T891O is an approximately 2880 square-foot general field office trailer, which is approximately 60-feet by 48-feet and was acquired in 1993 and is located in the 891 contractor yard. This trailer has painted wood siding with painted wood skirting There are 2 access doors on the south side of the structure and one access door on the east side of the trailer The two south-side access doors each have wood stairs attached to a 4-foot by 4-foot deck leading to the entry door The east side access door has wood stairs and a 4-foot by 8-foot deck leading to the door and is also used as a loading dock The roof construction could not be determined from this ground-inspection This trailer does not have roof drains or down spouts Trailer walls were not accessible, but likely have insulation

T891O is configured with hard-walled offices, several larger conference rooms, and large work areas The interior walls and ceiling are constructed of 4-foot x 10-foot vinyl-covered wallboard with the light fixture surface mounted on the wallboard The walls on a trailer of this age are usually constructed with steel studs The floors are 12-inch vinyl tiles The fire suppression is individual wall-mounted fire extinguishers T891O uses electrical heat and electrical air conditioning T891O has no plant water and plant sanitary hook ups T891O is not connected to the LSDW system or the fire alarm system

32

Trailer T891P

T891P is an approximately 720 square-foot general field office trailer, and is approximately 15-feet wide and 48-feet long This trailer was acquired in 1994 and is located east of B891 T891P has aluminum siding and aluminum skirting There are two entrances on the north side of the trailer Both entrances have wooden stairs attached to a 4-foot x 8-foot deck, which leads to the entry door One of the entrances has a handicapped ramp Both entrances have enclosures An inspection of the roof could not be made from the ground-level walkdown This trailer does not have roof drains or down spouts Trailer walls were not accessible, but likely have insulation

T891P is configured with one office on each end of the trailer with a large work area in the center The interior walls are vinyl-covered wallboard, and the ceiling is 2-foot by 4-foot acoustical drop ceiling with recessed lights The floors are 12-inch vinyl tiles Trailer construction during this time period commonly used medal studs The fire suppression is individual wall-mounted fire extinguishers T891P uses electrical heat and electrical air conditioning T891P has no plant water and plant sanitary hook ups T891P is not connected to the LSDW system or the fire alarm system

Trailer T891R

Trailer T891R is an approximately 2880 square-foot general field office and sample shipping trailer, which is approximately 60-feet long by 48-feet wide This trailer was acquired in 1993 and is located south east of the 904 pad. T891R has aluminum siding and aluminum skirting There are 2 entry doors on the south side of the structure and three entry doors on the east side of the trailer The two south-side access doors each have wood stairs attached to a 4-foot by 4-foot deck leading to the entry door One of the south-side entrance doors has a wood enclosure Two of the east-side access doors have wood stairs and a 4-foot by 4-foot deck leading to the entry door The third door has a 4-foot by 8-foot deck and is also used as a loading dock The roof construction could not be determined from the ground-level inspection This trailer does not have roof drains or down spouts Trailer walls were not accessible, but likely have insulation

T891R is configured of hard-walled offices with several larger work areas and conference rooms The interior walls are constructed of vinyl-covered wallboard, and the ceiling is a 2-foot x 4-foot acoustical drop ceiling with recessed light fixtures The floors are 12-inch vinyl tiles The fire suppression is individual wall-mounted fire extinguishers T891R uses electrical heat and electrical air conditioning T891R has no plant water or plant sanitary hook ups T891R is not connected to the LSDW system or the fire alarm system

Trailer T891V

Trailer T891V is an approximately 720 square-foot office field trailer located north east of B891 T891V was acquired in 1986 and is approximately 15-feet by 48-feet in size This trailer has aluminum siding, aluminum skirting, and a tin roof There are two entry doors on the south side of the trailer Each entry has wood stairs attached to a 4-foot x 4-foot deck, which leads to the entry door Each entry has a wooden enclosure. An inspection of the roof could not be made from the ground-level walkdown. This trailer does not have roof drains or down spouts Trailer walls were not accessible, but likely have insulation

The interior floor is primarily vinyl-sheet covering, and one of the offices is carpeted The interior walls are wood paneling The interior ceiling is 4-foot x 8-foot vinyl-covered wallboard with surface mounted light fixtures The trailer has a main work area in the center of the trailer and two smaller offices at each end of the trailer Trailer construction during this time period commonly used medal studs The fire suppression is individual wall-mounted fire extinguishers T891V uses electrical heat and electrical air conditioning T891V has plant water and plant sanitary hook ups and has a restroom T891V is not connected to the LSDW system or the fire alarm system

33

Trailer T893A

T893A is an approximately 15,600 square-foot general field office trailer and was acquired in 1991 This modular trailer is approximately 120-feet wide by 130-feet long and is located south east of B865 B893A has corrugated metal siding with corrugated metal skirting Trailer construction during this time period commonly used medal studs

T893A has a total of 6 entrances Three of the entrances are on the east side of the structure, and three are on the west side of the structure The east and west side each have one entry constructed with wood steps leading to a 4-foot by 4-foot deck which leads to the entry door; one entry with wooden steps leading to a 4-foot by 8-foot deck which acts as a dock, and one entry constructed of a wooden handicapped ramp attached to a 4-foot by 4-foot deck leading to the entry door All entries are covered with a wooden enclosure An inspection of the roof could not be made from the ground-level walkdown This trailer does not have roof drains or down spouts. Trailer walls were not accessible, but likely have insulation

The interior is primarily a cubical layout, but has several hard-walled offices, conference rooms, and rest rooms. Interior walls are paper-covered wallboard on metal studs The ceiling is a drop ceiling with 2-foot by 4-foot acoustical tiles and recessed lights The floor is primarily covered with carpet except in the bathrooms and dock entranceways, which are covered with vinyl tile

B893A has electrical heat and electrical air conditioning The fire suppression system is a overhead sprinkler system with hand held fire extinguishers in some areas This trailer is supplied water from the site water system and drains into the site sanitary system and has restrooms T891A is connected to the LSDW system or the fire alarm system

Trailer T893B

T893B is an approximately 15,600 square-foot general field office trailer and was acquired in 1991 This modular trailer is approximately 120-feet wide by 130-feet long and is located south east of B865 B893B has corrugated metal siding with corrugated-metal skirting Trailer construction during this time period commonly used medal studs

T893B has a total of 6 entrances Three of the entrances are on the east side of the structure, and three are on the west side of the structure The east and west side each have one entry constructed with wood steps leading to a 4-foot by 4-foot deck which leads to the entry door; one entry with wooden steps leading to a 4-foot by 8-foot deck which acts as a dock, and one entry constructed of a wooden handicapped ramp attached to a 4-foot by 4-foot deck leading to the entry door All entries are covered with a wooden enclosure An inspection of the roof could not be made from the ground-level walkdown This trailer does not have roof drains or down spouts Trailer walls were not accessible, but likely have insulation

The interior is primarily a cubical layout, but has a few hard-walled offices and conference rooms. Interior walls are vinyl-covered wallboard on metal studs. The ceiling is a drop ceiling with 2-foot by 4-foot acoustical tiles and recessed lights The floor is primarily covered with carpet except in the bathrooms and dock entranceways, which are covered with vinyl tile

T893B has electrical heat and electrical air conditioning The fire suppression system is a overhead sprinkler system with hand-held fire extinguishers in some areas This trailer is supplied water from the site water system and drains into the site sanitary system and has restrooms T891B is connected to the LSDW system or the fire alarm system

Historical Operations

T891B has historically been used as a general field office trailer T891B also houses a field laboratory in the large work area in the center of the trailer. Although this area is called a laboratory, it is only used to store and ship B891 environmental samples and to calibrate field instruments such as pH, conductivity and temperature meters. At one time this area was used to store acids and bases to preserve water samples, which are now stored in B891. Samples are stored in a refrigerator labeled as a RMA Sample size range from 1 L to 4 L Sample matrixes are both liquids and solids. This field lab was moved to T891B from T891C in 1999

T891D, T891E, T891F, and T891G historically been used as a general field trailer. Activities did not involve any hazardous substances or radioactive materials. One exception was T891E did have a Satellite Accumulation Area (4142 T891E 03) established to store spent Ni-Cd batteries

T891O has historically been a general field office trailer and has supported the Ground Water Monitoring Operations Group Support activities included coordinating ground water sampling activities, sample management, and sample shipping. Support also involved filtering ground water samples prior to shipping to a laboratory for analysis. Samples filtered and managed in this trailer were environmental samples, which usually contain very low levels of radiological and chemical contamination. Room 12 and Room 10 of T891O are designated as a RMA for storing radioactive samples. Room 9 was used to store acids for groundwater sample preservation and other miscellaneous sampling supplies. This trailer was also used to coordinate lead-lined drum recycling activities.

T891P has historically been used as a general field office trailer, and currently supports the water treatment support organization and is also used to coordinate water treatment sampling activities The west room of T891P is used for radiological monitoring (counting smears) by the water treatment support group and currently is posted as a RMA. The smears are collected for the release of samples from B891 as well as collected during operations and maintenance activities for the B891 Water Treatment Facility The B891 Water Treatment Facility primarily treats groundwater, which is considered to have only very low levels of contamination

T891R has historically been used as a general field office trailer and sample storage and shipping trailer. T891R historically supported the bioassay program and surface water support organization. The north end of the trailer was used to receive bioassay samples from RFETS employees. The surface Water Support Group used Room 7 as a radiological instrument calibration and instrument storage room Room 7 also had an acid cabinet used to store acids used to preserve surface water samples. Room 9A was used to store material to package and ship surface water samples to offsite laboratories. The east end of the trailer had several refrigerators used to store samples at a controlled temperature until they could be shipped off-site for analysis These refrigerators were labeled as a RMA. The trailer had no known radiological or hazardous operations other than those identified above.

T891V was currently empty, but was occupied by the CASI sampling organization to coordinate sampling activites. T891V was moved to its current location in 1997. Prior to 1997, T891V was labeled T690J and was located west of Building 881 T690J was used as an on-site analytical laboratory and sample preparation facility The trailer at that time was equipped with gamma detectors and also used 2 chemical hoods to perform sample preparation activities (e g., addition of acids and bases) This trailer was primarily used to prepare pond-crete samples for off-site shipment to an analytical laboratory for analysis

T893A and T893B have historically been used as a general field office trailer Activities did not involve any hazardous substances or radioactive materials

35

Current Operational Status

T891B is currently used as a general field office trailer, and recently the old RTG field lab was moved here T891B currently houses the water treatment support group. T891D and T891E currently houses Surface Water Operation Support personnel and Buffer Zone Support personnel. T891F currently houses surface water and ground water monitoring equipment and geological cores.

T891G was emptied in July of 2001 and had housed Ecology support personnel.

T891O was emptied in June of 2001 of all personnel due to the increased background radiation from the waste stored on the 904 pad and B906.

T891P is currently being used as a general field office trailer by the water treatment support organization to coordinate water treatment sampling activities. The west room of T891P is used for radiological monitoring (counting swipes) by the water treatment support group and currently is posted as a RMA.

T891R was emptied of all personnel in May of 2001 due to the increased background radiation from the waste stored on the 904 pad and B906.

Trailer T891V was emptied in July 2001 due to the increased background radiation from the waste stored on the 904 pad and B906

Trailer T893A and Trailer T893B currently houses the Material Stewardship Support Group

Contaminants of Concern

Asbestos

Describe any potential, likely, or known sources of Asbestos. All of the T891 trailers and the T893A and T893B trailers are posted as "Potentially Containing Asbestos Material" No records of asbestos building inspections were found on any of these buildings

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.

Beryllium (Be)

Describe any potential, likely, or known Be production or storage locations None of the T891 trailers nor T893A and T893B trailers are on the RFETS list of known Be locations.

Summarize any recent Be sampling results No recent Be sampling has been conducted.

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

36

Lead

Describe any potential, likely, or known sources of Lead (e g , paint, shielding, etc) Some trailers may contain lead-based paints, lead wiring, lead solder and lead bricks (T891R) Trailer T891O has a WSRIC, which addresses the management of lead-lined drum recycling activities T891O never stored any lead and only administered the paper work. The lead-lined drums were stored in seven cargo container east of T891C The seven cargo containers storing the lead lined drums for re-cycling have been relocated to the south side of T886D and are used to provide area radiation shielding for the analytical activities provided by Eberline No lead operations were known to have occurred in any of these 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.

RCRA/CERCLA Constituents

Describe any potential, likely, or known sources of RCRA/CERCLA constituents (e.g , chemical storage, waste storage, processes): The field labs in T891B, T891O, T891R and T891V used acids and bases to preserve samples See Building 891 WSRIC for detailed explanation of waste streams that are sampled and stored in the T891B field lab. Samples stored in these field labs were environmental samples with very low levels of radiological and chemical contamination. Most of the samples were well below RCRA regulatory levels. The 891 trailers and T893A &T893B trailers are not listed on "The Master List of RCRA Units"

Describe any potential, likely, or known spill locations (and sources, if any) None

Describe methods in which spills were mitigated, if any None

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.

PCBs

Describe any potential, likely, or known sources of PCBs (e g , light ballasts, paints, equipment, etc) If the age of a trailer is newer than 1980, PCBs should not be present. No equipment containing PCBs were ever located in any of these trailers

Describe any potential, likely, or known spill locations (and sources, if any) None

Describe methods in which spills were mitigated, if any· None.

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

37

Radiological Contaminants

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

The T891B sample storage refrigerator was a RMA See Building 891 WSRIC for detailed explanation of waste streams that were sampled and shipped by the T891B field lab Samples stored in the field lab were environmental samples with very low levels of contamination

Room 12 and Room 10 of T891O are designated as a RMA for storing radioactive samples

The west room of T891P is used for radiological monitoring (counting smears) by the water treatment support group and currently is posted as a RMA

The north end of T891R is used to receive bioassay samples from RFETS employees Room 7 is used as a radiological calibration and instrument storage room The east end of the trailer has several refrigerators used to store samples at a controlled temperatures until they can be shipped off-site for analysis The refrigerators are designated as RMAs

Trailer T891V is currently used to coordinate field sampling activities and sometime store sampling equipment T891V did act as a counting lab as part of it operational history and currently has 2 chemical hoods, which are not in use

Describe any potential, likely, or known spill locations (e g , known leaking sealed radioactive sources, leaking waste drums, potentially contaminated drains, etc) None

Describe methods in which spills were mitigated, if any None

Describe any potential, likely, or known isotopes of concern (e g , weapons grade plutonium, uranium isotopes, pure beta emitters, mixed fission products, etc) None

Describe any potential, likely, or known external facility contamination (e g , stack release points, unfiltered ventilation, facility's physical location to known site releases, etc) None

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)

No known IHSSs, PACs, or UBCs are related to these trailer

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) Trailer T891O has a WSRIC for sample filtering and lead-lined drum recycling activities, even though T891O only handled the paperwork related to the lead-lined drum recycling The lead-lined drums were stored in a cargo container west of the trailer

See Building 891 WSRIC for detailed explanation of waste streams that are sampled and stored in the T891B field lab

References

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

Sources reviewed to complete this HSA were the RFETS Facility list, the Historical Release Report, Site Master List of RCRA Units, and the Site IHSS, PAC, and UBC databases. This trailers do not have a Facility Safety Analysis or a WSRIC. In addition, facility walkdown were performed and the Building Coordinator was interviewed.

Waste Volume Estimates and Material Types

Facility	Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM	Other Waste (cu ft)
T891B	None	300	250	350	450	TBD	50
T891D	None	800	250	0	450	TBD	50
T891E	None	1400	500	0	800	TBD	200
T891F	None	800	250	0	450	TBD	75
T891G	None	800	250	0	450	TBD	75
T891O	None	1800	800	0	1800	TBD	200
T891P	None	275	250	350	450	TBD	50
T891R	None	600	800	1100	1400	TBD	200
T891V	None	275	250	350	450	TBD	50
T893A	None	3500	1500	3000	4500	TBD	400
T893B	None	3500	1500	3000	4500	TBD	400

Further Actions

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

Begin the RLC/PDS process

Note:

This HSA was performed prior to SME walkdowns, and chemical and radiological characterization package preparations Information contained in this HSA only represents a "snapshot" in time Subsequent data may be obtained during SME walkdowns and chemical and radiological characterization package preparations, which may conflict with this report. However, this report will not be amended, and the newer data will take precedence over the data in the report. Newer Data will appear in the RLCR/PDSR

Prepared By: DOUG BRYANT 11-20-01

Name Signature Date

39

D&D RISS Facility Characterization
Historical Site Assessment Report
December 4, 2001, Rev. 1

Facility ID: Area 1 – Group 15, Trailer T-900E, Soil Vapor Extraction (SVE) Unit
Anticipated Facility Type (1, 2, or 3): T-900E = Type 1

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:
Trailer T-900E is an approximately 384 square-foot extra heavy duty semi-trailer, which was acquired in January 1994 and is located south of Office Trailer T-893A, in the Building 891 Contractors Yard which is south of Central Avenue at approximately Tenth Street. This trailer is approximately 10 feet wide X 40 feet long X 10 feet high. The outside of Trailer T-900E is covered with metal. The roof of Trailer T-900E is also covered with metal. Trailer T-900E is equipped with process piping, tanks, HEPA filter banks, vacuum pumps, Magnahelic® Gauges, combustible gas and oxygen monitoring equipment, etc Trailer T-900E has fluorescent lighting, electrical heating, and electrical air conditioning Trailer T-900E was designed and constructed as a mobile SVE Unit. SVE is an in situ remediation technology designed to remove volatile organic compounds (VOCs) from unsaturated soils

Historical Operations
Trailer T-900E historically operated as an experimental mobile SVE Unit which operated at Trench T-3 (OU-2) from approximately 1994 until 1996. Trailer T-900E operated as a Soil Vapor Extraction Unit processing contaminated volatile organic compounds from the soils around and north of Trench T-3, which is directly east of the Plant and east of the North Perimeter Road

Current Operational Status
The Trailer T-900E Unit is currently out of service, appears inoperable, and is in the Building 891 Contractors Yard. Four Granular Activated Carbon Tanks, which are considered part of Trailer T-900E, are stored directly east of the unit.

Contaminants of Concern

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

Trailer T-900E was placed in service at RFETS in 1994. Trailer T-900E was designed and constructed in the last half of 1993 and would not be expected to contain asbestos.

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

Trailer T-900E is not on the RFETS list of known Be locations No known production or Be storage locations were ever in Trailer T-900E.

Summarize any recent Be sampling results:
No recent and/or known Be sampling has been conducted.

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

The manufacture date of Trailer T-900E is 1993, therefore the facility should not contain lead-based paints, lead wiring, and lead solder. T-900E never stored any lead or had any lead operations.

40

RCRA/CERCLA Constituents

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

Trailer T-900E was never used as a chemical storage facility Trailer T-900E has no WSRIC, but it may have been included in the OUOPS WSRIC at one time. Trailer T-900E is not listed on "The Master List of RCRA Units"

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

No known chemical spills ever occurred in Trailer T-900E.

Describe methods in which spills were mitigated, if any

None

PCBs

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

Trailer T-900E was manufactured in 1993 and is not expected to contain PCB and lead-based paints and light ballasts with PCBs. No equipment containing PCBs were ever located in Trailer T-900E.

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

None

Describe methods in which spills were mitigated, if any

None

Radiological Contaminants

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

Trailer T-900E used HEPA filters to filter out airborne radiological material in the soil vapor

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

None

Describe methods in which spills were mitigated, if any

No known spills or contamination occurred

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

None

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

None

41

D&D RISS Facility Characterization
Historical Site Assessment Report
December 4, 2001, Rev. 1

Environmental Restoration Concerns

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

No known IHSSs, PACs, or UBCs are related to Trailer T-900E, but it operated as a SVE Unit processing radioactively contaminated ground water and radioactively contaminated VOCs from IHSS/PACs areas, such as PAC 900-108, PAC 900-109, PAC 900-112, PAC 900-113, etc

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)

Trailer T-900E is not listed in the RFETS Historical Release Reports Trailer T-900E does not have a WSRIC

References

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

Sources reviewed to complete this HSA were the RFETS Facility list, the Historical Release Report, Site Master List of RCRA Units, and the Site IHSS, PAC, and UBC databases. Trailer T-900E does not have a Facility Safety Analysis or a WSRIC In addition, a facility walkdown was performed with the Facility Manager for Trailer T-900E

Waste Volume Estimates and Material Types For Trailer T-900E, Area 1 Group 15

Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM	Other Waste (cu ft)
None	None	2000	350	None	TBD	80 Rubber (Tires)

Further Actions

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

Begin the RLC/PDS process

Note:

This HSA was performed prior to SME walkdowns, and chemical and radiological characterization package preparations SMEs should evaluate and/or verify all information during the RLC/PDS process SMEs may need to review additional documentation and perform additional interviews Information contained in this HSA Report 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 HSA Report will not be amended The RLC data will take precedence over the information in this HSA Report. RLC data will appear in the RLCR/PDSR

Additional Note:

Two of the three people interviewed for this HSA Report said the manufacturer of Trailer T-900E, Soil Vapor Extraction (SVE) Unit, was interested in buying it. Please disregard the above waste volume estimates if Trailer T-900E is sold

Prepared By: Bob Sheets , Bob Sheets , 12/4/2001

Name Signature Date

42

D&D RISS Facility Characterization
Historical Site Assessment Report
December 4, 2001, Rev. 1

Facility ID: Area 1 – Group 15, T-904A Foreman Office Trailer/Break-room
Anticipated Facility Type (1, 2, or 3): 1

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-904A is an approximately 400 square-foot single-wide office trailer, which was acquired in 1991 and is located south Central Avenue near the northwest corner of Pad 904 This trailer is approximately 10 feet wide X 40 feet long X 10 feet high The outside of Office Trailer T-904A is covered with corrugated metal The roof of Office Trailer T-904A is also covered with metal, the roof rounded to the north and south for water drainage Office Trailer T-904A has the following systems two telephones, electrical heat, electrical air conditioning, and a LSDW System.

Historical Operations
T-904A has historically been used as a Foreman Office and Break-room trailer for the Hazard Reduction Technicians (HRTs) that work in the Pad 904 Tents.

Current Operational Status
T-904A is currently used as a Foreman Office and Break-room trailer T-904A currently houses the Pad 904 HRTs and their Foremen. The TLD Badge Rack near the covered east entrance to T-904A indicates approximately 20 HRTs use the badge exchange rack and the office trailer break-room.

Contaminants of Concern

Asbestos
Describe any potential, likely, or known sources of Asbestos

Trailer T-904A was placed in service at it present location in 1991 If Office Trailer T-904A was manufactured before 1980, asbestos insulation could have been used in the walls, floor, and ceiling/roof

Beryllium (Be)
Describe any potential, likely, or known Be production or storage locations

Trailer T-904A is not on the RFETS list of known Be locations Because Trailer T-904A is used as a Break-room for the Pad 904 HRTs, potentially the facility could have become Be contaminated because pondcrete and saltcrete stored in the Pad 904 Tents contained trace amounts of Be (see the HSA Report for Pad 904, October 2001) No known production or Be storage locations were ever in T-904A

Summarize any recent Be sampling results
No recent and/or known Be sampling has been conducted

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

The manufacture date of T-904A is uncertain, therefore the facility may contain lead-based paints, lead wiring, and lead solder Trailer T-904A does not have a WSRIC T-904A never stored any lead or had any lead operations

43

RCRA/CERCLA Constituents

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

Trailer T-904A was never used as a chemical storage facility Trailer T-904A has no WSRIC, but it may have been included in the Pad 904 WSRIC at one time Trailer T-904A is not listed on "The Master List of RCRA Units"

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

No known chemical spills ever occurred in Trailer T-904A

Describe methods in which spills were mitigated, if any

N/A

PCBs

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

If Trailer T-904A was manufactured before 1980 (T-904A was acquired in 1991 but the manufacture date is unknown), it may contain PCB and lead-based paints and light ballasts with PCBs No equipment containing PCBs were ever located in Trailer T-904A

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

None

Describe methods in which spills were mitigated, if any

None

Radiological Contaminants

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

Trailer T-904A has no known radiological production or storage locations

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

None

Describe methods in which spills were mitigated, if any

No known spills ever occurred in Office Trailer T-904A

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

None

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

None

44

D&D RISS Facility Characterization
Historical Site Assessment Report
December 4, 2001, Rev. 1

Environmental Restoration Concerns

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

No known IHSSs, PACs, or UBCs are related to Trailer 904A, but it is located near the northwest corner of Pad 904 and Tents 8, 9, 10, and 11

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)

Trailer T-904A is not listed in the RFETS Historical Release Reports Trailer T-904A does not have a WSRIC

References

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

Sources reviewed to complete this HSA were the RFETS Facility list, the Historical Release Report, Site Master List of RCRA Units, and the Site IHSS, PAC, the HSA Report for Pad 904 dated October 2001, and UBC databases Office Trailer T-904A does not have a Facility Safety Analysis or a WSRIC In addition, a facility walkdown was performed and the without Facility Manager for Trailer T-904A

Waste Volume Estimates and Material Types For Trailer T-904A, Area 1 Group 15

Concrete (cu ft)	Wood (cu ft)	Metal (cu ft)	Corrugated Sheet Metal (cu ft)	Wall Board (cu ft)	ACM	Other Waste (cu ft)
	WASTE VOLUME ESTIMATES NOT PERFORMED; THE FACILITY IS EXPECTED TO BE SOLD.					

Further Actions

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

Begin the RLC/PDS process

Note:

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

Prepared By: Bob Sheets / Bob Sheets 12/4/2001

Name Signature Date

45

ATTACHMENT C

Radiological Data Summaries and Survey Maps

Best Available Copy

SURVEY UNIT G11-A-001
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior & Exterior of T690N

47

Total Surface Activity Measurements

	30	30	
	Number Required	Number Obtained	
MIN	-12 1		dpm/100 cm^2
MAX	80 4		dpm/100 cm^2
MEAN	18 7		dpm/100 cm^2
STD DEV	22 6		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	30	30	
	Number Required	Number Obtained	
MIN	-0 9		dpm/100 cm^2
MAX	2 7		dpm/100 cm^2
MEAN	0.2		dpm/100 cm^2
STD DEV	1.3		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

48

SURVEY UNIT G11-A-001
TSA DATA SUMMARY

Manufacturer:	NE Electra	NE Electra	NE Electra
Model.	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	1379	1136	1379
Cal Due Date:	5/6/02	1/17/02	5/6/02
Analysis Date:	11/19/01	11/19/01	11/20/01
Alpha Eff. (c/d):	0.187	0.211	0.187
Alpha Bkgd (cpm)	0.7	2.7	3.1
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm^2)	27.7	39.1	46.5

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	7	4.7	25.1	10.0	53.5	2.3
2	9	8.0	42.8	5.3	28.3	20.0
3	7	4.0	21.4	3.3	17.6	1.4
4	9	8.7	46.5	2.7	14.4	23.7
5	9	11.3	60.4	4.7	25.1	37.6
6	9	12.0	64.2	2.7	14.4	41.4
7	7	6.7	35.8	3.3	17.6	13.0
8	7	11.3	60.4	2.0	10.7	37.6
9	7	11.3	60.4	4.0	21.4	37.6
10	7	3.3	17.6	2.0	10.7	5.2
11	7	9.3	49.7	6.7	35.8	26.9
12	9	13.3	71.1	5.3	28.3	48.3
13	7	6.7	35.8	4.0	21.4	13.0
14	7	9.3	49.7	2.7	14.4	26.9
15	7	19.3	103.2	3.3	17.6	80.4
16	9	4.0	21.4	7.3	39.0	1.4
17	9	5.3	28.3	4.7	25.1	5.5
18	9	6.7	35.8	2.0	10.7	13.0
19	9	2.0	10.7	6.0	32.1	-12.1
20	9	6.7	35.8	5.3	28.3	13.0
21	9	10.0	53.5	4.0	21.4	30.7
22	9	7.3	39.0	8.0	42.8	16.2
23	7	5.3	28.3	1.3	7.0	5.5
24	7	4.7	25.1	4.7	25.1	2.3
25	7	17.3	92.5	4.0	21.4	69.7
26	7	10.0	53.5	2.7	14.4	30.7
27	7	4.7	25.1	6.0	32.1	2.3
28	7	2.7	14.4	3.3	17.6	-8.4
29	7	4.0	21.4	5.3	28.3	-1.4
30	7	2.7	14.4	1.3	7.0	-8.4
					22.8	Sample LAB Average
					MIN	-12.1
					MAX	80.4
					MEAN	18.7
					SD	22.6
					Transuranic DCGL$_W$	100

1 - Average LAB used to subtract from Gross Sample Activity

QC Measurements

25 QC	8	21.3	100.9	4.0	19.0	86.7
15 QC	8	20.7	98.1	2.0	9.5	83.9
					14.2	QC LAB Average
					QC MIN	83.9
					QC MAX	86.7
					QC MEAN	85.3
					QC SD	2.0
					Transuranic DCGL$_W$	100

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

49

SURVEY UNIT G11-A-001
SMEAR DATA SUMMARY

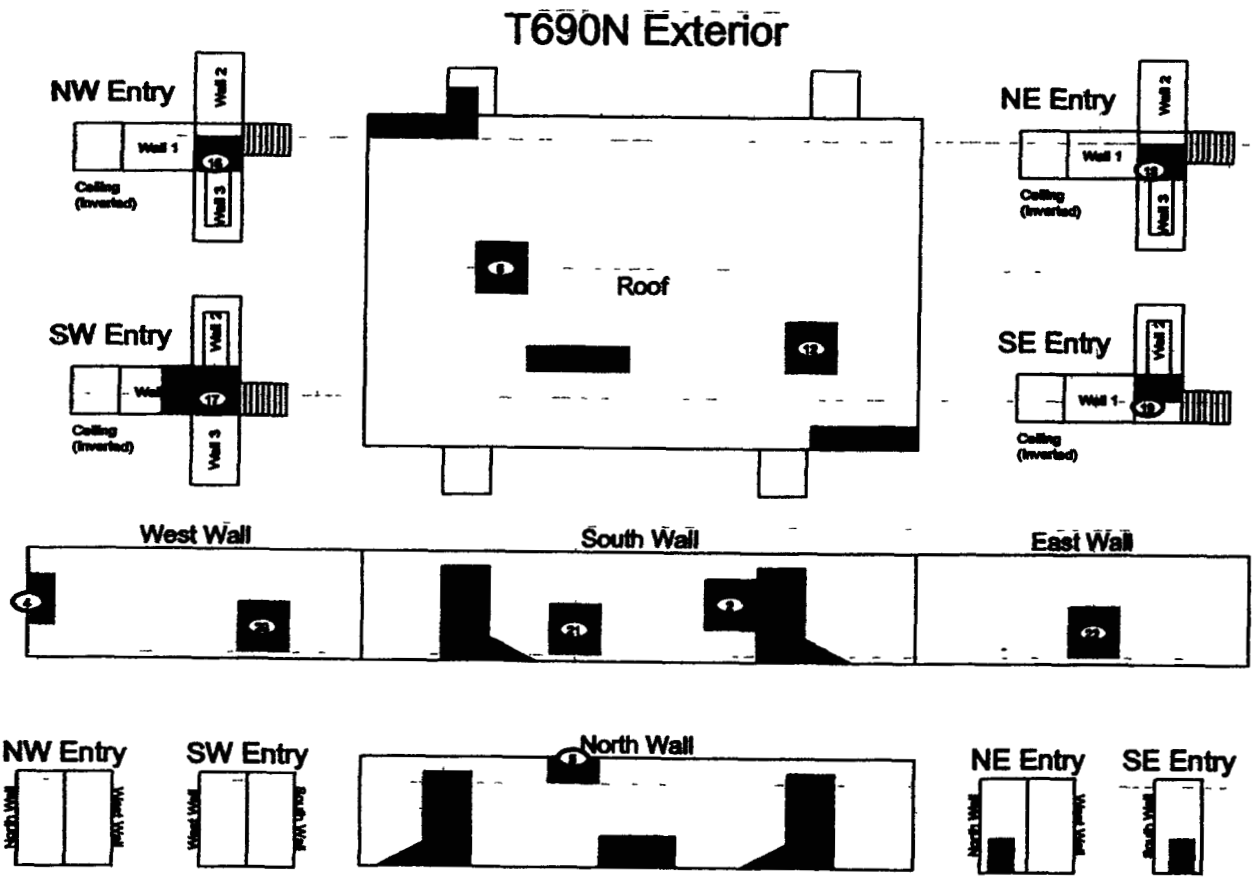
Manufacturer	Eberline	Eberline	Eberline	Eberline
Model	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#	1	2	3	4
Serial #	833	1157	830	770
Cal Due Date	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date	11/20/01	11/20/01	11/20/01	11/20/01
Alpha Eff. (c/d):	0.33	0 33	0 33	0.33
Alpha Bkgd (cpm)	0.2	0 1	0 1	0.3
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm^2)	8 0	7 0	7 0	8.8

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	3	1 0	2 7
2	1	0 0	-0 6
3	2	0 0	-0.3
4	1	0 0	-0 6
5	4	1 0	2 1
6	1	0 0	-0 6
7	1	1 0	2 4
8	2	0 0	-0.3
9	3	1 0	2 7
10	4	0 0	-0 9
11	2	1 0	2 7
12	2	0 0	-0.3
13	3	0 0	-0.3
14	1	0 0	-0 6
15	4	0 0	-0 9
16	2	0 0	-0 3
17	3	0 0	-0.3
18	3	0 0	-0.3
19	3	0 0	-0.3
20	4	0 0	-0 9
21	2	1 0	2 7
22	4	0 0	-0 9
23	4	1 0	2 1
24	4	0 0	-0 9
25	1	0 0	-0 6
26	3	0 0	-0 3
27	3	0 0	-0 3
28	1	0 0	-0 6
29	1	0 0	-0 6
30	2	0 0	-0.3
		MIN	-0 9
		MAX	2 7
		MEAN	0.2
		SD	1.3
		Transuranic DCGL$_W$	20

50

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit: G11-A-001** **Classification 3**
Building: T690N
Survey Unit Description: Exterior of Trailer T690N
Total Area: 1281 sq. m. **Total Floor Area. 276 sq m**
Total Roof Area: 287 sq. m



Scan Area

SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp RMST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30
0 METERS 10

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

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID: 02-0162/T690N-19c January 1, 2001

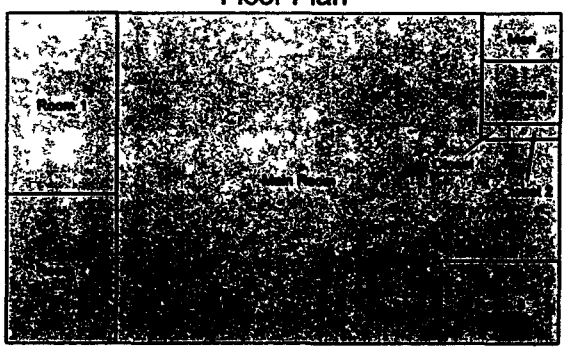
51

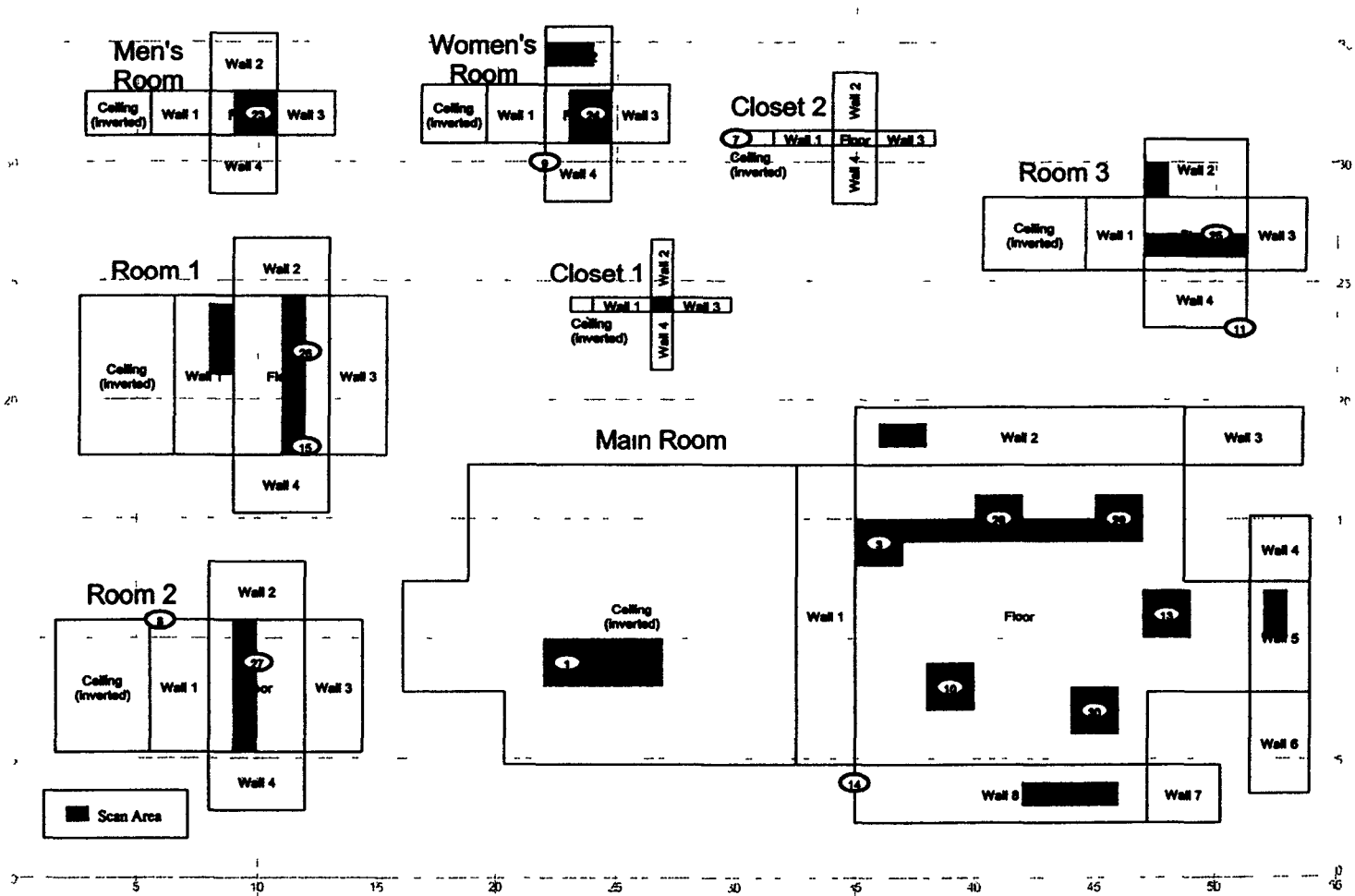
PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area A **Survey Unit: G11-A-001** **Classification 3**
Building T690N
Survey Unit Description Interior of Trailer T690N
Total Area 1281 sq m **Total Floor Area 276 sq m**
Total Roof Area 287 sq m

T690N Interior

Floor Plan





SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET nor any agency thereof, nor any of their employees, makes any warranty express or implied, or assumes any legal liability or responsibility for the accuracy completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

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

0 FEET 30
0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7767

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID. 02-0102/T690N-2Sc

January 1, 2002

52

SURVEY UNIT G11-A-003
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior of B850

53

G11-A-003
Radiological
Data Summary

Total Surface Activity Measurements

	Number Required	Number Obtained	
	110	110	
MIN	-18 8		dpm/100 cm^2
MAX	77 8		dpm/100 cm^2
MEAN	2 8		dpm/100 cm^2
STD DEV	14 0		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	Number Required	Number Obtained	
	110	110	
MIN	-0 6		dpm/100 cm^2
MAX	8 8		dpm/100 cm^2
MEAN	0 6		dpm/100 cm^2
STD DEV	1 7		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

54

SURVEY UNIT G11-A-003
TSA DATA SUMMARY

Manufacturer:	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
Instrument ID#:	7	8	9	10	11	12	19
Serial #:	1136	1379	1379	1136	1379	3114	1417
Cal Due Date:	1/17/02	5/6/02	5/6/02	1/17/02	5/6/02	4/25/02	4/25/02
Analysis Date:	11/28/01	11/28/01	11/29/01	11/30/01	11/30/01	12/5/01	12/5/01
Alpha Eff. (c/d):	0.211	0.187	0.187	0.211	0.187	0.202	0.198
Alpha Bkgd (cpm)	0.0	0.7	4.7	3.3	6.0	3.3	0.2
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	48.0	48.0	48.0	48.0	48.0	48.0	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	9	7.3	39.0	2.7	14.4	16.9
2	11	4.0	21.4	3.3	17.6	-0.8
3	8	8.0	42.8	4.7	25.1	20.6
4	7	3.3	15.6	6.0	28.4	-6.5
5	9	11.3	60.4	0.0	0.0	38.3
6	7	5.3	25.1	5.0	23.7	3.0
7	11	8.7	46.5	5.3	28.3	24.4
8	7	2.7	12.8	1.3	6.2	-9.4
9	19	8.0	40.4	2.0	10.1	18.2
10	9	5.3	28.3	4.0	21.4	6.2
11	11	4.7	25.1	2.7	14.4	3.0
12	8	5.3	28.3	8.7	46.5	6.2
13	9	6.7	35.8	6.0	32.1	13.7
14	8	2.0	10.7	3.3	17.6	-11.5
15	11	2.7	14.4	8.0	42.8	-7.7
16	11	5.3	28.3	6.0	32.1	6.2
17	8	7.3	39.0	8.7	46.5	16.9
18	8	5.3	28.3	4.0	21.4	6.2
19	8	4.0	21.4	2.7	14.4	-0.8
20	7	4.0	19.0	5.3	25.1	-3.2
21	8	7.3	39.0	5.3	28.3	16.9
22	7	6.0	28.4	4.0	19.0	6.3
23	8	5.3	28.3	6.7	35.8	6.2
24	12	6.7	33.2	1.3	6.4	11.0
25	8	5.3	28.3	8.0	42.8	6.2
26	8	3.3	17.6	7.3	39.0	-4.5
27	8	4.7	25.1	5.3	28.3	3.0
28	11	5.3	28.3	5.3	28.3	6.2
29	8	2.7	14.4	1.3	7.0	-7.7
30	9	6.7	35.8	4.7	25.1	13.7
31	19	1.3	6.6	1.3	6.6	-15.6
32	8	2.0	10.7	6.0	32.1	-11.5
33	9	3.3	17.6	3.3	17.6	-4.5
34	11	4.0	21.4	1.3	7.0	-0.8
35	7	4.0	19.0	4.0	19.0	-3.2
36	8	2.7	14.4	13.3	71.1	-7.7
37	10	1.3	6.2	2.0	9.5	-16.0
38	11	3.3	17.6	4.0	21.4	-4.5
39	8	6.7	35.8	6.0	32.1	13.7
40	7	0.7	3.3	2.7	12.8	-18.8
41	9	9.3	49.7	8.0	42.8	27.6
42	11	10.7	57.2	2.7	14.4	35.1
43	8	2.7	14.4	3.3	17.6	-7.7
44	11	4.7	25.1	4.7	25.1	3.0
45	8	6.7	35.8	2.7	14.4	13.7
46	7	0.7	3.3	1.3	6.2	-18.8

55

SURVEY UNIT G11-A-003
TSA DATA SUMMARY

Manufacturer:	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
Instrument ID#:	7	8	9	10	11	12	19
Serial #:	1136	1379	1379	1136	1379	3114	1417
Cal Due Date:	1/17/02	5/6/02	5/6/02	1/17/02	5/6/02	4/25/02	4/25/02
Analysis Date:	11/28/01	11/28/01	11/29/01	11/30/01	11/30/01	12/5/01	12/5/01
Alpha Eff. (c/d):	0.211	0.187	0.187	0.211	0.187	0.202	0.198
Alpha Bkgd (cpm)	0.0	0.7	4.7	3.3	6.0	3.3	0.2
Sample Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	48.0	48.0	48.0	48.0	48.0	48.0	48.0

47	8	6.0	32.1	0.7	3.7	9.9
48	7	2.7	12.8	0.0	0.0	-9.4
49	8	6.7	35.8	12.0	64.2	13.7
50	7	3.3	15.6	7.0	33.2	-6.5
51	7	4.0	19.0	0.7	3.3	-3.2
52	7	2.7	12.8	1.3	6.2	-9.4
53	8	4.7	25.1	5.7	30.5	3.0
54	8	3.3	17.6	1.0	5.3	-4.5
55	7	4.0	19.0	0.7	3.3	-3.2
56	7	2.7	12.8	4.0	19.0	-9.4
57	7	6.0	28.4	2.0	9.5	6.3
58	7	3.3	15.6	2.7	12.8	-6.5
59	7	5.3	25.1	2.0	9.5	3.0
60	8	0.7	3.7	4.7	25.1	-18.4
61	8	4.7	25.1	6.0	32.1	3.0
62	7	5.3	25.1	2.0	9.5	3.0
63	7	4.7	22.3	2.0	9.5	0.1
64	7	3.3	15.6	4.0	19.0	-6.5
65	7	3.3	15.6	4.0	19.0	-6.5
66	8	6.0	32.1	6.7	35.8	9.9
67	7	2.7	12.8	4.7	22.3	-9.4
68	8	4.7	25.1	4.0	21.4	3.0
69	8	4.7	25.1	5.3	28.3	3.0
70	8	6.0	32.1	4.7	25.1	9.9
71	8	2.7	14.4	3.3	17.6	7.7
72	8	4.0	21.4	5.3	28.3	-0.8
73	7	1.3	6.2	3.3	15.6	-16.0
74	7	2.0	9.5	6.0	28.4	-12.7
75	8	4.7	25.1	6.0	32.1	3.0
76	7	2.7	12.8	0.7	3.3	-9.4
77	7	0.7	3.3	0.7	3.3	-18.8
78	7	2.7	12.8	1.4	6.6	-9.4
79	8	6.7	35.8	3.3	17.6	13.7
80	9	7.3	39.0	4.7	25.1	16.9
81	9	2.7	14.4	8.7	46.5	-7.7
82	9	6.7	35.8	5.3	28.3	13.7
83	9	8.0	42.8	2.7	14.4	20.6
84	9	5.3	28.3	4.7	25.1	6.2
85	9	8.7	46.5	6.0	32.1	24.4
86	9	6.7	35.8	5.3	28.3	13.7
87	9	18.7	100.0	2.7	14.4	77.8
88	9	4.0	21.4	4.0	21.4	-0.8
89	9	4.7	25.1	2.7	14.4	3.0
90	9	6.7	35.8	10.7	57.2	13.7
91	11	3.3	17.6	2.7	14.4	-4.5
92	11	5.3	28.3	5.3	28.3	6.2
93	11	5.3	28.3	3.3	17.6	6.2
94	11	4.0	21.4	3.3	17.6	-0.8
95	11	7.3	39.0	4.0	21.4	16.9

56

SURVEY UNIT G11-A-003
TSA DATA SUMMARY

Manufacturer:	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
Instrument ID#:	7	8	9	10	11	12	19
Serial #:	1136	1379	1379	1136	1379	3114	1417
Cal Due Date:	1/17/02	5/6/02	5/6/02	1/17/02	5/6/02	4/25/02	4/25/02
Analysis Date:	11/28/01	11/28/01	11/29/01	11/30/01	11/30/01	12/5/01	12/5/01
Alpha Eff. (c/d):	0 211	0 187	0 187	0.211	0 187	0 202	0 198
Alpha Bkgd (cpm)	0.0	0 7	4 7	3 3	6 0	3.3	0 2
Sample Time (min)	1 5	1 5	1 5	1 5	1 5	1 5	1 5
LAB Time (min)	1 5	1 5	1 5	1 5	1 5	1 5	1 5
MDC (dpm/100cm²)	48.0	48.0	48 0	48 0	48 0	48.0	48 0

96	11	5.3	28.3	6 7	35 8	6.2
97	11	5 3	28.3	6.0	32.1	6.2
98	11	4 0	21 4	2.0	10 7	-0 8
99	11	8 0	42.8	4.7	25 1	20 6
100	11	11 0	58.8	5.3	28.3	36.7
101	11	4 0	21 4	5.3	28.3	-0.8
102	11	2.7	14 4	9.3	49 7	-7 7
103	11	4 0	21 4	6.0	32.1	-0.8
104	19	2.7	13 6	4.7	23 7	-8.5
105	12	4 7	23.3	2.0	9 9	1 1
106	12	2.7	13 4	3.3	16.3	-8 8
107	12	1.3	6.4	2.7	13 4	-15 7
108	19	2.0	10 1	4 0	20.2	-12.1
109	19	3.3	16.7	4 0	20 2	-5 5
110	12	4 7	23.3	1 3	6 4	1 1

1 Average LAB used to subtract from Gross Sample Activity

22.2	Sample LAB Average
MIN	-18 8
MAX	77 8
MEAN	2.8
SD	14 0
Transuranic $DCGL_W$	100

QC Measurements

70 QC	7	2 7	12.8	0 7	3.3	-0 5
54 QC	7	3.3	15 6	2.7	12.8	2.4
47 QC	7	1 3	6.2	4 0	19 0	-7 1
59 QC	8	4 7	25 1	6.0	32.1	11 9
10 QC	10	1 3	6 2	1.3	6.2	-7 1
86 QC	10	1.3	6.2	1.3	6.2	-7 1

1 Average QC LAB used to subtract from Gross Sample Activity

13.2	QC LAB Average
QC MIN	-7 1
QC MAX	11 9
QC MEAN	-1.2
QC SD	7 6
Transuranic $DCGL_W$	100

57

SURVEY UNIT G11-A-003
SMEAR DATA SUMMARY

Manufacturer	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
Instrument ID#	1	2	3	4	5	6	13	14
Serial #	833	1157	830	770	833	1157	830	770
Cal Due Date	1/31/02	2/16/02	2/16/02	1/19/02	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date	12/3/01	12/3/01	12/3/01	12/3/01	12/6/01	12/6/01	12/6/01	12/6/01
Alpha Eff (c/d)	0 33	0 33	0 33	0.33	0.33	0 33	0 33	0 33
Alpha Bkgd (cpm)	0.2	0 0	0 1	0 0	0 2	0 1	0 0	0.2
Sample Time (min)	2	2	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10	10	10
MDC (dpm/100cm^2)	8 0	4 5	7 0	4 5	8 0	7 0	4 5	8 0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	1 0	2 4
2	2	0 0	0 0
3	3	1 0	2 7
4	4	0 0	0 0
5	1	0 0	-0 6
6	2	0 0	0 0
7	3	0 0	-0 3
8	4	0 0	0 0
9	5	0 0	-0 6
10	1	0 0	-0 6
11	2	0 0	0 0
12	3	1 0	2 7
13	4	2 0	6 1
14	1	0 0	-0 6
15	2	0 0	0 0
16	3	0 0	-0 3
17	4	0 0	0 0
18	1	0 0	-0 6
19	2	0 0	0 0
20	3	0 0	-0.3
21	4	0 0	0 0
22	1	0 0	-0 6
23	2	0 0	0 0
24	6	0 0	-0.3
25	3	1 0	2 7
26	4	0 0	0 0
27	1	0 0	-0 6
28	2	1 0	3 0
29	3	0 0	-0 3
30	4	0 0	0 0
31	3	0 0	-0 3
32	1	0 0	-0 6
33	2	0 0	0 0
34	3	0 0	-0.3
35	4	2 0	6 1
36	1	1 0	2 4
37	2	0 0	0 0
38	3	0 0	-0.3
39	4	0 0	0 0
40	1	0 0	-0 6
41	2	0 0	0 0
42	3	0 0	-0.3
43	4	0 0	0 0
44	1	2 0	5.5

58

SURVEY UNIT G11-A-003
SMEAR DATA SUMMARY

Manufacturer	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
Instrument ID#	1	2	3	4	5	6	13	14
Serial #	833	1157	830	770	833	1157	830	770
Cal Due Date	1/31/02	2/16/02	2/16/02	1/19/02	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date	12/3/01	12/3/01	12/3/01	12/3/01	12/6/01	12/6/01	12/6/01	12/6/01
Alpha Eff. (c/d)	0 33	0.33	0.33	0.33	0.33	0.33	0 33	0 33
Alpha Bkgd (cpm)	0 2	0 0	0 1	0 0	0.2	0 1	0 0	0 2
Sample Time (min)	2	2	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10	10	10
MDC (dpm/100cm^2)	8 0	4 5	7 0	4 5	8 0	7 0	4 5	8 0

45	2	0 0	0 0
46	3	0 0	-0 3
47	4	0 0	0 0
48	1	0 0	-0 6
49	2	0 0	0 0
50	3	0 0	-0.3
51	4	0 0	0 0
52	1	0 0	-0 6
53	2	1 0	3 0
54	3	0 0	-0.3
55	4	0 0	0 0
56	1	0 0	-0 6
57	2	0 0	0 0
58	3	0 0	-0 3
59	4	1 0	3 0
60	1	0 0	-0 6
61	2	1 0	3 0
62	3	0 0	-0 3
63	4	1 0	3 0
64	1	0 0	-0 6
65	2	0 0	0 0
66	3	1 0	2 7
67	4	0 0	0 0
68	1	0 0	-0 6
69	2	0 0	0 0
70	3	0 0	-0 3
71	4	0 0	0 0
72	1	1 0	2 4
73	2	1 0	3 0
74	3	0 0	-0.3
75	4	1 0	3 0
76	1	0 0	-0 6
77	2	0 0	0 0
78	3	0 0	-0.3
79	4	1 0	3 0
80	1	0 0	-0 6
81	2	0 0	0 0
82	3	0 0	-0 3
83	4	0 0	0 0
84	1	0 0	-0 6
85	2	0 0	0 0
86	3	3 0	8 8
87	4	0 0	0 0
88	1	1 0	2 4
89	2	0 0	0 0
90	3	0 0	-0 3

59

SURVEY UNIT G11-A-003
SMEAR DATA SUMMARY

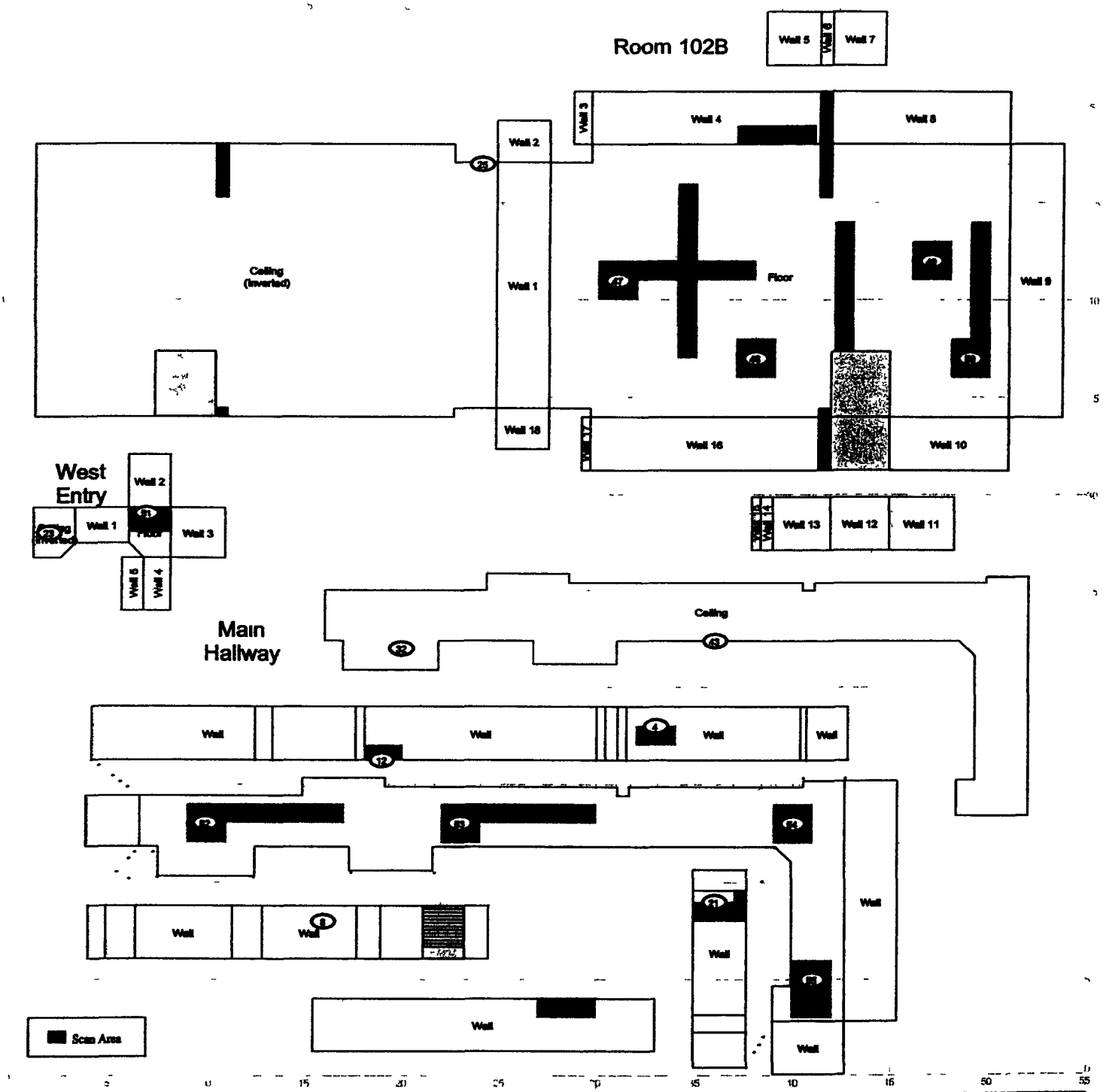
Manufacturer	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#	1	2	3	4	5	6	13	14
Serial #	833	1157	830	770	833	1157	830	770
Cal Due Date	1/31/02	2/16/02	2/16/02	1/19/02	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date	12/3/01	12/3/01	12/3/01	12/3/01	12/6/01	12/6/01	12/6/01	12/6/01
Alpha Eff (c/d)	0 33	0 33	0 33	0.33	0 33	0.33	0 33	0.33
Alpha Bkgd (cpm)	0.2	0 0	0 1	0 0	0.2	0 1	0 0	0.2
Sample Time (min)	2	2	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10	10	10
MDC (dpm/100cm^2)	8 0	4 5	7 0	4.5	8 0	7 0	4 5	8 0

91	4	0 0	0 0
92	1	0 0	-0 6
93	2	0 0	0 0
94	3	0 0	-0.3
95	4	0 0	0 0
96	1	0 0	-0 6
97	2	0 0	0 0
98	3	0 0	-0.3
99	4	0 0	0 0
100	1	0 0	-0 6
101	2	0 0	0 0
102	3	1 0	2 7
103	4	1 0	3 0
104	5	1 0	2 4
105	6	1 0	2 7
106	13	0 0	0 0
107	14	0 0	-0 6
108	5	0 0	-0 6
109	6	0 0	-0 3
110	13	0 0	0 0
		MIN	-0 6
		MAX	8 8
		MEAN	0 6
		SD	1 7
		Transuranic $DCGL_W$	20

60

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit G11-A-003** **Classification. 3**
Building. 850
Survey Unit Description Interior of building 850
Total Area 11622 sq m **Total Floor Area: 3038 sq m.**



SURVEY MAP LEGEND

- Sensor & TSA Location
- Sensor, TSA & Sample Location
- Open/inaccessible Area
- Area in Another Survey Unit

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 11, 12, 19
RCT ID #(s): 1, 2

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

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

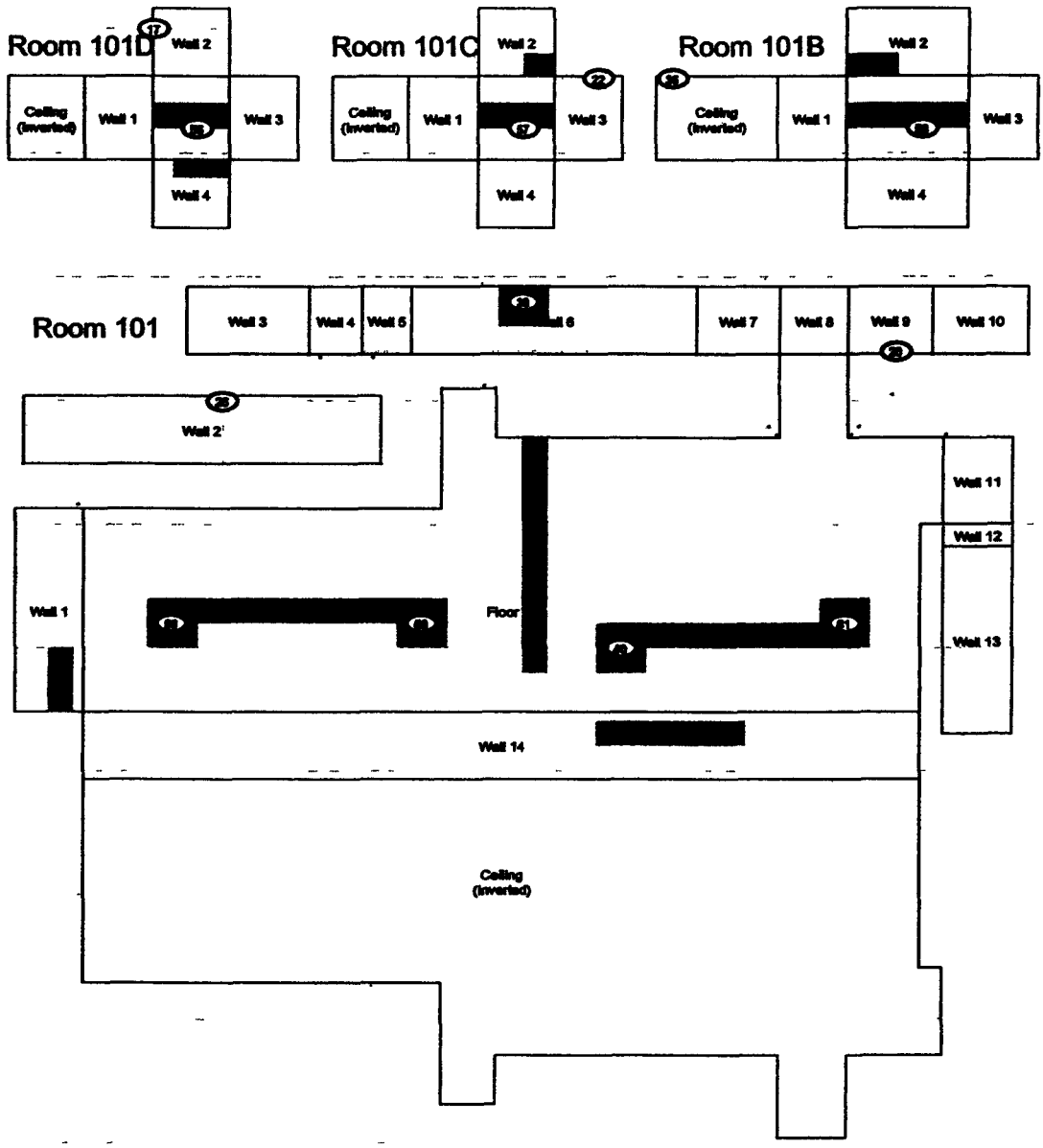
MAP ID: 02-[illegible]-1-Sc

January 1, 2002

61

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area. A **Survey Unit G11-A-003** **Classification. 3**
Building 850
Survey Unit Description: Interior of building 850
Total Area: 11622 sq m **Total Floor Area. 3038 sq. m**



Scan Area

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MMT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 11, 12, 19
RCT ID #(s): 1, 2

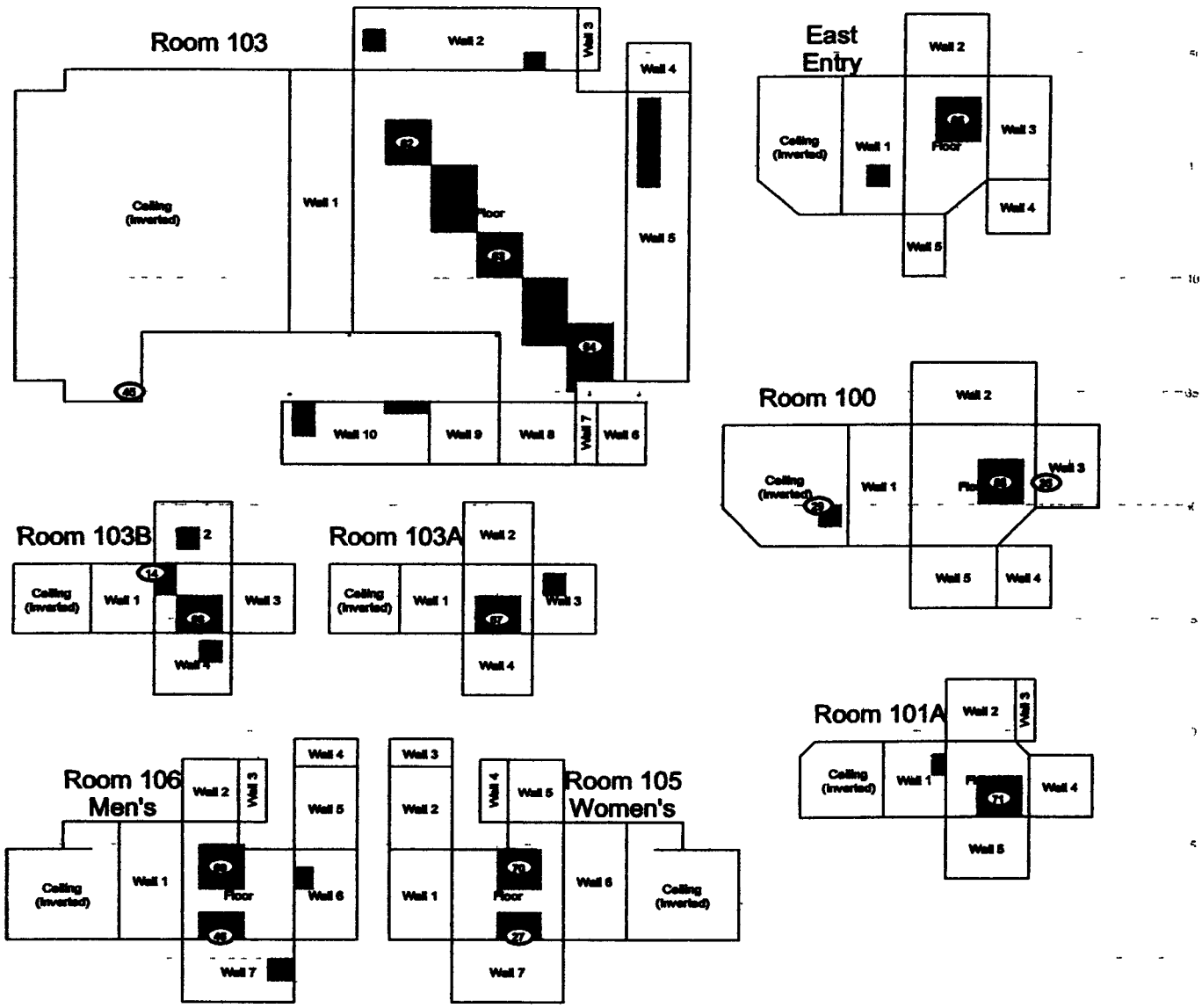
0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq = 1 sq. m.

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: 02-0102/B850-2-Sc
JANUARY 1, 2002

62

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit G11-A-003** **Classification. 3**
Building: 850
Survey Unit Description **Interior of building 850**
Total Area· 11622 sq. m **Total Floor Area. 3038 sq m**



Scan Area

SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s)· 7, 8, 9, 11, 12, 19
RCT ID #(s): 1, 2

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

DynCorp
THE ART OF TECHNOLOGY

Prepared for·

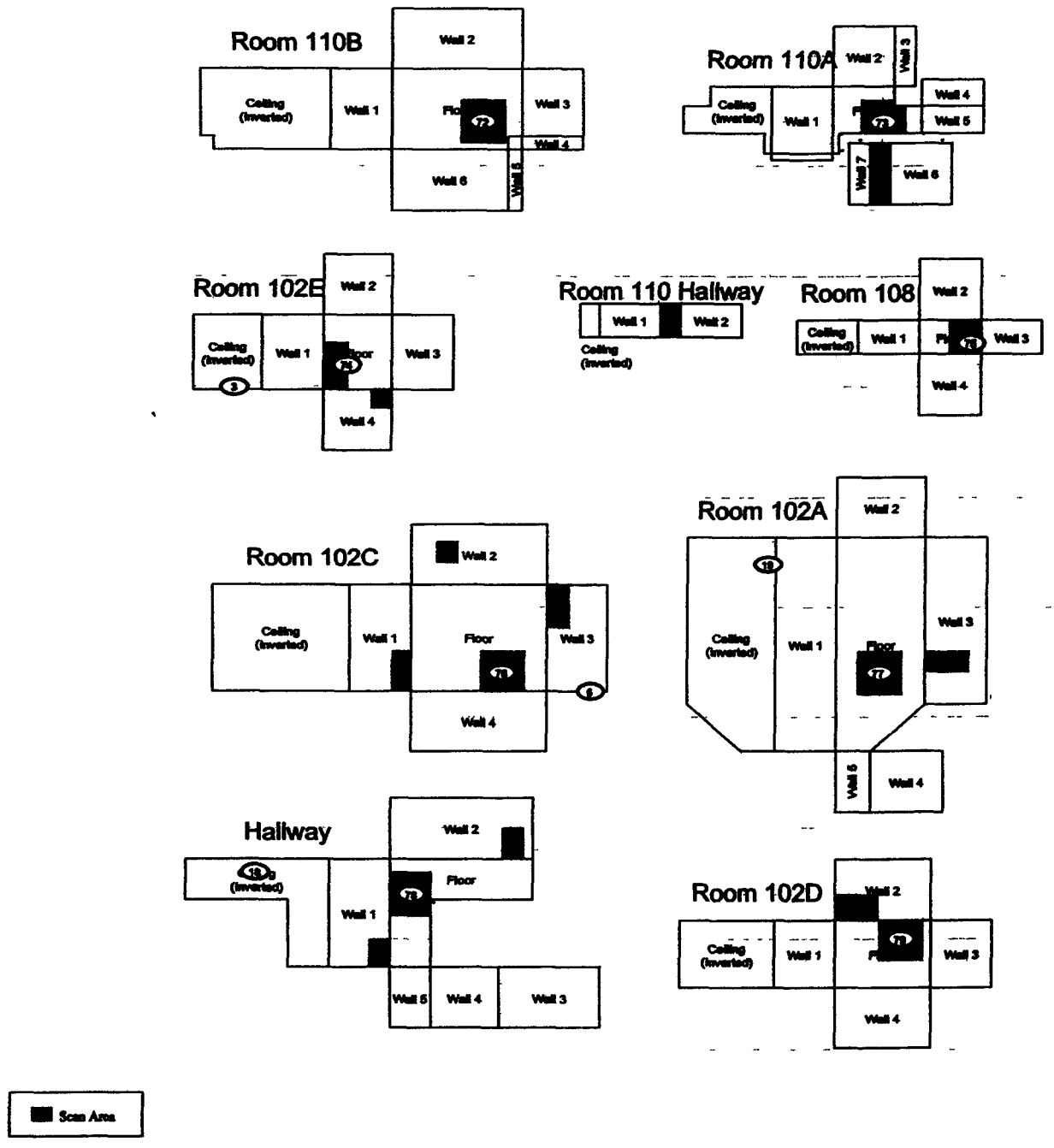
MAP ID: 02-0102/B850-3-Sc

January 1, 2002

63

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit G11-A-003** **Classification 3**
Building: 850
Survey Unit Description Interior of building 850
Total Area: 11622 sq. m **Total Floor Area: 3038 sq m**



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 11, 12, 19
RCT ID #(s): 1, 2

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:

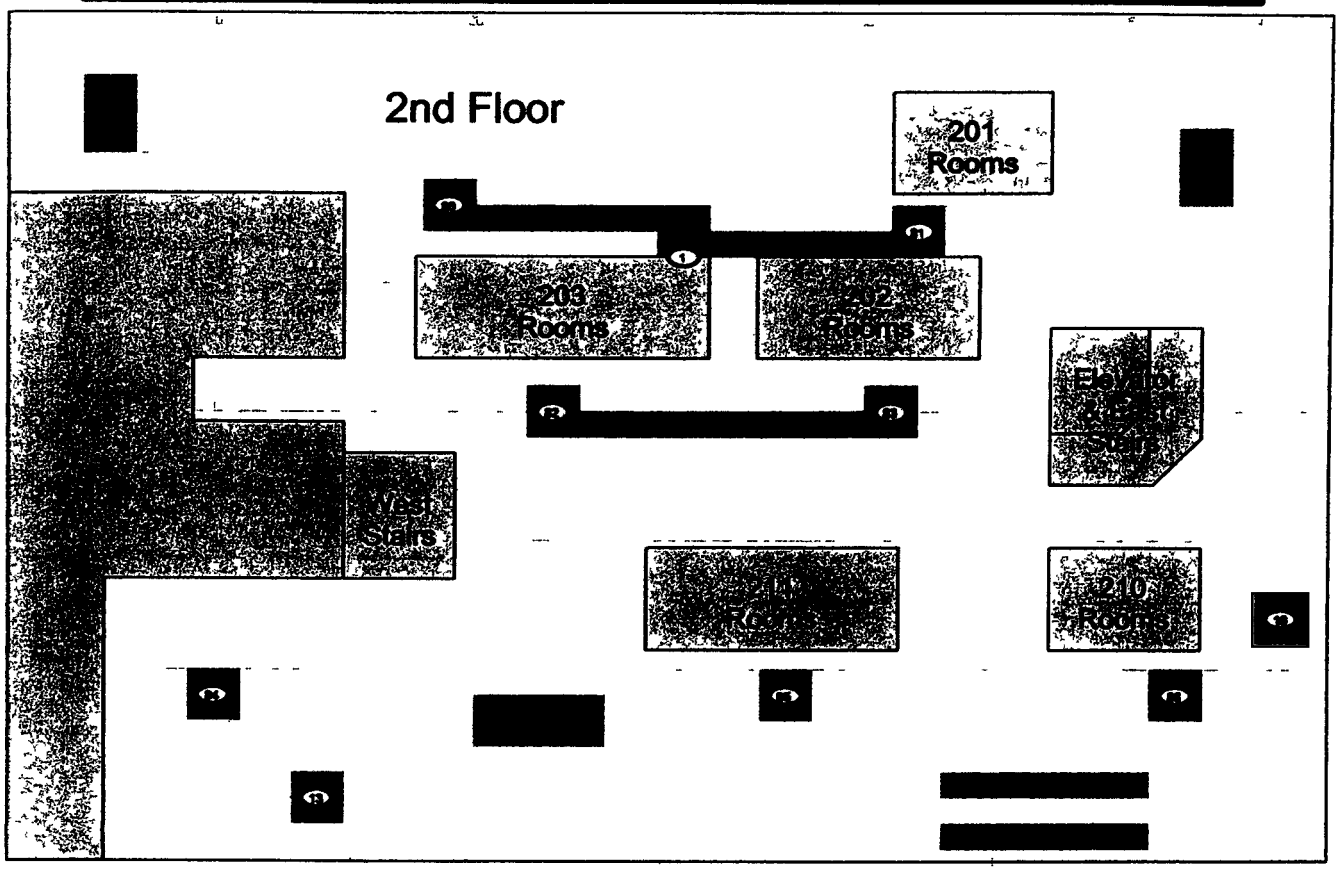
DynCorp
THE ART OF TECHNOLOGY

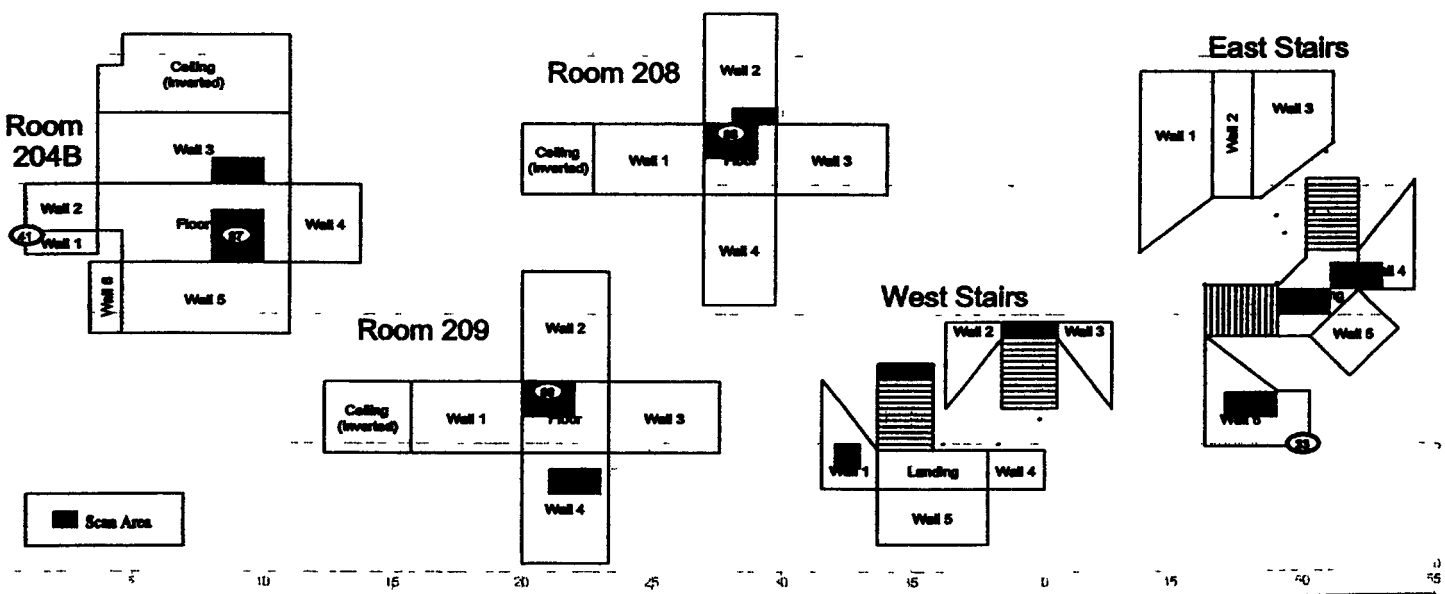
MAP ID: 02-0102/B850-4-Sc January 1, 2002

64

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area. A **Survey Unit G11-A-003** **Classification 3**
Building: 850
Survey Unit Description: Interior of building 850
Total Area 11622 sq. m. **Total Floor Area 3038 sq m**





SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&MT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 11, 12, 19
RCT ID #(s): 1, 2

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. 303-699-7767

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

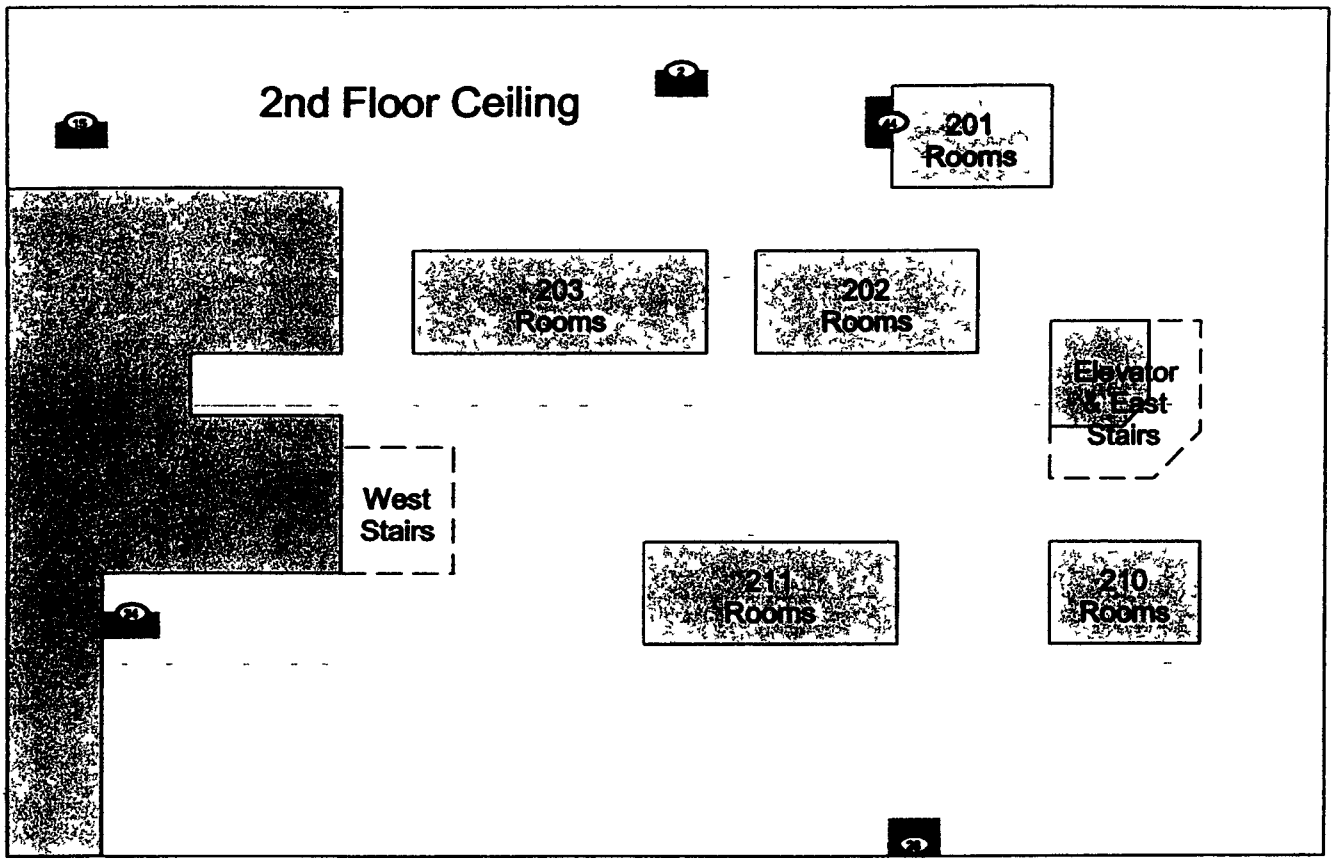
MAP ID: 02-0192/0820-5-Sc

January 1, 2002

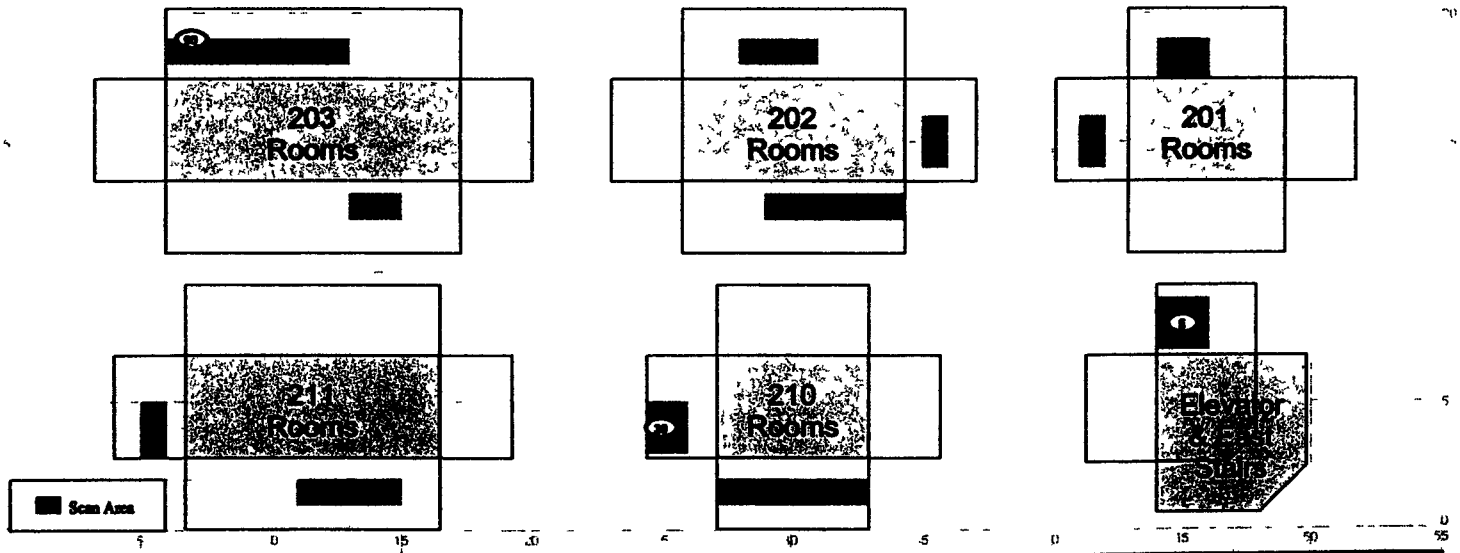
65

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit G11-A-003** **Classification. 3**
Building: 850
Survey Unit Description **Interior of building 850**
Total Area: 11622 sq m **Total Floor Area. 3038 sq m.**



Exterior walls of 2nd floor rooms



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&HT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 11, 12, 19
RCT ID #(s): 1, 2

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:

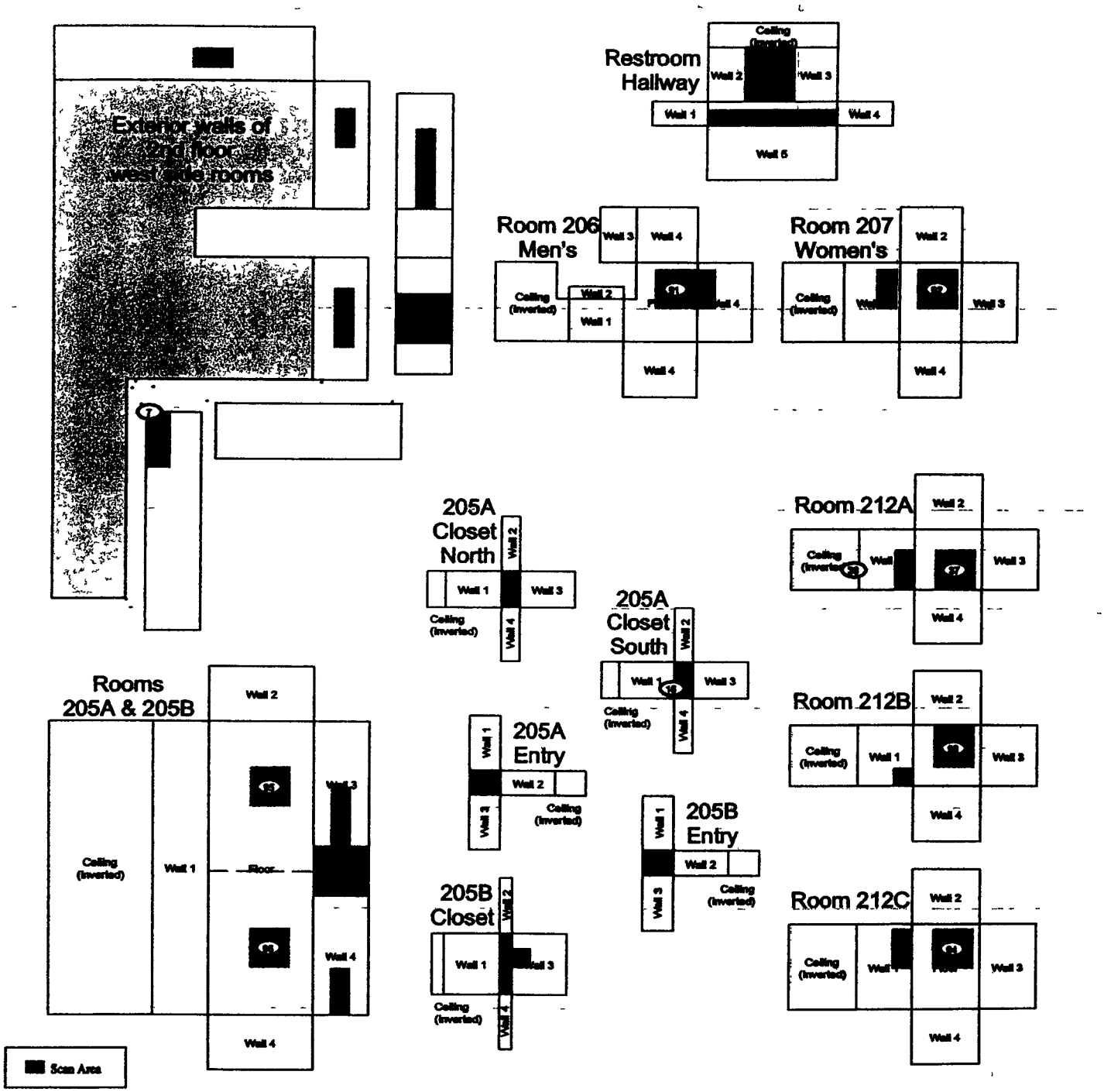
DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0102/D850-6-Sc January 1, 2002

64

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit. G11-A-003** **Classification: 3**
Building: 850
Survey Unit Description. Interior of building 850
Total Area. 11622 sq m **Total Floor Area 3038 sq. m**



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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, 11, 12, 19
RCT ID #(s): 1, 2

U.S Department of Energy
Rocky Flats Environmental Technology Site

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

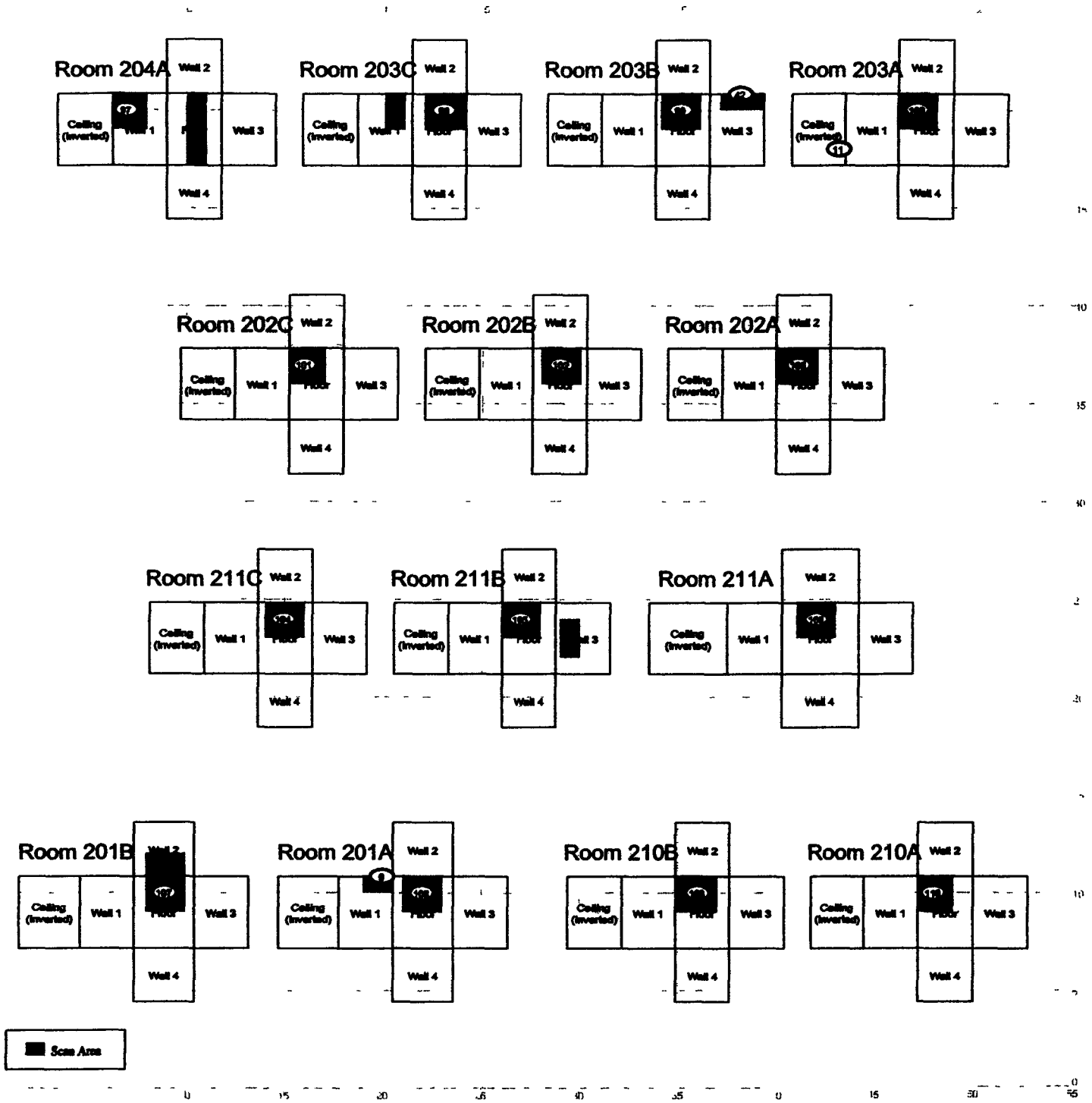
DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0102/B850-7-Sc
January 1, 2002

67

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit G11-A-003** **Classification 3**
Building 850
Survey Unit Description: Interior of building 850
Total Area· 11622 sq m **Total Floor Area. 3038 sq m**



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 11, 12, 19
RCT ID #(s): 1, 2

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

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

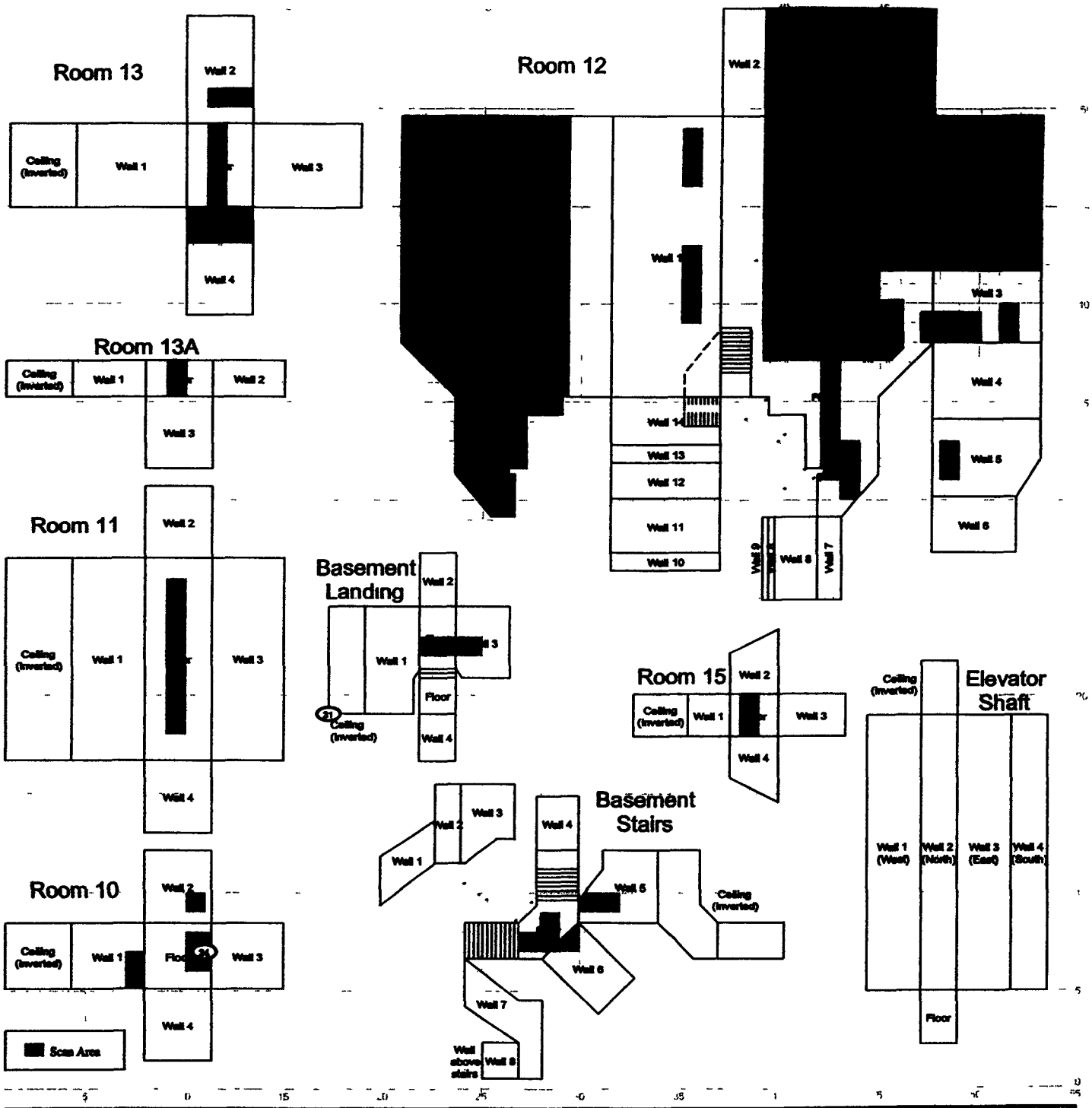
MAP ID: 02-0162[illegible]-S-Sc

January 1, 2002

68

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit. G11-A-003** **Classification: 3**
Building: 850
Survey Unit Description: Interior of building 850
Total Area: 11622 sq m **Total Floor Area. 3038 sq m.**



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 11, 12, 19
RCT ID #(s): 1, 2

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: 02-0102/B850-9-Sc
January 1, 2002

69

SURVEY UNIT G11-B-004
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Exterior of B850

70

G11-B-004
RADIOLOGICAL
DATA SUMMARY

Total Surface Activity Measurements

	Number Required	Number Obtained	
	40	40	
MIN	-10.5		dpm/100 cm^2
MAX	78.6		dpm/100 cm^2
MEAN	22.8		dpm/100 cm^2
STD DEV	19.6		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	Number Required	Number Obtained	
	40	40	
MIN	-0.6		dpm/100 cm^2
MAX	9.1		dpm/100 cm^2
MEAN	1.3		dpm/100 cm^2
STD DEV	2.6		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

71

SURVEY UNIT G11-B-004
TSA DATA SUMMARY

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 #:	1136	3114	1417	3114	3114	1417
Cal Due Date:	1/17/02	4/25/02	4/25/02	4/25/02	4/25/02	4/25/02
Analysis Date:	12/4/01	12/4/01	12/5/01	12/5/01	12/10/01	12/10/01
Alpha Eff. (cpd):	0.211	0.202	0.198	0.202	0.202	0.198
Alpha Bkgd (cpm)	2.0	2.7	3.3	3.3	1.3	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)	34.9	40.8	45.0	44.1	31.3	26.2

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	8	20.7	102.5	5.3	26.2	76.6
2	12	14.7	74.2	6.7	33.8	50.4
3	8	10.7	53.0	1.3	6.4	29.1
4	9	8.7	43.9	3.3	16.7	20.1
5	7	8.0	37.9	9.3	44.1	14.0
6	12	11.3	57.1	10.0	50.5	33.2
7	7	14.0	66.4	4.0	19.0	42.5
8	7	6.7	31.8	3.3	15.6	7.9
9	10	9.3	46.0	4.7	23.3	22.2
10	7	10.7	50.7	2.0	9.5	26.8
11	12	8.0	40.4	2.0	10.1	16.5
12	9	7.3	36.9	6.7	33.8	13.0
13	8	12.0	59.4	4.0	19.8	35.5
14	8	17.3	85.6	6.7	33.2	61.8
15	9	4.7	23.7	8.7	43.9	-0.1
16	10	2.7	13.4	4.7	23.3	10.5
17	12	8.0	40.4	9.3	47.0	16.5
18	12	14.7	74.2	2.9	14.6	50.4
19	10	5.3	26.2	10.0	49.5	2.4
20	8	9.3	46.0	4.7	23.3	22.2
21	12	10.7	54.0	5.3	26.8	30.2
22	11	12.7	62.9	0.0	0.0	39.0
23	7	8.7	41.2	2.7	12.8	17.4
24	9	8.7	43.9	5.3	26.8	20.1
25	8	8.0	39.6	4.0	19.8	15.7
26	9	6.7	33.8	3.3	16.7	10.0
27	11	15.3	75.7	4.0	19.8	51.9
28	8	13.3	65.8	3.3	16.3	42.0
29	12	12.0	60.6	3.3	16.7	36.7
30	10	4.7	23.3	8.7	43.1	-0.6
31	12	6.0	30.3	4.7	23.7	6.4
32	7	8.0	37.9	3.3	15.6	14.0
33	7	6.0	28.4	4.0	19.0	4.6
34	10	6.7	33.2	4.0	19.8	9.3
35	9	3.3	16.7	5.3	26.8	-7.2
36	9	4.7	23.7	3.3	16.7	-0.1
37	9	7.5	37.9	5.3	26.8	14.0
38	10	9.3	46.0	6.7	33.2	22.2
39	10	7.0	34.7	2.0	9.9	10.8
40	9	13.7	69.2	4.2	21.2	45.3
					23.9	Sample LAB Average
					MIN	-10.5
					MAX	76.6
					MEAN	22.8
					SD	19.6
					Transuranic DCGL$_w$	100

1 Average LAB used to subtract from Gross Sample Activity

QC Measurements

2 QC	12	9.3	47.0	4.7	23.7	12.1
2 QC	11	14.0	69.3	9.3	46.0	34.4
					34.9	QC LAB Average
					QC MIN	12.1
					QC MAX	34.4
					QC MEAN	23.2
					QC SD	15.8
					Transuranic DCGL$_w$	100

1 Average QC LAB used to subtract from Gross Sample Activity

72

SURVEY UNIT G11-B-004
SMEAR DATA SUMMARY

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 #	833	1157	830	770	833	1157
Cal Due Date.	1/31/02	2/16/02	2/16/02	1/19/02	1/31/02	2/16/02
Analysis Date:	12/4/01	12/4/01	12/4/01	12/4/01	12/6/01	12/6/01
Alpha Eff. (c/d).	0.33	0 33	0 33	0.33	0.33	0 33
Alpha Bkgd (cpm)	0 0	0 1	0 0	0 0	0 2	0 1
Sample Time (min)	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10
MDC (dpm/100cm^2)	4.5	7 0	4.5	4.5	8 0	7 0

Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	13	14	15	16	17	18
Serial #.	830	770	833	1157	830	770
Cal Due Date.	2/16/02	1/19/02	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	12/6/01	12/6/01	12/10/01	12/10/01	12/10/01	12/10/01
Alpha Eff. (c/d):	0.33	0 33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0 0	0.2	0.2	0.1	0 2	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	7 0	4.5	4.5	8 0	7 0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	3 0	9 1
2	15	0 0	-0 6
3	2	1 0	2.7
4	5	0 0	-0 6
5	3	1 0	3 0
6	16	0 0	-0.3
7	4	0 0	0 0
8	1	0 0	0 0
9	6	1 0	2.7
10	2	0 0	-0.3
11	5	1 0	2.4
12	13	0 0	0 0
13	3	0 0	0 0
14	4	0 0	0 0
15	14	0 0	-0 6
16	5	0 0	-0 6
17	17	0 0	-0 6
18	18	1 0	3 0
19	6	0 0	-0.3
20	1	1 0	3 0
21	15	1 0	2.4
22	16	0 0	-0.3
23	2	0 0	-0.3
24	13	0 0	0 0
25	3	3 0	9 1

73

SURVEY UNIT G11-B-004
SMEAR DATA SUMMARY

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 #·	833	1157	830	770	833	1157
Cal Due Date:	1/31/02	2/16/02	2/16/02	1/19/02	1/31/02	2/16/02
Analysis Date:	12/4/01	12/4/01	12/4/01	12/4/01	12/6/01	12/6/01
Alpha Eff. (c/d):	0.33	0 33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0 0	0 1	0 0	0 0	0.2	0 1
Sample Time (min)	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10
MDC (dpm/100cm^2)	4.5	7 0	4.5	4.5	8 0	7 0

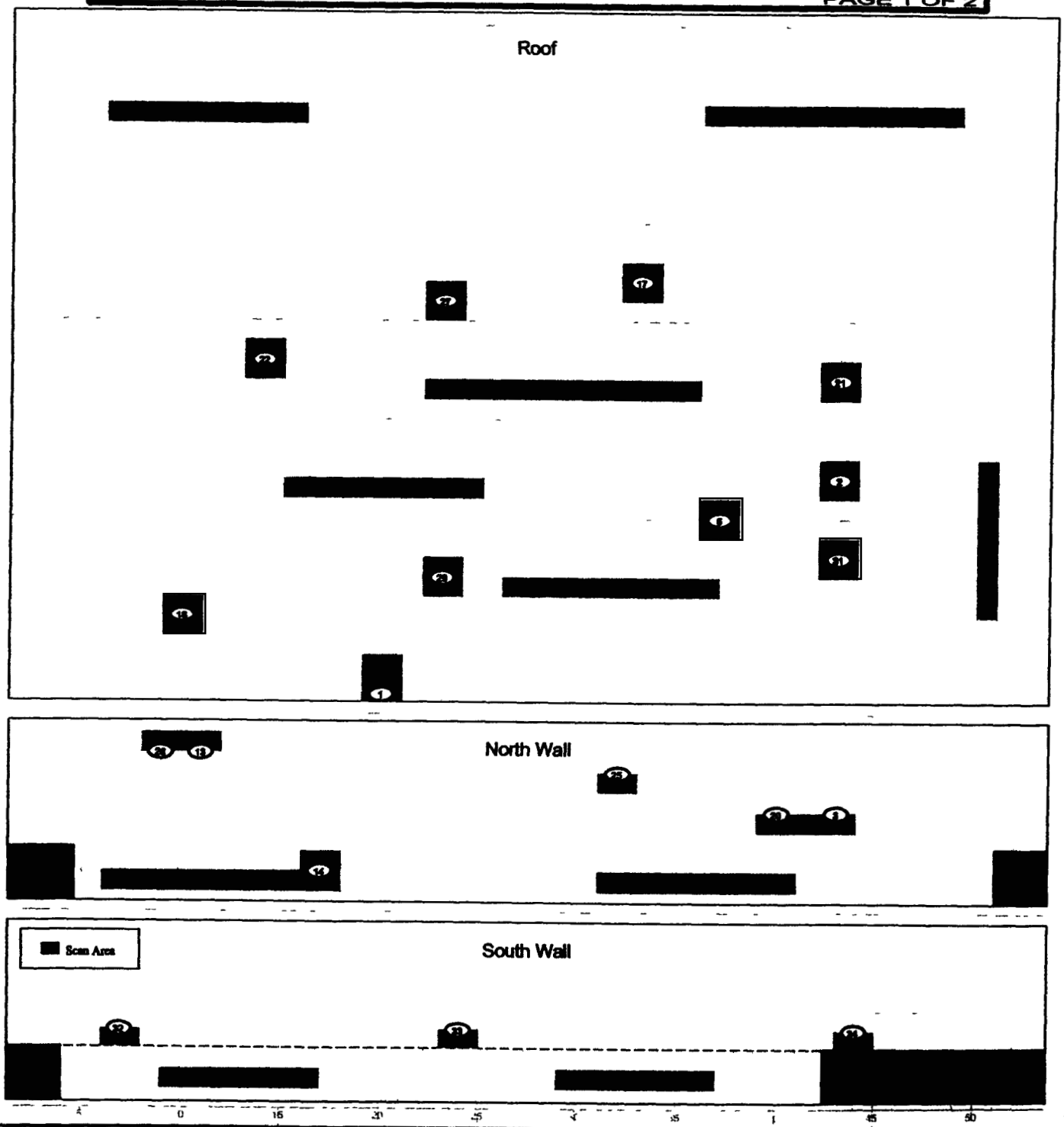
Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#·	13	14	15	16	17	18
Serial #·	830	770	833	1157	830	770
Cal Due Date·	2/16/02	1/19/02	1/31/02	2/16/02	2/16/02	1/19/02
Analysis Date:	12/6/01	12/6/01	12/10/01	12/10/01	12/10/01	12/10/01
Alpha Eff. (c/d)	0.33	0 33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0 0	0 2	0.2	0.1	0.2	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	7 0	4.5	4.5	8 0	7 0

26	14	0 0	-0 6
27	17	0 0	-0 6
28	4	0 0	0 0
29	18	2.0	6 1
30	5	0 0	-0 6
31	15	0 0	-0 6
32	1	1 0	3 0
33	2	2.0	5 8
34	6	1 0	2.7
35	13	0 0	0 0
36	14	0 0	-0 6
37	5	1 0	2.4
38	6	0 0	-0.3
39	13	1 0	3 0
40	14	0.0	-0.6
		MIN	-0 6
		MAX	9.1
		MEAN	1.3
		SD	2.6
		Transuranic $DCGL_W$	20

74

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: B **Survey Unit G11-B-004** **Classification. 3**
Building: 850
Survey Unit Description **Exterior of building 850**
Total Area: 4002 sq. m. **Total Roof Area 1838 sq m**
Total Floor Area. 198 sq m



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 10, 12
RCT ID #(s): 1, 2, 3, 4

0 FEET 30
0 METERS 10

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

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

Prepared by: GIS Dept. 208-966-7707
Prepared for:

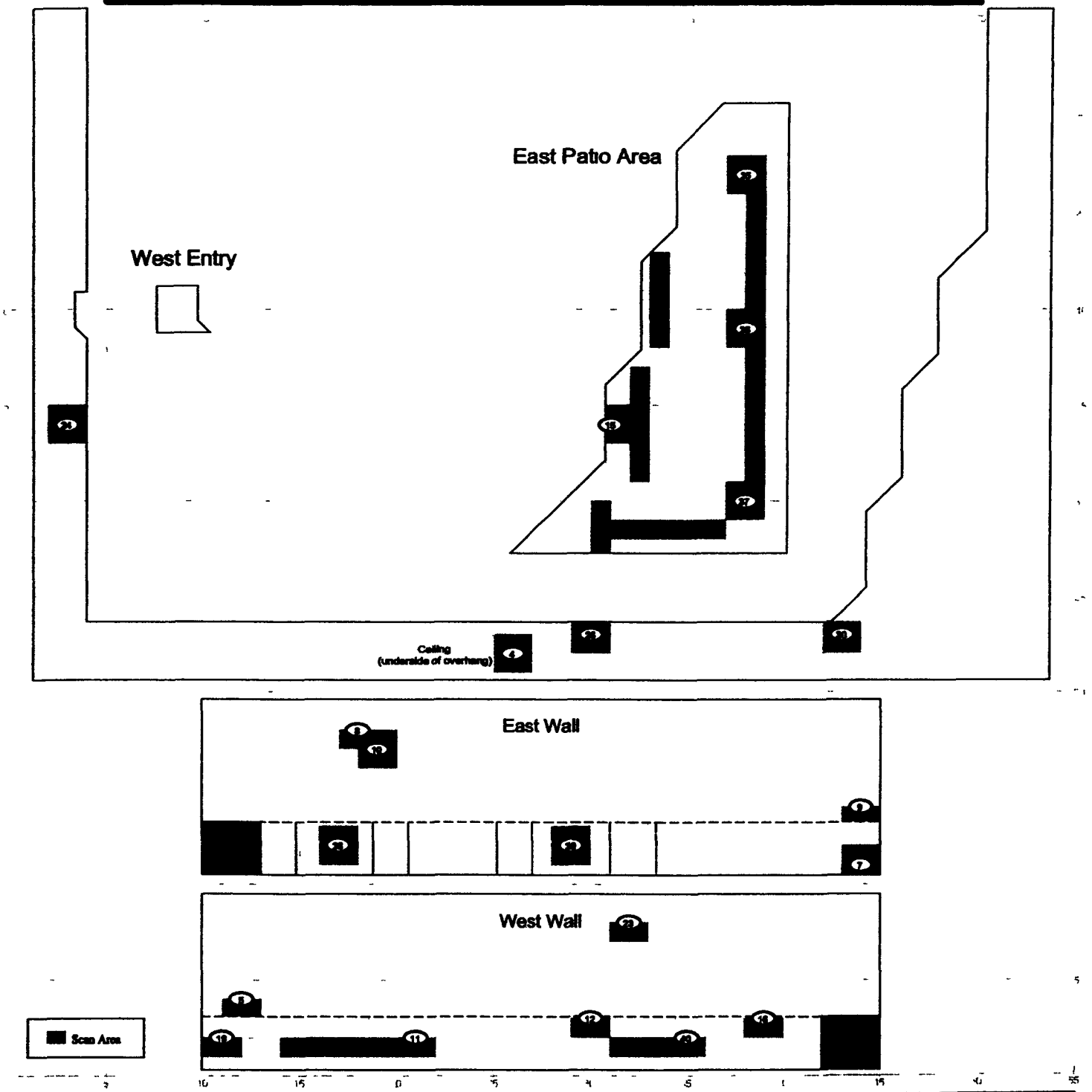
DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0102/850-EX1-Sc
January 1, 2002

75

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: B **Survey Unit. G11-B-004** **Classification: 3**
Building: 850
Survey Unit Description. Exterior of building 850
Total Area. 4002 sq. m. **Total Roof Area. 1838 sq. m**
Total Floor Area. 198 sq m



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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, 10, 12
RCT ID #(s): 1, 2, 3, 4

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID: 02-0102/850EX-2-Sc

January 1, 2002

76

SURVEY UNIT G11-A-005
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: C865 (COOLING TOWER)

* Exterior surfaces of C865 were characerized during this PDS effort. Interior surfaces will be radiologically characterized using the Waste Release Evaluation process during demolition of C865

77

G11-A-005
RADIOLOGICAL
DATA SUMMARY

Total Surface Activity Measurements

	15	15	
	Number Required	Number Obtained	
MIN	-2.9		dpm/100 cm^2
MAX *	192.7		dpm/100 cm^2
MEAN	46.2		dpm/100 cm^2
STD DEV	52.2		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	15	15	
	Number Required	Number Obtained	
MIN	-0.6		dpm/100 cm^2
MAX	3.0		dpm/100 cm^2
MEAN	0.5		dpm/100 cm^2
STD DEV	1 4		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

* The roof of C865 had initial alpha activity greater than the DCGL$_W$ (100 dpm/100 cm^2). A roof coupon/sample was collected and analyzed using the Canberra ISOCS gamma spectroscopy system. Results did not indicate any DOE added isotopes of concern (i.e., weapons grade plutonium or uranium) Therefore, no further investigation is required, and the exterior surfaces of C865 are acceptable for unrestricted release Gamma spectroscopy results are included as a part of this survey package

78

SURVEY UNIT G11-A-005
TSA - DATA SUMMARY

Manufacturer:	NE Electra	NE Electra
Model:	DP-6	DP-6
Instrument ID#:	7	8
Serial #:	3114	1379
Cal Due Date:	4/25/02	5/6/02
Analysis Date:	1/9/02	1/9/02
Alpha Eff. (c/d):	0.209	0.202
Alpha Bkgd (cpm)	0.7	2.0
Sample Time (min)	1.5	1.5
LAB Time (min)	1.5	1.5
MDC (dpm/100cm^2)	24.8	36.5

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	8	8.0	39.6	2.7	13.4	20.9
2	7	14.7	70.3	3.3	15.8	51.7
3	7	6.7	32.1	5.3	25.4	13.4
4	7	6.0	28.7	2.0	9.6	10.0
5 *	8	29.3	145.0	2.7	13.4	126.4
6	8	15.3	75.7	5.3	26.2	57.1
7	7	3.3	15.8	6.7	32.1	-2.9
8	7	16.7	79.9	4.7	22.5	61.2
9	8	6.0	29.7	4.7	23.3	11.0
10 *	8	42.7	211.4	2.7	13.4	192.7
11	8	12.7	62.9	5.3	26.2	44.2
12	8	4.7	23.3	2.7	13.4	4.6
13	8	14.7	72.8	2.7	13.4	54.1
14	7	12.0	57.4	4.7	22.5	38.8
15	7	6.0	28.7	2.0	9.6	10.0
					18.7	Sample LAB Average
					MIN	-2.9
					MAX	192.7
					MEAN	46.2
					SD	52.2
					Transuranic DCGL$_{SF}$	100

1 - Average LAB used to subtract from Gross Sample Activity

QC Measurements

1 QC	7	13.0	62.2	4.7	22.5	47.7
2 QC	8	20.7	102.5	1.3	6.4	88.0
					14.5	QC LAB Average
					QC MIN	47.7
					QC MAX	88.0
					QC MEAN	67.9
					QC SD	28.5
					Transuranic DCGL$_{SF}$	100

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

* The roof of C865 had initial alpha activity greater than the DCGLW (100 dpm/100 cm2). A roof coupon/sample was collected and analyzed using the Canberra ISOCS gamma spectroscopy system. Results did not indicate any DOE added isotopes of concern (i.e., weapons grade plutonium or uranium). Therefore, no further investigation is required, and the exterior surfaces of C865 are acceptable for unrestricted release. Gamma spectroscopy results are included as a part of this survey package.

79

SURVEY UNIT G15-A-011
SMEAR DATA SUMMARY

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 #	767	1164	830	959	767	1164
Cal Due Date	4/30/02	5/13/02	2/16/02	7/14/02	4/30/02	5/13/02
Analysis Date:	1/31/02	1/31/02	1/31/02	1/31/02	2/5/02	2/5/02
Alpha Eff. (c/d)	0 33	0 33	0.33	0.33	0 33	0.33
Alpha Bkgd (cpm)	0 0	0.2	0.2	0 1	0.2	0.2
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	8 0	7 0	8 0	8.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	3	2.0	5 5
2	5	0 0	-0 6
3	1	0 0	0 0
4	3	1 0	2 4
5	1	1 0	3 0
6	4	0 0	-0.3
7	2	1 0	2 4
8	3	1 0	2 4
9	2	0 0	-0 6
10	4	0 0	-0.3
11	5	0 0	-0 6
12	6	0 0	-0 6
13	6	0 0	-0 6
14	1	0 0	0 0
15	5	4 0	11 5
16	2	0 0	-0 6
17	4	0 0	-0.3
18	1	0 0	0 0
19	2	1 0	2 4
20	3	0 0	-0 6
		MIN	-0 6
		MAX	11 5
		MEAN	1.2
		SD	3 0
		Transuranic DCGL$_W$	20

80

CANBERRA

GAMMA SPECTROSCOPY

ANALYTICAL RESULTS

81

CANBERRA

COVER PAGE

RC10B, On-Site Radiological Screening by Gamma Spectrometry

Gamma Spectrometry

PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE TO CMLS SAMPLE LABORATORY IDs

BATCH 0202124453
Subcontract KH001076OZ

COC NUMBER	PROJECT SAMPLE ID NUMBER	SITE SAMPLE NUMBER(S)	CMLS SAMPLE ID NUMBER(S)	OBJECT NUMBER(S) CMLS	LINE ITEM CODE(S)
02D0817#001	02D0817-001.001	02D0817-001.001	CMLS-926	Obj00319	RC10B019

Calibration Package ID Object individually modeled using ISOCS

Comments:

Sample was counted in T130A using BEGe Detector LI009

Certification Statement

"I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above Release of the data contained in this sample data package and the computer-readable EDD, as applicable, submitted on diskette or by modem, has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature "

Larry Umbaugh
Signature

Date 2/12/02

Laboratory Director
Title

82

83

RISS RFETS	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	COC: 02D0817#001	Page 1 of 1

Sampler(s) (time/date)	Contact/Requester: JOHNSEN, SHELLY/BRITTEN, JAY	Telephone No.: 6401/3050
RIN: 02D0817	Sampling Origin: T904A	Purchase Order/Charge Code: EED82220
Project Title: T904A METAL ROOF COUPONS	Logbook No.	Ice Chest No. Temp.
To (Lab): Canberra Mobile Lab Service	Method of Shipment	Bill of Lading/Air Bill No.
Protocol	Related COC (if any)	PRE

POSSIBLE SAMPLE HAZARDS/REMARKS
Are sold preserved samples DOS [illegible] per 40 CFR Part 136.3 Table II? YES NO
Are other known hazardous substances present? YES NO
[illegible]

SCREENING REQUIRED ☐

SPECIAL INSTRUCTIONS Hold Time

Faxed MK 2-12-02

Bottle No.	Customer Number	Matrix	Date/Time	Location	Container (size/type)	Sample Analysis [Field-Filtered] LIC [Method Title] [TAT]/[Parameter List]	Preservative, Packing
02D0817 -001.001		SOLID		T904A	1-SAMPLE N/A	RC10B019 (GS-I-N/S-Lab-Natd ISOCS-Solid) [24hrR] (AM241, U235, U238)	None None

Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	2/12/02 1010	[signature]	2/12/02 1015	[signature]	2/12/02 1015	[signature]	2-12-02 1015
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., returned to customer, disposed of per lab procedure, total to analytical process) Disposed By

Date/Time COC printed: 02/11/02 15:46

Best Available Copy

CANBERRA


```
************************************************************************
*****        G A M M A   S P E C T R U M   A N A L Y S I S        *****
** C a n b e r r a  M o b i l e  L a b o r a t o r y  S e r v i c e s **
************************************************************************
```

Report Generated On . 2/12/2002 2 53 20 PM

RIN Number 02D0817
Analytical Batch ID . 0202124453
Line Item Code RC10B019

Filename· A \OBJ00319 CNF

Sample Number 02D0817-001 001
Lab Sample Number CMLS-926
Sample Receipt Date . 2/12/2002
Sample Volume Received 2 60E+000 GRAM

Result Identifier N/A

Peak Locate Threshold · 2 50
Peak Locate Range (in channels) 100 - 8192
Peak Area Range (in channels) 100 - 8192
Identification Energy Tolerance 1 500 keV

Sample (Final Aliquot Size) 2 600E+000 GRAM
Sample Quantity Error . 0 000E+000
Systematic Error Applied 0 000E+000

Sample Taken On 2/12/2002 8 00 00 AM
Acquisition Started 2/12/2002 10 35 33 AM

Count Time 14400 0 seconds
Real Time 14401 3 seconds
Dead Time . 0.01 %

Energy Calibration Used Done On . 1/14/02
Energy = 0 072 + 0 250*ch + -4 22E-008*ch^2 + 3.75E-012*ch^3

Corrections Applied
None

Efficiency Calibration Used Done On 2/12/02
Efficiency Geometry ID 02D0817-001.001

Analyzed By Brian Anderson Date 02/12/02

Reviewed By Daniel Remington Date 02/12/02

84

CANBERRA

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

Site Sample ID · 02D0817-001 001

Analytical Batch ID · 0202124453

Sample Type (Result Identifier) OBJ

Lab Sample Number . CMLS-926

Geometry ID 02D0817-001 001

Filename A \OBJ00319.CNF

Detector Name: BEGE

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

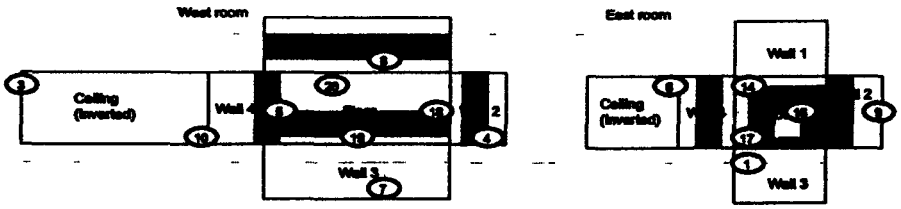
Analyte	Activity (pCi/GRAM)	2-Sigma Uncertainty (pCi/GRAM)	MDA (pCi/GRAM)
K-40	0 00E+000	0 00E+000	1.59E+001
TL-208	5 35E-001	3 51E-001	5 57E-001
PO-210	0 00E+000	0 00E+000	1 09E+005
BI-212	0 00E+000	0.00E+000	1.54E+001
PB-212	1 86E+000	6 21E-001	8 74E-001
BI-214	0 00E+000	0.00E+000	2 55E+000
PB-214	7 94E-001	8 41E-001	1.45E+000
RA-224	0 00E+000	0 00E+000	1 37E+001
RA-226	1 13E+001	6 53E+000	1.00E+001
AC-228	0 00E+000	0 00E+000	4.32E+000
TH-230	0.00E+000	0 00E+000	6 05E+001
Th-231	0 00E+000	0.00E+000	3 88E+000
NP/U-233	0 00E+000	0.00E+000	2.13E+000
PA-234	0.00E+000	0 00E+000	8 42E-001
PA-234M	0 00E+000	0 00E+000	1 12E+002
U-235	0 00E+000	0 00E+000	6 21E-001
U238/234	0 00E+000	0.00E+000	4.80E+000
AM-241	0 00E+000	0 00E+000	6 87E-001

85

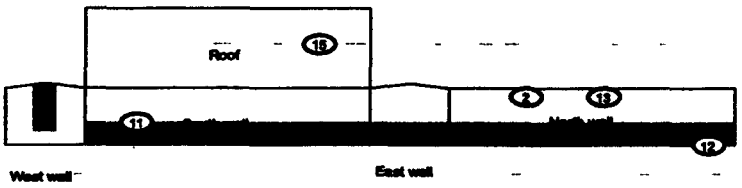
PRE-DEMOLITION SURVEY

Survey Area. A **Survey Unit: G15-A-011** **Classification 3**
Building: T904A
Survey Unit Description Intertior/Exterior
Total Area. 223 sq. m. **Total Roof & Floor Area 63 sq m**

T904A Interior



T904A Exterior



Scan Area

SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30
0 METERS 10

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

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

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

Prepared by: GIS Dept. 303-000-770 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0140/T904AGC February 20, 2002

86

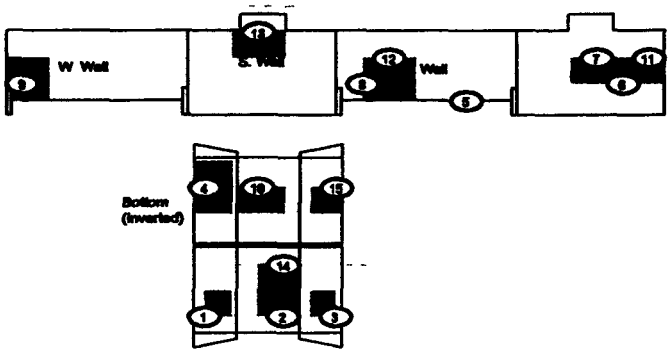
ATTACHMENT D

Chemical Data Summaries and Sample Maps

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit** G11-A-007 **Classification:** 3
Building: 881C East Tower
Survey Unit Description Exterior
Total Area: 118 sq. m **Total Roof Area:** N/A

881C (east tower)



Scan Area

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&MT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30
0 METERS 10

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

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

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

Prepared by: GIS Dept. 303-966-7767
DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID: 02-0102/881C-Sc
January 1, 2002

88

SURVEY UNIT G11-A-008
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior of 881G & 881H

84

G11-A-008
RADIOLOGICAL
DATA SUMMARY

Total Surface Activity Measurements

	Number Required	Number Obtained	
	30	30	
MIN	-11.3		dpm/100 cm^2
MAX	15 4		dpm/100 cm^2
MEAN	4.3		dpm/100 cm^2
STD DEV	7 1		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	Number Required	Number Obtained	
	30	30	
MIN	-0.6		dpm/100 cm^2
MAX	9 1		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

90

SURVEY UNIT G11-A-008
TSA DATA SUMMARY

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9	10
Serial #:	3114	1417	3114	3114
Cal Due Date:	4/25/02	4/25/02	4/25/02	4/25/02
Analysis Date:	12/12/01	12/12/01	12/13/01	12/14/01
Alpha Eff. (cfd):	0.202	0.316	0.202	0.202
Alpha Bkgd (cpm)	0 7	4.0	0.7	2.7
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)	25.6	30.4	25.6	40.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	9	5.3	26.2	6.7	33.2	8.5
2	7	2.7	13.4	2.7	13.4	-4.4
3	10	3.3	16.3	1.3	6.4	-1.4
4	10	2.7	13.4	2.7	13.4	-4.4
5	10	5.3	26.2	4.0	19.8	8.5
6	7	4.7	23.3	0.0	0.0	5.5
7	7	6.0	29 7	1.3	6.4	12.0
8	10	5.3	26.2	8.0	39.6	8.5
9	10	5.3	26.2	2.0	9.9	8.5
10	9	5.3	26.2	2.7	13.4	8.5
11	7	3.3	16.3	3.3	16.3	1 4
12	9	4.0	19.8	2.7	13.4	2.1
13	7	6.7	33.2	4.0	19.8	15.4
14	9	5.3	26.2	4 7	23.3	8.5
15	7	6.0	29 7	1.3	6.4	12.0
16	7	4 7	23.3	2.7	13.4	5.5
17	7	4 7	23.3	6.7	33.2	5.5
18	7	6.7	33.2	2.7	13.4	15.4
19	7	6.0	29 7	4.7	23.3	12.0
20	7	4.0	19.8	8.0	39.6	2.1
21	7	5.3	26.2	3.3	16.3	8.5
22	7	5.3	26.2	2.7	13.4	8.5
23	7	2.7	13.4	5.3	26.2	-4.4
24	7	5.3	26.2	3.3	16.3	8.5
25	9	2.7	13.4	5.3	26.2	-4.4
26	9	5.3	26.2	5.3	26.2	8.5
27	9	2.0	9.9	5.3	26.2	7.8
28	9	2.7	13.4	1.3	6.4	-4.4
29	9	1.3	6.4	2.7	13.4	-11.3
30	9	3.3	16.3	0.7	3.5	-1.4
					17.7	Sample LAB Average
					MIN	-11.3
					MAX	15.4
					MEAN	4.5
					SD	7 1
					Transuranic DCGL$_w$	100

1 Average LAB used to subtract from Gross Sample Activity

QC Measurements

7 QC	8	4.0	12.7	2.7	8.5	4 1
6 QC	8	2.7	8.5	2.7	8.5	0.0
					8.5	QC LAB Average
					QC MIN	0.0
					QC MAX	4.1
					QC MEAN	2.1
					QC SD	2.9
					Transuranic DCGL$_w$	100

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

91

SURVEY UNIT G11-A-008
SMEAR DATA SUMMARY

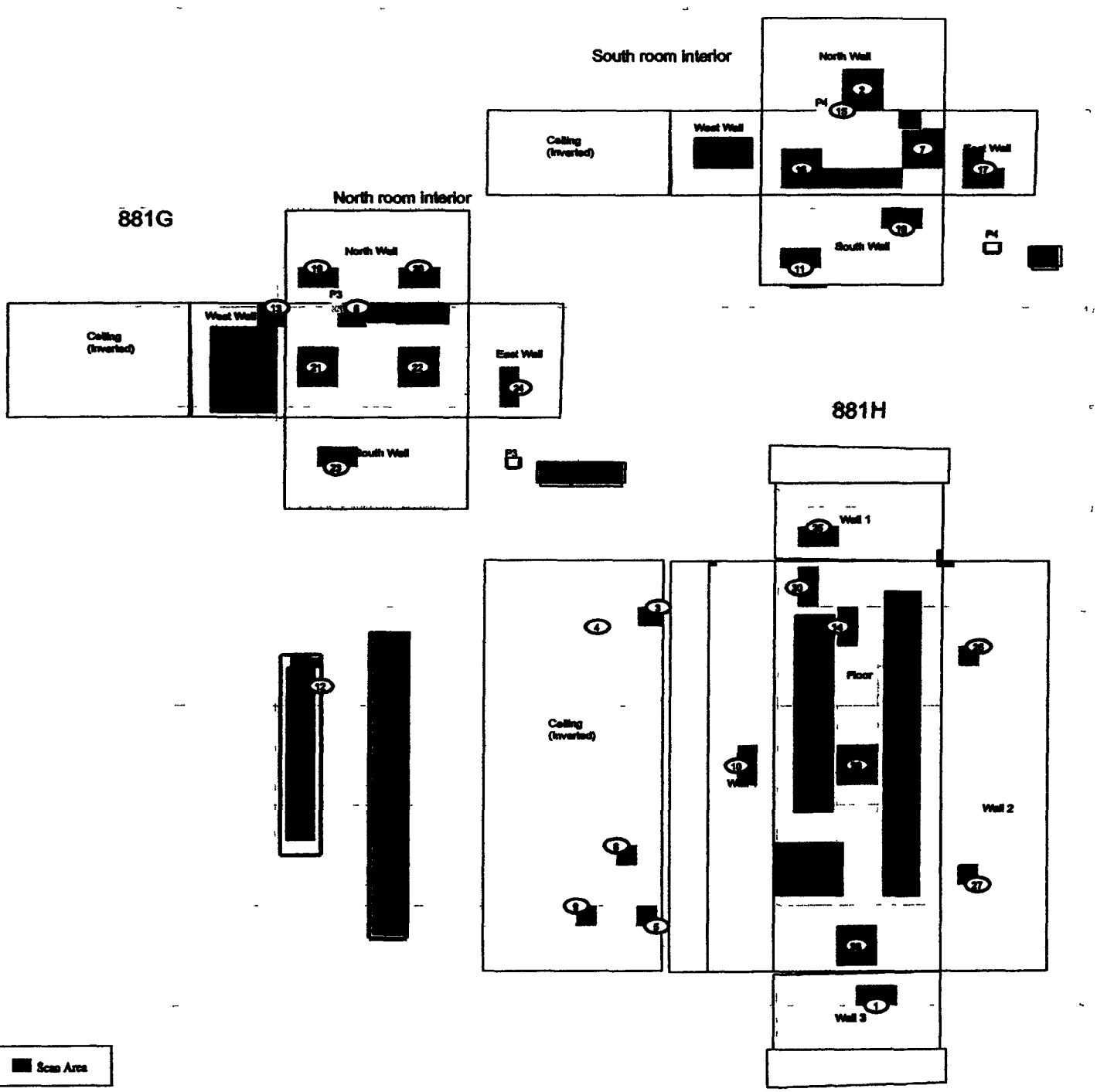
Manufacturer	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model.	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#	1	2	3	4	5	6
Serial #	833	959	830	770	833	959
Cal Due Date.	1/31/02	2/9/02	2/16/02	1/19/02	1/31/02	2/9/02
Analysis Date	12/13/01	12/13/01	12/13/01	12/13/01	12/14/01	12/14/01
Alpha Eff (c/d)	0.33	0.33	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.0	0.0	0.1	0.1	0.2	0.2
Sample Time (min)	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10
MDC (dpm/100cm^2)	4.5	4.5	7.0	7.0	8.0	8.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	4	0.0	-0.3
2	3	0.0	-0.3
3	5	1.0	2.4
4	6	1.0	2.4
5	5	0.0	-0.6
6	4	0.0	-0.3
7	2	1.0	3.0
8	6	0.0	-0.6
9	6	1.0	2.4
10	2	0.0	0.0
11	4	1.0	2.7
12	3	0.0	-0.3
13	1	1.0	3.0
14	4	0.0	-0.3
15	1	1.0	3.0
16	3	0.0	-0.3
17	2	0.0	0.0
18	1	1.0	3.0
19	1	0.0	0.0
20	3	0.0	-0.3
21	3	0.0	-0.3
22	1	0.0	0.0
23	2	3.0	9.1
24	4	0.0	-0.3
25	2	0.0	0.0
26	3	0.0	-0.3
27	2	0.0	0.0
28	1	0.0	0.0
29	4	0.0	-0.3
30	1	0.0	0.0
		MIN	-0.6
		MAX	9.1
		MEAN	0.9
		SD	2.1
		Transuranic $DCGL_W$	20

92

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit G11-A-008** **Classification: 3**
Building: 881 G&H
Survey Unit Description: Interior
Total Area. 804 sq. m. **Floor Area 200 sq. m**



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 9, 10
RCT ID #(s): 1, 2

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

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID: 02-0102/GH881-In-Sc January 1, 2002

93

SURVEY UNIT G11-B-009
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Exterior of 881G & 881H

94

G11-B-009
RADIOLOGICAL
DATA SUMMARY

Total Surface Activity Measurements			Removable Activity Measurements		
	25	25		25	25
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-7.3	dpm/100 cm^2	MIN	-1.5	dpm/100 cm^2
MAX	76.9	dpm/100 cm^2	MAX	5.5	dpm/100 cm^2
MEAN	25 1	dpm/100 cm^2	MEAN	0.7	dpm/100 cm^2
STD DEV	20.5	dpm/100 cm^2	STD DEV	1.8	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2	TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

95

SURVEY UNIT G11-B-009
TSA DATA SUMMARY

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 #:	3114	3114	1417	1379	1379
Cal Due Date:	4/25/02	4/25/02	4/25/02	5/6/02	5/6/02
Analysis Date:	12/13/01	12/17/01	12/17/01	12/17/01	12/19/01
Alpha Eff. (c/d):	0.202	0.202	0 198	0.202	0.202
Alpha Bkgd (cpm)	0 7	2.0	2.7	3.0	5.3
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)	25.6	36.5	41.6	42.5	48.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	7	6.7	33.2	2.0	9.9	6.1
2	11	16.0	79.2	9.3	46.0	52.1
3	10	14.0	69.3	6.7	33.2	42.2
4	11	17.3	85.6	5.3	26.2	58.6
5	10	11.3	55.9	6.0	29 7	28.9
6	10	9.3	46.0	6.7	33.2	19.0
7	10	8 7	43 1	12.7	62.9	16.0
8	7	4.0	19.8	1.3	6.4	-7.3
9	8	12.7	62.9	2.7	13 4	35.8
10	9	7.3	36.9	7.3	36.9	9.8
11	11	12.0	59.4	5.3	26.2	32.3
12	9	8.0	40.4	4.0	20.2	13.3
13	11	21.0	104.0	6.7	33.2	76.9
14	7	8.0	39.6	3.3	16.3	12.5
15	7	13.3	65.8	2.7	13.4	38.8
16	8	8.0	39.6	6.7	33.2	12.5
17	8	8.0	39.6	5.3	26.2	12.5
18	7	10.0	49.5	4 7	23.3	22 4
19	10	14 7	72.8	6.3	31.2	45 7
20	10	8.0	39.6	4.0	19.8	12.5
21	8	7.3	36.1	2.0	9.9	9 1
22	8	5.3	26.2	4.0	19.8	-0.8
23	10	6.0	29 7	8.0	39.6	2.6
24	10	14 7	72.8	7.3	36.1	45 7
25	9	11.3	57 1	6.0	30.3	30.0
					27 1	Sample LAB Average
					MIN	-7.3
					MAX	76.9
					MEAN	25.1
					SD	20.5
					Transuranic DCGL$_W$	100

1 Average LAB used to subtract from Gross Sample Activity

QC Measurements

12 QC	10	7.3	36.1	3.3	16.3	3.2
21 QC	10	8.0	39.6	10.0	49.5	6.7
					32.9	QC LAB Average
					QC MIN	3.2
					QC MAX	6.7
					QC MEAN	5.0
					QC SD	2.5
					Transuranic DCGL$_W$	100

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

96

SURVEY UNIT G11-B-009
SMEAR DATA SUMMARY

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 #	833	959	830	770	767	963
Cal Due Date:	1/31/02	2/9/02	2/16/02	1/19/02	4/30/02	1/26/02
Analysis Date:	12/17/01	12/17/01	12/17/01	12/17/01	12/20/01	12/20/01
Alpha Eff. (c/d)	0.33	0 33	0 33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0.2	0.2	0 0	0 0	0.5	0 0
Sample Time (min)	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10
MDC (dpm/100cm^2)	8 0	8 0	4.5	4.5	10 0	4.5

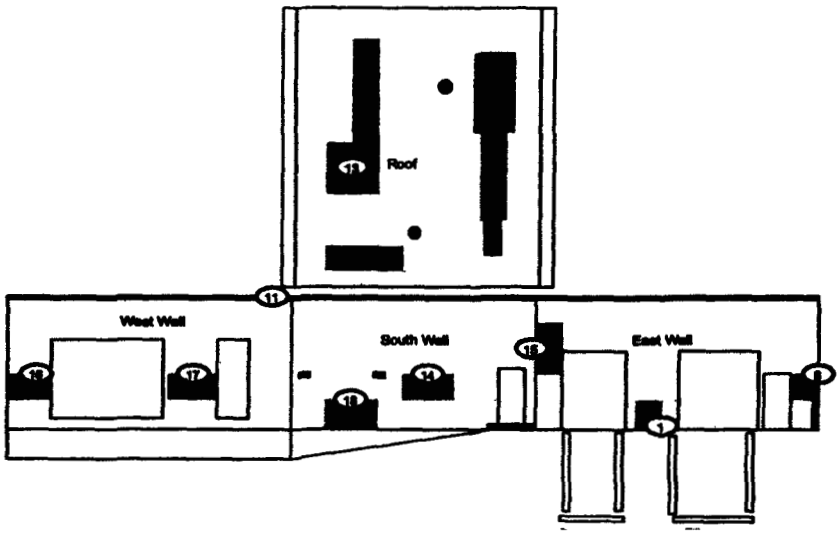
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	0 0	-0 6
2	5	0 0	-1.5
3	2	1 0	2 4
4	6	0 0	0 0
5	3	1 0	3 0
6	4	0 0	0 0
7	1	2 0	5.5
8	2	0 0	-0 6
9	3	1 0	3 0
10	4	0 0	0 0
11	5	0 0	-1.5
12	1	1 0	2 4
13	6	1 0	3 0
14	2	0 0	-0 6
15	3	0 0	0 0
16	4	0 0	0 0
17	1	0 0	-0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

97

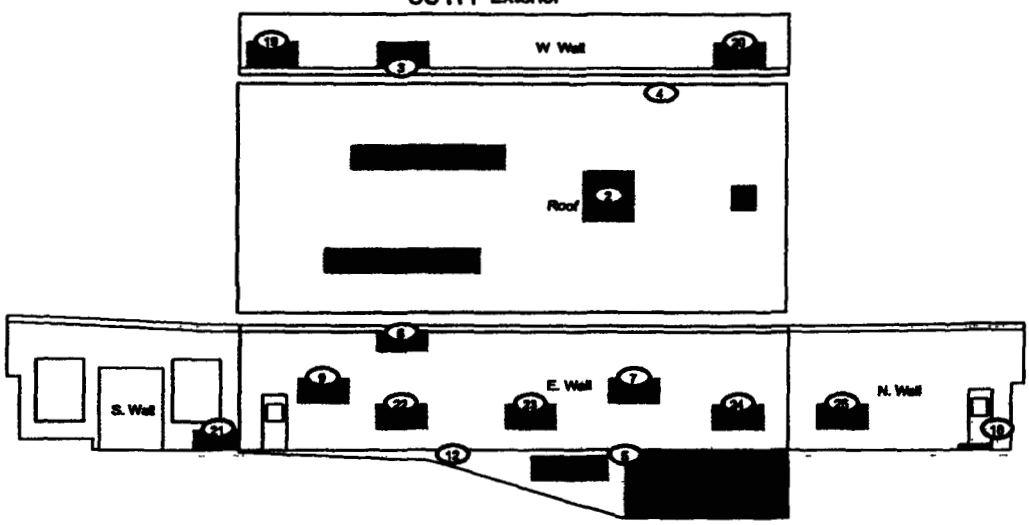
PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: B **Survey Unit.** G11-B-009 **Classification** 3
Building: 881 G&H
Survey Unit Description: Exterior
Total Area: 724 sq m. **Total Roof Area.** 292 sq. m.

881G Exterior



881H Exterior



Scan Area

SURVEY MAP LEGEND

- Sensor & TSA Location
- Sensor, TSA & Sample Location
- Open/inaccessible Area
- Area in Another Survey Unit

Neither the United States Government nor Kaiser Hill Co., nor DynCorp IAST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7, 8, 9, 10, 11
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. 303-966-7767

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID: 02-9102GH881-Ex-Sc January 1, 2002

98

SURVEY UNIT G11-A-011
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: 883C (COOLING TOWER)

* Exterior surfaces of B883C were characerized during this PDS effort. Interior surfaces will be radiologically characterized using the Waste Release Evaluation process during demolition of 883C

99

G11-A-011
RADIOLOGICAL
DATA SUMMARY

Total Surface Activity Measurements

	15	15	
	Number Required	Number Obtained	
MIN	-18 9		dpm/100 cm^2
MAX	68 7		dpm/100 cm^2
MEAN	17.5		dpm/100 cm^2
STD DEV	26.3		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	15	15	
	Number Required	Number Obtained	
MIN	-0.6		dpm/100 cm^2
MAX	5.8		dpm/100 cm^2
MEAN	1 1		dpm/100 cm^2
STD DEV	2.3		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

180

SURVEY UNIT G11-A-011
TSA - DATA SUMMARY

Manufacturer:	NE Electra	NE Electra
Model:	DP-6	DP-6
Instrument ID#:	7	8
Serial #:	1379	1136
Cal Due Date:	5/6/02	1/17/02
Analysis Date:	12/26/01	12/26/01
Alpha Eff. (c/d):	0.202	0.209
Alpha Bkgd (cpm)	4.5	0 7
Sample Time (min)	1.5	1.5
LAB Time (min)	1.5	1.5
MDC (dpm/100cm^2)	49.8	24.8

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	7	7.3	36.1	7.3	36.1	-2.5
2	7	13.3	65.8	10.0	49.5	27.2
3	7	4 7	23.3	7.3	36.1	-15 4
4	7	21 7	107.4	7.3	36.1	68.7
5	7	12.0	59.4	5.3	26.2	20.7
6	7	18.0	89 1	9.3	46.0	50.4
7	7	21.3	105.4	8.7	43 1	66.8
8	7	4.0	19.8	3.3	16.3	18.9
9	7	8.7	43.1	10 0	49.5	4.4
10	7	11.3	55.9	7.3	36.1	17.3
11	7	10.0	49.5	6.0	29 7	10.8
12	7	10.7	53.0	8.0	39.6	14.3
13	7	9.3	46.0	2.7	13.4	7.4
14	7	8.0	39.6	10.7	53.0	0.9
15	7	10.0	49.5	14.0	69.3	10.8
					38 7	Sample LAB Average
					MIN	-18.9
					MAX	68.7
					MEAN	17.5
					SD	26.3
					Transuranic $DCGL_w$	100

1 - Average LAB used to subtract from Gross Sample Activity

QC Measurements

1 1 QC	8	8.7	41.6	3.3	15.8	25.8
2 QC	8	9.3	44.5	3.3	15.8	28.7
					15.8	QC LAB Average
					QC MIN	25.8
					QC MAX	28.7
					QC MEAN	27.3
					QC SD	2.0
					Transuranic $DCGL_w$	100

1 Average QC LAB used to subtract from Gross Sample Activity

101

SURVEY UNIT G11-A-011
RSC - DATA SUMMARY

Manufacturer	Eberline	Eberline	Eberline	Eberline
Model	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#	1	2	3	4
Serial #	767	963	830	770
Cal Due Date.	4/30/02	1/26/02	2/16/02	1/19/02
Analysis Date.	12/26/01	12/26/01	12/26/01	12/26/01
Alpha Eff. (c/d):	0.33	0 33	0.33	0.33
Alpha Bkgd (cpm)	0.2	0 1	0 0	0.1
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm^2)	8 0	7 0	4.5	7.0

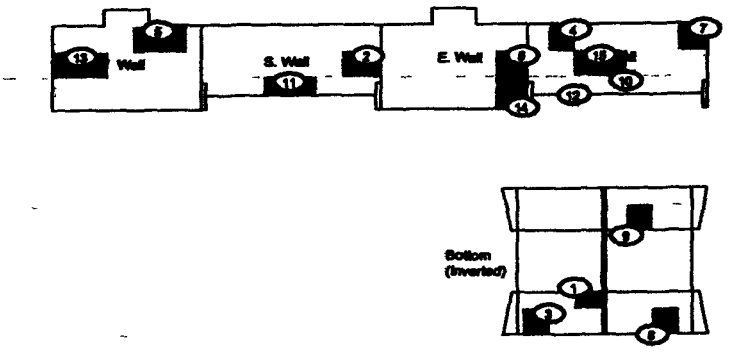
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	0 0	-0 6
2	2	0 0	-0.3
3	3	0 0	0 0
4	4	2.0	5 8
5	1	0 0	-0 6
6	2	0 0	-0 3
7	3	1 0	3 0
8	4	0 0	-0.3
9	1	0 0	-0 6
10	2	2.0	5 8
11	3	0 0	0 0
12	4	0 0	-0.3
13	1	0 0	-0 6
14	2	1 0	2.7
15	3	1 0	3 0
		MIN	-0 6
		MAX	5 8
		MEAN	1 1
		SD	2.3
		Transuranic $DCGL_W$	20

102

PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit. G11-A-011** **Classification 3**
Building: 883C
Survey Unit Description: Exterior
Total Area: 118 sq m **Total Floor Area: N/A**

883C



Scan Area

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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
RCT ID #(s): 1

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

Prepared by: GIS Dept. 303-966-7767

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID: 02-9102883C-Sc

January 1, 2002

103

SURVEY UNIT G11-A-012
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior & Exterior of B890

104

G11-A-012
RADIOLOGICAL
DATA SUMMARY

Total Surface Activity Measurements			Removable Activity Measurements		
	15	15		15	15
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-11.7	dpm/100 cm^2	MIN	-0.3	dpm/100 cm^2
MAX	71.0	dpm/100 cm^2	MAX	12.1	dpm/100 cm^2
MEAN	39.5	dpm/100 cm^2	MEAN	2.1	dpm/100 cm^2
STD DEV	23.5	dpm/100 cm^2	STD DEV	3.4	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2	TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

105

SURVEY UNIT G11-A-012
TSA - DATA SUMMARY

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	1379	1379	1136
Cal Due Date:	5/6/02	5/6/02	1/17/02
Analysis Date:	12/27/01	12/31/01	12/31/01
Alpha Eff. (c/d):	0.202	0.202	0.209
Alpha Bkgd (cpm)	1.3	4.0	2.0
Sample Time (min)	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5
MDC (dpm/100cm^2)	31.3	48.0	35.3

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	7	20.0	99.0	10.0	49.5	61.1
2	7	18.0	89 1	7.3	36.1	51.2
3	7	18.7	92.6	9.3	46.0	54.7
4	7	18.7	92.6	6.0	29 7	54.7
5	8	22.0	108.9	12.7	62.9	71.0
6	7	18.7	92.6	8.0	39.6	54.7
7	7	11.3	55.9	8.0	39.6	18.1
8	8	16.7	82.7	3.3	16.3	44.8
9	8	5.3	26.2	10.7	53.0	-11 7
10	7	14.0	69.3	4.0	19.8	31.4
11	8	9.3	46.0	6.7	33.2	8.2
12	8	11.3	55 9	8.7	43 1	18.1
13	8	21.3	105.4	4.7	23.3	67.6
14	7	15.3	75 7	6.7	33.2	37.9
15	7	14.0	69.3	8.7	43.1	31.4
					37.9	Sample LAB Average
					MIN	-11 7
					MAX	71.0
					MEAN	39.5
					SD	23.5
					Transuranic DCGL$_W$	100

1 - Average LAB used to subtract from Gross Sample Activity

QC Measurements

13 QC	9	20.3	97 1	5.3	25.4	73.2
12 QC	9	9.3	44.5	4 7	22.5	20.6
					23.9	QC LAB Average
					QC MIN	20.6
					QC MAX	73.2
					QC MEAN	46.9
					QC SD	37.2
					Transuranic DCGL$_W$	100

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

106

SURVEY UNIT G11-A-012
RSC - DATA SUMMARY

Manufacturer:	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#	1	2	3	4
Serial #:	767	963	767	963
Cal Due Date:	4/30/02	1/26/02	4/30/02	1/26/02
Analysis Date:	12/28/01	12/28/01	12/31/01	12/31/01
Alpha Eff. (c/d):	0.33	0.33	0.33	0.33
Alpha Bkgd (cpm)	0 1	0 0	0 0	0 0
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm^2)	7 0	4.5	4.5	4.5

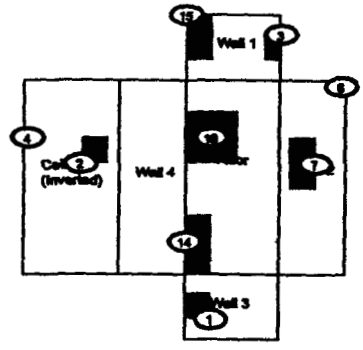
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	0 0	-0.3
2	2	0 0	0.0
3	1	0 0	-0.3
4	2	1 0	3 0
5	3	1 0	3 0
6	1	0 0	-0.3
7	2	4 0	12.1
8	4	1 0	3 0
9	4	0 0	0 0
10	1	0 0	-0.3
11	3	1 0	3 0
12	3	1 0	3 0
13	4	2 0	6 1
14	2	0 0	0 0
15	1	0 0	-0.3
		MIN	-0.3
		MAX	12 1
		MEAN	2 1
		SD	3 4
		Transuranic $DCGL_W$	20

107

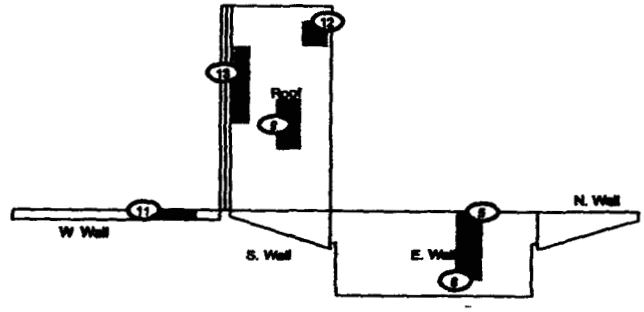
PRE-DEMOLITION SURVEY FOR GROUP 11

Survey Area: A **Survey Unit G11-A-012** **Classification. 3**
Building: 890
Survey Unit Description. Interior/Exterior
Total Area: 179 sq m **Total Floor/Roof Area: 58 sq. m.**

Interior



Exterior



Scan Area

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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
RCT ID #(s): 1, 2

U.S Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID: 02-0102/999-Sc

January 1, 2002

108

SURVEY UNIT G15-A-004
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior & Exterior of T891D

109

G15-A-004
Radiological
Data Summary

Total Surface Activity Measurements

	25	25	
	Number Required	Number Obtained	
MIN	-13 1		dpm/100 cm^2
MAX	71.2		dpm/100 cm^2
MEAN	12.2		dpm/100 cm^2
STD DEV	20 0		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	25	25	
	Number Required	Number Obtained	
MIN	-0 9		dpm/100 cm^2
MAX	3 0		dpm/100 cm^2
MEAN	0 4		dpm/100 cm^2
STD DEV	1.5		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

110

SURVEY UNIT G15-A-004
TSA DATA SUMMARY

Manufacturer:	NE Electra	NE Electra	NE Electra
Model:	DP-6	DP-6	DP-6
Instrument ID#:	7	8	9
Serial #:	396	396	1589
Cal Due Date:	6/10/02	6/10/02	5/15/02
Analysis Date:	1/24/02	1/25/02	1/25/02
Alpha Eff. (c/d):	0.229	0.229	0.211
Alpha Bkgd (cpm)	1.3	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)	27.6	27.6	30.0

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	8	4.7	20.5	3.3	14.4	4.4
2	8	4.7	20.5	3.3	14.4	4.4
3	8	16.0	69.9	6.7	29.3	53.7
4	8	9.3	40.6	1.3	5.7	24.5
5	8	4.7	20.5	2.0	8.7	4.4
6	8	0.7	3.1	4.0	17.5	-13.1
7	8	6.0	26.2	5.3	23.1	10.0
8	8	4.7	20.5	2.0	8.7	4.4
9	8	20.0	87.3	3.3	14.4	71.2
10	8	6.0	26.2	7.3	31.9	10.0
11	8	0.7	3.1	2.0	8.7	-13.1
12	8	9.3	40.6	4.7	20.5	24.5
13	8	7.3	31.9	4.7	20.5	15.7
14	8	4.7	20.5	2.0	8.7	4.4
15	7	3.3	14.4	2.7	11.8	1.7
16	7	4.0	17.5	5.3	23.1	1.3
17	7	8.7	38.0	2.7	11.8	21.8
18	8	2.0	8.7	3.3	14.4	7.4
19	8	5.3	23.1	2.7	11.8	7.0
20	8	2.7	11.8	2.7	11.8	-4.4
21	8	1.3	5.7	3.3	14.4	-10.5
22	8	8.0	34.9	3.3	14.4	18.8
23	8	6.0	26.2	6.0	26.2	10.0
24	8	10.0	43.7	3.3	14.4	27.5
25	8	12.0	52.4	5.3	23.1	36.2
					16.2	Sample LAB Average
					MIN	-13.1
					MAX	71.2
					MEAN	12.2
					SD	20.0
					Transuranic DCGL$_W$	100

1 Average LAB used to subtract from Gross Sample Activity

QC Measurements

14QC	9	2.7	12.8	2.7	12.8	4.7
22QC	9	2.0	9.5	0.7	3.3	1.4
					8.1	QC LAB Average
					QC MIN	1.4
					QC MAX	4.7
					QC MEAN	3.1
					QC SD	2.4
					Transuranic DCGL$_W$	100

1 Average QC LAB used to subtract from Gross Sample Activity

111

SURVEY UNIT G15-A-004
SMEAR DATA SUMMARY

Manufacturer	Eberline	Eberline	Eberline	Eberline
Model	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#	1	2	3	4
Serial #	767	1164	830	959
Cal Due Date.	4/30/02	5/13/02	2/16/02	7/14/02
Analysis Date·	1/25/02	1/25/02	1/25/02	1/25/02
Alpha Eff. (c/d)	0.33	0.33	0 33	0.33
Alpha Bkgd (cpm)	0.3	0 0	0 1	0.2
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm^2)	8 8	4 5	7 0	8.0

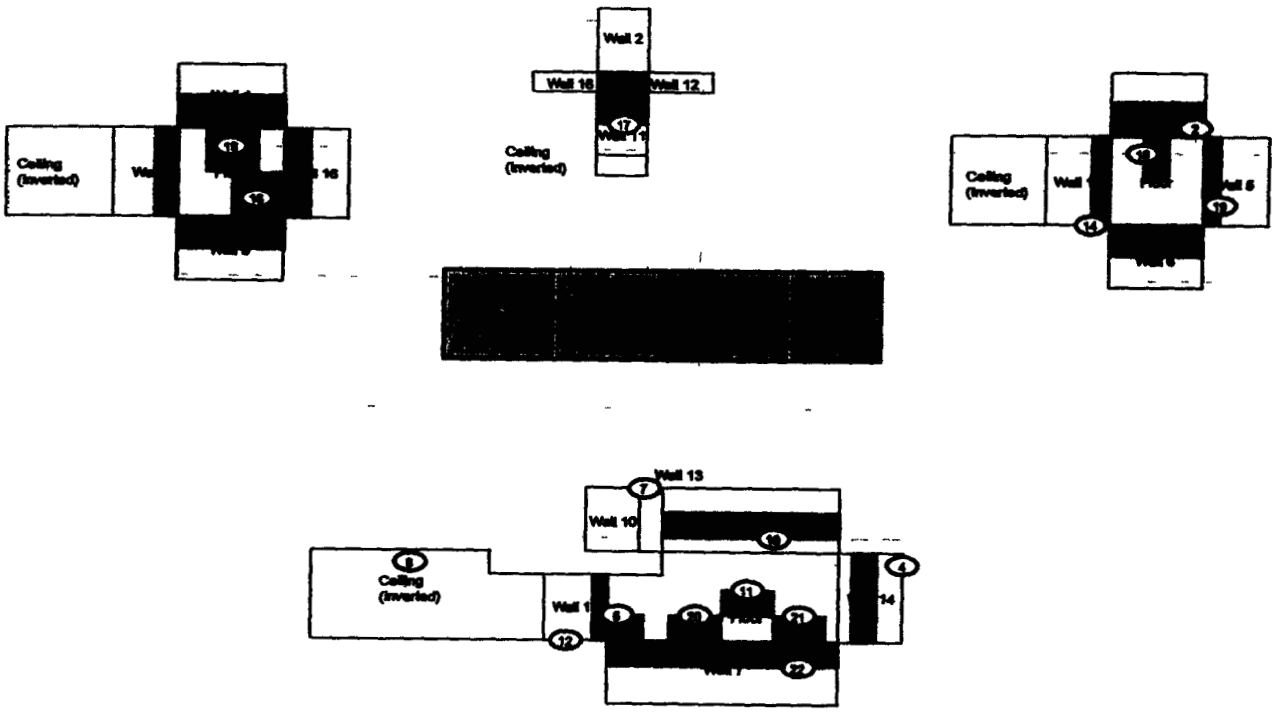
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	1	0 0	-0 9
2	2	0 0	0 0
3	2	1 0	3 0
4	4	0 0	-0 6
5	2	1 0	3 0
6	1	1 0	2 1
7	2	0 0	0 0
8	3	1 0	2 7
9	4	1 0	2 4
10	1	0 0	-0 9
11	3	0 0	-0.3
12	2	0 0	0 0
13	3	0 0	-0 3
14	4	0 0	-0 6
15	2	0 0	0 0
16	1	0 0	-0 9
17	3	1 0	2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

112

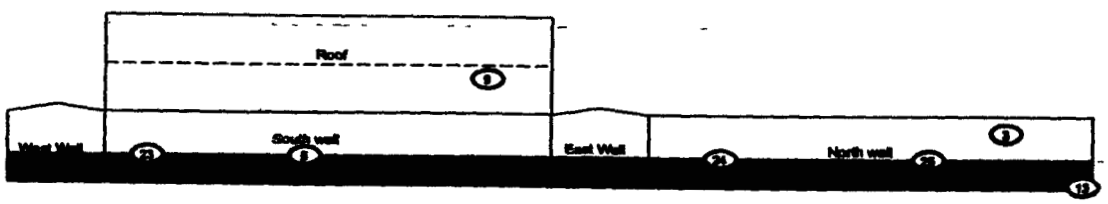
PRE-DEMOLITION SURVEY

Survey Area: A Survey Unit: G15-A-004 Classification: 3
Building T891D
Survey Unit Description Exterior/Interior
Total Area 545 sq m. Total Roof & Floor Area: 122 sq m.

T891D
(Interior)



T891D
(Exterior)



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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

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. 303-966-7700 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0140/T891D-SC February 20, 2002

G15-A-004

PAGE 1 OF 1

113

SURVEY UNIT G15-A-005
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior & Exterior of T891E

114

G15-A-005
Radiological
Data Summary

Total Surface Activity Measurements			Removable Activity Measurements		
	25	25		25	25
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-18 4	dpm/100 cm^2	MIN	-0 3	dpm/100 cm^2
MAX	90 0	dpm/100 cm^2	MAX	3 0	dpm/100 cm^2
MEAN	11 5	dpm/100 cm^2	MEAN	0.5	dpm/100 cm^2
STD DEV	30 4	dpm/100 cm^2	STD DEV	1.3	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2	TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

115

SURVEY UNIT G15-A-005
TSA DATA SUMMARY

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 #	396	1379	3114	396
Cal Due Date:	6/10/02	5/6/02	4/25/02	6/10/02
Analysis Date:	1/30/02	1/30/02	2/4/02	2/4/02
Alpha Eff. (c/d):	0 229	0.202	0 209	0 229
Alpha Bkgd (cpm)	2.0	3.3	3 3	0.3
Sample Time (min)	1 5	1 5	1.5	1 5
LAB Time (min)	1 5	1 5	1 5	1.5
MDC (dpm/100cm^2)	48 0	48 0	48 0	48.0

Sample Location Number	Instrument ID#	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	7	5.3	23 1	7.3	31 9	1 7
2	7	2.0	8.7	3.3	14 4	-12.7
3	10	14 7	64.2	8.7	38.0	42.7
4	7	4 7	20 5	2.7	11 8	-1 0
5	7	1.3	5 7	3.3	14.4	-15 8
6	7	2.7	11 8	4 7	20 5	-9 7
7	7	2.0	8.7	4 7	20 5	12.7
8	9	23.3	111 5	8.0	38.3	90 0
9	7	4 7	20 5	2.7	11 8	-1 0
10	10	16.7	72.9	6.7	29 3	51 4
11	7	5.3	23 1	2.7	11 8	1 7
12	7	0 7	3 1	4.0	17.5	-18 4
13	9	18.2	87 1	7.3	34 9	65 6
14	7	3.3	14 4	5.3	23 1	-7 1
15	7	9.3	40 6	6.0	26 2	19 1
16	7	5.3	23 1	1.3	5 7	1 7
17	7	3.3	14 4	0 7	3 1	7 1
18	7	1 3	5 7	0 7	3 1	15 8
19	7	1.3	5 7	4.7	20 5	-15 8
20	7	2.7	11 8	3 3	14 4	-9 7
21	7	2.0	8 7	2.0	8.7	-12.7
22	10	13.3	58 1	6.0	26.2	36.6
23	10	10 0	43 7	8 7	38 0	22.2
24	10	14.7	64 2	8.7	38.0	42.7
25	10	16.7	72.9	8.0	34.9	51 4

1 Average LAB used to subtract from Gross Sample Activity

21.5	Sample LAB Average
MIN	-18.4
MAX	90.0
MEAN	11 5
SD	30 4
Transuranic DCGL$_W$	100

QC Measurements

180C	8	5.3	26 2	4 7	23.3	7 9
170C	8	4.7	23 3	2.7	13 4	5.0

1 Average QC LAB used to subtract from Gross Sample Activity

18.3	QC LAB Average
QC MIN	5.0
QC MAX	7 9
QC MEAN	6.4
QC SD	2.1
Transuranic DCGL$_W$	100

116

SURVEY UNIT G15-A-005
SMEAR DATA SUMMARY

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 #	767	1164	830	959	767	1164
Cal Due Date	4/30/02	5/13/02	2/16/02	7/14/02	4/30/02	5/13/02
Analysis Date:	1/30/02	1/30/02	1/30/02	1/30/02	2/4/02	2/4/02
Alpha Eff. (c/d)	0.33	0.33	0.33	0.33	0.33	0 33
Alpha Bkgd (cpm)	0 1	0 1	0 0	0 1	0 1	0 1
Sample Time (min)	2	2	2	2	2	2
Bkgd Time (min)	10	10	10	10	10	10
MDC (dpm/100cm^2)	7 0	7 0	4 5	7 0	7 0	7 0

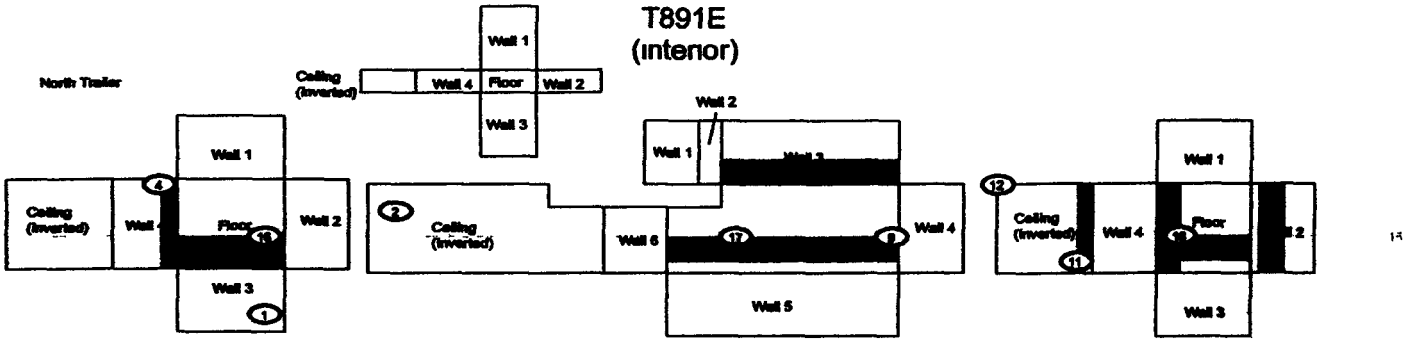
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	2	0 0	-0.3
2	1	0 0	-0.3
3	5	1 0	2 7
4	3	0 0	0 0
5	3	0 0	0 0
6	2	0 0	-0.3
7	1	1 0	2 7
8	5	1 0	2 7
9	4	0 0	-0.3
10	6	0 0	-0.3
11	2	0 0	-0 3
12	3	0 0	0 0
13	6	0 0	-0 3
14	4	0 0	-0.3
15	1	0 0	-0 3
16	3	1 0	3 0
17	4	0 0	-0 3
18	4	0 0	-0 3
19	1	0 0	-0.3
20	2	0 0	-0.3
21	1	0 0	-0 3
22	6	0 0	-0.3
23	6	1 0	2 7
24	5	0 0	-0.3
25	5	1 0	2 7
		MIN	-0 3
		MAX	3 0
		MEAN	0 5
		SD	1.3
		Transuranic $DCGL_W$	20

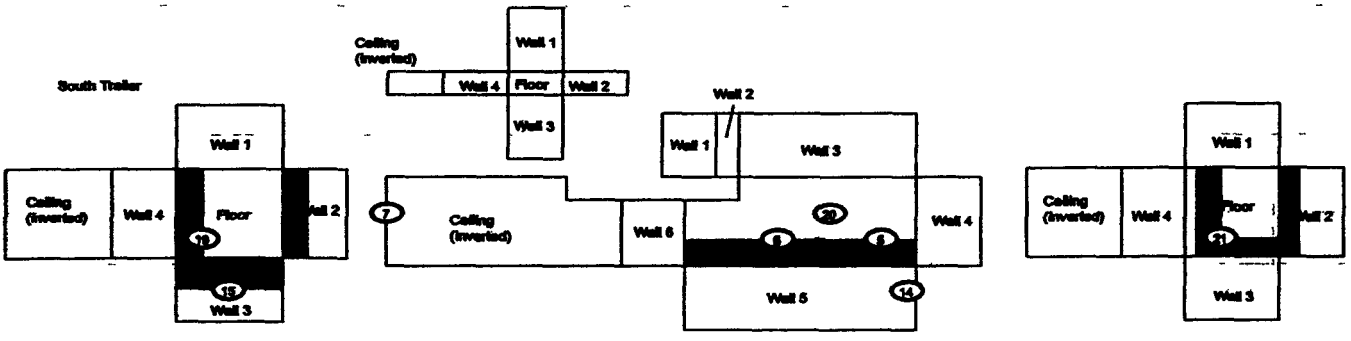
117

PRE-DEMOLITION SURVEY

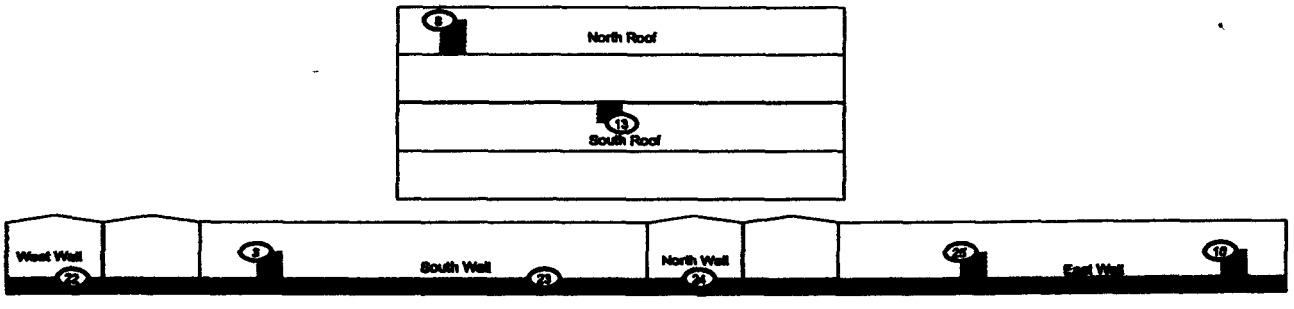
Survey Area A **Survey Unit: G15-A-005** **Classification 3**
Building T891E
Survey Unit Description *Interior/Exterior*
Total Area 846 sq m. **Total Roof & Floor Area. 242 sq. m.**

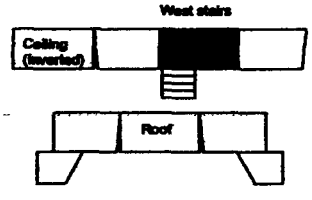
T891E (interior)

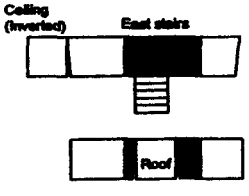




T891E (exterior)







Scan Area

SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MEX, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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, 9, 10
RCT ID #(s): 1, 2

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

Prepared by: [illegible] Prepared for:
DynCorp
THE ART OF TECHNOLOGY

MAP ID: [illegible] February 20, 2002

G15-A-005

118

SURVEY UNIT G15-A-006
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior & Exterior of T891F

119

G15-A-006
Radiological
Data Summary

Total Surface Activity Measurements

	Number Required	Number Obtained	
	25	25	
MIN	-19 0		dpm/100 cm^2
MAX	80 5		dpm/100 cm^2
MEAN	12 5		dpm/100 cm^2
STD DEV	23 8		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	Number Required	Number Obtained	
	25	25	
MIN	-0 6		dpm/100 cm^2
MAX	5 8		dpm/100 cm^2
MEAN	0 9		dpm/100 cm^2
STD DEV	2 0		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

120

SURVEY UNIT G15-A-006
TSA DATA SUMMARY

Manufacturer	NE Electra	NE Electra
Model.	DP-6	DP-6
Instrument ID#	7	8
Serial #	396	1379
Cal Due Date:	6/10/02	5/6/02
Analysis Date	1/28/02	1/28/02
Alpha Eff (c/d):	0.227	0.202
Alpha Bkgd (cpm)	2.0	2.7
Sample Time (min)	1.5	1.5
LAB Time (min)	1.5	1.5
MDC (dpm/100cm^2)	32.5	40.8

Sample Location Number	Instrument ID#	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	7	4.7	20.7	6.0	26.4	-1.4
2	7	16.7	73.6	8.0	35.2	51.4
3	7	15.3	67.4	4.7	20.7	45.3
4	7	5.3	23.3	6.0	26.4	1.2
5	7	5.3	23.3	3.3	14.5	1.2
6	7	23.3	102.6	7.7	33.9	80.5
7	7	8.7	38.3	8.0	35.2	16.2
8	7	13.3	58.6	4.0	17.6	36.5
9	7	4.7	20.7	6.7	29.5	-1.4
10	7	5.3	23.3	3.3	14.5	1.2
11	7	10.0	44.1	7.3	32.2	21.9
12	7	4.0	17.6	3.3	14.5	-4.5
13	7	14.0	61.7	5.3	23.3	39.5
14	7	5.3	23.3	7.3	32.2	1.2
15	7	9.3	41.0	4.7	20.7	18.8
16	7	4.0	17.6	6.7	29.5	-4.5
17	7	2.0	8.8	0.7	3.1	-13.3
18	7	2.7	11.9	2.0	8.8	-10.2
19	7	0.7	3.1	3.3	14.5	-19.0
20	7	3.3	14.5	5.3	23.3	-7.6
21	7	4.7	20.7	2.7	11.9	-1.4
22	7	4.7	20.7	8.0	35.2	-1.4
23	7	8.7	38.3	5.3	23.3	16.2
24	7	12.7	55.9	2.0	8.8	33.8
25	7	8.0	35.2	4.0	17.6	13.1

1 - Average LAB used to subtract from Gross Sample Activity

22.1	Sample LAB Average
MIN	-19.0
MAX	80.5
MEAN	12.5
SD	23.8
Transuranic DCGL$_W$	100

QC Measurements

10QC	8	2.7	13.4	4.0	19.8	-11.4
12QC	8	6.0	29.7	6.0	29.7	5.0

1 Average QC LAB used to subtract from Gross Sample Activity

24.8	QC LAB Average
QC MIN	-11.4
QC MAX	5.0
QC MEAN	-3.2
QC SD	11.6
Transuranic DCGL$_W$	100

121

SURVEY UNIT G15-A-006
SMEAR DATA SUMMARY

Manufacturer	Eberline	Eberline	Eberline	Eberline
Model	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#	1	2	3	4
Serial #	767	1164	830	959
Cal Due Date	4/30/02	5/13/02	2/16/02	7/14/02
Analysis Date	1/28/02	1/28/02	1/28/02	1/28/02
Alpha Eff (c/d)	0 33	0 33	0 33	0.33
Alpha Bkgd (cpm)	0 1	0 2	0 0	0 1
Sample Time (min)	2	2	2	2
Bkgd Time (min)	10	10	10	10
MDC (dpm/100cm^2)	7 0	8 0	4 5	7 0

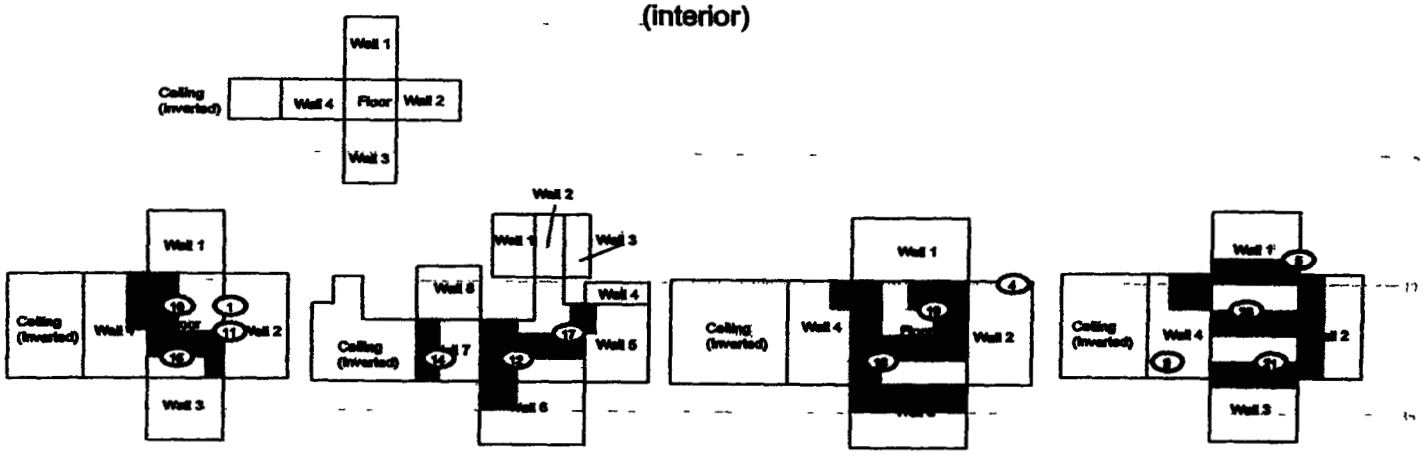
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm^2)
1	3	0 0	0 0
2	1	0 0	-0 3
3	2	0 0	-0 6
4	1	1 0	2 7
5	3	0 0	0 0
6	2	0 0	-0 6
7	3	0 0	0 0
8	1	1 0	2 7
9	1	0 0	-0 3
10	4	0 0	-0.3
11	2	0 0	-0 6
12	3	0 0	0 0
13	1	2 0	5 8
14	2	0 0	-0 6
15	4	1 0	2 7
16	1	0 0	-0 3
17	4	0 0	-0 3
18	1	2 0	5 8
19	4	0 0	-0 3
20	2	0 0	-0 6
21	4	0 0	-0 3
22	4	0 0	-0.3
23	2	1 0	2 4
24	3	1.0	3 0
25	3	1 0	3 0
		MIN	-0 6
		MAX	5 8
		MEAN	0 9
		SD	2 0
		Transuranic DCGL$_w$	20

122

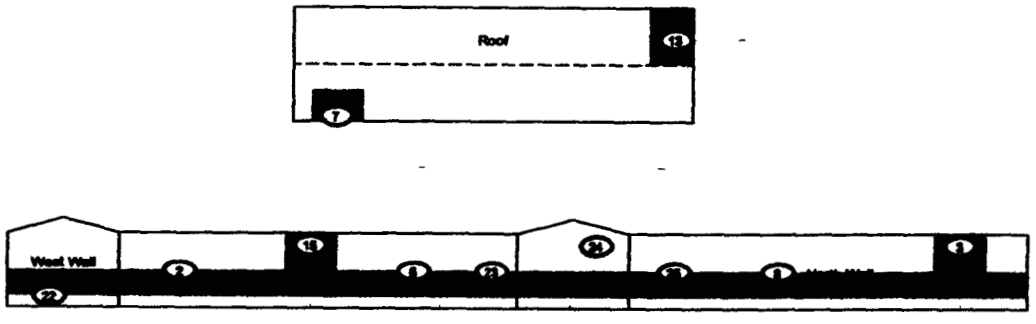
PRE-DEMOLITION SURVEY

Survey Area. A Survey Unit: G15-A-006 Classification 3
Building. T891F
Survey Unit Description Interior/Exterior
Total Area: 474 sq m. Total Roof & Floor Area: 126 sq. m.

T891F
(interior)



T891F
(exterior)



Scan Area

SURVEY MAP LEGEND

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

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

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. 303-966-7770 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: 02-0149/T891F-SC February 28, 2002

G15-A-006

123

SURVEY UNIT G15-A-008
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior & Exterior of T893A

124

G15-A-008
Radiological
Data Summary

Total Surface Activity Measurements			Removable Activity Measurements		
	70	70		70	70
	Number Required	Number Obtained		Number Required	Number Obtained
MIN	-22 8	dpm/100 cm^2	MIN	-1.2	dpm/100 cm^2
MAX	69 6	dpm/100 cm^2	MAX	12 1	dpm/100 cm^2
MEAN	5 8	dpm/100 cm^2	MEAN	1 8	dpm/100 cm^2
STD DEV	21 0	dpm/100 cm^2	STD DEV	3 0	dpm/100 cm^2
TRANSURANIC DCGL$_W$	100	dpm/100 cm^2	TRANSURANIC DCGL$_W$	20	dpm/100 cm^2

125

SURVEY UNIT G15-A-008
TSA DATA SUMMARY

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	10	11	12
Serial #	3114	1379	1379	3114	3114
Cal Due Date	4/25/02	5/6/02	5/6/02	4/25/02	4/25/02
Analysis Date:	1/15/02	1/16/02	1/25/02	1/25/02	1/28/02
Alpha Eff. (c/d):	0.209	0.202	0.202	0.209	0.209
Alpha Bkgd (cpm)	3.3	4.7	4.0	2.7	4.7
Sample Time (min)	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	42.6	50.7	47.5	39.4	49.0

Sample Location Number	Instrument ID#	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	12	20.7	99.0	6.0	28.7	66.7
2	8	4.0	19.8	8.0	39.6	-12.5
3	10	6.7	33.2	3.3	16.3	0.8
4	8	6.7	33.2	5.3	26.2	0.8
5	10	10.0	49.5	7.3	36.1	17.2
6	7	3.3	15.8	9.3	44.5	-16.5
7	12	18.0	86.1	6.7	32.1	53.8
8	8	8.7	43.1	10.0	49.5	10.7
9	12	18.7	89.5	4.0	19.1	57.1
10	7	2.0	9.6	6.0	28.7	-22.8
11	7	5.3	25.4	6.7	32.1	-7.0
12	7	2.0	9.6	5.3	25.4	-22.8
13	7	13.3	63.6	6.0	28.7	31.3
14	8	4.7	23.3	6.7	33.2	-9.1
15	12	18.0	86.1	7.3	34.9	53.8
16	8	10.0	49.5	8.0	39.6	17.2
17	7	10.1	48.3	4.0	19.1	16.0
18	8	3.3	16.3	6.7	33.2	-16.0
19	10	12.0	59.4	4.7	23.3	27.1
20	12	21.3	101.9	3.3	15.8	69.6
21	8	4.7	23.3	6.7	33.2	9.1
22	7	6.0	28.7	6.0	28.7	-3.6
23	10	10.0	49.5	8.7	43.1	17.2
24	7	12.7	60.8	11.3	54.1	28.4
25	7	3.3	15.8	6.0	28.7	-16.5
26	10	6.0	29.7	6.0	29.7	-2.6
27	7	8.7	41.6	5.3	25.4	9.3
28	7	8.7	41.6	6.7	32.1	9.3
29	8	8.0	39.6	4.7	23.3	7.3
30	8	4.7	23.3	6.7	33.2	9.1
31	8	6.0	29.7	3.3	16.3	-2.6
32	8	7.3	36.1	10.7	53.0	3.8
33	10	11.3	55.9	10.7	53.0	23.6
34	8	7.3	36.1	10.0	49.5	3.8
35	12	16.0	76.6	6.0	28.7	44.2
36	10	10.7	53.0	4.7	23.3	20.6
37	8	11.3	55.9	6.7	33.2	23.6
38	7	6.0	28.7	10.0	47.8	-3.6
39	10	5.3	26.2	8.7	43.1	-6.1
40	7	6.0	28.7	12.7	60.8	-3.6
41	10	10.0	49.5	5.3	26.2	17.2
42	7	6.7	32.1	10.0	47.8	-0.3
43	8	8.0	39.6	4.7	23.3	7.3
44	10	4.7	23.3	4.0	19.8	-9.1
45	10	4.0	19.8	8.7	43.1	-12.5

126

SURVEY UNIT G15-A-008
TSA DATA SUMMARY

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	10	11	12
Serial #:	3114	1379	1379	3114	3114
Cal Due Date:	4/25/02	5/6/02	5/6/02	4/25/02	4/25/02
Analysis Date:	1/15/02	1/16/02	1/25/02	1/25/02	1/28/02
Alpha Eff. (c/d):	0.209	0.202	0.202	0.209	0.209
Alpha Bkgd (cpm)	3.3	4.7	4.0	2.7	4.7
Sample Time (min)	1.5	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	42.6	50.7	47.5	39.4	49.0

46	10	6.7	33.2	2.7	13.4	0.8
47	10	5.3	26.2	6.7	33.2	-6.1
48	10	11.3	55.9	7.3	36.1	23.6
49	10	6.7	33.2	8.7	43.1	0.8
50	10	10.0	49.5	8.7	43.1	17.2
51	10	5.3	26.2	5.3	26.2	-6.1
52	10	5.3	26.2	5.3	26.2	-6.1
53	7	4.7	22.5	4.0	19.1	-9.8
54	8	8.0	39.6	4.7	23.3	7.3
55	8	5.3	26.2	6.0	29.7	-6.1
56	8	5.3	26.2	6.0	29.7	-6.1
57	7	6.7	32.1	10.0	47.8	-0.3
58	7	2.7	12.9	4.7	22.5	19.4
59	8	5.3	26.2	6.0	29.7	-6.1
60	8	6.0	29.7	6.0	29.7	-2.6
61	8	2.0	9.9	7.3	36.1	-22.4
62	7	3.3	15.8	3.3	15.8	16.5
63	7	7.3	34.9	3.3	15.8	2.6
64	7	4.0	19.1	6.7	32.1	-13.2
65	7	6.7	32.1	8.7	41.6	-0.3
66	7	4.7	22.5	6.7	32.1	-9.8
67	7	12.0	57.4	8.0	38.3	25.1
68	7	9.3	44.5	6.7	32.1	12.2
69	7	3.3	15.8	9.3	44.5	-16.5
70	7	8.7	41.6	3.3	15.8	9.3
					32.3	Sample LAB Average
					MIN	22.8
					MAX	69.6
					MEAN	5.8
					SD	21.0
					Transuranic DCGL$_W$	100

1 Average LAB used to subtract from Gross Sample Activity

QC Measurements

12QC	8	6.7	33.2	7.3	36.1	3.7
63QC	8	6.0	29.7	10.7	53.0	0.2
3QC	11	3.3	15.8	3.3	15.8	-13.7
5QC	11	9.3	44.5	2.7	12.9	15.0
					29.5	QC LAB Average
					QC MIN	-13.7
					QC MAX	15.0
					QC MEAN	1.3
					QC SD	11.8
					Transuranic DCGL$_W$	100

1 Average QC LAB used to subtract from Gross Sample Activity

127

128

SURVEY UNIT G15-A-008
SMEAR DATA SUMMARY

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	5	6	13	14	15	16	17	18	19	20	21	22
Serial #:	767	963	830	770	767	963	830	770	767	1164	830	959	767	1164	830	959
Cal Due Date:	4/30/02	1/26/02	2/16/02	1/19/02	4/30/02	1/26/02	2/16/02	1/19/02	4/30/02	5/13/02	2/16/02	7/14/02	4/30/02	5/13/02	2/16/02	7/14/02
Analysis Date:	1/15/02	1/15/02	1/15/02	1/15/02	1/16/02	1/16/02	1/16/02	1/16/02	1/25/02	1/25/02	1/25/02	1/25/02	1/28/02	1/28/02	1/28/02	1/28/02
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)	0.2	0.0	0.2	0.4	0.0	0.0	0.2	0.1	0.3	0.0	0.1	0.2	0.1	0.2	0.0	0.1
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/100cm²)	8.0	4.5	8.0	9.4	4.5	4.5	8.0	7.0	8.8	4.5	7.0	8.0	7.0	8.0	4.5	7.0

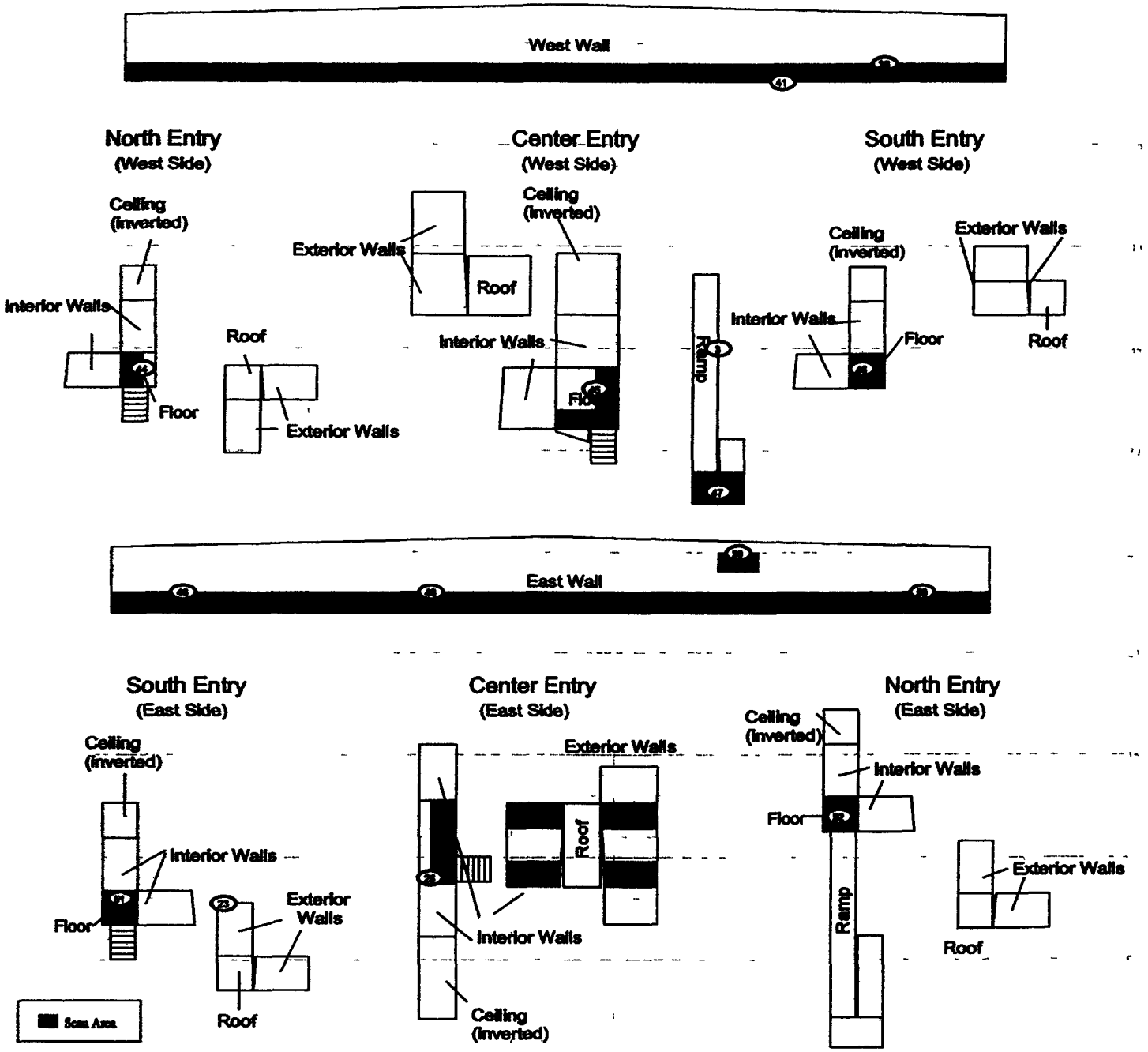
Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm²)
1	20	3.0	8.5
2	5	1.0	3.0
3	17	1.0	2.7
4	7	0.0	0.0
5	15	1.0	2.1
6	2	1.0	3.0
7	19	2.0	5.8
8	5	0.0	0.0
9	20	3.0	8.5
10	4	0.0	1.2
11	2	0.0	0.0
12	3	1.0	2.4
13	3	0.0	-0.6
14	7	0.0	0.0
15	19	0.0	-0.3
16	6	0.0	0.0
17	4	3.0	7.9
18	7	2.0	6.1
19	17	4.0	11.8
20	22	1.0	2.7
21	8	1.0	3.0
22	1	1.0	2.4
23	17	0.0	-0.3
24	2	0.0	0.0
25	3	1.0	2.4
26	16	0.0	0.0
27	4	0.0	1.2
28	2	0.0	0.0
29	6	0.0	0.0
30	6	0.0	0.0
31	6	0.0	0.0
32	6	0.0	0.0
33	16	4.0	12.1
34	5	2.0	6.1
35	21	0.0	0.0
36	16	2.0	6.1
37	8	1.0	3.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm²)
38	1	1.0	2.4
39	17	1.0	2.7
40	3	1.0	2.4
41	15	2.0	5.2
42	1	0.0	-0.6
43	8	0.0	0.0
44	18	1.0	2.4
45	17	0.0	-0.3
46	18	0.0	-0.6
47	18	0.0	-0.6
48	18	2.0	5.5
49	15	1.0	2.1
50	16	0.0	0.0
51	15	0.0	-0.9
52	15	0.0	-0.9
53	1	0.0	-0.6
54	5	1.0	3.0
55	7	0.0	1.2
56	5	0.0	0.0
57	4	0.0	-1.2
58	2	1.0	3.0
59	7	0.0	-1.2
60	16	0.0	0.0
61	8	0.0	0.0
62	1	1.0	2.4
63	3	0.0	-0.6
64	2	1.0	3.0
65	1	0.0	-0.6
66	1	0.0	-0.6
67	4	1.0	3.0
68	4	1.0	3.0
69	3	0.0	-0.6
70	2	0.0	0.0
		MIN	1.2
		MAX	12.1
		MEAN	1.8
		SD	3.0
		Transuranic $DCGL_w$	20

PRE-DEMOLITION SURVEY

Survey Area: A | Survey Unit: G15-A-008 | Classification 3
Building T893A
Survey Unit Description Interior & Exterior | Total Roof Area 1467 sq. m.
Total Area. 6764 sq. m. | Total Floor Area: 1424 sq. m.

T893A Exterior



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MAST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,11,12
RCT ID #(s): 1,3,4

N

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

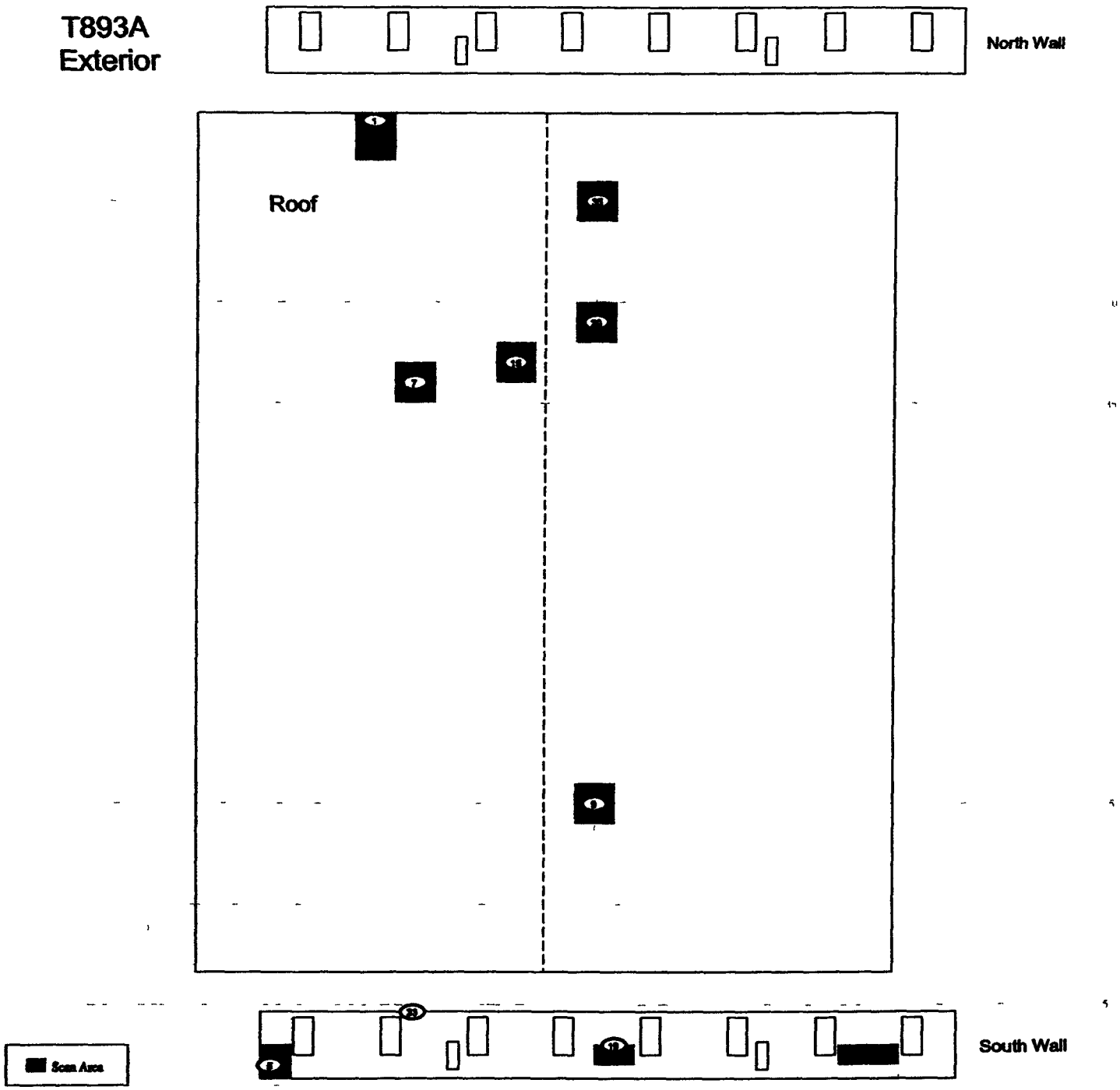
U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-000-7707 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: 02-0140/B03A-1SC
February 28, 2002

G15-A-008

129

PRE-DEMOLITION SURVEY

Survey Area. A Survey Unit: G15-A-008 Classification 3
Building: T893A
Survey Unit Description Interior & Exterior Total Roof Area. 1467 sq m.
Total Area. 6764 sq. m. Total Floor Area. 1424 sq. m.



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MMC, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,11,12
RCT ID #(s): 1,3,4

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

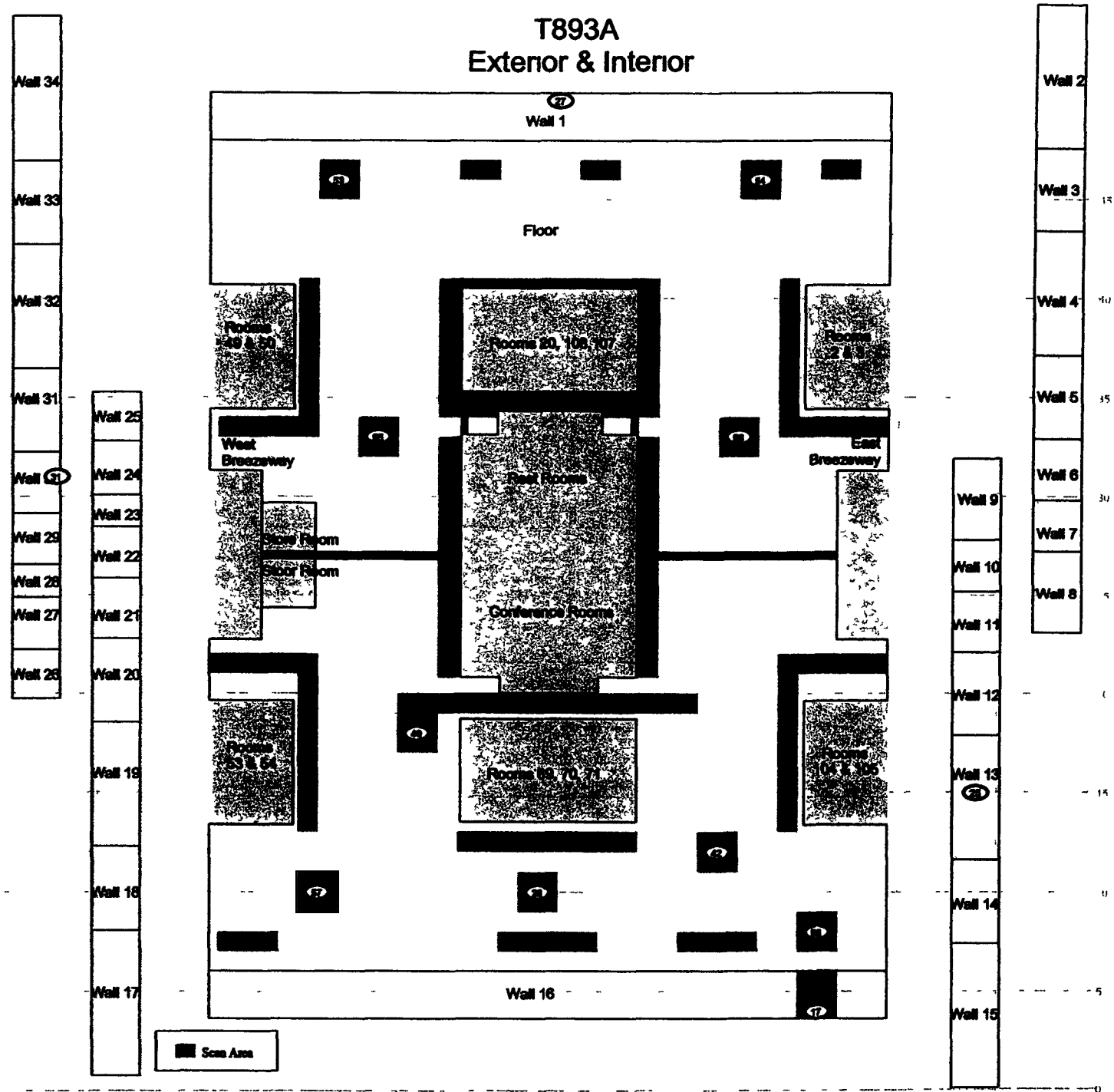
U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. [illegible] Prepared for:
DynCorp
THE ART OF TECHNOLOGY
[redacted]
MAP ID: [illegible] February [illegible], 2002

G15-A-008

130

PRE-DEMOLITION SURVEY

Survey Area. A | Survey Unit: G15-A-008 | Classification: 3
Building: T893A
Survey Unit Description Interior & Exterior | Total Roof Area 1467 sq m.
Total Area: 6764 sq. m. | Total Floor Area: 1424 sq. m.



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,11,12
RCT ID #(s): 1,3,4

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. 303-000-770 Prepared for:
DynCorp
THE ART OF TECHNOLOGY

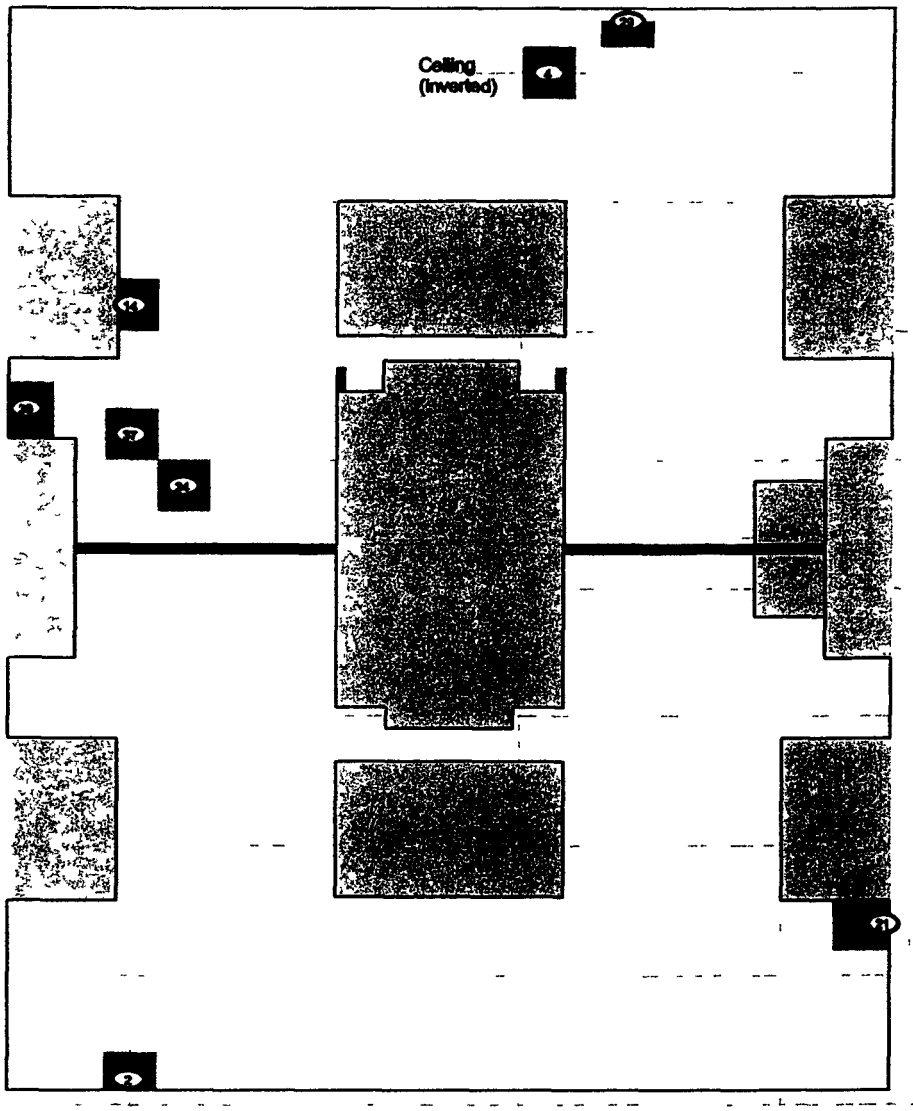
MAP ID: 1-02-0140/T893A-3 December 3, 2001

131

PRE-DEMOLITION SURVEY

Survey Area A | Survey Unit: G15-A-008 | Classification 3
Building: T893A
Survey Unit Description Interior & Exterior | Total Roof Area 1467 sq m.
Total Area. 6764 sq. m. | Total Floor Area: 1424 sq. m.

T893A
Interior ceiling



Scan Area

SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MAT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,11,12
RCT ID #(s): 1,3,4

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

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

Prepared by: GIS Dept. [illegible] Prepared for:

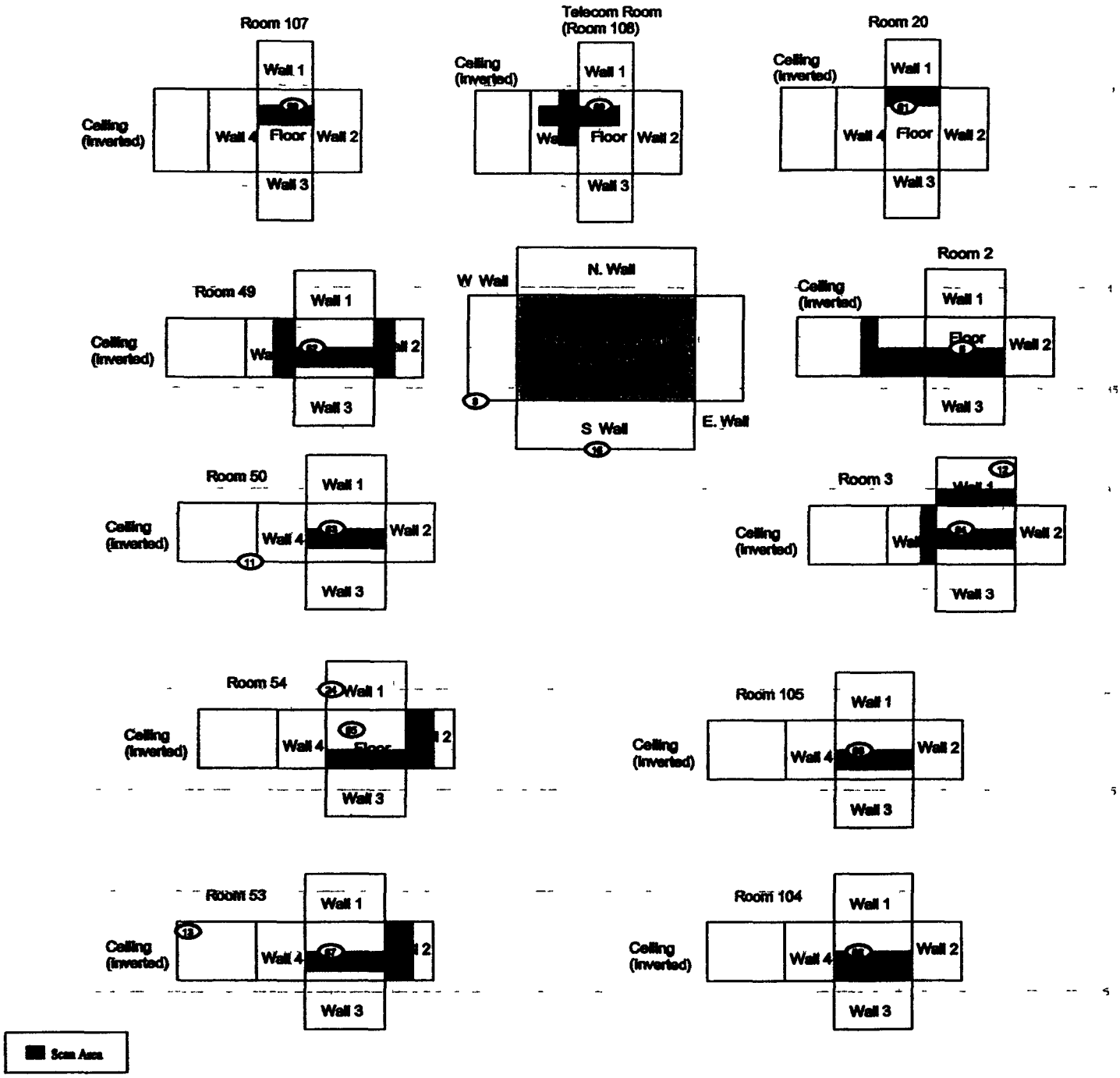
DynCorp
THE ART OF TECHNOLOGY

MAP ID: [illegible] February [illegible], [illegible]

132

PRE-DEMOLITION SURVEY

Survey Area. A Survey Unit: G15-A-008 Classification 3
Building T893A
Survey Unit Description Interior & Exterior Total Roof Area. 1467 sq m.
Total Area: 6764 sq. m. Total Floor Area: 1424 sq. m.



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,11,12
RCT ID #(s): 1,3,4

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. 303-966-7700 Prepared for:

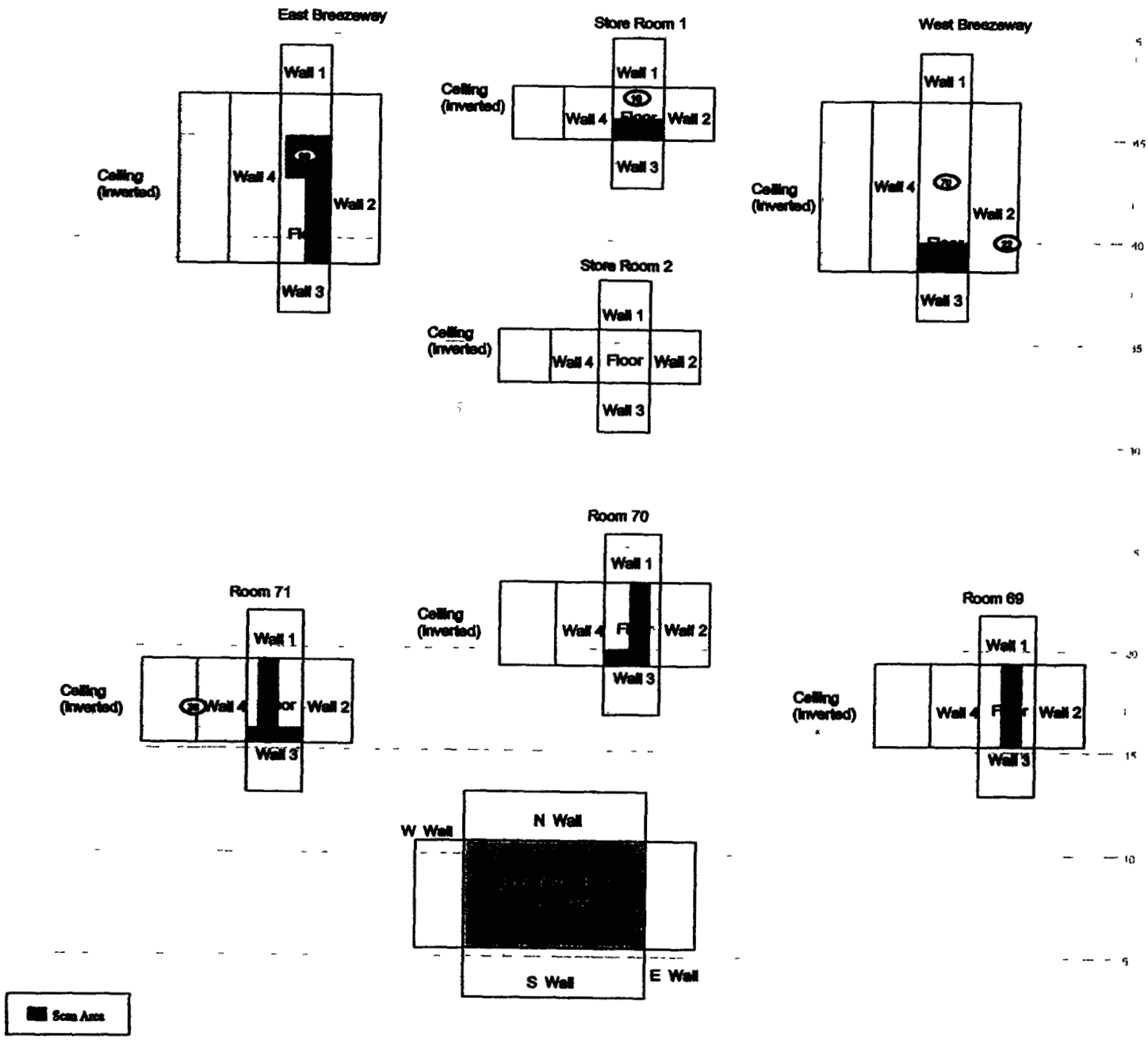
DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0149/T893A-00C February 28, 2002

133

PRE-DEMOLITION SURVEY

Survey Area: A | Survey Unit: G15-A-008 | Classification: 3
Building: T893A
Survey Unit Description: Interior & Exterior | Total Roof Area. 1467 sq m.
Total Area. 6764 sq. m. | Total Floor Area. 1424 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): 7,8,9,10,11,12
RCT ID #(s): 1,3,4

N

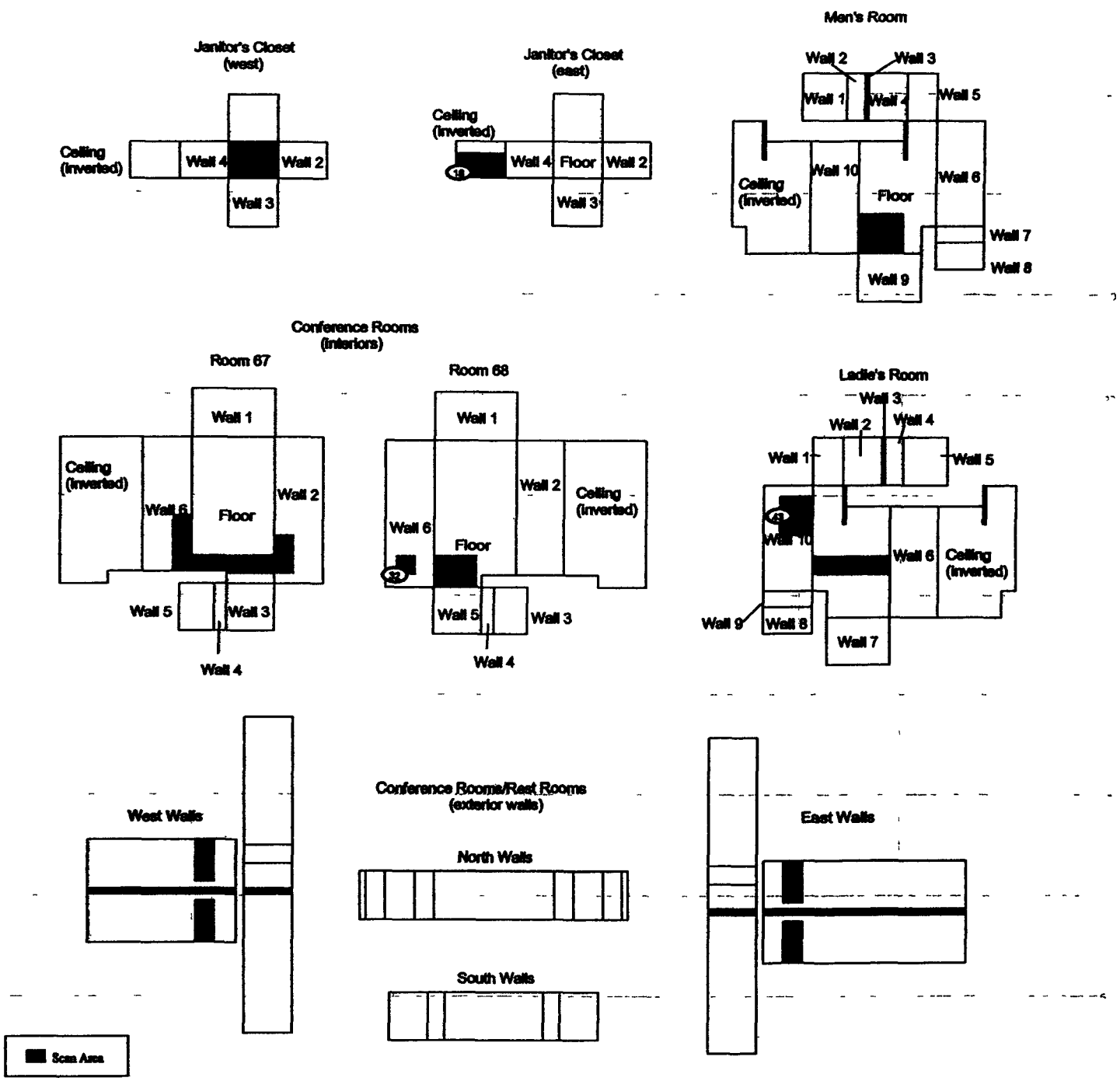
0 FEET 30
0 METERS 10
1 inch = 24 feet 1 grid sq. = 1 sq. m.

U.S. Department of Energy
Rocky Flats Environmental Technology Site
Prepared by: GIS Dept. 303-966-7700 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: 02-0140/T893A-008C
February 28, 2002

134

PRE-DEMOLITION SURVEY

Survey Area. A Survey Unit: G15-A-008 Classification 3
Building. T893A
Survey Unit Description Interior & Exterior Total Roof Area. 1467 sq m.
Total Area: 6764 sq. m. Total Floor Area: 1424 sq. m.



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,11,12
RCT ID #(s): 1,3,4

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. 303-000-7707 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0140/T893A-7DC February 28, 2002

135

SURVEY UNIT G15-A-009
RADIOLOGICAL DATA SUMMARY

Survey Unit Description: Interior & Exterior of T893B

136

G15-A-009
Radiological
Data Summary

Total Surface Activity Measurements

	Number Required	Number Obtained	
	70	70	
MIN	-14 7		dpm/100 cm^2
MAX	87 1		dpm/100 cm^2
MEAN	11 3		dpm/100 cm^2
STD DEV	21.2		dpm/100 cm^2
TRANSURANIC DCGL$_W$	100		dpm/100 cm^2

Removable Activity Measurements

	Number Required	Number Obtained	
	70	70	
MIN	-0 6		dpm/100 cm^2
MAX	8 8		dpm/100 cm^2
MEAN	0 9		dpm/100 cm^2
STD DEV	1 9		dpm/100 cm^2
TRANSURANIC DCGL$_W$	20		dpm/100 cm^2

137

SURVEY UNIT G15-A-009
TSA DATA SUMMARY

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra
Model	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	9	10	11
Serial #:	396	3114	396	3114
Cal Due Date:	6/10/02	4/25/02	6/10/02	4/25/02
Analysis Date:	1/29/02	1/30/02	2/4/02	2/4/02
Alpha Eff. (c/d):	0.229	0.209	0.229	0.209
Alpha Bkgd (cpm)	2.0	4.7	0.3	3.3
Sample Time (min)	1.5	1.5	1.5	1.5
LAB Time (min)	1.5	1.5	1.5	1.5
MDC (dpm/100cm^2)	32.2	49.0	17.8	42.6

Sample Location Number	Instrument ID#:	Sample Gross Counts (cpm)	Sample Gross Activity (dpm/100cm2)	LAB Gross Counts (cpm)	LAB Gross Activity (dpm/100cm2)	Sample Net Activity (dpm/100cm2)[1]
1	7	4.0	17.5	5.3	23.1	-5.9
2	7	12.7	55.5	8.0	34.9	32.1
3	10	8.0	34.9	4.0	17.5	11.5
4	7	5.3	23.1	4.7	20.5	-0.3
5	10	21.3	93.0	5.3	23.1	69.6
6	7	8.7	38.0	5.3	23.1	14.6
7	7	6.7	29.3	4.7	20.5	5.9
8	7	7.3	31.9	4.7	20.5	8.5
9	10	8.0	34.9	7.3	31.9	11.5
10	11	17.3	82.8	4.7	22.5	59.4
11	7	2.7	11.8	2.0	8.7	-11.6
12	9	6.7	32.1	4.7	22.5	8.7
13	7	7.3	31.9	6.7	29.3	8.5
14	10	8.7	38.0	2.0	8.7	14.6
15	9	5.3	25.4	6.7	32.1	2.0
16	10	5.3	23.1	2.7	11.8	-0.3
17	9	9.3	44.5	10.7	51.2	21.1
18	10	25.3	110.5	4.7	20.5	87.1
19	11	20.0	95.7	3.3	15.8	72.3
20	9	10.0	47.8	2.0	9.6	24.4
21	7	4.7	20.5	5.3	23.1	-2.9
22	7	11.3	49.3	2.7	11.8	25.9
23	7	6.7	29.3	9.3	40.6	5.9
24	7	8.0	34.9	4.0	17.5	11.5
25	9	6.0	28.7	9.3	44.5	5.3
26	9	9.3	44.5	2.7	12.9	21.1
27	9	5.3	25.4	3.3	15.8	2.0
28	7	4.0	17.5	3.3	14.4	-5.9
29	9	6.7	32.1	7.3	34.9	8.7
30	10	22.0	96.1	4.7	20.5	72.7
31	10	16.0	69.9	4.7	20.5	46.5
32	10	9.3	40.6	10.0	43.7	17.2
33	7	4.0	17.5	5.3	23.1	-5.9
34	10	16.0	69.9	4.7	20.5	46.5
35	10	6.0	26.2	4.0	17.5	2.8
36	7	4.7	20.5	6.0	26.2	-2.9
37	7	3.3	14.4	3.3	14.4	-9.0
38	9	8.0	38.3	7.3	34.9	14.9
39	9	7.3	34.9	4.7	22.5	11.5
40	10	4.7	20.5	5.3	23.1	-2.9
41	10	4.7	20.5	2.0	8.7	-2.9
42	7	4.0	17.5	2.0	8.7	-5.9
43	7	6.0	26.2	0.7	3.1	2.8
44	10	11.3	49.3	6.0	26.2	25.9
45	10	7.3	31.9	4.7	20.5	8.5

138

SURVEY UNIT G15-A-009
TSA DATA SUMMARY

Manufacturer:	NE Electra	NE Electra	NE Electra	NE Electra
Model.	DP-6	DP-6	DP-6	DP-6
Instrument ID#:	7	9	10	11
Serial #:	396	3114	396	3114
Cal Due Date:	6/10/02	4/25/02	6/10/02	4/25/02
Analysis Date:	1/29/02	1/30/02	2/4/02	2/4/02
Alpha Eff. (c/d):	0.229	0.209	0.229	0.209
Alpha Bkgd (cpm)	2.0	4 7	0.3	3.3
Sample Time (min)	1 5	1.5	1 5	1 5
LAB Time (min)	1 5	1.5	1 5	1 5
MDC (dpm/100cm^2)	32.2	49 0	17 8	42.6

46	10	6.7	29.3	1.3	5 7	5 9
47	10	9.3	40 6	7.3	31 9	17.2
48	10	10.0	43 7	4 0	17 5	20.3
49	10	8.0	34 9	4 0	17.5	11.5
50	10	2.0	8.7	6.0	26.2	-14.7
51	10	6.7	29.3	6.0	26.2	5 9
52	10	4 0	17.5	4.0	17.5	-5 9
53	10	4 0	17.5	4.7	20 5	-5.9
54	10	8 0	34.9	2.7	11 8	11 5
55	10	6.0	26.2	8.0	34 9	2.8
56	7	8 0	34 9	10 0	43 7	11.5
57	7	5.3	23 1	4 0	17 5	-0.3
58	7	2.0	8.7	12.7	55.5	-14.7
59	7	5.3	23 1	10 7	46.7	-0.3
60	7	9.3	40 6	8 0	34 9	17.2
61	7	5.3	23 1	2.7	11 8	-0.3
62	7	4 7	20 5	8.7	38.0	-2.9
63	7	4 0	17 5	2.7	11 8	-5.9
64	7	6 7	29 3	6.7	29.3	5 9
65	9	10 0	47 8	4 0	19 1	24.4
66	9	4 7	22.5	7.3	34 9	-0.9
67	7	2.7	11 8	3.3	14 4	-11 6
68	7	4 0	17.5	3.3	14 4	-5.9
69	7	6.0	26.2	6 7	29.3	2.8
70	7	4.7	20.5	6.7	29.3	-2.9
					23 4	Sample LAB Average
					MIN	-14.7
					MAX	87 1
					MEAN	11.3
					SD	21.2
					Transuranic DCGL$_w$	100

1 - Average LAB used to subtract from Gross Sample Activity

QC Measurements

2QC	9	2.7	12.9	5.3	25 4	-11 0
57QC	9	6 1	29.2	4 0	19 1	5.3
34QC	11	17.3	82.8	6.0	28.7	58.9
30QC	11	19.3	92.3	4 7	22.5	68.4
					23.9	QC LAB Average
					QC MIN	-11 0
					QC MAX	68 4
					QC MEAN	30.4
					QC SD	39.2
					Transuranic DCGL$_w$	100

1 Average QC LAB used to subtract from Gross Sample Activity

139

140

SURVEY UNIT G15-A-009
SMEAR DATA SUMMARY

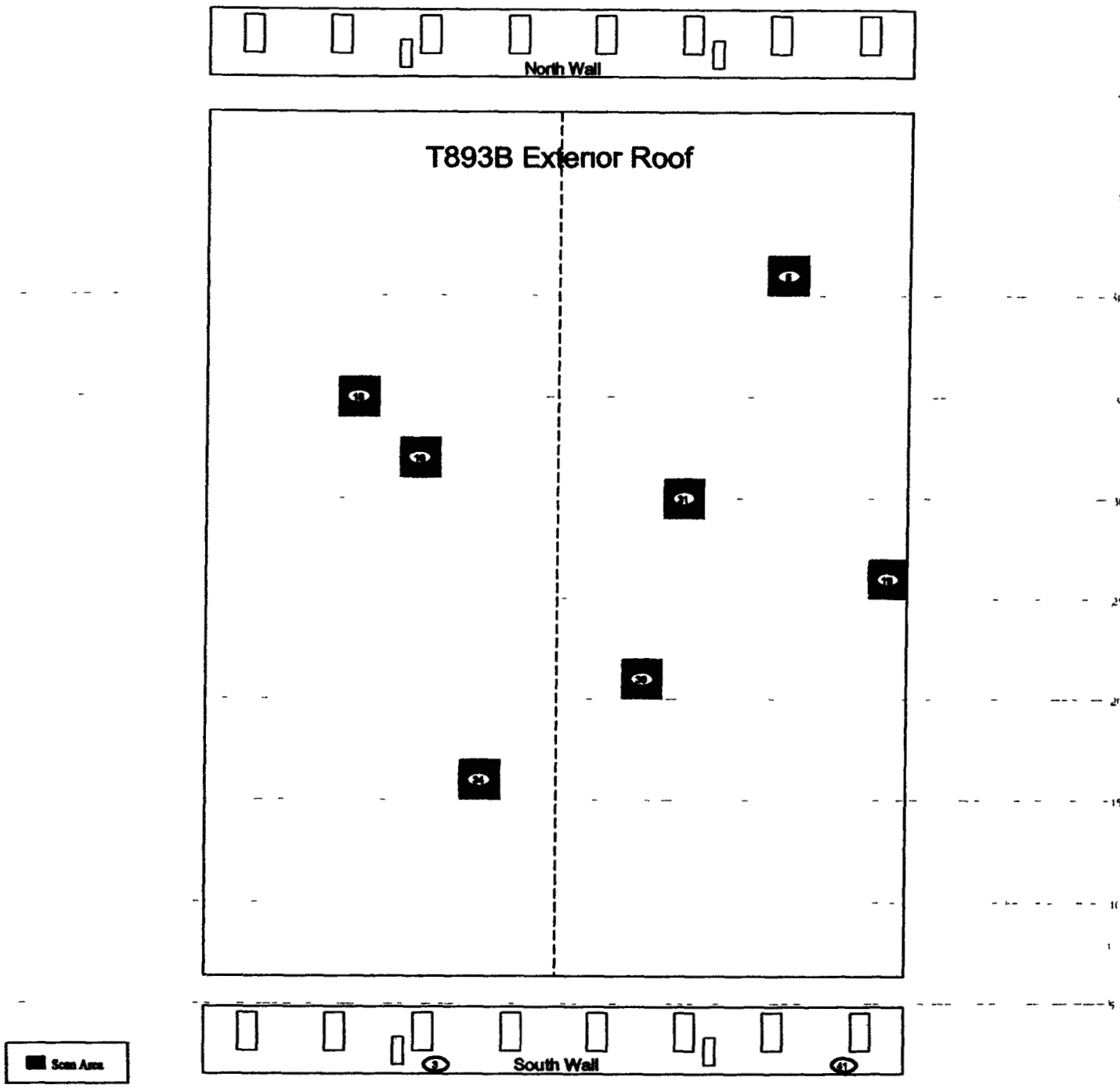
Manufacturer:	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline	Eberline
Model:	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4	SAC-4
Instrument ID#:	1	2	3	4	5	6	13	14	15	16	17	18
Serial #:	767	1164	830	959	767	1164	830	959	767	1164	830	959
Cal Due Date:	4/30/02	5/13/02	2/16/02	7/14/02	4/30/02	5/13/02	2/16/02	7/14/02	4/30/02	5/13/02	2/16/02	7/14/02
Analysis Date:	1/29/02	1/29/02	1/29/02	1/29/02	1/30/02	1/30/02	1/30/02	1/30/02	2/4/02	2/4/02	2/4/02	2/4/02
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
Alpha Bkgd (cpm)	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2
Sample Time (min)	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
MDC (dpm/100cm²)	7.0	4.5	7.0	4.5	7.0	7.0	4.5	7.0	7.0	7.0	7.0	8.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm²)
1	1	0.0	-0.3
2	2	0.0	0.0
3	15	0.0	-0.3
4	1	0.0	-0.3
5	15	1.0	2.7
6	1	0.0	-0.3
7	1	0.0	-0.3
8	3	0.0	-0.3
9	16	0.0	-0.3
10	16	1.0	2.7
11	1	0.0	-0.3
12	5	1.0	2.7
13	2	0.0	0.0
14	16	0.0	-0.3
15	14	0.0	-0.3
16	15	0.0	-0.3
17	13	0.0	0.0
18	17	1.0	2.7
19	15	1.0	2.7
20	14	0.0	-0.3
21	4	2.0	6.1
22	3	0.0	-0.3
23	2	1.0	3.0
24	3	1.0	2.7
25	5	0.0	-0.3
26	6	0.0	-0.3
27	18	1.0	2.4
28	3	0.0	-0.3
29	6	0.0	-0.3
30	15	3.0	8.8
31	16	1.0	2.7
32	18	0.0	-0.6
33	2	1.0	3.0
34	18	2.0	5.5
35	16	0.0	-0.3
36	1	1.0	2.7
37	4	0.0	0.0

Sample Location Number	Instrument ID#	Gross Counts (cpm)	Net Activity (dpm/100 cm²)
38	13	0.0	0.0
39	14	0.0	-0.3
40	17	1.0	2.7
41	18	1.0	2.4
42	2	0.0	0.0
43	4	1.0	3.0
44	18	0.0	-0.6
45	16	0.0	-0.3
46	18	1.0	2.4
47	17	0.0	-0.3
48	18	0.0	-0.6
49	15	0.0	-0.3
50	17	0.0	-0.3
51	17	0.0	-0.3
52	15	0.0	-0.3
53	16	0.0	-0.3
54	17	1.0	2.7
55	15	0.0	-0.3
56	1	0.0	-0.3
57	1	0.0	-0.3
58	2	0.0	0.0
59	4	0.0	0.0
60	3	0.0	-0.3
61	4	0.0	0.0
62	2	0.0	0.0
63	1	0.0	-0.3
64	2	0.0	0.0
65	13	0.0	0.0
66	17	1.0	2.7
67	2	1.0	3.0
68	3	0.0	-0.3
69	4	0.0	0.0
70	4	1.0	3.0
		MIN	-0.6
		MAX	8.8
		MEAN	0.9
		SD	1.9
		Transuranic $DCGL_w$	20

PRE-DEMOLITION SURVEY

Survey Area A Survey Unit: G15-A-009 Classification. 3
Building T893B
Survey Unit Description Interior & Exterior Total Roof Area: 1467 sq. m.
Total Area 6750 sq. m. Total Floor Area. 1389 sq. m.



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MRK, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,
RCT ID #(s): 1,2,3

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. 303-000-7700 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
[redacted]

MAP ID: 02-0140/T893B-1BC FEBRUARY 20, 2002

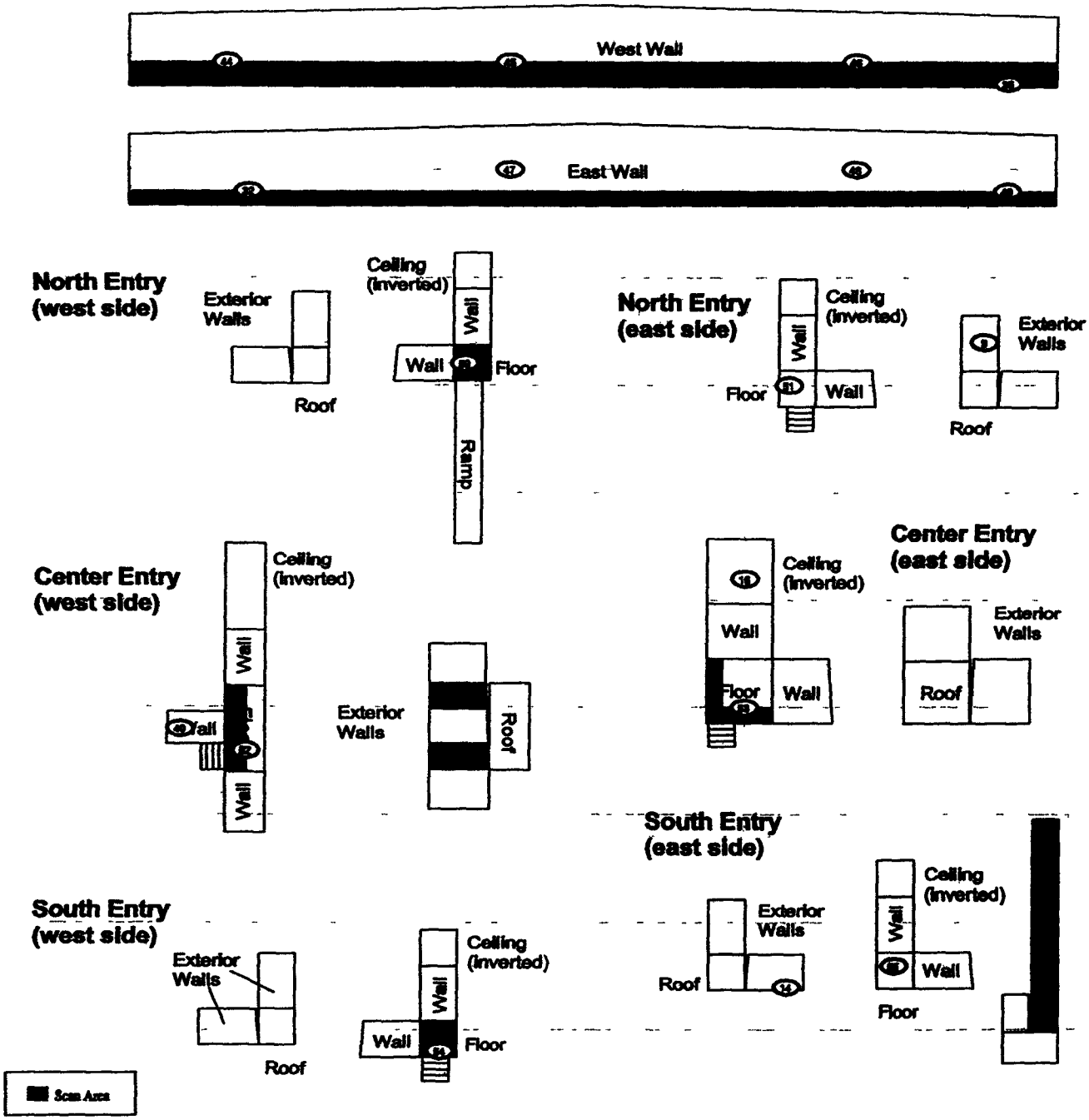
G15-A-009

141

PRE-DEMOLITION SURVEY

Survey Area. A Survey Unit: G15-A-009 Classification 3
Building: T893B
Survey Unit Description Interior & Exterior Total Roof Area: 1467 sq. m.
Total Area. 6750 sq m. Total Floor Area 1389 sq. m.

T893B Exterior



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MAST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,
RCT ID #(s): 1,2,3

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. 303-966-7700 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

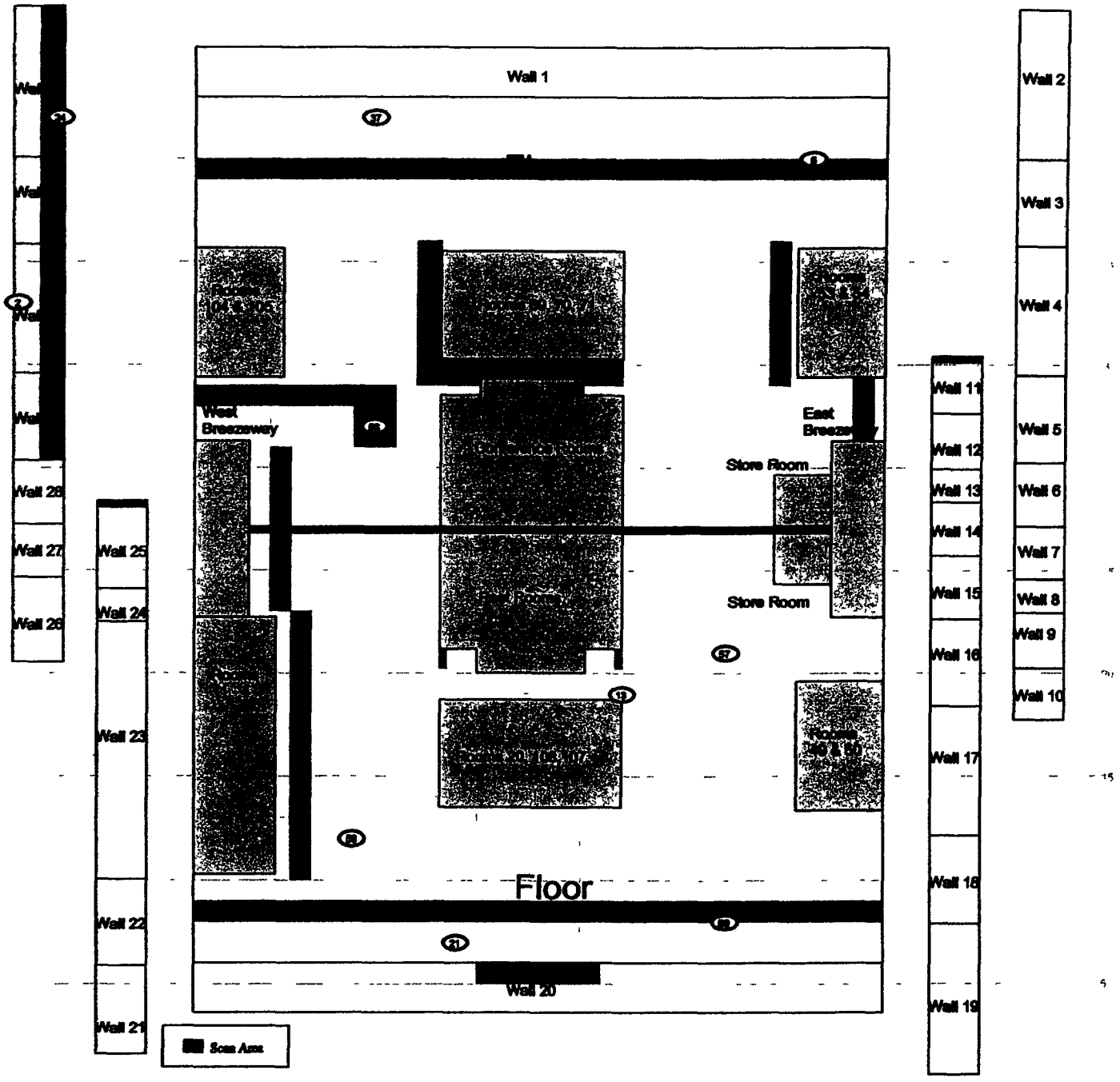
MAP ID: 02-0140/T893B-SSC February 20, 2002

142

PRE-DEMOLITION SURVEY

Survey Area A Survey Unit: G15-A-009 Classification 3
Building: T893B
Survey Unit Description Interior & Exterior Total Roof Area: 1467 sq. m.
Total Area. 6750 sq. m. Total Floor Area 1389 sq. m.

T893B Interior



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

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,
RCT ID #(s): 1,2,3

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: [illegible] Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: [illegible] February 28, 2002

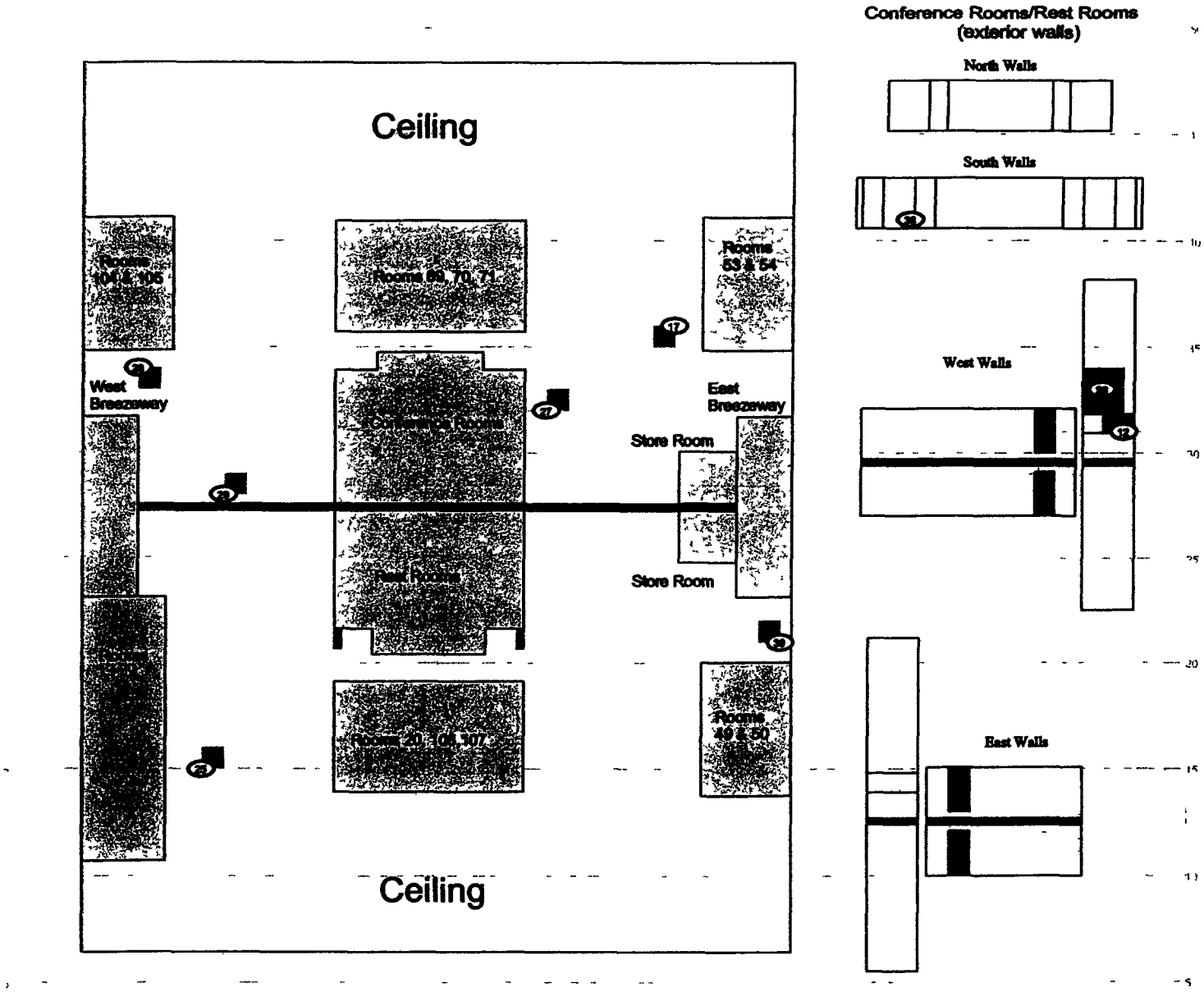
G15-A-009

143

PRE-DEMOLITION SURVEY

Survey Area A Survey Unit: G15-A-009 Classification 3
Building. T893B
Survey Unit Description Interior & Exterior Total Roof Area. 1467 sq. m.
Total Area. 6750 sq m. Total Floor Area 1389 sq. m.

T893B Interior



Scan Area

SURVEY MAP LEGEND

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

Neither the United States Government nor Lockheed Martin Co., nor DynCorp IMSC, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,
RCT ID #(s): 1,2,3

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. 303-966-4700 Prepared for:
DynCorp
THE ART OF TECHNOLOGY
MAP ID: 98-0149/T893B-49C February 20, 2002

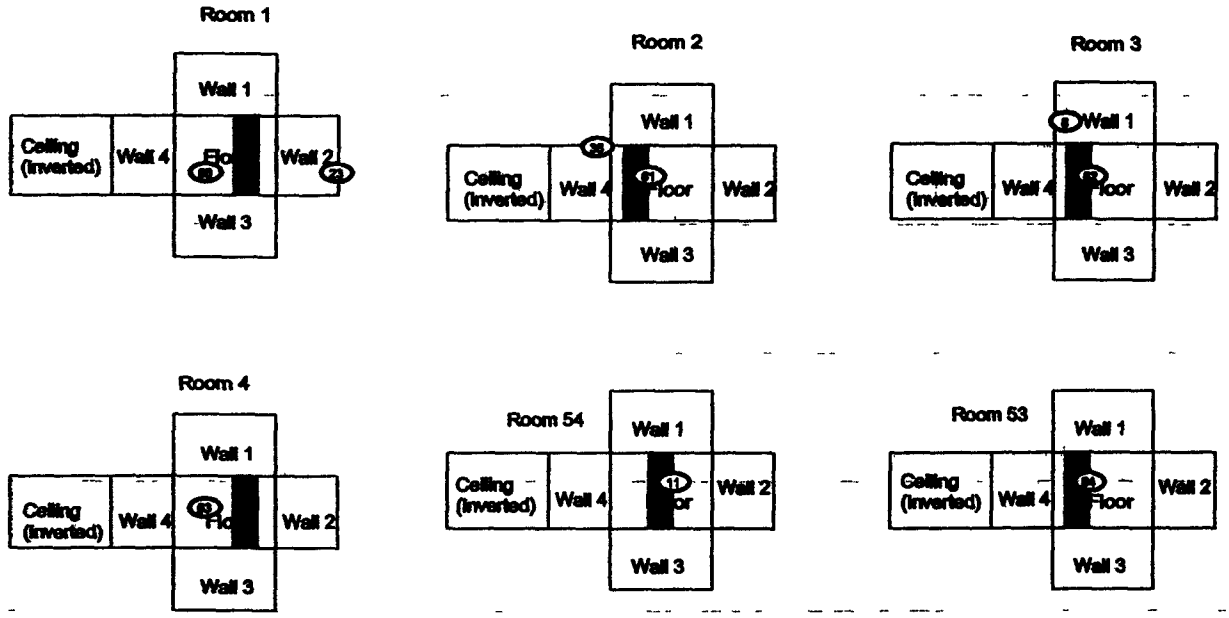
G15-A-009

144

PRE-DEMOLITION SURVEY

Survey Area: A Survey Unit: G15-A-009 Classification: 3
Building T893B
Survey Unit Description Interior & Exterior Total Roof Area: 1467 sq. m.
Total Area. 6750 sq. m. Total Floor Area. 1389 sq. m.

T893B Interior



Scan Area

SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MHC, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Scan Survey Information
Survey Instrument ID #(s): 7,8,9,10,
RCT ID #(s): 1,2,3

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-[illegible] Prepared for:

DynCorp
THE ART OF TECHNOLOGY

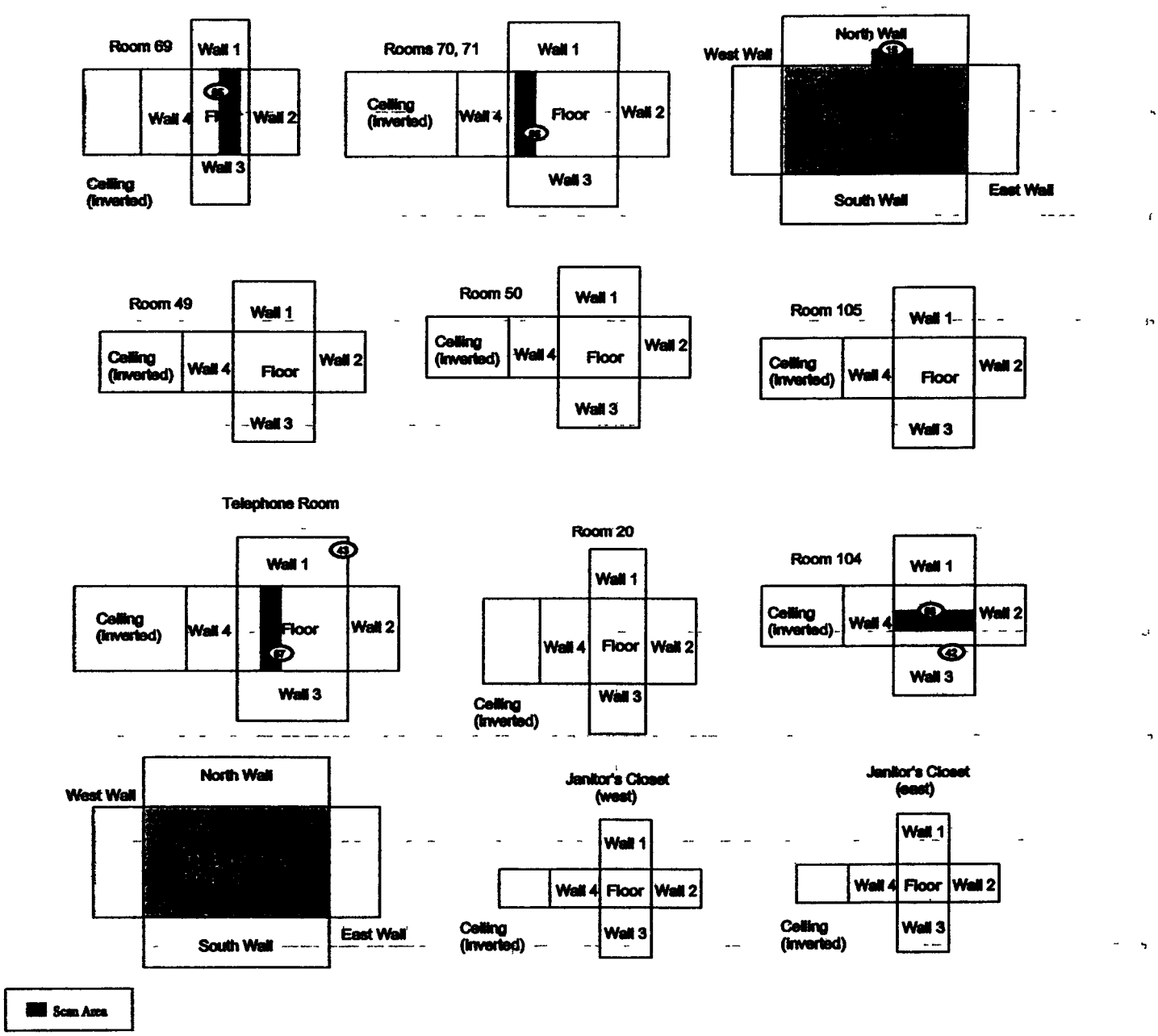
MAP ID: [illegible] February 20, 2002

145

PRE-DEMOLITION SURVEY

Survey Area. A Survey Unit: G15-A-009 Classification 3
Building T893B
Survey Unit Description Interior & Exterior Total Roof Area. 1467 sq. m.
Total Area 6750 sq m. Total Floor Area 1389 sq m.

T893B Interior



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): 7,8,9,10,
RCT ID #(s): 1,2,3

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. 303-966-7770 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0140/T893B-SDC February 20, 2002

146

147

Best Available Copy

Asbestos Data Summary

[illegible]	[illegible]	[illegible]	[illegible]
		Building 890	
890-12182001-315-201	**201**	**Roof – Black tar roofing and white fabric by sheet metal vent**	**12 % Chrysotile (black fibrous tar)**
890-12182001-315-202	**202**	**Roof – Black tar roofing by west wall**	**12 % Chrysotile (black fibrous tar) 65 % Chrysotile (brown fibrous material)**
890-12182001-315-203	**203**	**Roof – Black tar roofing by sheet metal vent**	**65 % Chrysotile (Gray/brown fibrous material)**
		Building 881H	
881H-12182001-315-204	204	Main Room – Black tar on west wall	None Detected
881H-12182001-315-205	205	Main Room – Black tar on west wall	None Detected
881H-12182001-315-206	206	Main Room – Black tar on west wall	None Detected
881H-12182001-315-207	207	Exterior – White exterior caulking, north conduit penetration	None Detected
881H-12182001-315-208	208	White caulking at base of south, corrugated metal siding	None Detected
881H-01312002-315-318	318	Brown and gray roof caulking, SE corner	None Detected
		Building 881G	
881G-12182001-315-209	209	North Room – Supply line for faucet, white plaster block on east pipe, friable TSI	None Detected
881G-12182001-315-210	210	North Room – Supply line for fire suppression, white plaster on middle pipe, friable TSI	None Detected
881G-12182001-315-211	211	North Room – Supply line for fire suppression, white plaster block on west pipe, friable TSI	None Detected
881G-12182001-315-212	212	North Room – Core sample of exhaust collar, white friable TSI	None Detected
881G-12182001-315-213	213	North Room – Core sample of exhaust pipe, white friable TSI	None Detected
881G-12182001-315-214	214	North Room – White plaster from collar, friable TSI	None Detected
881G-12182001-315-215	215	North Room – Core sample of exhaust collar, white friable TSI	None Detected
881G-12182001-315-216	216	North Room – Core sample of exhaust pipe, white friable TSI	None Detected
881G-12182001-315-217	217	North Room – Cinderblock paint/skim coat, north wall	None Detected
881G-12182001-315-218	218	North Room – Cinderblock paint/skim coat, south wall	None Detected
881G-12182001-315-219	219	North Room – Cinderblock paint/skim coat, south wall	None Detected
881G-12182001-315-220	220	South Room – Generator exhaust pipe, white friable TSI	None Detected
881G-12182001-315-221	221	South Room – Generator exhaust pipe, white friable TSI	None Detected
881G-12182001-315-222	222	South Room – Generator exhaust pipe, white friable TSI	None Detected
881G-12182001-315-223	223	South Room – CMU, white paint/skim coat, north wall	None Detected
881G-12182001-315-224	224	South Room – CMU, white paint/skim coat, west wall	None Detected
881G-12182001-315-225	225	South Room – CMU, white paint/skim coat, south wall	None Detected
881G-01312002-315-315	315	Roof – White TSI on north exhaust stack	None Detected
881G-01312002-315-316	**316**	**Roof – Silver and black roofing tar, NW corner**	**5% Chrysotile**
881G-01312002-315-317	**317**	**Roof – Silver and black tar flashing at south stack**	**5% Chrysotile**

[illegible]	[illegible]	[illegible]	[illegible]
		881CT2	
881CT2-12192001-315-226	226	White and gray elbow, east side, friable TSI	None Detected
881CT2-12192001-315-227	227	White block TSI on pipe collar, west side, friable	None Detected
881CT2-12192001-315-228	228	Dark gray & white TSI on pipe collar, west side, friable	None Detected
881CT2-12192001-315-229	229	White block TSI on pipe collar, west side, friable	None Detected
881CT2-12192001-315-230	230	Gray & white TSI caulking over fiberglass, west side	None Detected
881CT2-12192001-315-231	231	White & gray elbow TSI, east side, friable	None Detected
		881CT3	
881CT3-12192001-315-232	232	White TSI caulking on valve collar, south side, friable	None Detected
881CT3-12192001-315-233	233	White TSI caulking on valve collar, south side, friable	None Detected
881CT3-12192001-315-234	234	White TSI caulking on valve collar, south side, friable	None Detected
881CT3-12192001-315-235	235	White TSI caulking on valve collar, south side, friable	None Detected
881CT3-12192001-315-236	236	White block TSI on water pipe, north side, friable	None Detected
881CT3-12192001-315-237	237	White block TSI on water pipe, east-west run, friable	None Detected
881CT3-12192001-315-238	238	White block TSI on water pipe, east-west run, friable	None Detected
		881CT4	
881CT4-12192001-315-239	239	White caulking over fiberglass ends, west side	None Detected
881CT4-12192001-315-240	240	White caulking over fiberglass ends, west side	None Detected
881CT4-12192001-315-241	241	White caulking over fiberglass ends, west side	None Detected
881CT4-12192001-315-242	242	White caulking over fiberglass ends, west side	None Detected
881CT4-12192001-315-243	243	White caulking over fiberglass ends, east side	None Detected
		T690N	
T690N-01022002-315-244	244	Room 1 – 2' x 4' white, speckled drop ceiling tile	None Detected
T690N-01022002-315-245	245	Room 1 – Drywall substrate ceiling, no joint compound	None Detected
T690N-01022002-315-246	246	Room 1 – Drywall substrate ceiling, joint compound	None Detected
T690N-01022002-315-247	247	Main Room – 2' x 4' white, speckled drop ceiling tile	None Detected
T690N-01022002-315-248	248	Main Room – Drywall ceiling substrate, no joint compound	None Detected
T690N-01022002-315-249	249	Main Room – Drywall substrate ceiling, joint compound	None Detected
T690N-01022002-315-250	250	Main Room – 2' x 4' white, speckled drop ceiling tile	None Detected
T690N-01022002-315-251	251	Women's – 12 " x 12" tan and brown vinyl floor tile	None Detected
T690N-01022002-315-252	252	Women's – 12 " x 12" tan and brown vinyl floor tile	None Detected
T690N-01022002-315-253	253	Men's – 12 " x 12" tan and brown vinyl floor tile	None Detected
		Building 850	
850-01082002-315-254	254	Basement Room 14 – Drywall	None Detected
850-01082002-315-255	255	Basement Room 14 – Drywall and joint compound	None Detected
850-01082002-315-256	256	Basement Room 12 – Mechanical room, rubbery "pookie" from fiberglass valve insulation	None Detected
850-01082002-315-257	257	Basement Room 12 – Drywall	None Detected
850-01082002-315-258	258	Basement Room 12 – Drywall & joint compound	None Detected
850-01082002-315-259	259	Basement Room 12 – 2' x 4' white, speckled acoustical tile stored in corner	None Detected

Sample Number	Map Sample Number	Material Sampled & Location	Analytical Results
850-01082002-315-260	260	Basement Room 12 – Light green, sandy finish coat on exterior concrete wall	None Detected
850-01082002-315-261	261	Basement Room 12 – Green and white paints from exterior wall	None Detected
850-01082002-315-262	262	Basement Room 11 – 12" x 12" black with white specks vinyl floor tile and black mastic	None Detected
850-01082002-315-263	263	Basement Landing – 12" x 12" black with white specks vinyl floor tile and black mastic	None Detected
850-01082002-315-264	264	Basement Stairs – 12" x 12"beige & tan vinyl floor tile and black mastic	None Detected
850-01082002-315-265	265	Basement Stairs – 12" x 12" tan & brown vinyl floor tile and black mastic	None Detected
850-01082002-315-266	266	Basement Landing – Brown base cove and brown mastic	None Detected
850-01082002-315-267	267	Basement Landing – Dark brown base cove and brown mastic	None Detected
850-01082002-315-268	268	Room 110 – Entry in NE corner; 12" x 12" white, tan , & brown floor tile and black mastic	None Detected
850-01082002-315-269	269	Room 110 – Photo Lab, 12" x 12" white, tan, & brown floor tile and black mastic	None Detected
850-01082002-315-270	270	Room 110 – Drywall & joint compound	None Detected
850-01082002-315-271	271	Room 107 – Main Hallway; 2' x 2' white, acoustical drop ceiling tile	None Detected
850-01082002-315-272	272	Room 107 – Main Hallway, drywall	None Detected
850-01082002-315-273	273	Room 107 – Main Hallway, joint compound	None Detected
850-01082002-315-274	274	Room 107 – Main Hallway; 2' x 4' white, acoustical drop ceiling tile	None Detected
850-01082002-315-275	275	Room 102B – 2' x 4' white, flecked, acoustical drop ceiling tile	None Detected
850-01082002-315-276	276	Room 102B – Drywall and joint compound	None Detected
850-01082002-315-277	277	Room 102B – 12" x 12" white, tan, & brown vinyl floor tile and black mastic	None Detected
850-01082002-315-278	278	Room 102B – 2' x 4' white, dotted, acoustical drop ceiling tile	None Detected
850-01082002-315-279	279	Room 102B – Drywall	None Detected
850-01082002-315-280	280	Room 102B – Joint compound	None Detected
850-01082002-315-281	281	Room 102B – 12" x 12" beige & tan vinyl floor tile and black mastic	None Detected
850-01082002-315-282	282	Room 101 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
850-01082002-315-283	283	Room 101 – Drywall	None Detected
850-01082002-315-284	284	Room 106 – Men's Room, 12" x 12" black with white specks vinyl floor tile & black mastic	None Detected
850-01082002-315-285	285	Room 105 – Women's, 12" x 12" black with white specks vinyl floor tile & black mastic	None Detected
850-01082002-315-286	286	Room 101 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
850-01082002-315-287	287	Room 101 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-288	288	Room 101 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-289	289	Room 101 – White caulking on seam of HVAC metal ducting, non-friable	None Detected
850-01082002-315-290	290	Room 101 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-291	291	Room 101 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-292	292	Room 101 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
850-01082002-315-293	293	Room 101 –Brown cove base and brown mastic	None Detected
850-01082002-315-294	294	Room 200 – Brown base cove with brown mastic	None Detected
850-01082002-315-295	295	Room 200 – Drywall, exterior wall	None Detected
850-01082002-315-296	**296**	**Room 211 – Drywall with tan & white "wash" fabric and brown adhesive**	**1.25 % Chrysotile by Point Count (brown adhesive)**
850-01082002-315-297	297	Room 211 – Brown base cove with brown mastic	None Detected

Sample Number	Area Number (Color Reference)	Material Sampled & Location	Analytical Results
850-01082002-315-298	298	Room 206 – Men's, 12" x 12" beige & tan vinyl floor tile with black mastic	None Detected
850-01082002-315-299	299	Restroom Hallway – Drywall	None Detected
850-01082002-315-300	300	Room 207 – Women's, 12" x 12" beige & tan vinyl floor tile with black mastic	None Detected
850-01082002-315-301	301	Room 200 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
850-01082002-315-302	302	Room 200 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
850-01082002-315-303	303	Room 200 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-304	304	Room 200 – White caulking on seam of HVAC metal ducting, non-friable	None Detected
850-01082002-315-305	305	Room 200 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-306	306	Room 200 – 2' x 3' white, speckled acoustical drop ceiling tile	None Detected
850-01082002-315-307	307	Room 200 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-308	308	Room 200 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-309	309	Room 200 – Drywall, south wall	None Detected
850-01082002-315-310	310	Room 200 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
850-01082002-315-311	311	Room 200 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
850-01082002-315-312	312	Room 200 – HVAC white seam tape from main to feeder, friable	None Detected
850-01082002-315-313	313	Room 200 – Drywall joint compound	None Detected
850-01082002-315-314	314	Room 200 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
850-1312002-315-319	319	Roof – Silver and black tar flashing at vent	None Detected
850-1312002-315-320	320	Roof – Silver and black roofing tar	None Detected
850-1312002-315-321	321	Roof – Brown caulking from skylight	None Detected
850-1312002-315-322	322	Roof – Black tar at skylight seam	None Detected
850-1312002-315-323	323	Roof – Silver and black flashing at hatch	None Detected
		Building	
		T891D	
T891D-01302002-315-201	201	West room – spray-on white popcorn ceiling texture and drywall substrate	None Detected
T891D-01302002-315-202	202	West room – Drywall with surfacing texture, east wall	None Detected
T891D-01302002-315-203	203	Main room – Spray-on white popcorn ceiling texture and drywall substrate	None Detected
T891D-01302002-315-204	204	Main room – Drywall with surfacing texture, north wall	None Detected
T891D-01302002-315-205	205	Main room – Spray-on white popcorn ceiling texture and drywall substrate	None Detected
T891D-01302002-315-206	206	East room – Drywall with surfacing texture, west wall	None Detected
T891D-01302002-315-207	207	East room – Drywall joint compound in SE corner	None Detected
T891D-01302002-315-208	208	West room – 12" x 12" white, brown, tan vinyl floor tile & brown mastic adhesive	None Detected
T891D-01302002-315-209	209	Main room – 12" x 12" white, brown, tan vinyl floor tile & brown mastic adhesive	None Detected
		T891F	
T891F-01302002-315-210	210	West room – white ceiling board	None Detected
T891F-01302002-315-211	211	West room – white ceiling board	None Detected
T891F-01302002-315-212	212	East room – white ceiling board	None Detected
T891F-01302002-315-213	**213**	**Rest room – brown caulking on vent pipe**	**10 % Chrysotile**
T891F-01302002-315-214	214	12" x 12" white & gray floor tile with brown adhesive	None Detected

Sample Number	Map Survey Point Location	Material Sampled & Location	Analytical Results
T891F-01302002-315-215	215	12" x 12" white & gray floor tile with brown adhesive	None Detected
		T891E	
T891E-01302002-315-216	216	Spray-on white popcorn ceiling texture & drywall substrate	None Detected
T891E-01302002-315-217	217	12" x 12" white & tan floor tile and brown adhesive	None Detected
T891E-01302002-315-218	218	Spray-on white popcorn ceiling texture & drywall substrate	None Detected
T891E-01302002-315-219	219	Spray-on white popcorn ceiling texture & drywall substrate	None Detected
T891E-01302002-315-220	220	Spray-on white popcorn ceiling texture & drywall substrate	None Detected
T891E-01302002-315-221	221	Spray-on white popcorn ceiling texture & drywall substrate	None Detected
T891E-01302002-315-222	222	Ceiling drywall substrate, no popcorn	None Detected
T891E-01302002-315-223	223	12" x 12" white & tan floor tile and brown adhesive	None Detected
T891E-01302002-315-224	224	12" x 12" white & tan floor tile and brown adhesive	None Detected
T891E-01302002-315-225	225	Drywall and joint compound	None Detected
T891E-01302002-315-226	226	Drywall and joint compound	None Detected
T891E-01302002-315-227	227	Drywall and joint compound	None Detected
T891E-01302002-315-228	228	Drywall and joint compound	None Detected
T891E-01302002-315-219	229	Drywall and joint compound	None Detected
		T904A	
T904A-02042002-315-230	230	West room – 12" x 12" gray & white vinyl floor tile with beige adhesive	None Detected
T904A-02042002-315-231	231	East room – 12" x 12" gray & white vinyl floor tile with beige adhesive	None Detected
T904A-02042002-315-232	232	West room – 3' x 8' white textured drywall ceiling panels	None Detected
T904A-02042002-315-233	233	East room – 3' x 8' white textured drywall ceiling panels	None Detected
T904A-02042002-315-234	234	West room – 3' x 8' white textured drywall ceiling panels	None Detected
		T893A	
T893A-02052002-315-235	235	Room 69 – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
T893A-02052002-315-236	236	Room 69 – Drywall only, ceiling substrate	None Detected
T893A-02052002-315-237	237	Room 69 – Drywall & joint compound, ceiling substrate	None Detected
T893A-02052002-315-238	238	Room 69 – Brown & white fabric wall panel with drywall	None Detected
T893A-02052002-315-239	239	Room 69 – Beige base cove with beige adhesive	None Detected
T893A-02052002-315-240	240	Interior – NE of room 69, drywall only, ceiling substrate	None Detected
T893A-02052002-315-241	241	Interior – NE of Room 69, drywall & joint compound, ceiling substrate	None Detected
T893A-02052002-315-242	242	Interior – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
T893A-02052002-315-243	243	Interior – West of rooms 2 & 3, drywall & joint compound, ceiling substrate	None Detected
T893A-02052002-315-244	244	Interior – West of rooms 2 & 3, 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
T893A-02052002-315-245	245	Interior – North exterior wall, drywall only	None Detected
T893A-02052002-315-246	246	Interior – North exterior wall, joint compound & tape only	None Detected
T893A-02052002-315-247	247	Interior – Gray and brown wall panel drywall, north exterior wall	None Detected
T893A-02052002-315-248	248	Interior – 2' x 4' white, speckled acoustical drop ceiling tile, north end	None Detected
T893A-02052002-315-249	249	East of room 49 – 2' x 4' white, speckled acoustical drop ceiling tile, north end	None Detected
T893A-02052002-315-250	250	East of room 49 – Drywall only, ceiling substrate	None Detected

Sample Number	Map Sample Point Location	Material Sampled/Location	Analytical Results
T893A-02052002-315-251	251	East of room 49 – Drywall and joint compound, ceiling substrate	None Detected
T893A-02052002-315-252	252	Room 71 – Gray and brown wall panel drywall, west wall	None Detected
T893A-02052002-315-253	253	Men's room – White sheet vinyl linoleum with square pattern	None Detected
T893A-02052002-315-254	254	Men's room – Beige base cove with brown adhesive	None Detected
T893A-02052002-315-255	255	Women's room – White sheet vinyl linoleum with square pattern	None Detected
		T893B	
T893B-02062002-315-256	256	Men's – White linoleum patch with square pattern	None Detected
T893B-02062002-315-257	257	Men's – Beige & white linoleum with square pattern	None Detected
T893B-02062002-315-258	258	Men's – Beige base cove and yellow adhesive	None Detected
T893B-02062002-315-259	259	Women's – Beige and white linoleum with square pattern	None Detected
T893B-02062002-315-260	260	Men's – Exterior wall with gray, brown, white fabric, drywall	None Detected
T893B-02062002-315-261	261	Breezeway – West exterior wall with gray, brown, white fabric, drywall	None Detected
T893B-02062002-315-262	262	Interior – North wall with brown, white fabric, drywall	None Detected
T893B-02062002-315-263	263	Conference room – East wall with brown, white fabric, drywall	None Detected
T893B-02062002-315-264	264	Interior – Drywall, ceiling substrate	None Detected
T893B-02062002-315-265	265	Interior – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
T893B-02062002-315-266	266	Interior – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
T893B-02062002-315-267	267	Interior – Drywall, ceiling substrate	None Detected
T893B-02062002-315-268	268	Interior – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
T893B-02062002-315-269	269	Interior – Divider drywall with brown, white fabric	None Detected
T893B-02062002-315-270	270	East Breezeway – White & tan linoleum	None Detected
T893B-02062002-315-271	271	East Breezeway – Beige linoleum	None Detected
T893B-02062002-315-272	272	Interior – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
T893B-02062002-315-273	273	Interior – 2' x 4' white, speckled acoustical drop ceiling tile, Cube 77	None Detected
T893B-02062002-315-274	274	Interior – Drywall, ceiling substrate	None Detected
T893B-02062002-315-275	275	Interior – 2' x 4' white, speckled acoustical drop ceiling tile	None Detected
T893B-02062002-315-276	276	Interior – North wall drywall with brown, white fabric	None Detected

Beryllium Data Summary

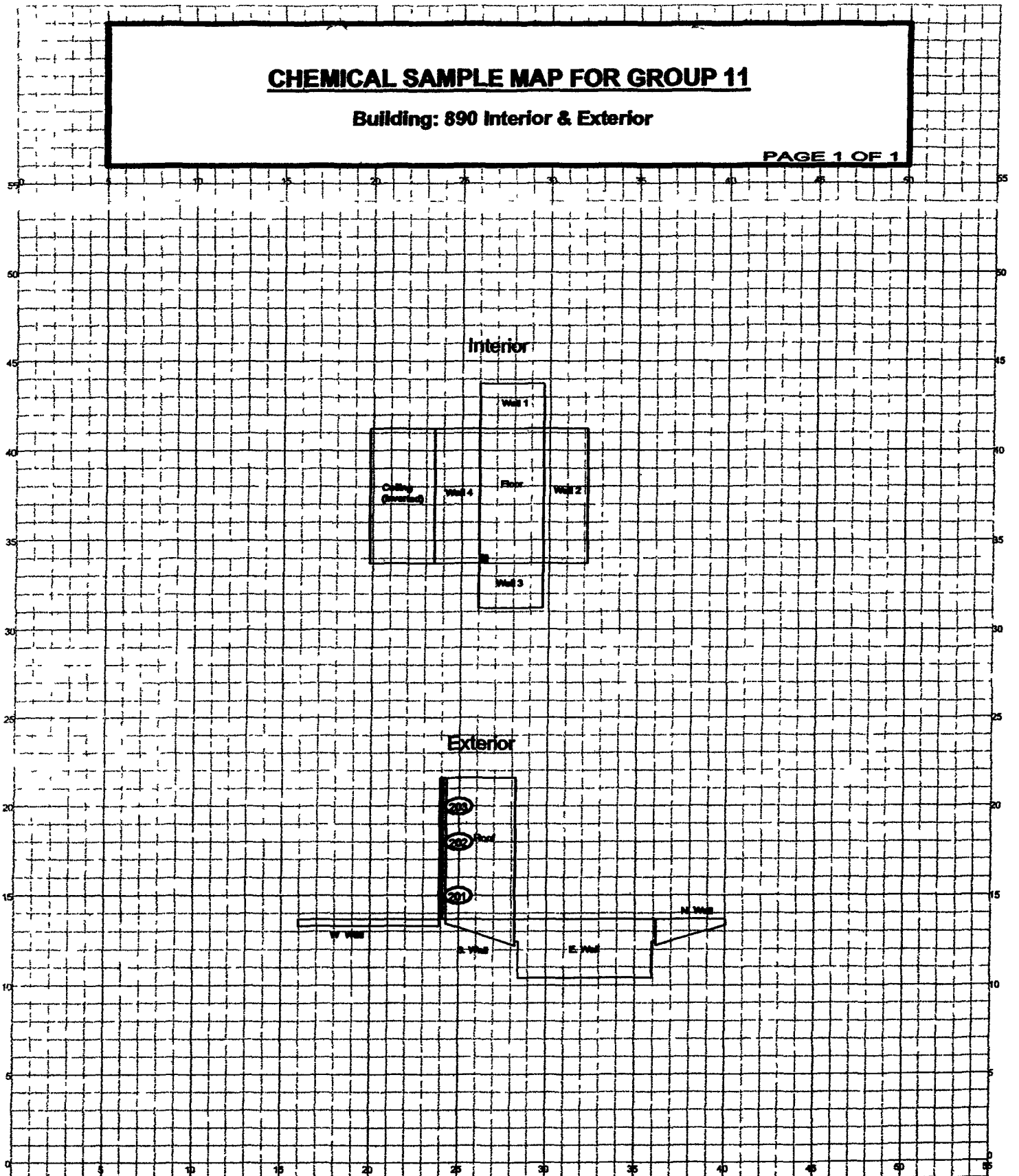
[illegible]	[illegible]	[illegible]	[illegible]
		Building 890	
890-12182001-315-101	101	Main – Top of metal shelf in NE corner	< 0 1
890-12182001-315-102	102	Main – Middle of concrete slab	< 0 1
890-12182001-315-103	103	Main – Concrete slab, south wall	< 0 1
890-12182001-315-104	104	Main – Top of metal shelf in SE corner	< 0 1
890-12182001-315-105	105	Main –Inside edge of pip penetration, west wall north end	< 0 1
		Building 881H	
881H-12182001-315-106	106	Main – Top of electrical box, west wall	< 0 1
881H-12182001-315-107	107	Main – Top of electrical conduit, west wall	< 0 1
881H-12182001-315-108	108	Main – Top of horizontal surface of angle iron conduit support, north wall	< 0 1
881H-12182001-315-109	109	Main – Top of red flange, fire suppression at east wall	< 0 1
881H-12182001-315-110	110	Main – Top of angle iron sway brace, east wall	< 0 1
		Building 881G	
881G-12182001-315-111	111	North Room – Top of east end of generator	< 0 1
881G-12182001-315-112	112	North Room – Top of La Marche ConstaVolt float, south wall	< 0 1
881G-12182001-315-113	113	North Room – Top of conduit wall support, south wall	< 0 1
881G-12182001-315-114	114	North Room – Top of west end of generator, Simplx panel	< 0 1
881G-12182001-315-115	115	North Room – Top of generator, base support I-beam	< 0 1
881G-12182001-315-116	116	South Room – Top of HVAC duct at south wall	< 0 1
881G-12182001-315-117	117	South Room – Top of generator	< 0 1
881G-12182001-315-118	118	South Room – Top of circuit breaker, north wall	< 0 1
881G-12182001-315-119	119	South Room – Top of LPIJ-1 breaker box, north wall	< 0 1
881G-12182001-315-120	120	South Room – Concrete floor by generator	< 0 1
		T690N	
T690N-01022002-315-126	126	Room 1 – Top of fluorescent light fixture	< 0 1
T690N-01022002-315-127	127	Main Room -- Top of fluorescent light fixture	< 0 1
T690N-01022002-315-128	128	Women's – Corner of floor on vinyl tile	< 0 1
T690N-01022002-315-129	129	Men's – Corner of floor on vinyl tile	< 0 1
T690N-01022002-315-130	130	Main Room – Top of metal shelving at secretary's desk	< 0 1
		Building 850	
850-01082002-315-131	131	Room 14 – Concrete floor of elevator pit	< 0 1
850-01082002-315-132	132	Room 15 – Top of elevator control panel	< 0 1
850-01082002-315-133	133	Room 12 – Inside plenum filter room on lip of outside air inlet	< 0 1
850-01082002-315-134	134	Room 11 – Concrete floor of storage room	< 0 1
850-01082002-315-135	135	Room 12 – Top of HVAC duct, east side	< 0 1
850-01082002-315-136	136	Room 107 – Main Hallway; top of electrical conduit above drop ceiling	< 0 1
850-01082002-315-137	137	Room 107 – Main Hallway; top of 2' x 4' white acoustical drop ceiling tile	< 0 1
850-01082002-315-138	138	Room 107 – Main Hallway; top of fire suppression water pipe	< 0 1

Sample Number	Map Number (Table 1-2 Map)	Sample Location	Result (pCi/100 cm²)
850-01082002-315-139	139	Room 102B – Top of fluorescent light fixture	<0.1
850-01082002-315-140	140	Room 101 – Top of fluorescent light fixture	<0.1
850-01082002-315-141	141	Room 101 – Top of channel for electrical cable	<0.1
850-01082002-315-142	142	Room 101 – Top of fluorescent light fixture	<0.1
850-01082002-315-143	143	Room 200 – Top of AC diffuser	<0.1
850-01082002-315-144	144	Room 200 – Top of fluorescent light fixture	<0.1
850-01082002-315-145	145	Room 200 – Top of fluorescent light fixture	<0.1
850-01082002-315-146	146	Room 200 – Top of fluorescent light fixture	<0.1
850-01082002-315-147	147	Room 200 – Top of hot water pipe, fiberglass insulation	<0.1
850-01082002-315-148	148	Room 200 – Top of 2' x 4' white speckled acoustical drop ceiling tile	<0.1
850-01082002-315-149	149	Room 200 – Top of channel for electrical cable	<0.1
850-01082002-315-150	150	Room 200 – Top of HVAC sheet metal ducting	<0.1
		[illegible]	
		T891D	
T891D-01302002-315-101	101	SW corner of desktop, west wall	<0.1
T891D-01302002-315-102	102	NE corner on floor	<0.1
T891D-01302002-315-103	103	Top of metal shelf, south wall	<0.1
T891D-01302002-315-104	104	Top of wooden shelf, west wall	<0.1
T891D-01302002-315-105	105	HVAC louvers, east wall	<0.1
		T891F	
T891F-01302002-315-106	106	Top of electrical box, west wall	<0.1
T891F-01302002-315-107	107	Top of wooden shelf in closet	<0.1
T891F-01302002-315-108	108	Top of lab table	<0.1
T891F-01302002-315-109	109	Top of wooden shelf, west wall	<0.1
T891F-01302002-315-110	110	Top of electrical baseboard heater, south wall	<0.1
		T891E	
T891E-01302002-315-111	111	Top of fluorescent light fixture	<0.1
T891E-01302002-315-112	112	Top of fluorescent light fixture	<0.1
T891E-01302002-315-113	113	Top of Public Address (PA) speaker	<0.1
T891E-01302002-315-114	114	Top of fluorescent light fixture	<0.1
T891E-01302002-315-115	115	Top of wooden PA speaker	<0.1
		T904A	
T904A-02042002-315-116	116	SW corner on floor, west room	<0.1
T904A-02042002-315-117	117	North side on floor, west room	<0.1
T904A-02042002-315-118	118	Top of metal lockers, north wall, west room	<0.1
T904A-02042002-315-119	119	Floor by west wall, east room	<0.1
T904A-02042002-315-120	120	Top of wooden shelf, east wall, east room	<0.1
		T900E	
T900E-02042002-315-121	121	Top of gray, metal control box,, main room	<0.1
T900E-02042002-315-122	122	Top of extracted vapors pipe, main room	<0.1
T900E-02042002-315-123	123	Top of air compressor tank, main room	<0.1

Sample Number	Air Survey Point Location	Sample Location	Result (pCi/100 cm²)
T900E-02042002-315-124	124	Top of JB-8D box, south wall, main room	< 0 1
T900E-02042002-315-125	125	Top of I-beam support for air compressor tank, main room	< 0 1
		T893A	
T893A-02052002-315-126	126	Top of south fluorescent light fixture, room 69	< 0 1
T893A-02052002-315-127	127	NE of room 69, top of fluorescent light fixture	< 0 1
T893A-02052002-315-128	128	West of rooms 2 & 3, top of fire suppression water pipe	< 0 1
T893A-02052002-315-129	129	Top of fluorescent light fixture, north end	< 0 1
T893A-02052002-315-130	130	Top of fluorescent light fixture, east of room 49	< 0 1
T893A-02052002-315-131	131	Top of fire suppression water pipe, east of room 49	< 0 1
T893A-02052002-315-132	132	Top of book shelf, Cube 73	< 0 1
T893A-02052002-315-133	133	Top of book shelf, Cube 33	< 0 1
T893A-02052002-315-134	134	Top of water heater, Janitor's Closet	< 0 1
T893A-02052002-315-135	135	SE corner of linoleum, Men's	< 0 1
T893A-02052002-315-136	136	At west wall on linoleum, Women's	< 0 1
T893A-02052002-315-137	137	Top of fluorescent light fixture	< 0 1
T893A-02052002-315-138	138	Top of metal shelf, Cube 81	< 0 1
T893A-02052002-315-139	139	Top of metal shelf, Cube 99	< 0 1
T893A-02052002-315-140	140	Top of metal shelf, SE corner	< 0 1
		T893B	
T893B-02062002-315-141	141	Floor on linoleum, Men's	< 0 1
T893B-02062002-315-142	142	Top of water heater, Janitor's Closet	< 0 1
T893B-02062002-315-143	143	Top of blue metal cabinet, Women's	< 0 1
T893B-02062002-315-144	144	Top of beige metal shelf, Cube 92	< 0 1
T893B-02062002-315-145	145	Top of beige metal shelf, Cube 66	< 0 1
T893B-02062002-315-146	146	Top of fire suppression water pipe	< 0 1
T893B-02062002-315-147	147	Top of AC disc diffuser	< 0 1
T893B-02062002-315-148	148	Top of AC disc diffuser	< 0 1
T893B-02062002-315-149	149	Top of beige metal shelf, Cube 77	< 0 1
T893B-02062002-315-150	150	Top of fire suppression water pipe	< 0 1
T893B-02062002-315-151	151	Top of angle iron sway brace	< 0 1
T893B-02062002-315-152	152	Top of fluorescent light fixture	< 0 1
T893B-02062002-315-153	153	Top of fire suppression water pipe	< 0 1
T893B-02062002-315-154	154	Top of angle iron brace	< 0 1
T893B-02062002-315-155	155	Top of fire extinguisher, west exterior wall	< 0 1

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 890 Interior & Exterior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp RMST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

DynCorp
THE ART OF TECHNOLOGY

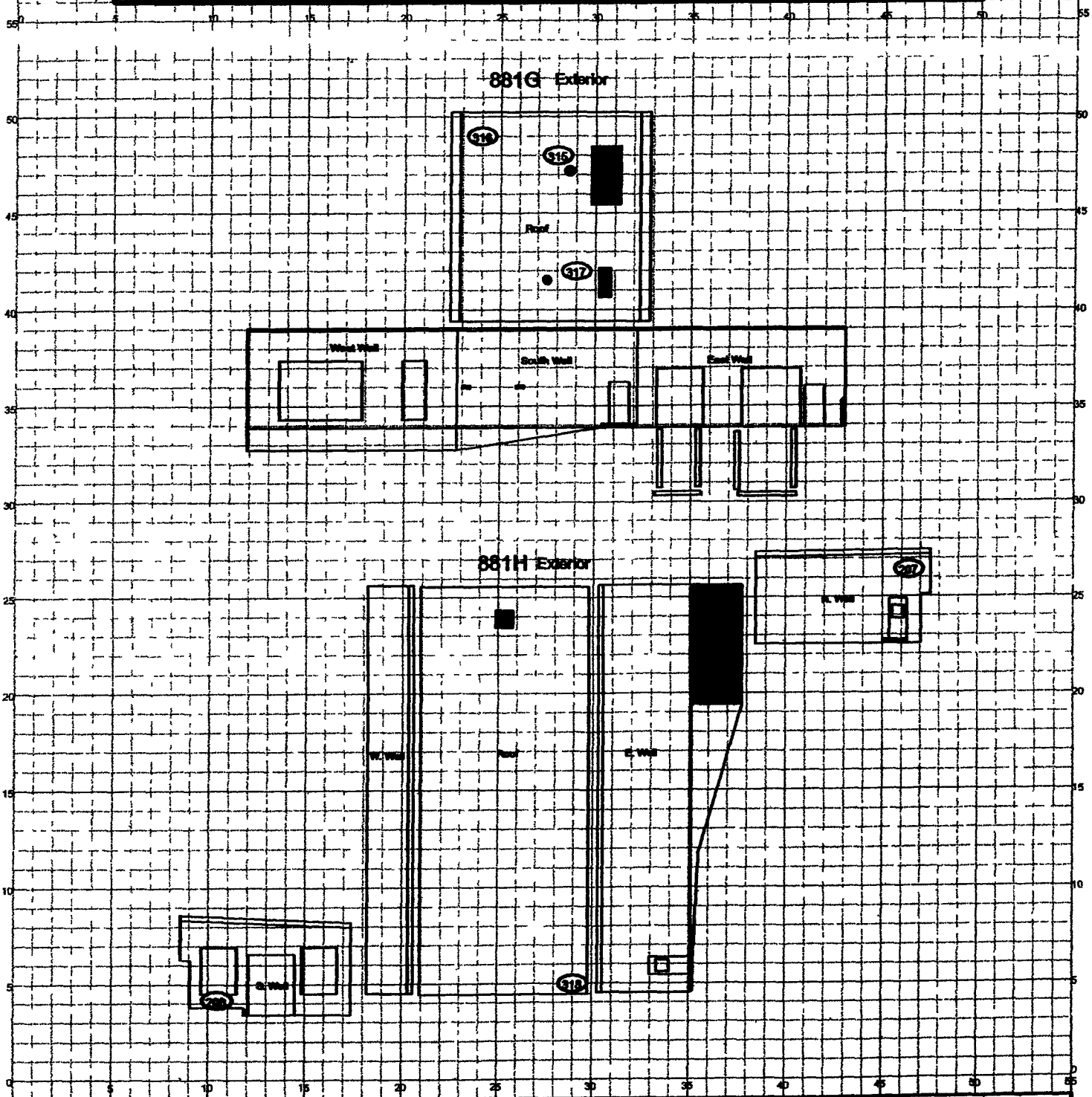
MAP ID: 02-0102999-AB

January 15, 2002

156

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 881 G & H



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp RMSC, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

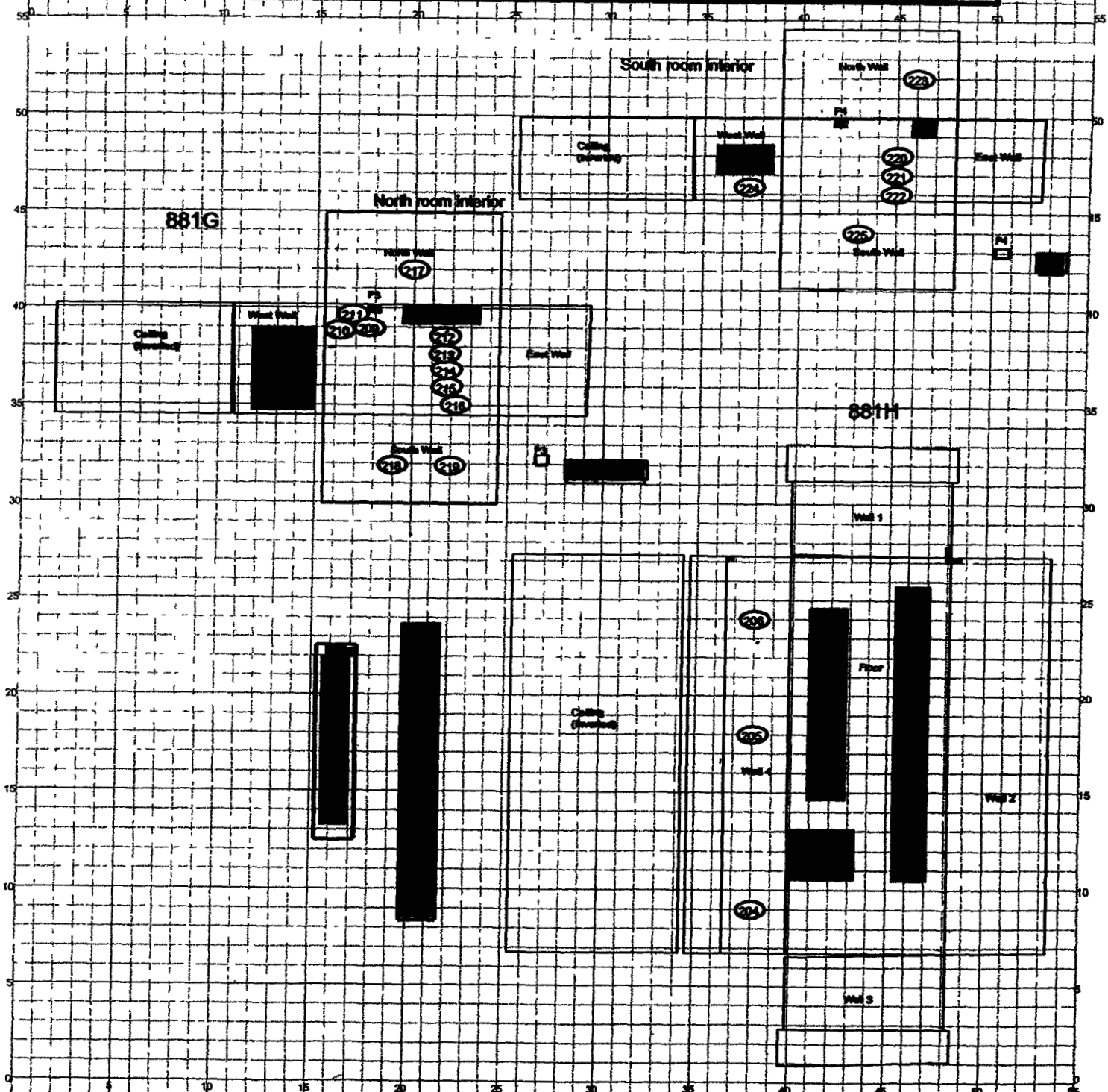
DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0102GH881-Ex-AB January 15, 2002

157

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 881 G & H



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp IMET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

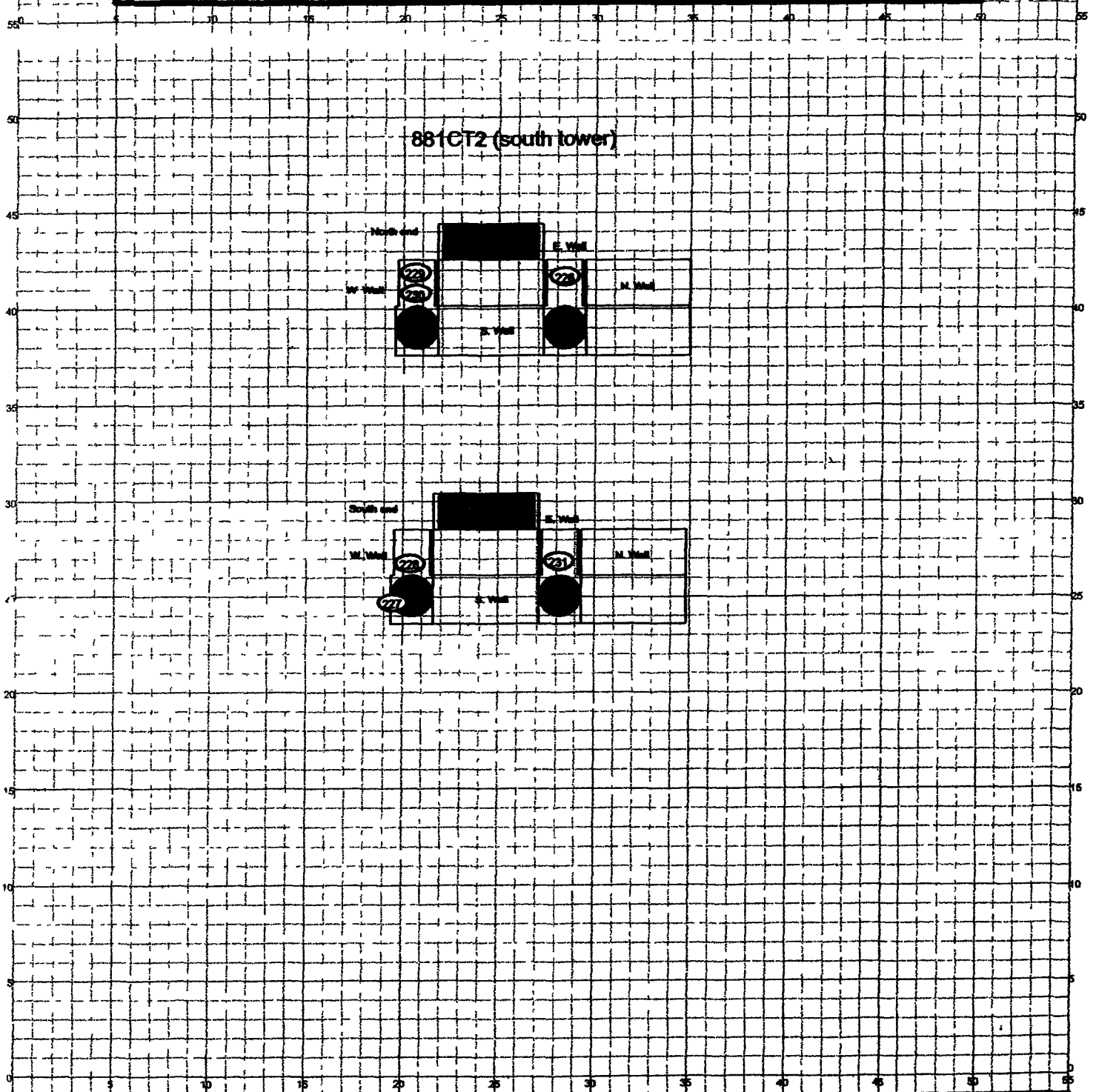
DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0102G1881-In-AB January 15, 2002

158

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 881C South Tower



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MRM, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

DynCorp
THE ART OF TECHNOLOGY

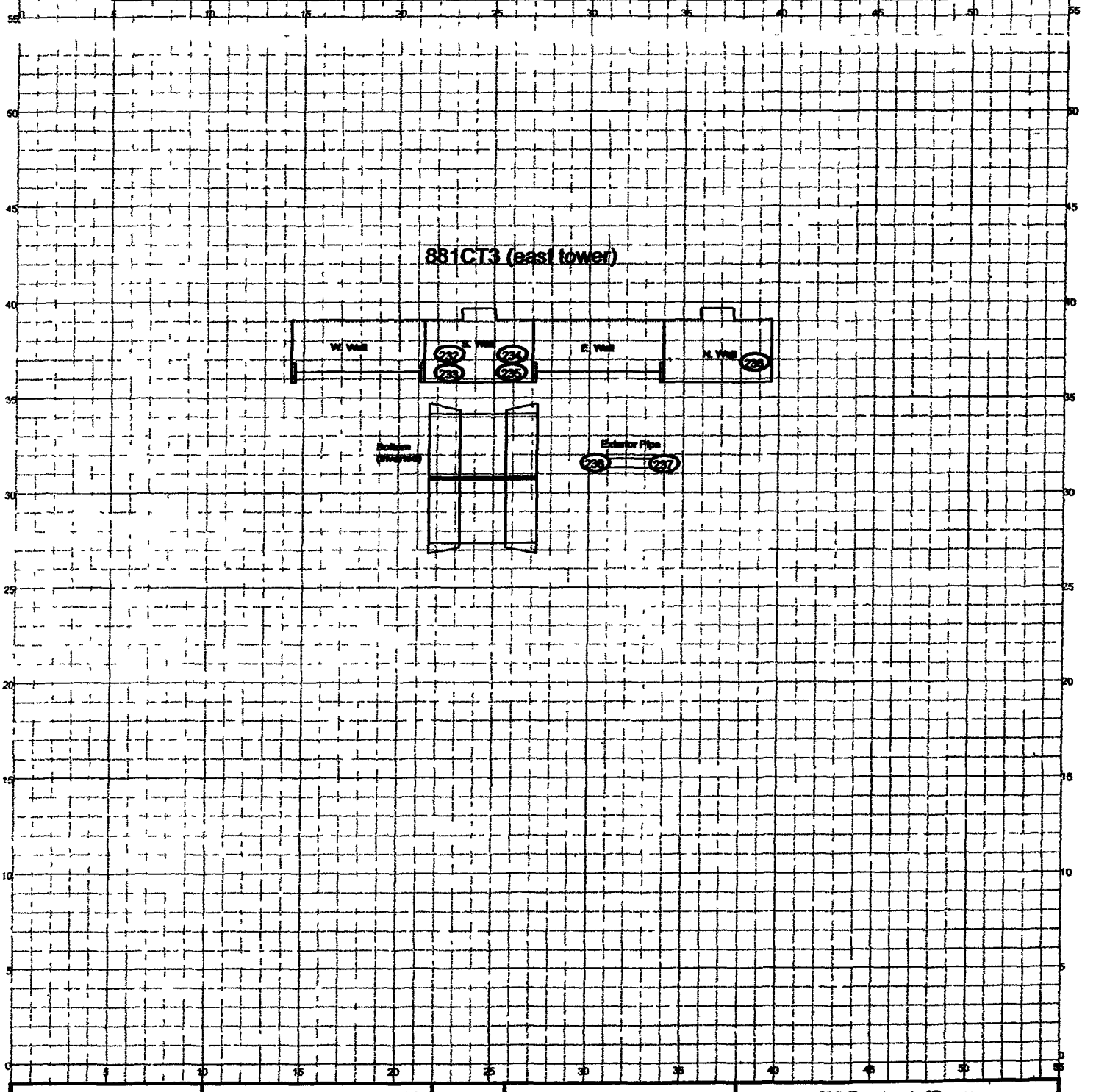
MAP ID: 02-0103881C-AB

January 15, 2002

159

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 881C East Tower



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MRT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

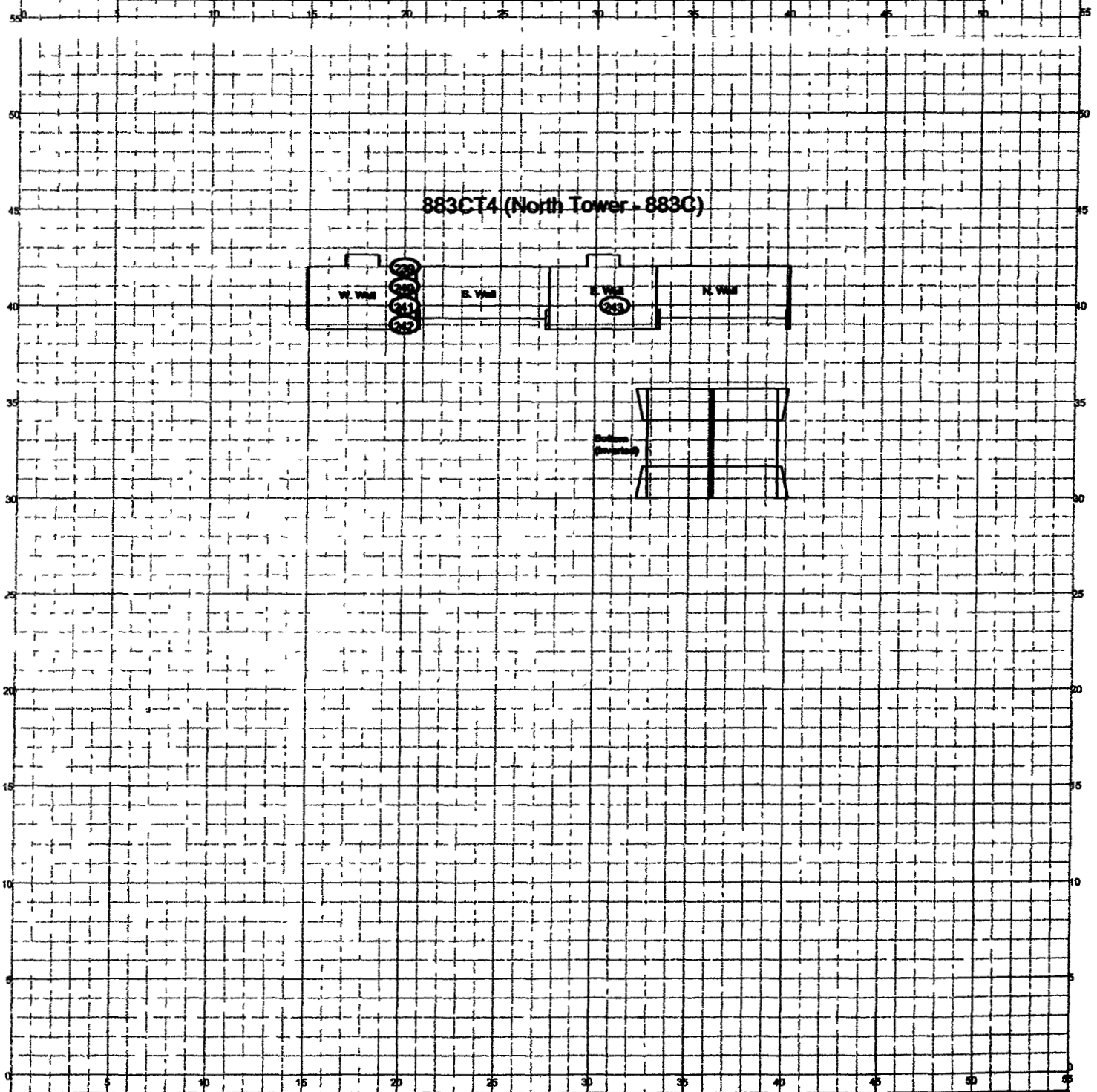
MAP ID: 02-0102881C-AB

January 15, 2002

160

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 883C



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp RMSC, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

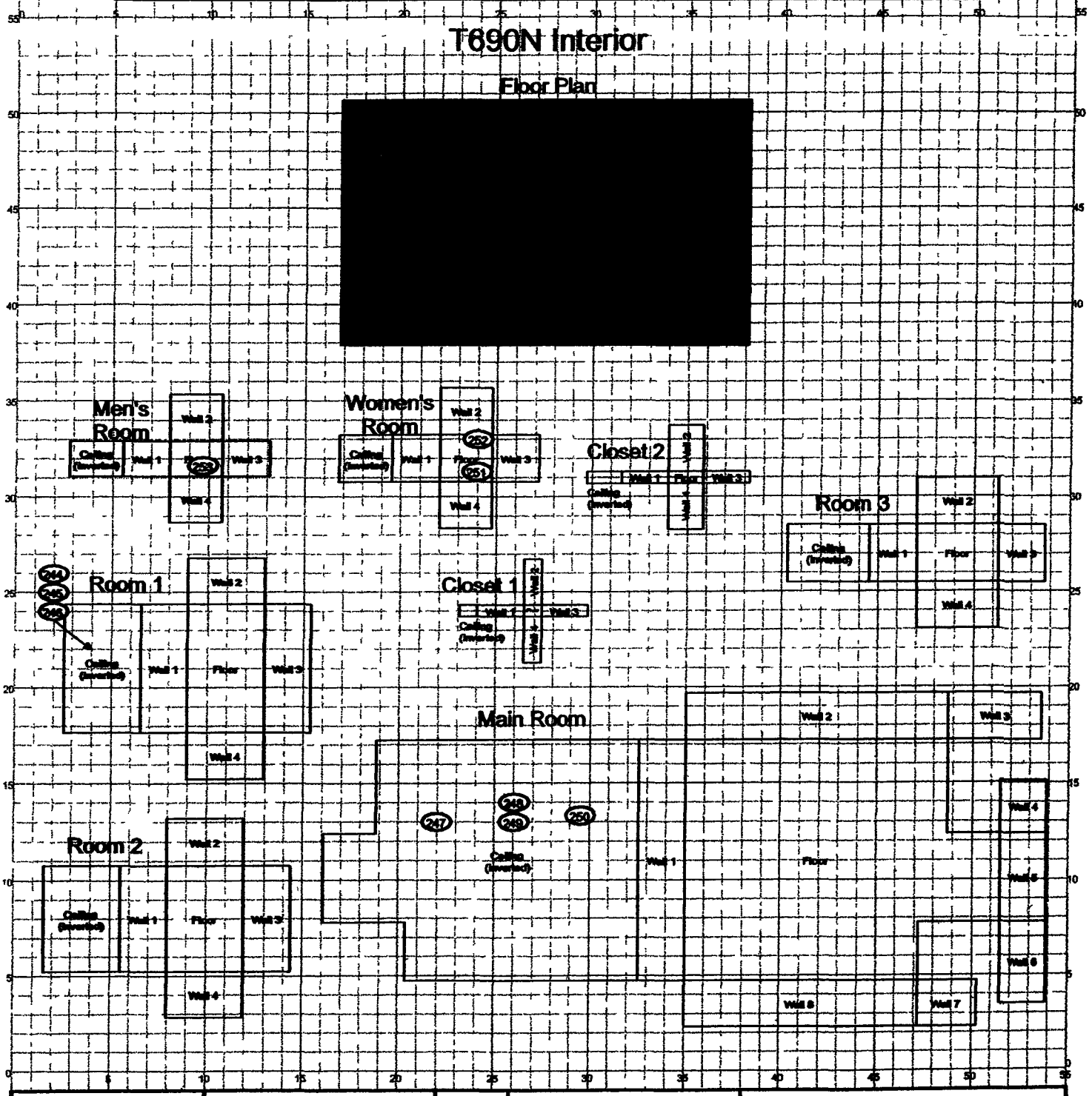
MAP ID: 92-0192/883C-AB

January 15, 2002

161

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: T690N Exterior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MRT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30
0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for: [redacted]

DynCorp
THE ART OF TECHNOLOGY

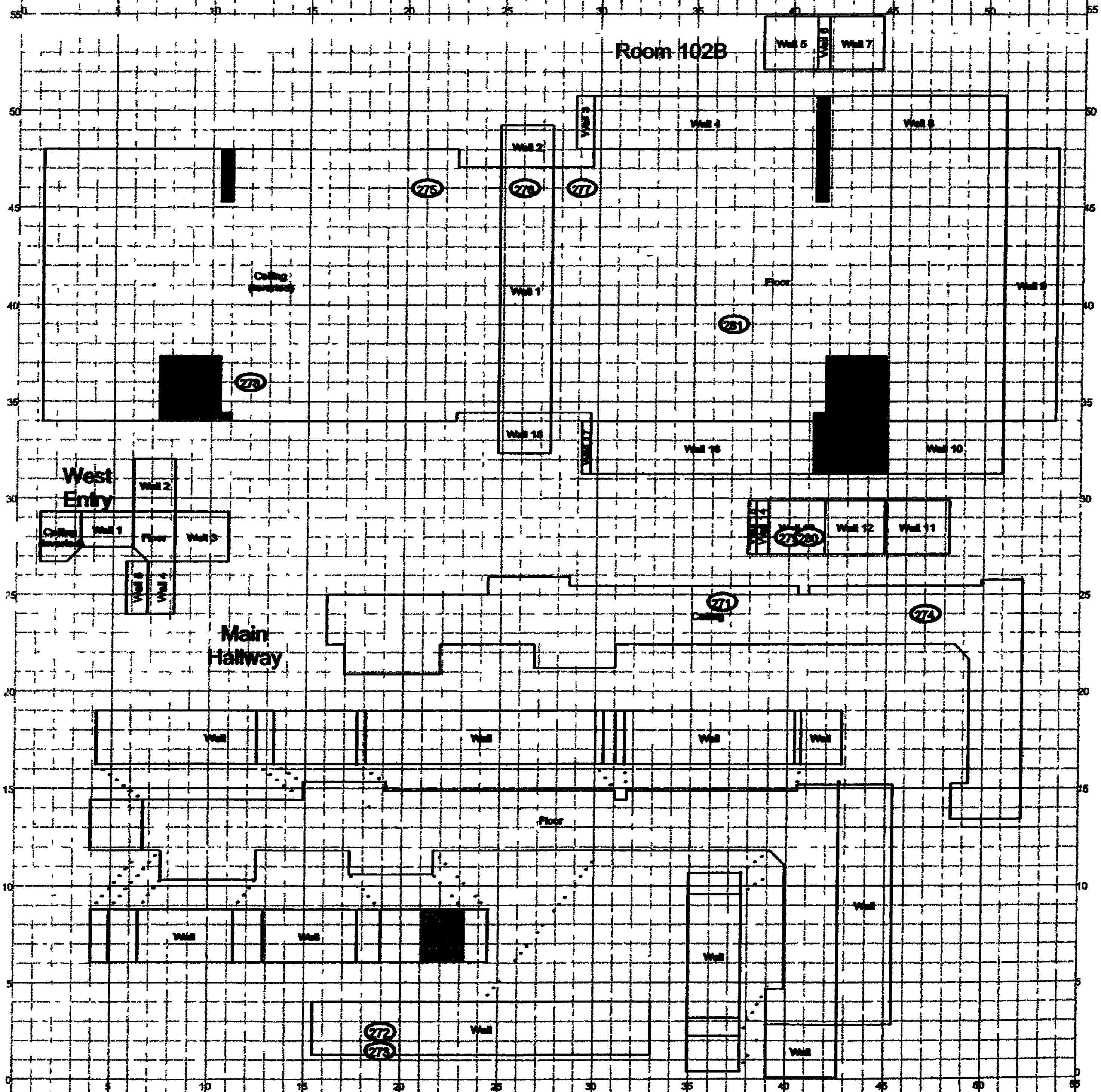
MAP ID: 02-0192T690N-2-AB

January 15, 2002

162

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp [illegible], nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

U.S Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707

Prepared for:

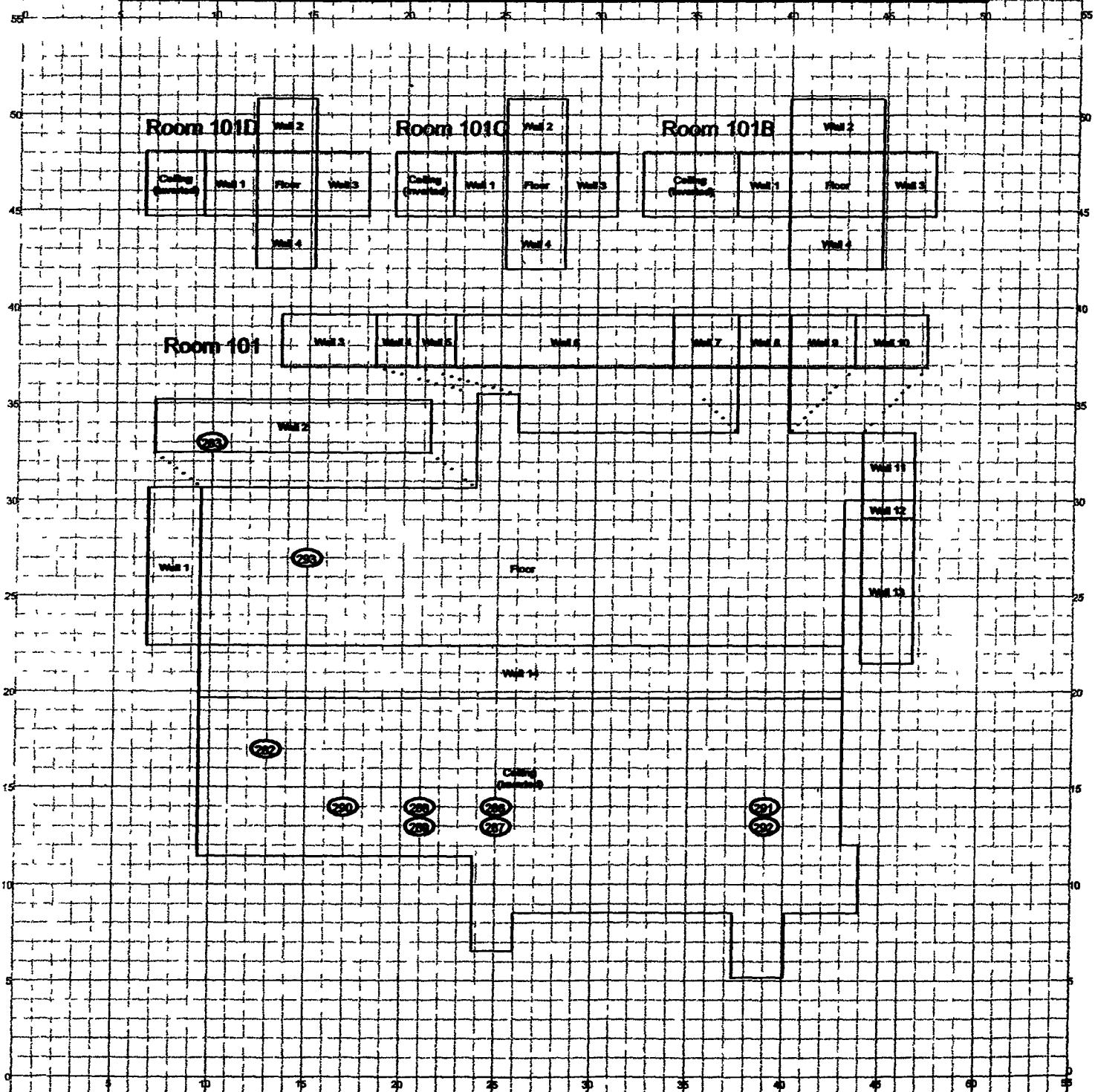
DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0102/B850-1-AB January 15, 2002

163

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp RMST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

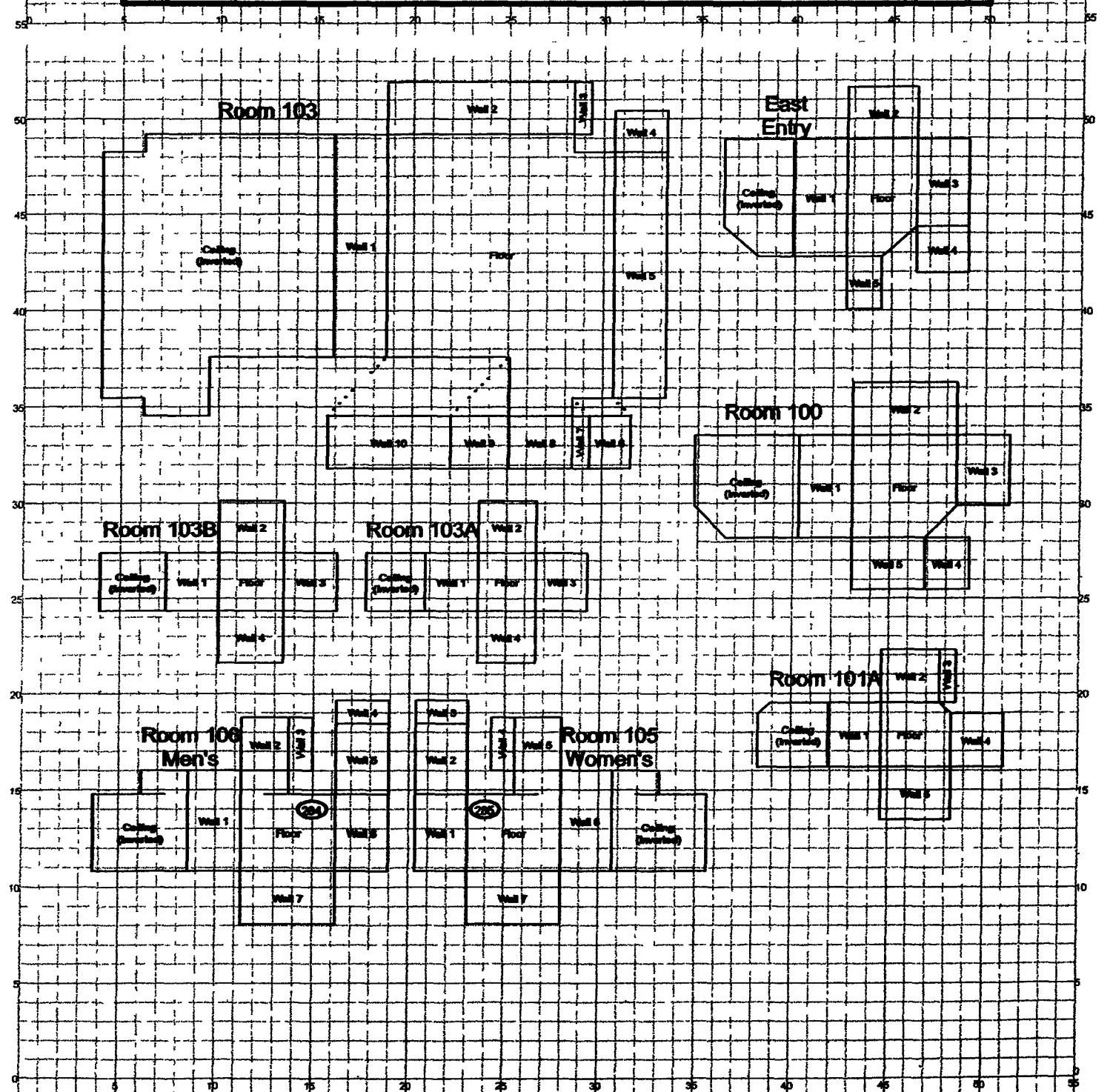
MAP ID: 02-0192/R959-2-AB

January 15, 2002

164

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

DynCorp
THE ART OF TECHNOLOGY

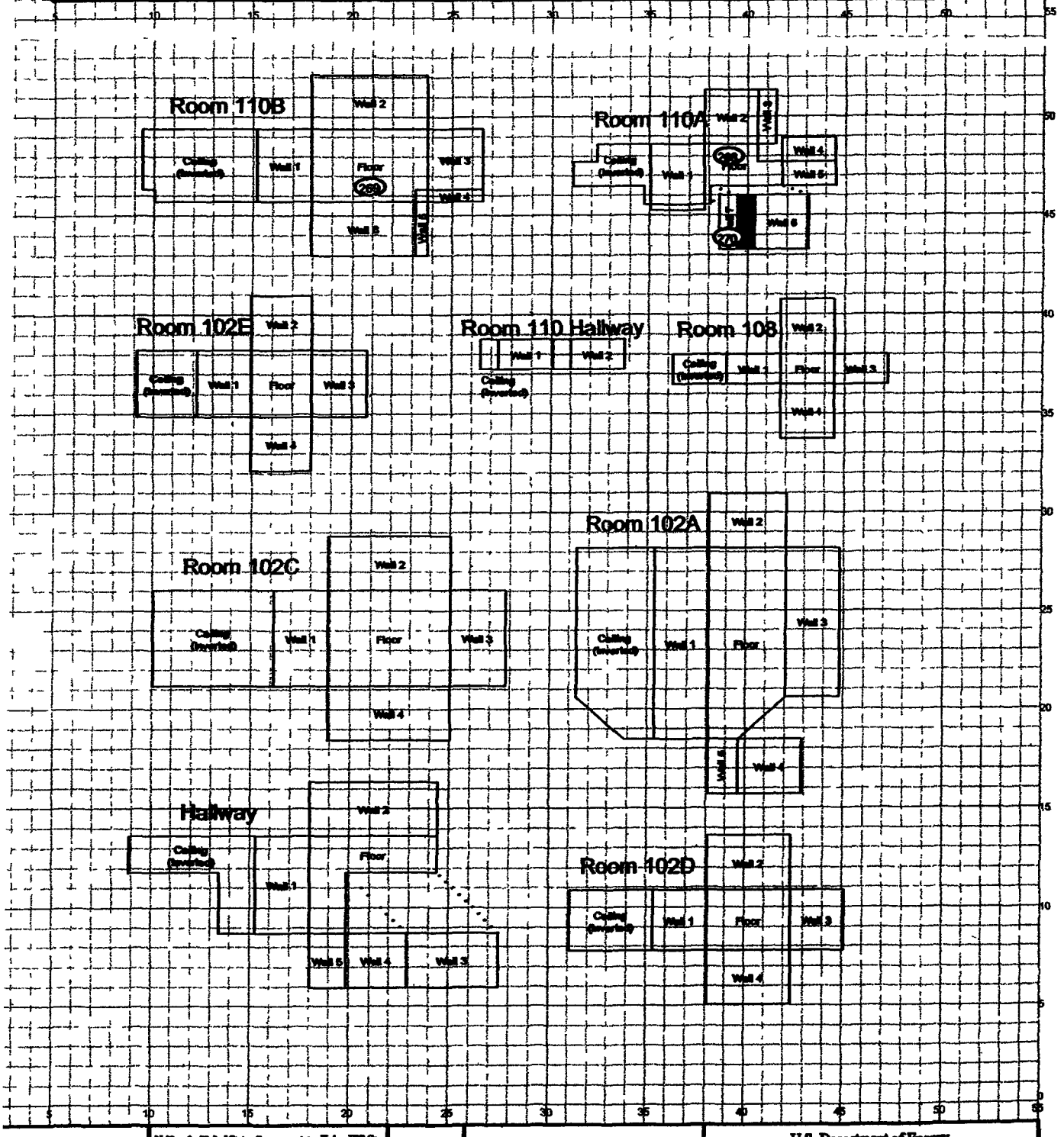
MAP ID: 02-0102/B850-3-AB

January 15, 2002

165

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



EY MAP LEGEND

- ...ocatoe Sample Location
- ...yllium Sample Location
- ...d Sample Location
- ...RA/CERCLA Sample Location
- ...B Sample Location
- Open/Inaccessible Area
- Area in Another Survey Unit

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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:

DynCorp
THE ART OF TECHNOLOGY

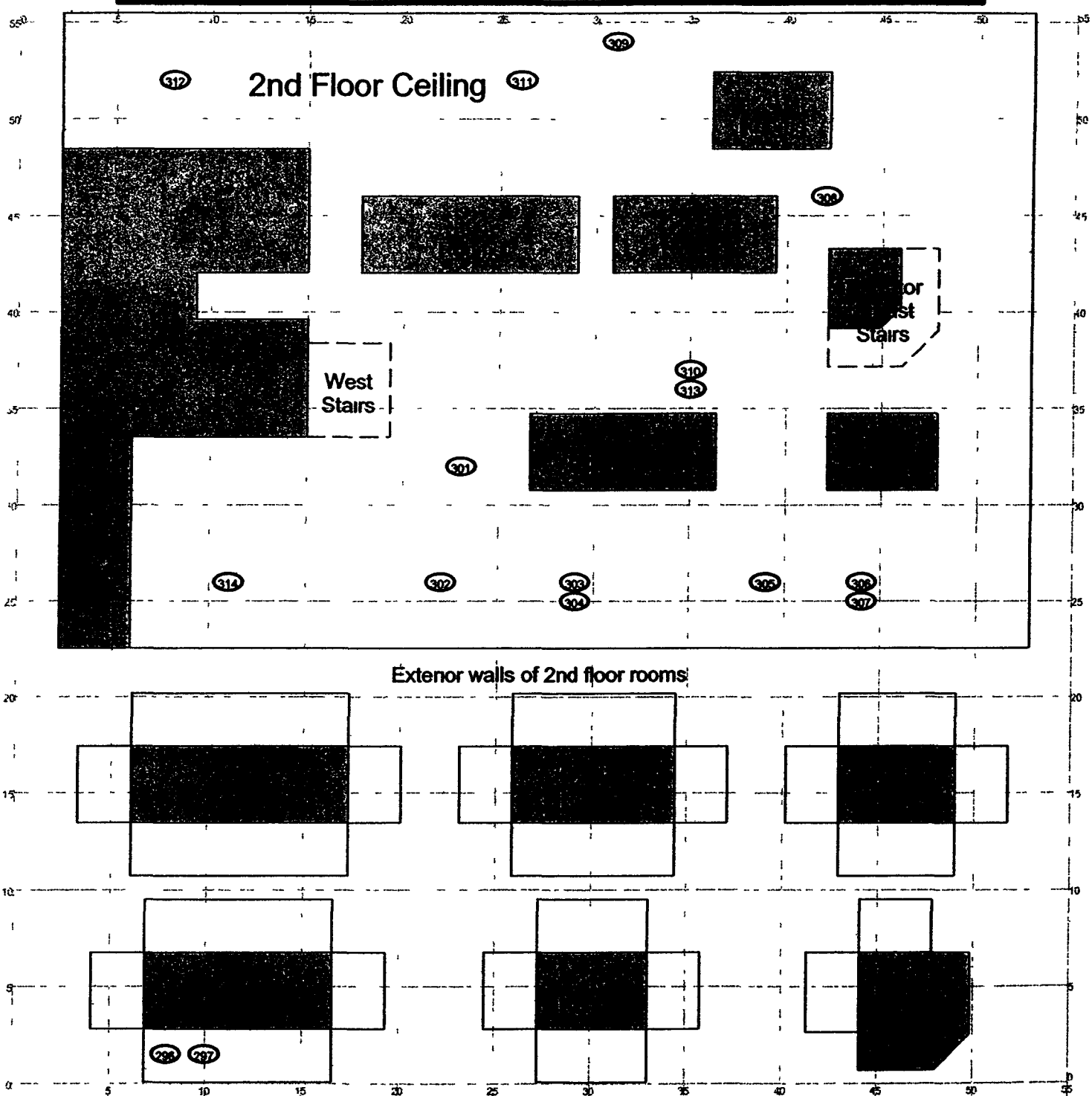
MAP ID: 02-0102/B850-4-AB

January 15, 2002

166

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

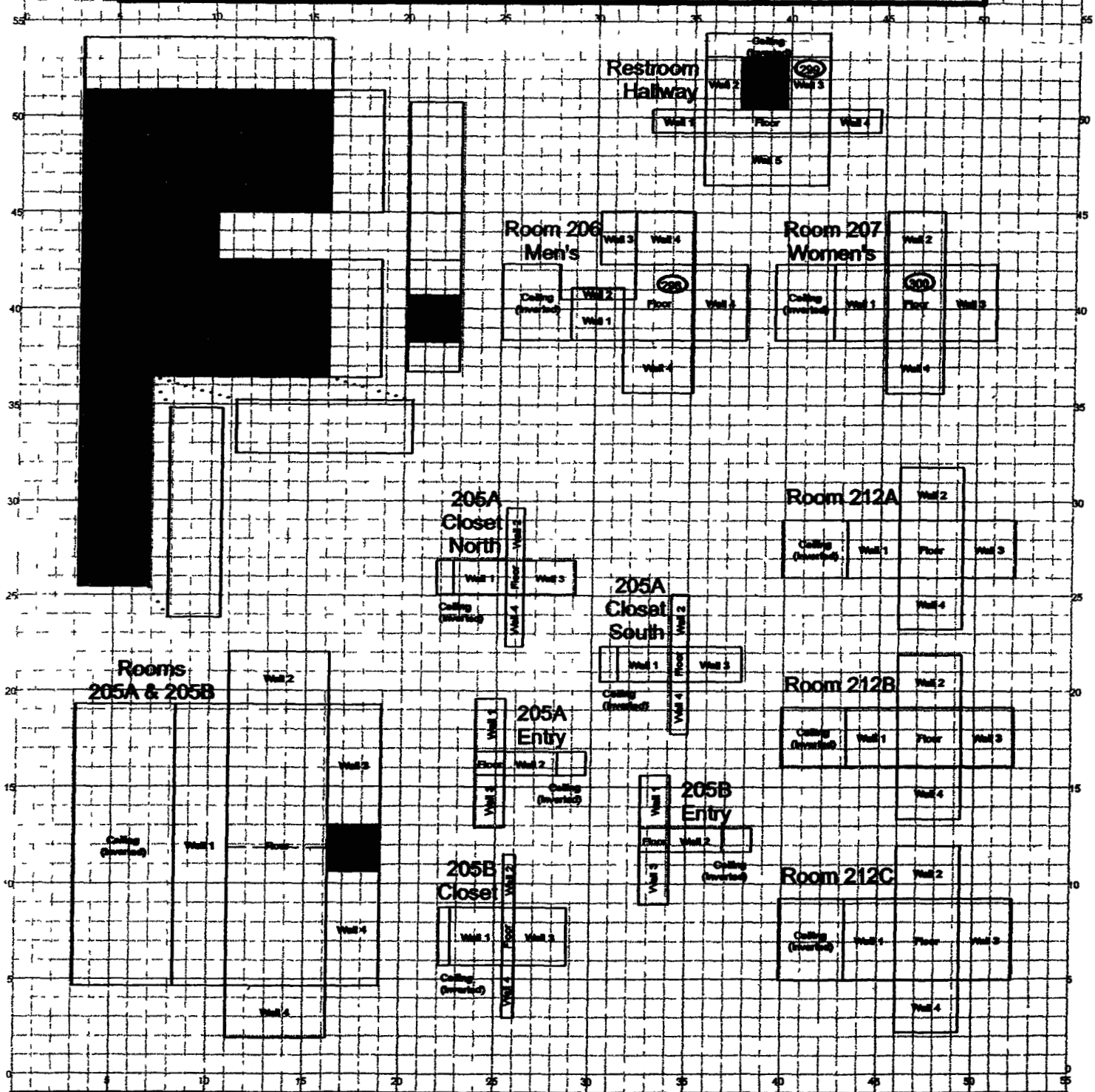
MAP ID: 92-0192/B850-6-AB

January 15, 2002

167

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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:

DynCorp
THE ART OF TECHNOLOGY

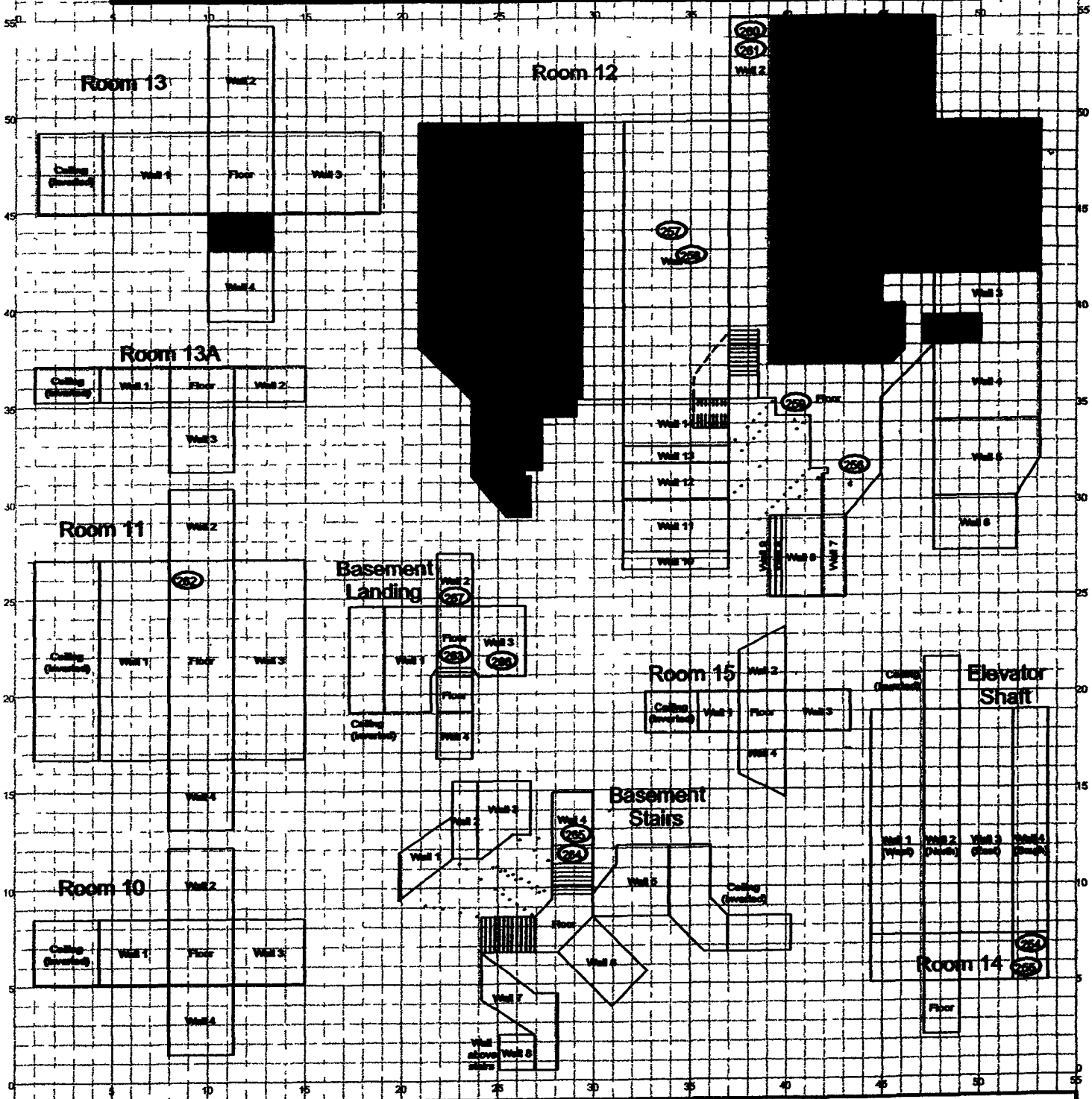
MAP ID: 02-0102/B850-7-AB

January 15, 2002

168

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MMT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

DynCorp
THE ART OF TECHNOLOGY

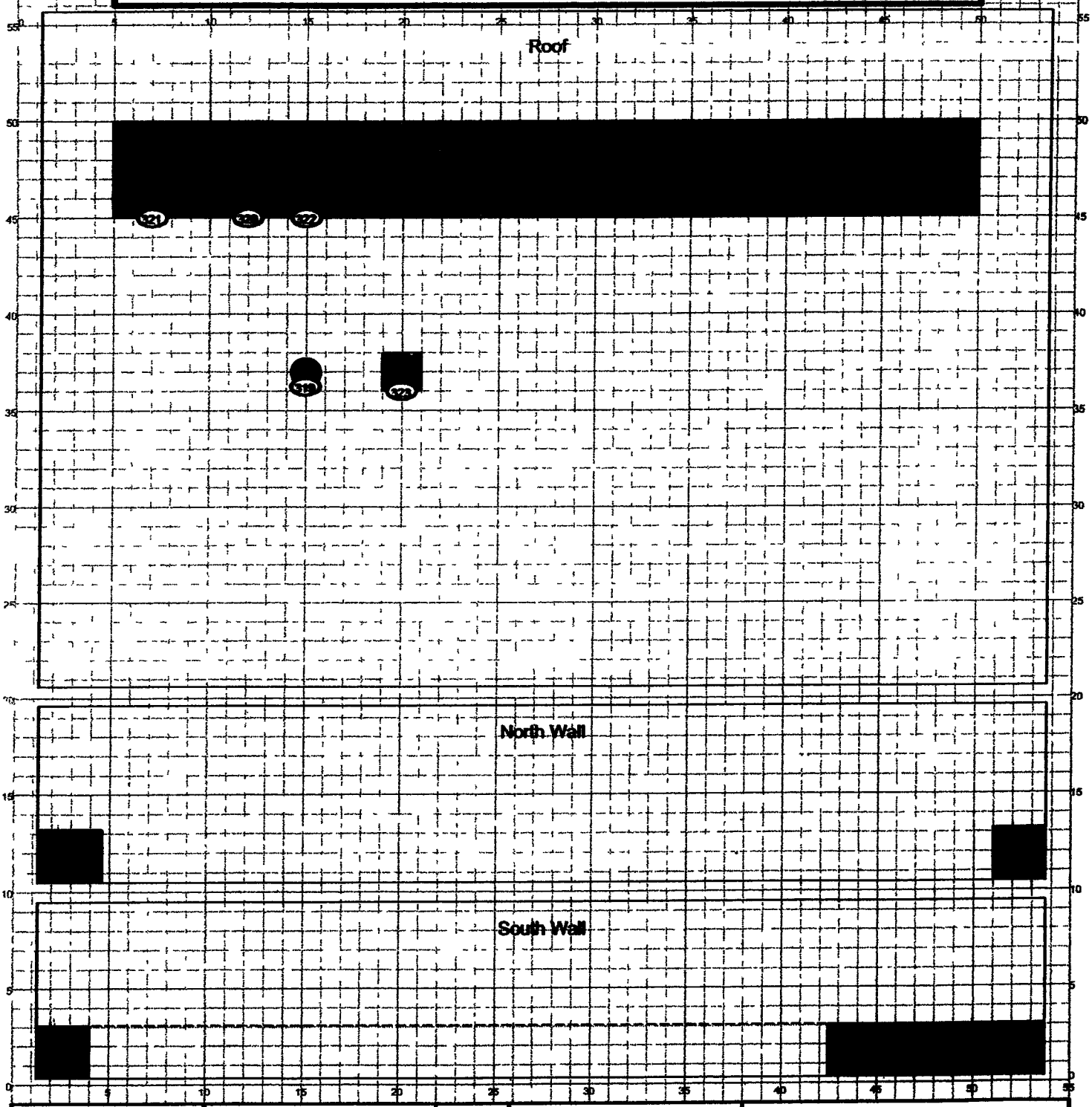
MAP ID: 02-0102/B850-0-AB

January 15, 2002

169

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850 Exterior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

DynCorp
THE ART OF TECHNOLOGY

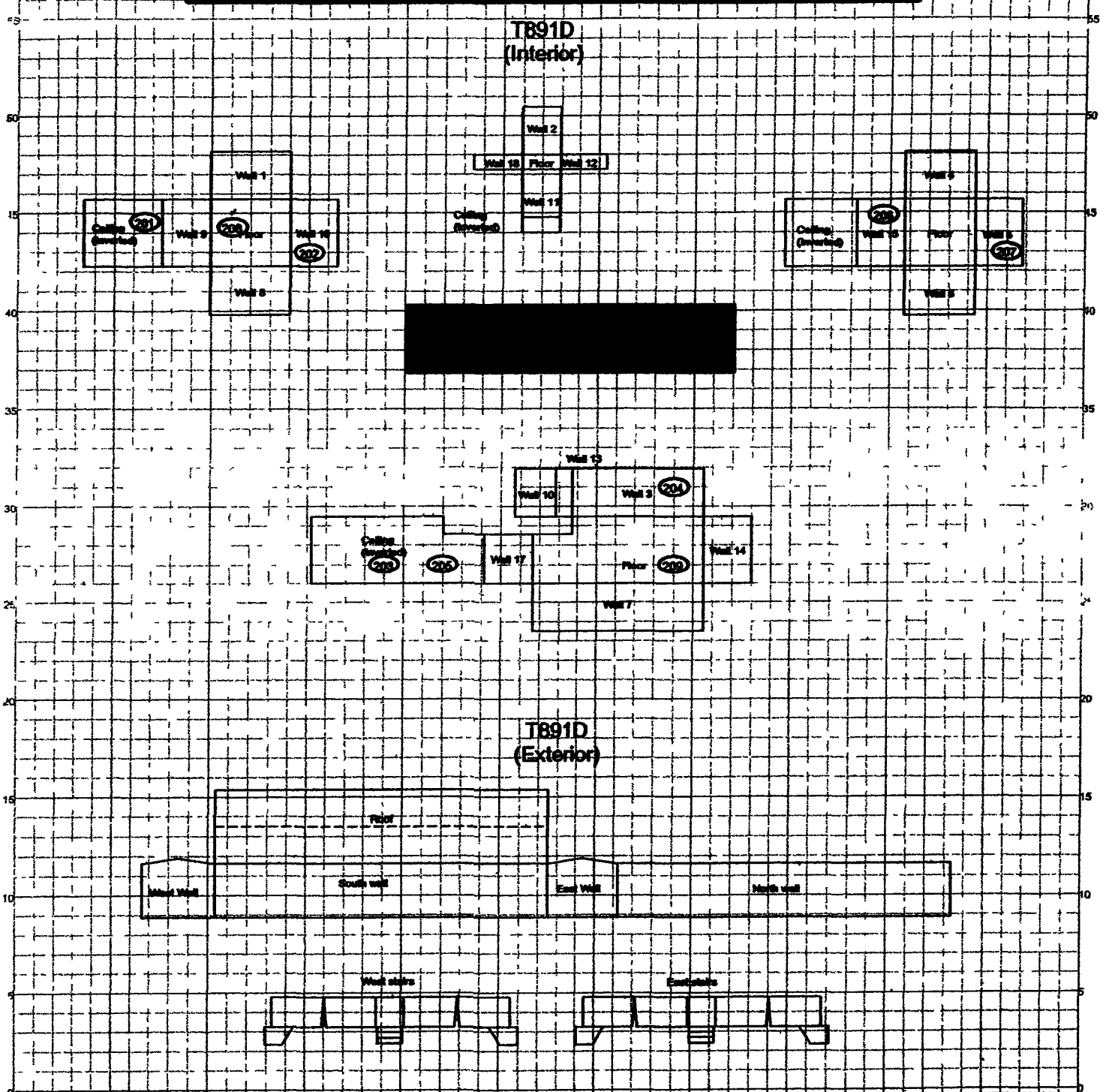
MAP ID: 02-0102/850-EX1-AB

January 15, 2002

170

CHEMICAL SAMPLE MAP

Building: T891D Interior & Exterior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp RMT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared By: GIS Dept. 303-966-7799 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

[redacted]

MAP ID: [illegible]

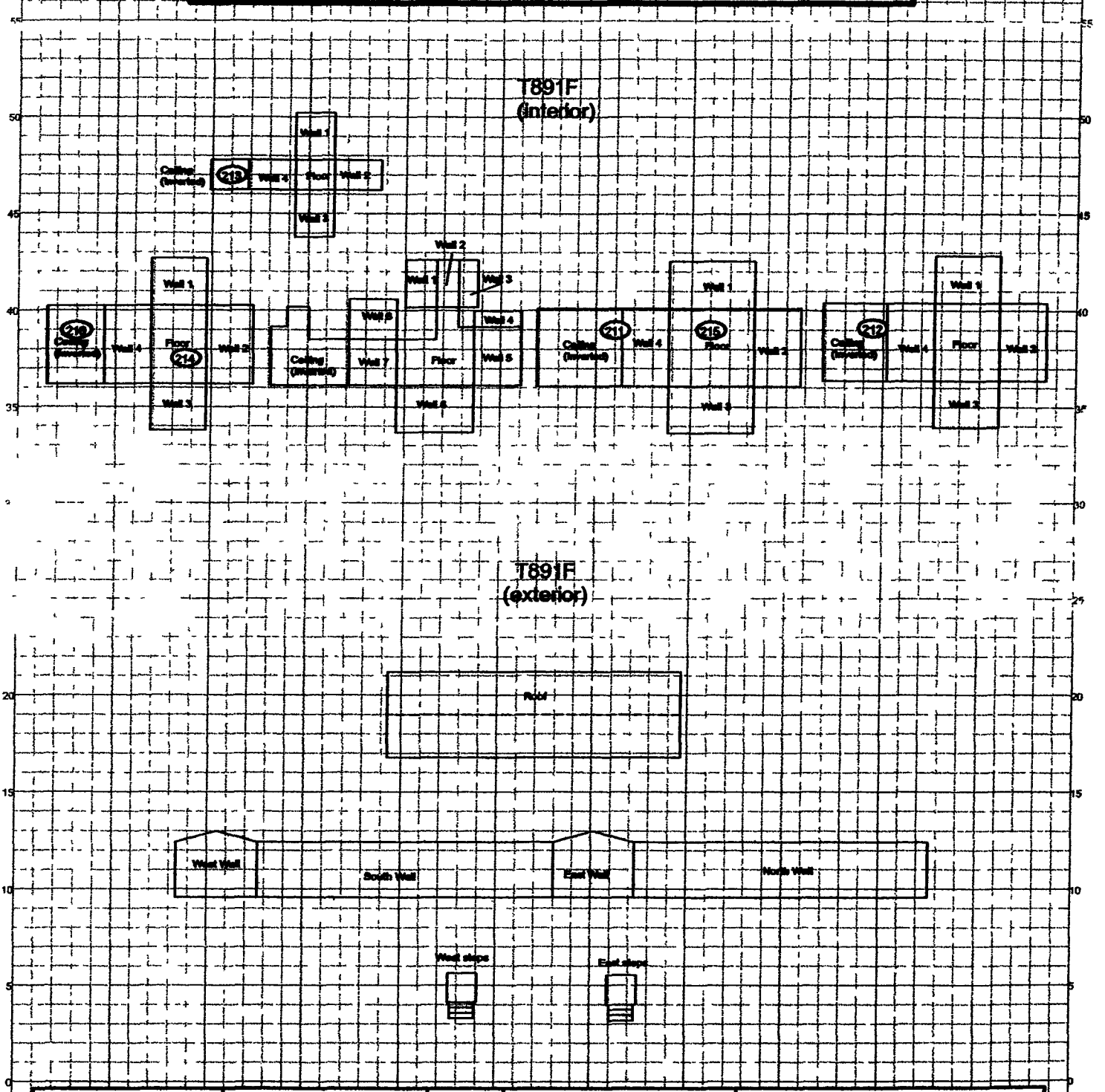
Date: [illegible]

G15-A-004

171

CHEMICAL SAMPLE MAP

Building: T891F Interior & Exterior



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

Neither the United States Government nor Rocky Flats Co., nor DynCorp MMS, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-020-7769 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

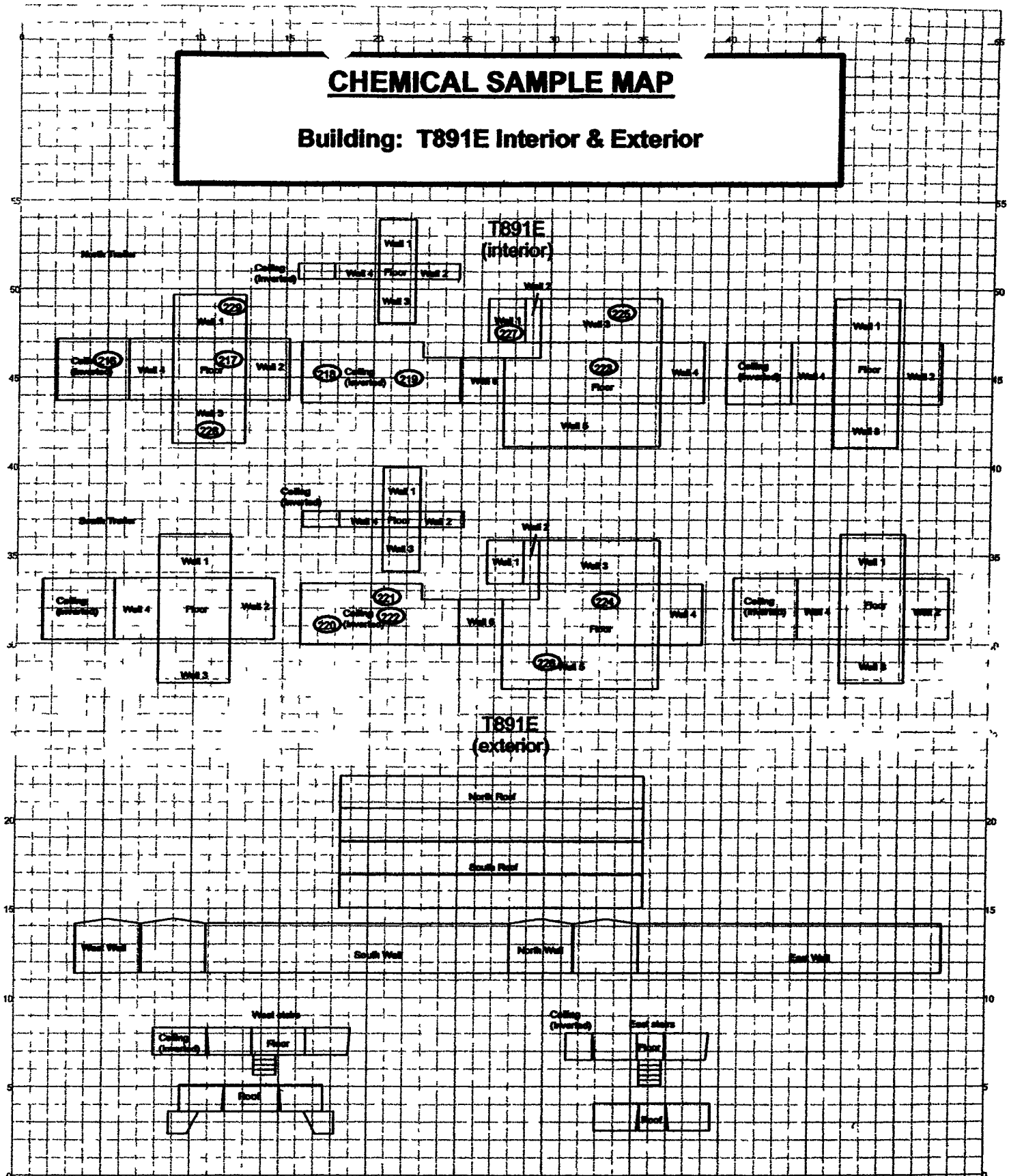
MAP ID: h02-9149/T891F-C100 December 3, 2001

G15-A-006

172

CHEMICAL SAMPLE MAP

Building: T891E Interior & Exterior

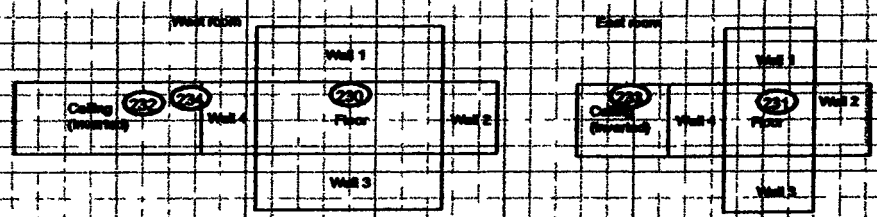


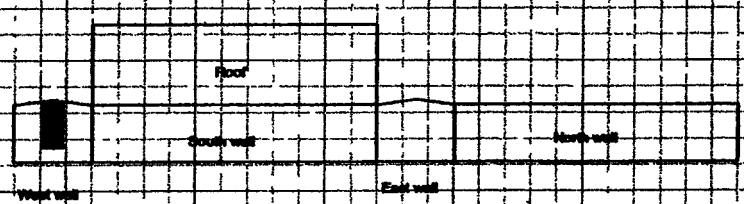
G15-A-005

173

CHEMICAL SAMPLE MAP

Building: T904A Interior & Exterior





SURVEY MAP LEGEND

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

Neither the United States Government nor Dyncorp IMS Co., nor DynCorp IMS, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7765 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

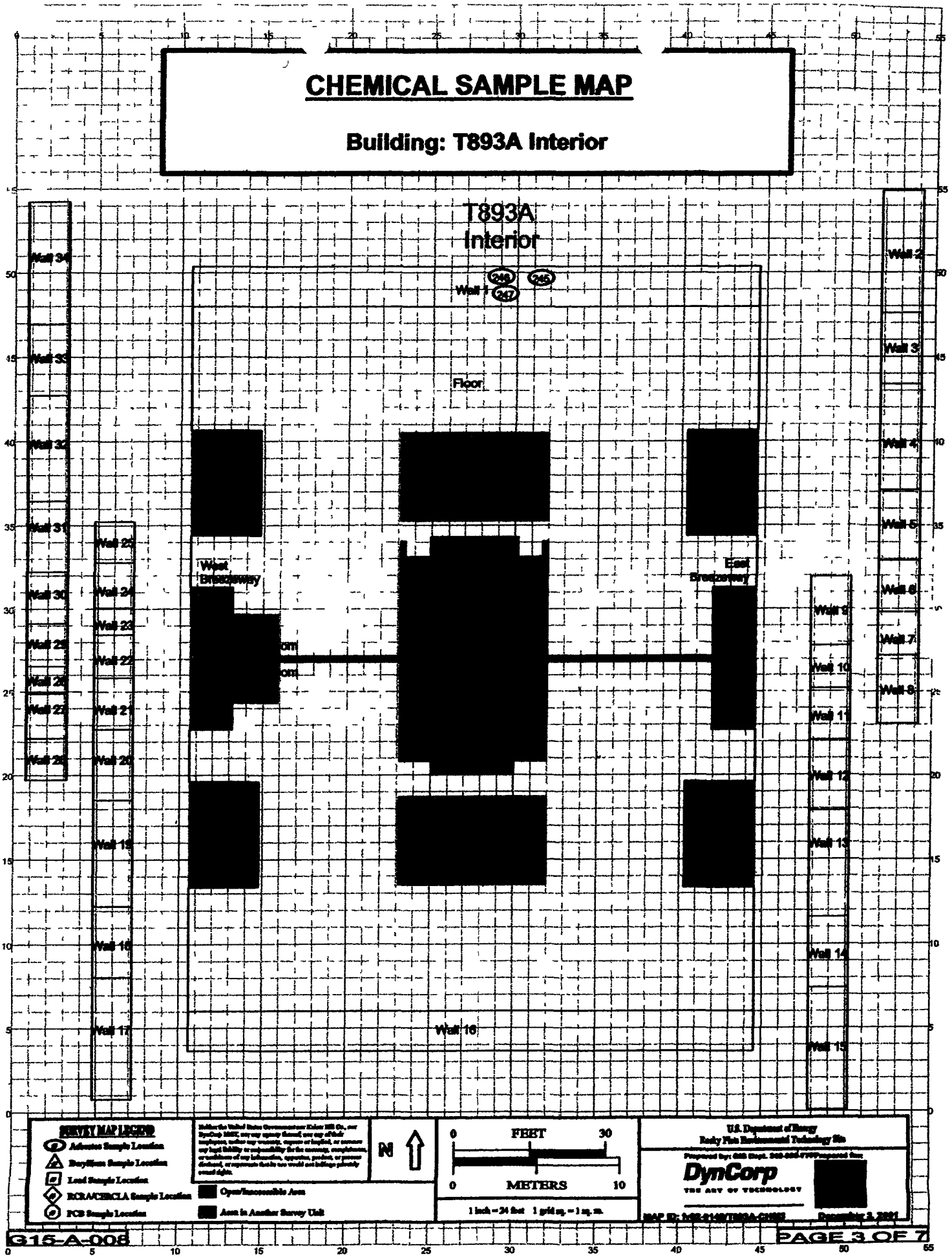
MAP ID: [illegible] December 3, 2001

G15-A-011

174

CHEMICAL SAMPLE MAP

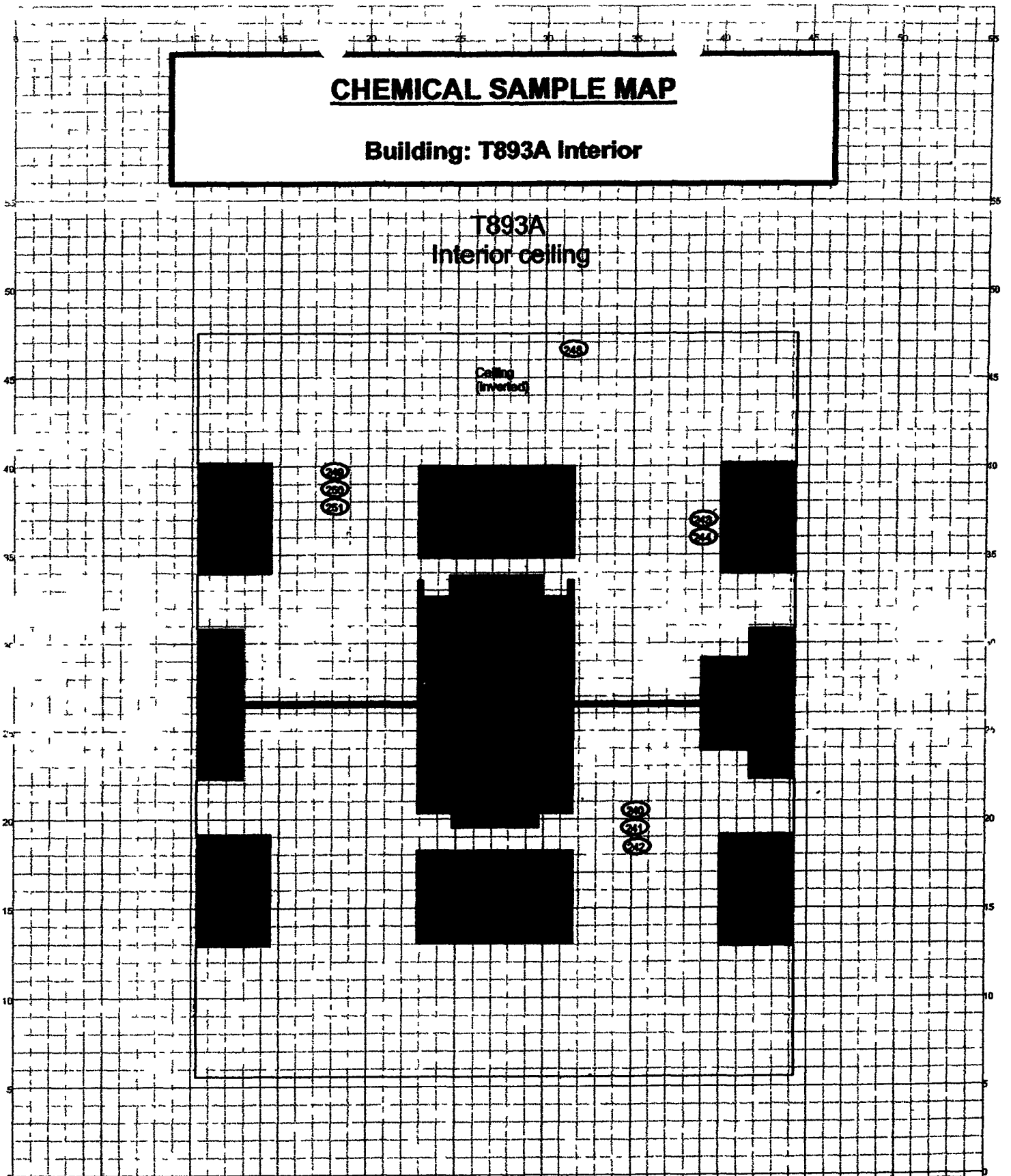
Building: T893A Interior



175

CHEMICAL SAMPLE MAP

Building: T893A Interior



SURVEY MAP LEGEND

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

Neither the United States Government nor Dyncorp, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7700 Approved for:

DynCorp
THE ART OF TECHNOLOGY

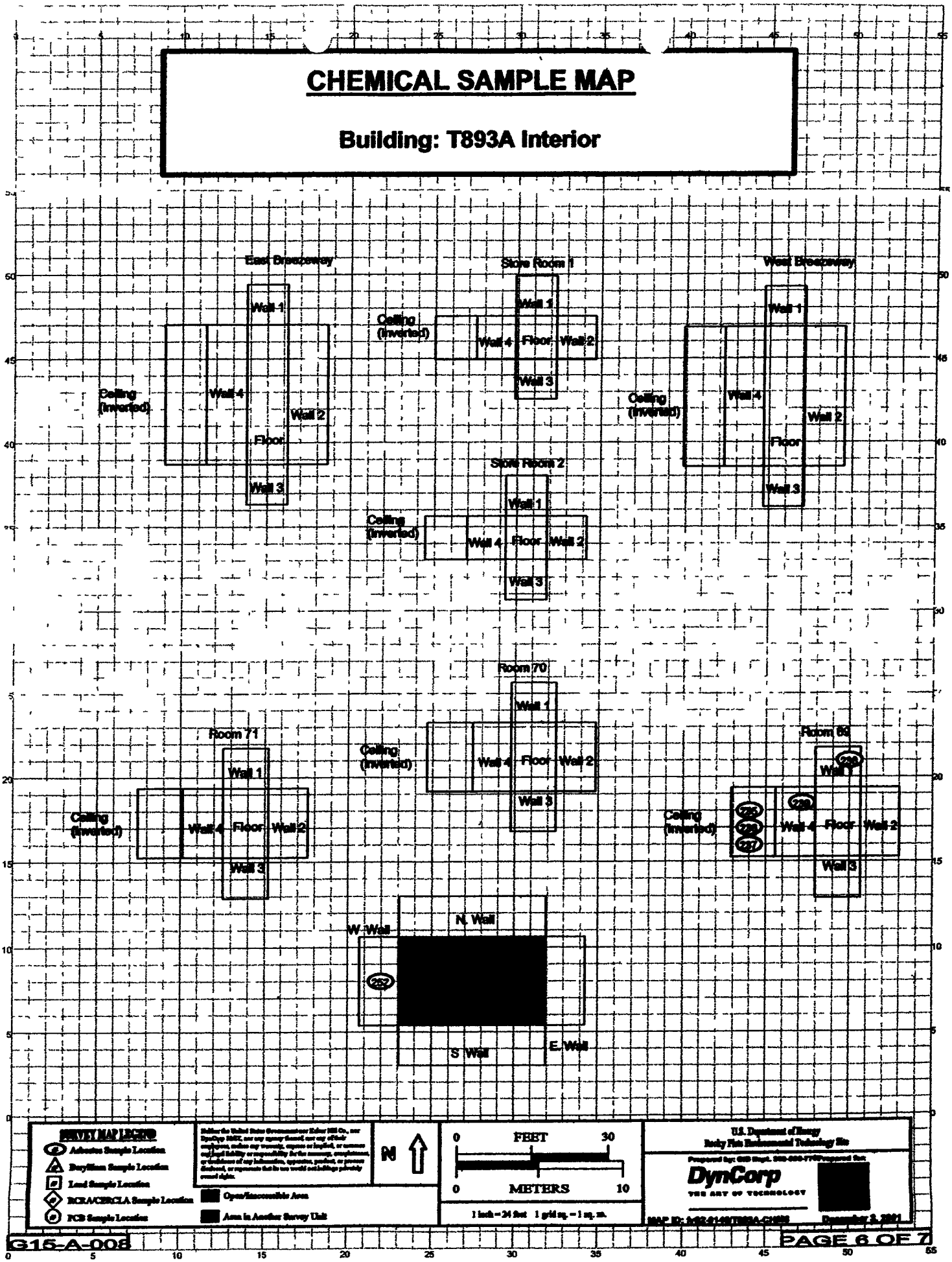
MAP ID: W02-0145-T893A-C1004 December 3, 2001

G15-A-008

176

CHEMICAL SAMPLE MAP

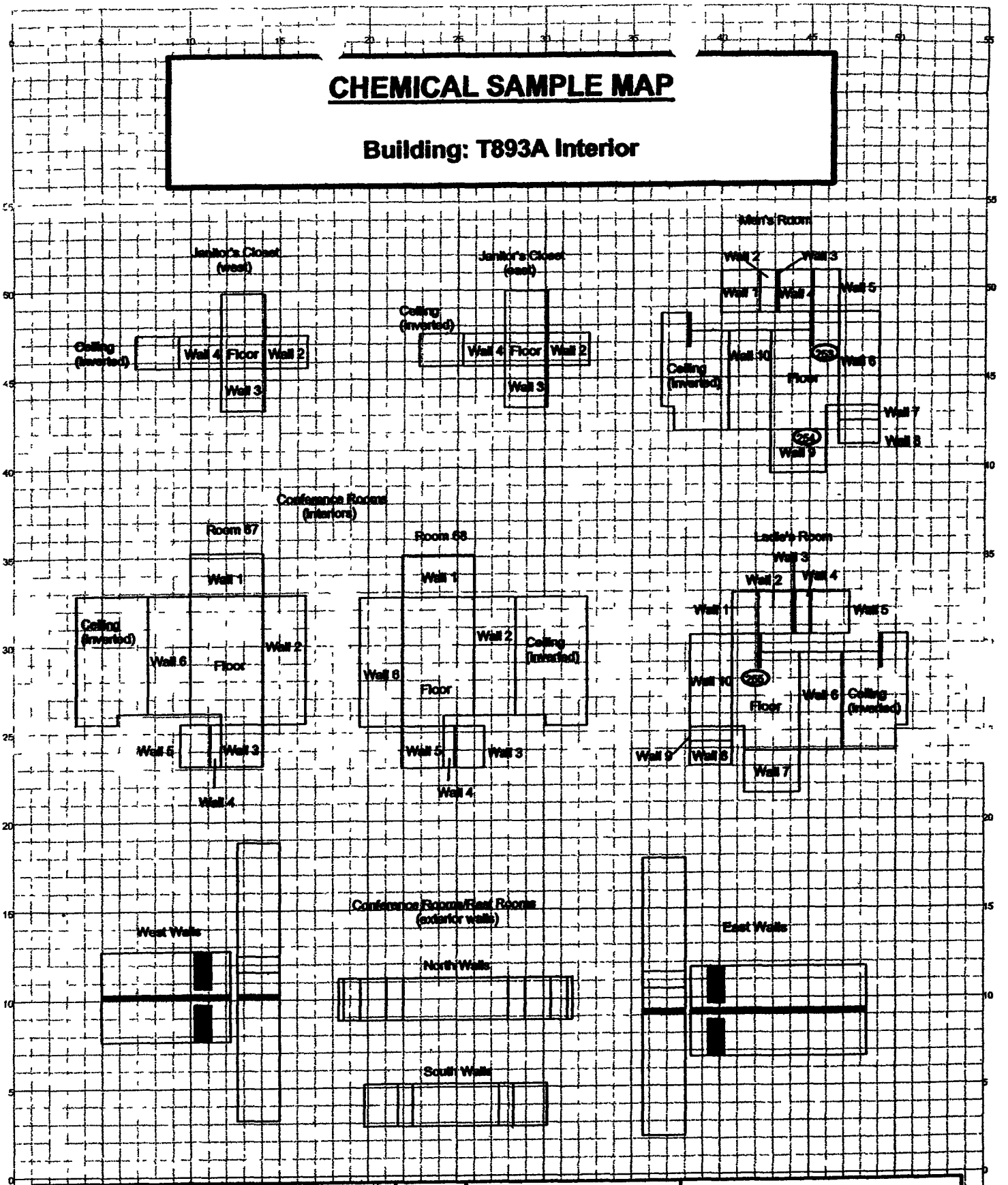
Building: T893A Interior



177

CHEMICAL SAMPLE MAP

Building: T893A Interior



SURVEY MAP LEGEND

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

Neither the United States Government nor Lockheed Martin Co., nor DynCorp MHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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: [illegible]

DynCorp
THE ART OF TECHNOLOGY

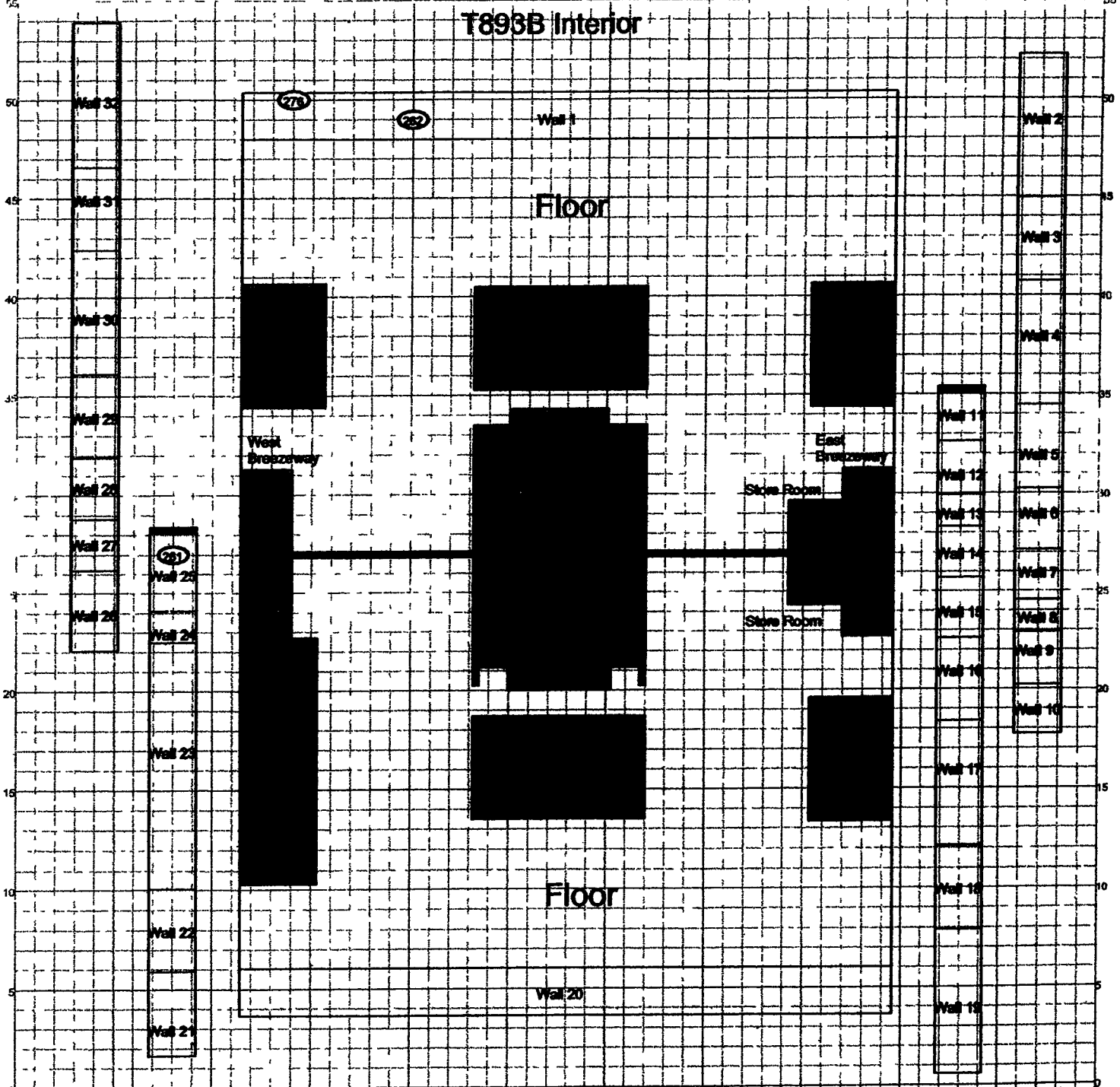
MAP ID: [illegible] December 3, 2001

G15-A-008

178

CHEMICAL SAMPLE MAP

Building: T893B Interior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MMST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7700 [redacted]

DynCorp
THE ART OF TECHNOLOGY

[redacted]

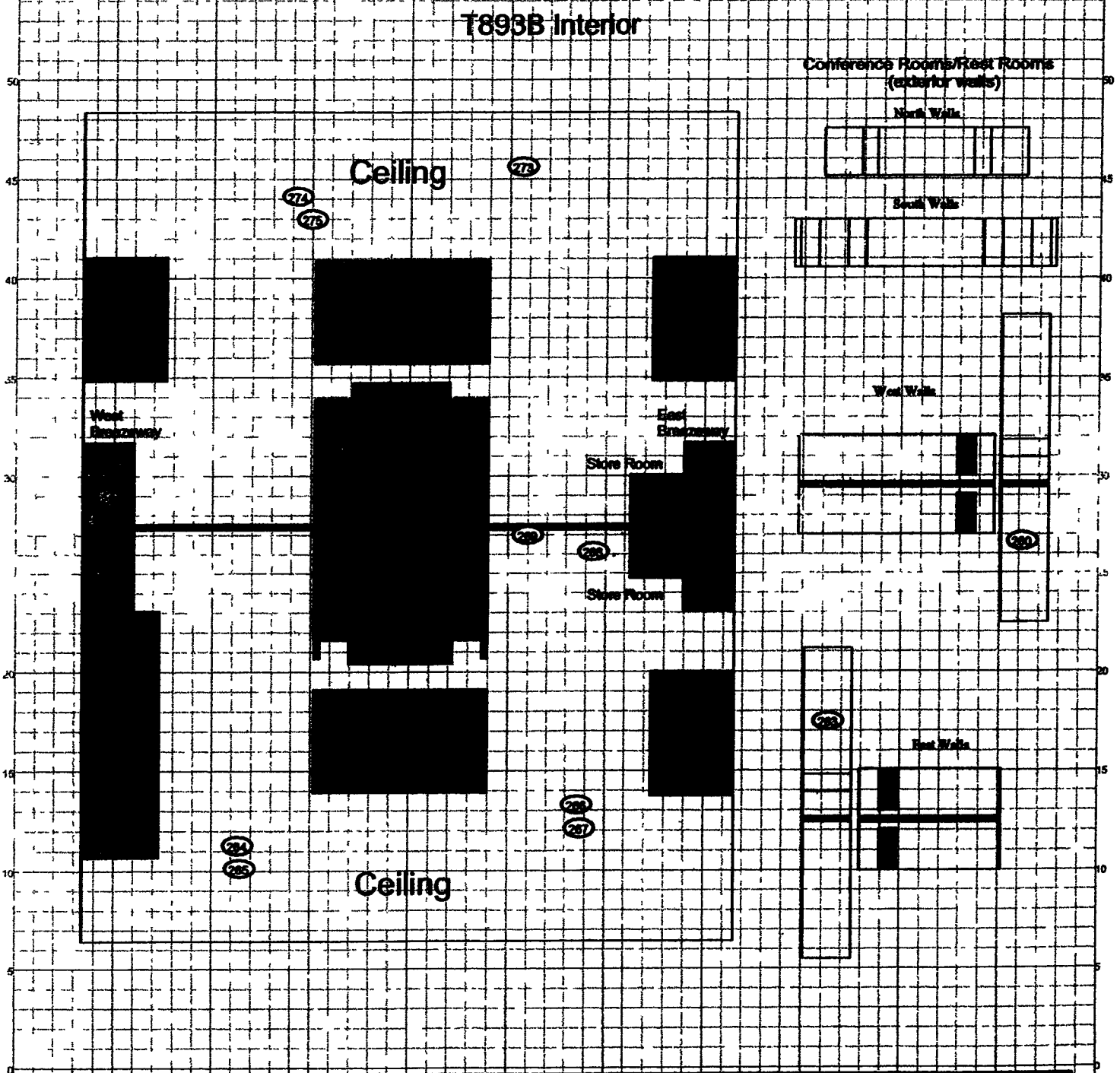
MAP ID: [illegible] December 3, 2001

G15-A-009

179

CHEMICAL SAMPLE MAP

Building: T893B Interior



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

Neither the United States Government nor Eaker MM Co., nor DynCorp MST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: [illegible] Prepared for: [illegible]

DynCorp
THE ART OF TECHNOLOGY

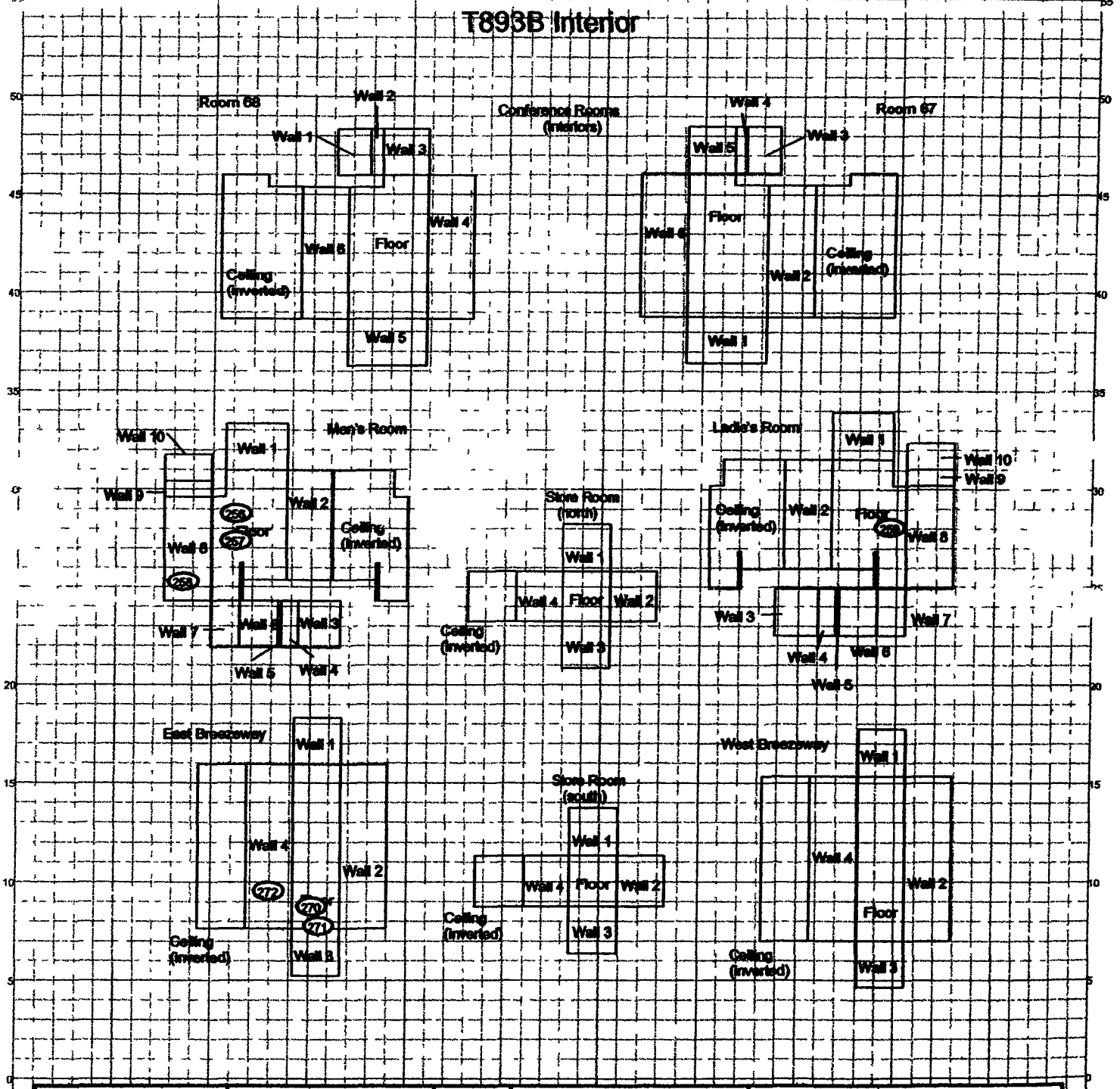
MAP ID: [illegible] December 3, 2001

G15-A-009

180

CHEMICAL SAMPLE MAP

Building: T893B Interior



G15-A-009

181

Beryllium Data Summary

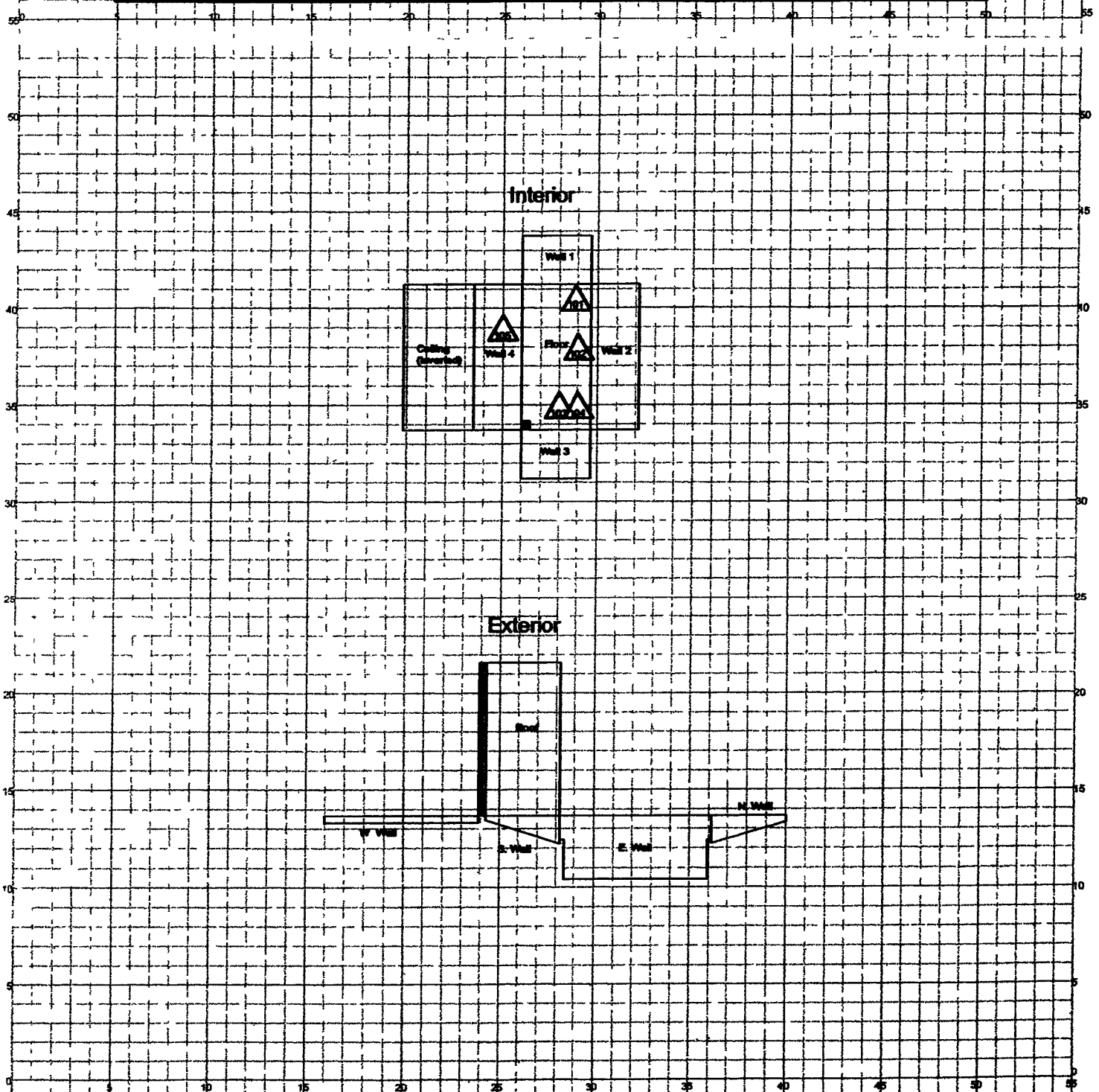
[illegible]	[illegible]	[illegible]	[illegible]
Building 890			
890-12182001-315-101	101	Main – Top of metal shelf in NE corner	< 0 1
890- 2182001-315-102	102	Main – Middle of concrete slab	< 0 1
890-12182001-315-103	103	Main – Concrete slab, south wall	< 0 1
890-12182001-315-104	104	Main – Top of metal shelf in SE corner	< 0 1
890-12182001-315-105	105	Main –Inside edge of pip penetration, west wall north end	< 0 1
Building 881H			
881H-12182001-315-106	106	Main – Top of electrical box, west wall	< 0 1
881H-12182001-315-107	107	Main – Top of electrical conduit, west wall	< 0 1
881H-12182001-315-108	108	Main – Top of horizontal surface of angle iron conduit support, north wall	< 0 1
881H-12182001-315-109	109	Main – Top of red flange, fire suppression at east wall	< 0 1
881H-12182001-315-110	110	Main – Top of angle iron sway brace, east wall	< 0 1
Building 881G			
881G-12182001-315-111	111	North Room – Top of east end of generator	< 0 1
881G-12182001-315-112	112	North Room – Top of La Marche ConstaVolt float, south wall	< 0 1
881G-12182001-315-113	113	North Room – Top of conduit wall support, south wall	< 0 1
881G-12182001-315-114	114	North Room – Top of west end of generator, Simplx panel	< 0 1
881G-12182001-315-115	115	North Room – Top of generator, base support I-beam	< 0 1
881G-12182001-315-116	116	South Room – Top of HVAC duct at south wall	< 0 1
881G-12182001-315-117	117	South Room – Top of generator	< 0 1
881G-12182001-315-118	118	South Room – Top of circuit breaker, north wall	< 0 1
881G-12182001-315-119	119	South Room – Top of LPIJ-1 breaker box, north wall	< 0 1
881G-12182001-315-120	120	South Room – Concrete floor by generator	< 0 1
T690N			
T690N-01022002-315-126	126	Room 1 – Top of fluorescent light fixture	< 0 1
T690N-01022002-315-127	127	Main Room – Top of fluorescent light fixture	< 0 1
T690N-01022002-315-128	128	Women's – Corner of floor on vinyl tile	< 0 1
T690N-01022002-315-129	129	Men's – Corner of floor on vinyl tile	< 0 1
T690N-01022002-315-130	130	Main Room – Top of metal shelving at secretary's desk	< 0 1
Building 850			
850-01082002-315-131	131	Room 14 – Concrete floor of elevator pit	< 0 1
850-01082002-315-132	132	Room 15 – Top of elevator control panel	< 0 1
850-01082002-315-133	133	Room 12 – Inside plenum filter room on lip of outside air inlet	< 0 1
850-01082002-315-134	134	Room 11 – Concrete floor of storage room	< 0 1
850-01082002-315-135	135	Room 12 – Top of HVAC duct, east side	< 0 1
850-01082002-315-136	136	Room 107 – Main Hallway, top of electrical conduit above drop ceiling	< 0 1
850-01082002-315-137	137	Room 107 – Main Hallway, top of 2' x 4' white acoustical drop ceiling tile	< 0 1
850-01082002-315-138	138	Room 107 – Main Hallway, top of fire suppression water pipe	< 0 1

Sample Number	Map/Survey Point Location	Sample Location	Result (µg/100 cm²)
850-01082002-315-139	139	Room 102B – Top of fluorescent light fixture	<0.1
850-01082002-315-140	140	Room 101 – Top of fluorescent light fixture	<0.1
850-01082002-315-141	141	Room 101 – Top of channel for electrical cable	<0.1
850-01082002-315-142	142	Room 101 – Top of fluorescent light fixture	<0.1
850-01082002-315-143	143	Room 200 – Top of AC diffuser	<0.1
850-01082002-315-144	144	Room 200 – Top of fluorescent light fixture	<0.1
850-01082002-315-145	145	Room 200 – Top of fluorescent light fixture	<0.1
850-01082002-315-146	146	Room 200 – Top of fluorescent light fixture	<0.1
850-01082002-315-147	147	Room 200 – Top of hot water pipe, fiberglass insulation	<0.1
850-01082002-315-148	148	Room 200 – Top of 2' x 4' white speckled acoustical drop ceiling tile	<0.1
850-01082002-315-149	149	Room 200 – Top of channel for electrical cable	<0.1
850-01082002-315-150	150	Room 200 – Top of HVAC sheet metal ducting	<0.1
[illegible]			
		T891D	
T891D-01302002-315-101	101	SW corner of desktop, west wall	<0.1
T891D-01302002-315-102	102	NE corner on floor	<0.1
T891D-01302002-315-103	103	Top of metal shelf, south wall	<0.1
T891D-01302002-315-104	104	Top of wooden shelf, west wall	<0.1
T891D-01302002-315-105	105	HVAC louvers, east wall	<0.1
		T891F	
T891F-01302002-315-106	106	Top of electrical box, west wall	<0.1
T891F-01302002-315-107	107	Top of wooden shelf in closet	<0.1
T891F-01302002-315-108	108	Top of lab table	<0.1
T891F-01302002-315-109	109	Top of wooden shelf, west wall	<0.1
T891F-01302002-315-110	110	Top of electrical baseboard heater, south wall	<0.1
		T891E	
T891E-01302002-315-111	111	Top of fluorescent light fixture	<0.1
T891E-01302002-315-112	112	Top of fluorescent light fixture	<0.1
T891E-01302002-315-113	113	Top of Public Address (PA) speaker	<0.1
T891E-01302002-315-114	114	Top of fluorescent light fixture	<0.1
T891E-01302002-315-115	115	Top of wooden PA speaker	<0.1
		T904A	
T904A-02042002-315-116	116	SW corner on floor, west room	<0.1
T904A-02042002-315-117	117	North side on floor, west room	<0.1
T904A-02042002-315-118	118	Top of metal lockers, north wall, west room	<0.1
T904A-02042002-315-119	119	Floor by west wall, east room	<0.1
T904A-02042002-315-120	120	Top of wooden shelf, east wall, east room	<0.1
		T900E	
T900E-02042002-315-121	121	Top of gray, metal control box,, main room	<0.1
T900E-02042002-315-122	122	Top of extracted vapors pipe, main room	<0.1
T900E-02042002-315-123	123	Top of air compressor tank, main room	<0.1

[illegible]	[illegible] Point Location	Sample Location	Result (pCi/100 cm²)
T900E-02042002-315-124	124	Top of JB-8D box, south wall, main room	<0.1
T900E-02042002-315-125	125	Top of I-beam support for air compressor tank, main room	<0.1
		T893A	
T893A-02052002-315-126	126	Top of south fluorescent light fixture, room 69	<0.1
T893A-02052002-315-127	127	NE of room 69, top of fluorescent light fixture	<0.1
T893A-02052002-315-128	128	West of rooms 2 & 3, top of fire suppression water pipe	<0.1
T893A-02052002-315-129	129	Top of fluorescent light fixture, north end	<0.1
T893A-02052002-315-130	130	Top of fluorescent light fixture, east of room 49	<0.1
T893A-02052002-315-131	131	Top of fire suppression water pipe, east of room 49	<0.1
T893A-02052002-315-132	132	Top of book shelf, Cube 73	<0.1
T893A-02052002-315-133	133	Top of book shelf, Cube 33	<0.1
T893A-02052002-315-134	134	Top of water heater, Janitor's Closet	<0.1
T893A-02052002-315-135	135	SE corner of linoleum, Men's	<0.1
T893A-02052002-315-136	136	At west wall on linoleum, Women's	<0.1
T893A-02052002-315-137	137	Top of fluorescent light fixture	<0.1
T893A-02052002-315-138	138	Top of metal shelf, Cube 81	<0.1
T893A-02052002-315-139	139	Top of metal shelf, Cube 99	<0.1
T893A-02052002-315-140	140	Top of metal shelf, SE corner	<0.1
		T893B	
T893B-02062002-315-141	141	Floor on linoleum, Men's	<0.1
T893B-02062002-315-142	142	Top of water heater, Janitor's Closet	<0.1
T893B-02062002-315-143	143	Top of blue metal cabinet, Women's	<0.1
T893B-02062002-315-144	144	Top of beige metal shelf, Cube 92	<0.1
T893B-02062002-315-145	145	Top of beige metal shelf, Cube 66	<0.1
T893B-02062002-315-146	146	Top of fire suppression water pipe	<0.1
T893B-02062002-315-147	147	Top of AC disc diffuser	<0.1
T893B-02062002-315-148	148	Top of AC disc diffuser	<0.1
T893B-02062002-315-149	149	Top of beige metal shelf, Cube 77	<0.1
T893B-02062002-315-150	150	Top of fire suppression water pipe	<0.1
T893B-02062002-315-151	151	Top of angle iron sway brace	<0.1
T893B-02062002-315-152	152	Top of fluorescent light fixture	<0.1
T893B-02062002-315-153	153	Top of fire suppression water pipe	<0.1
T893B-02062002-315-154	154	Top of angle iron brace	<0.1
T893B-02062002-315-155	155	Top of fire extinguisher, west exterior wall	<0.1

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 890 Interior & Exterior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp IAHT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

DynCorp
THE ART OF TECHNOLOGY

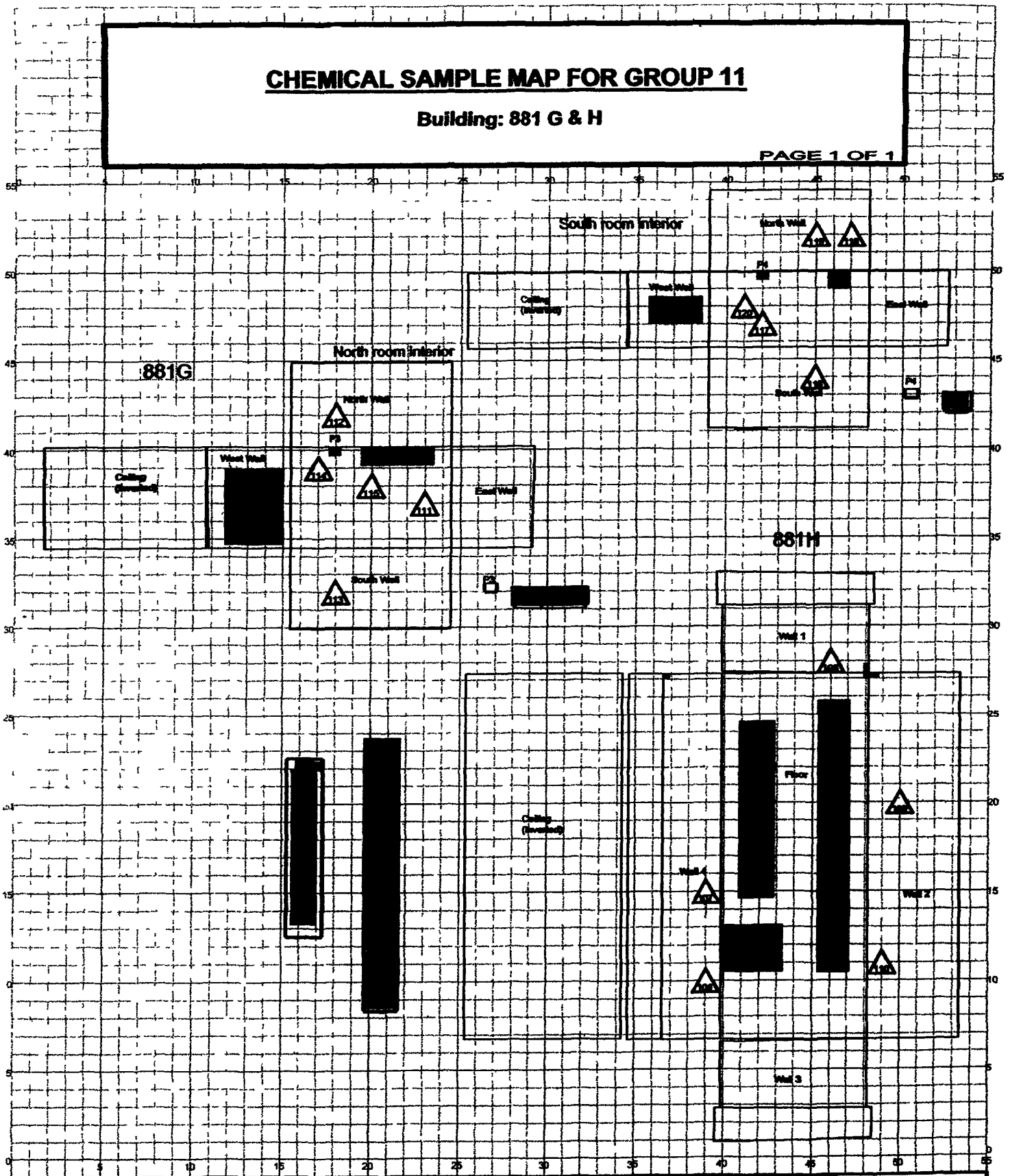
MAP ID: 02-0192999-DE

January 15, 2002

185

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 881 G & H



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&MS, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30
0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

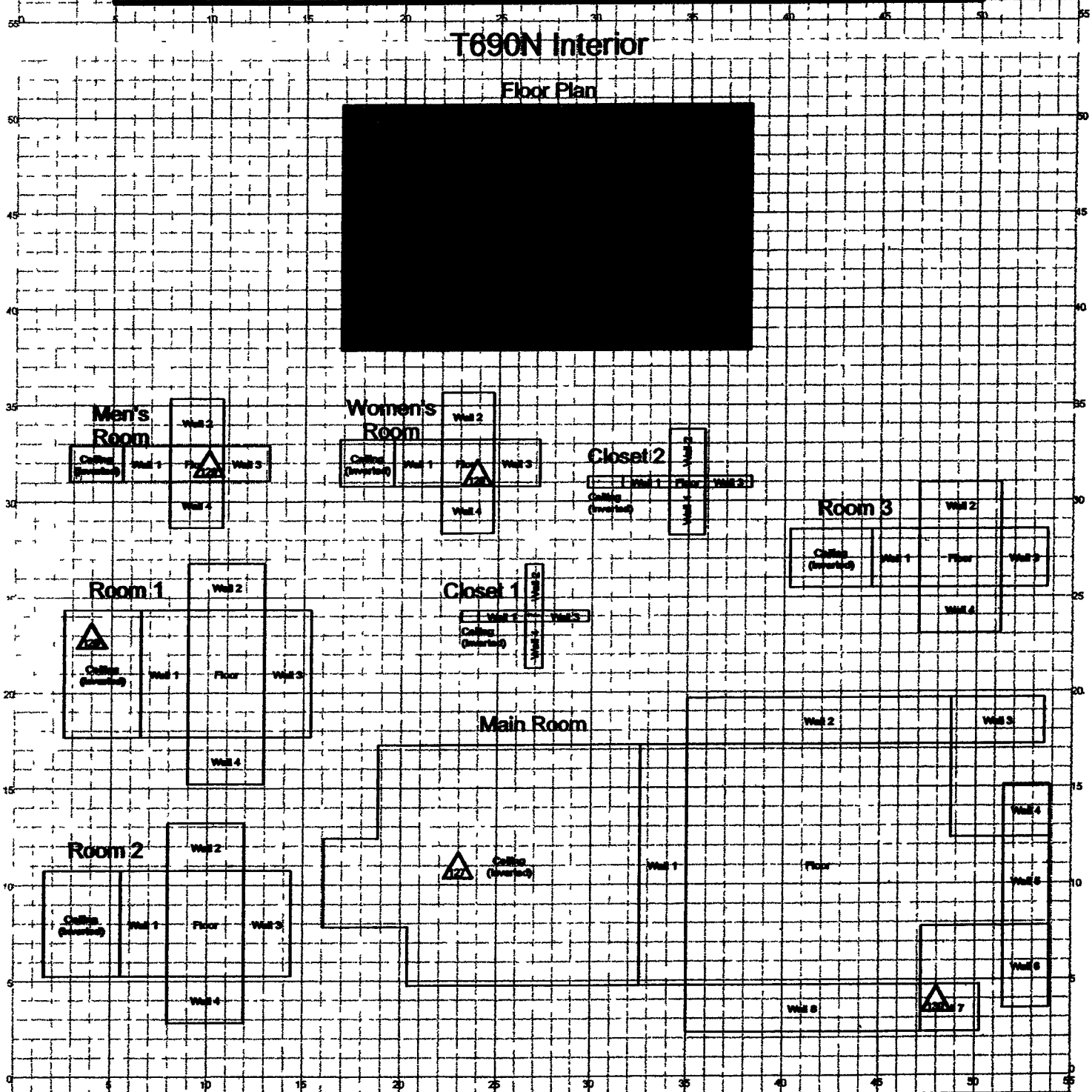
Prepared for:

MAP ID: 02-0102G1881-In-DE January 15, 2002

186

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: T690N Exterior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MRT, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30
0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

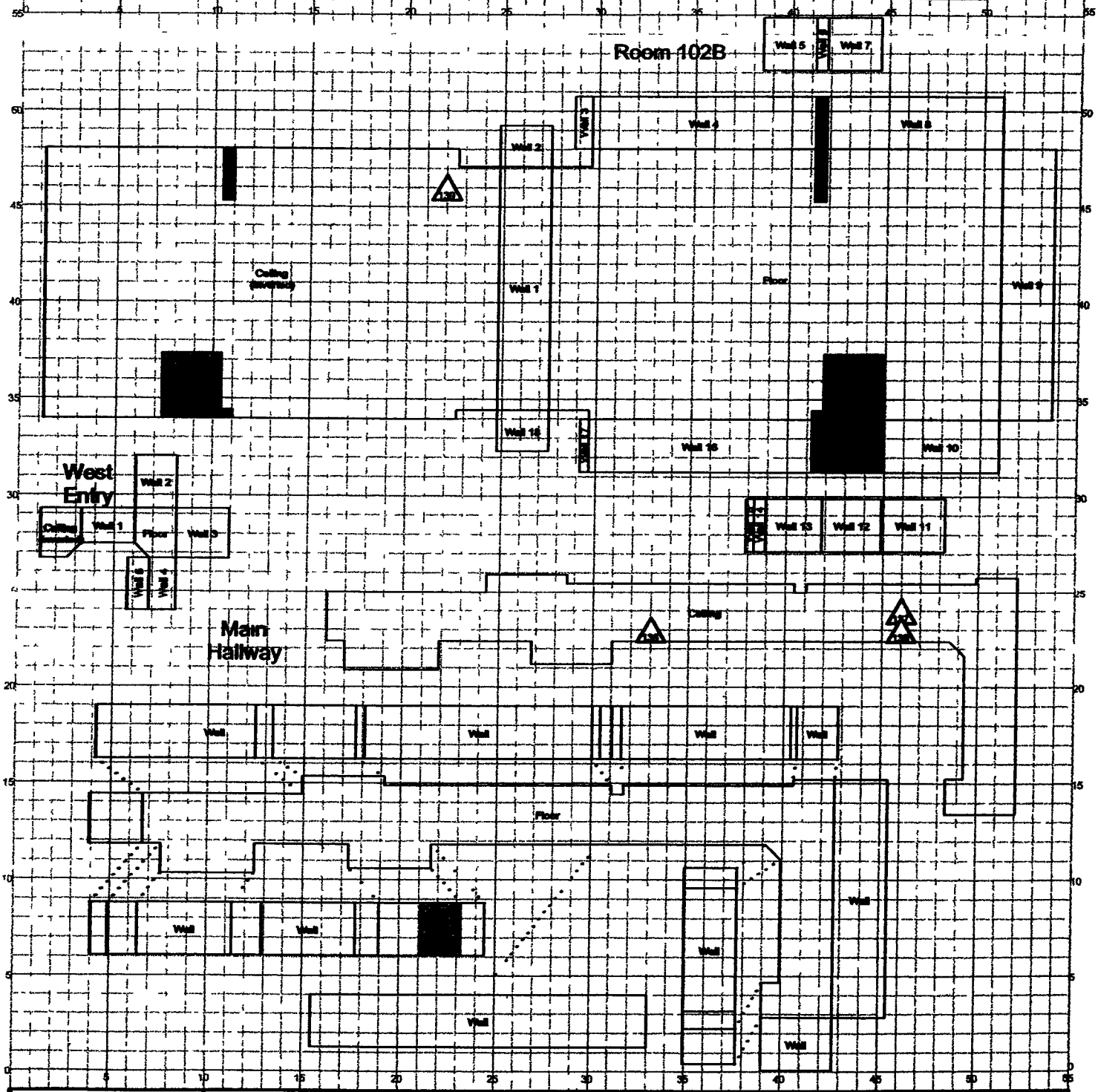
Prepared for: [redacted]

MAP ID: 02-0102/T690N-2-BE January 15, 2002

187

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp IMET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

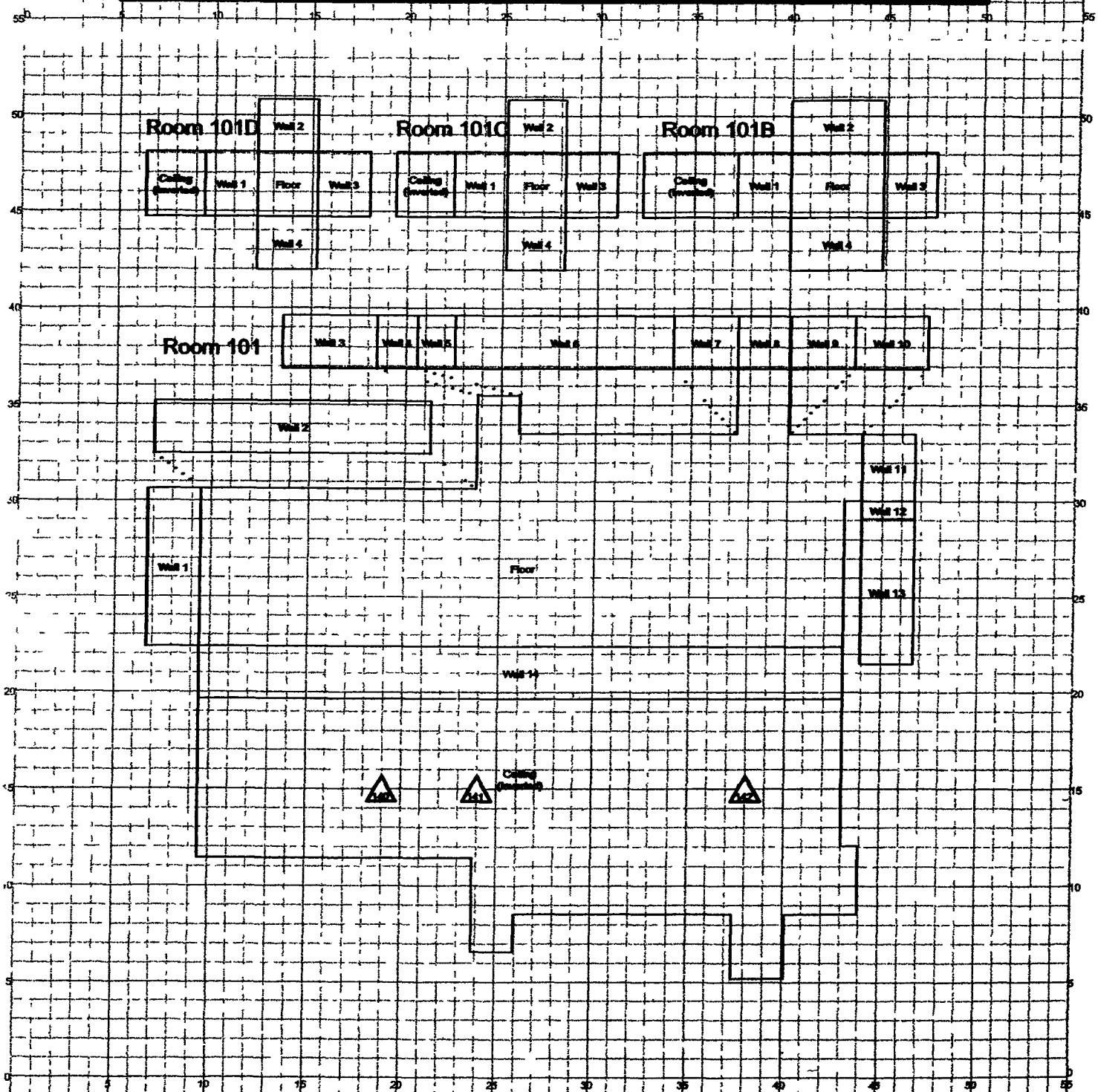
MAP ID: 02-0102/0909-1-BE

January 15, 2002

188

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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:

DynCorp
THE ART OF TECHNOLOGY

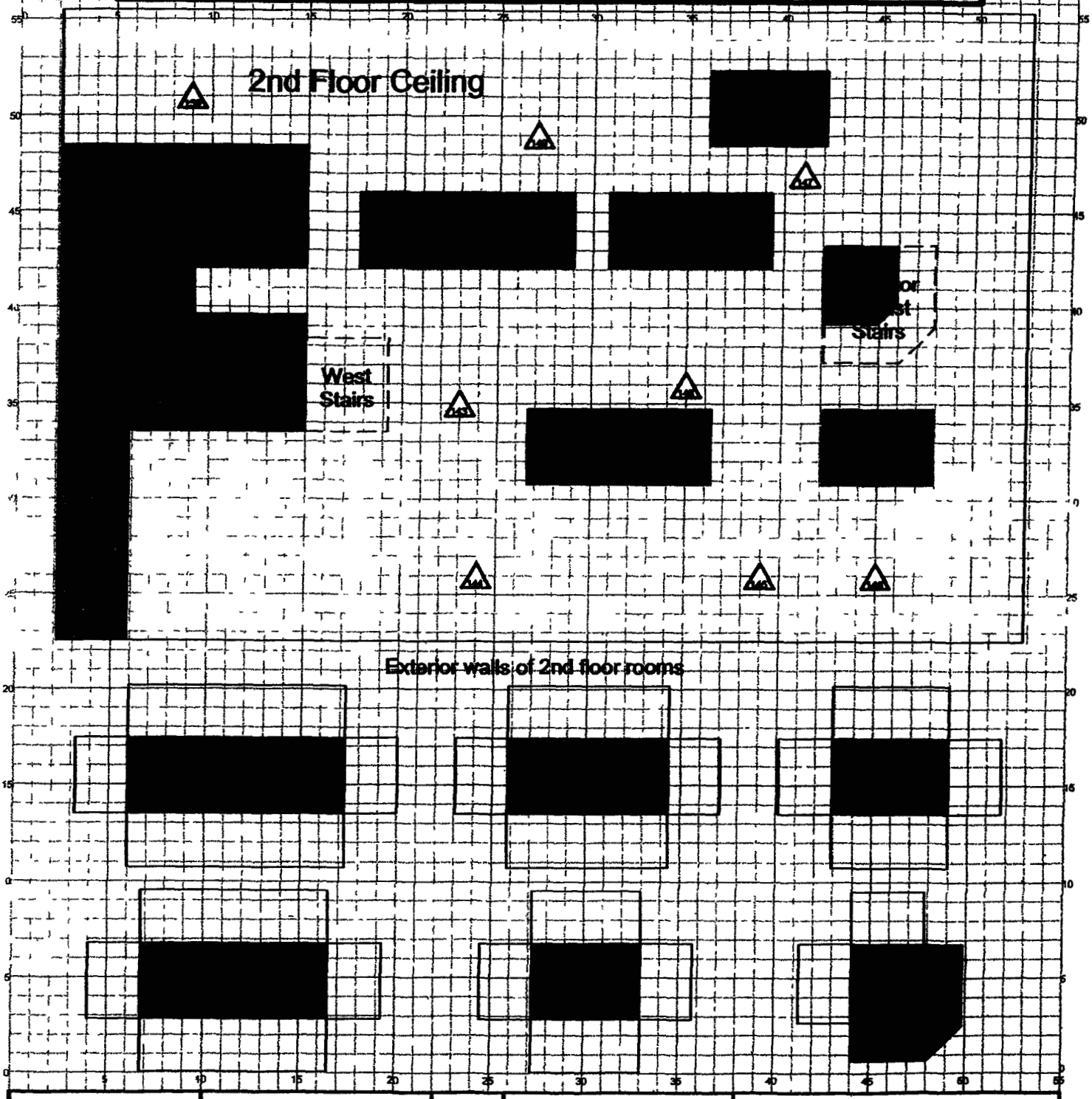
MAP ID: 02-0102/D050-2-BE

January 15, 2002

189

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MSSC, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

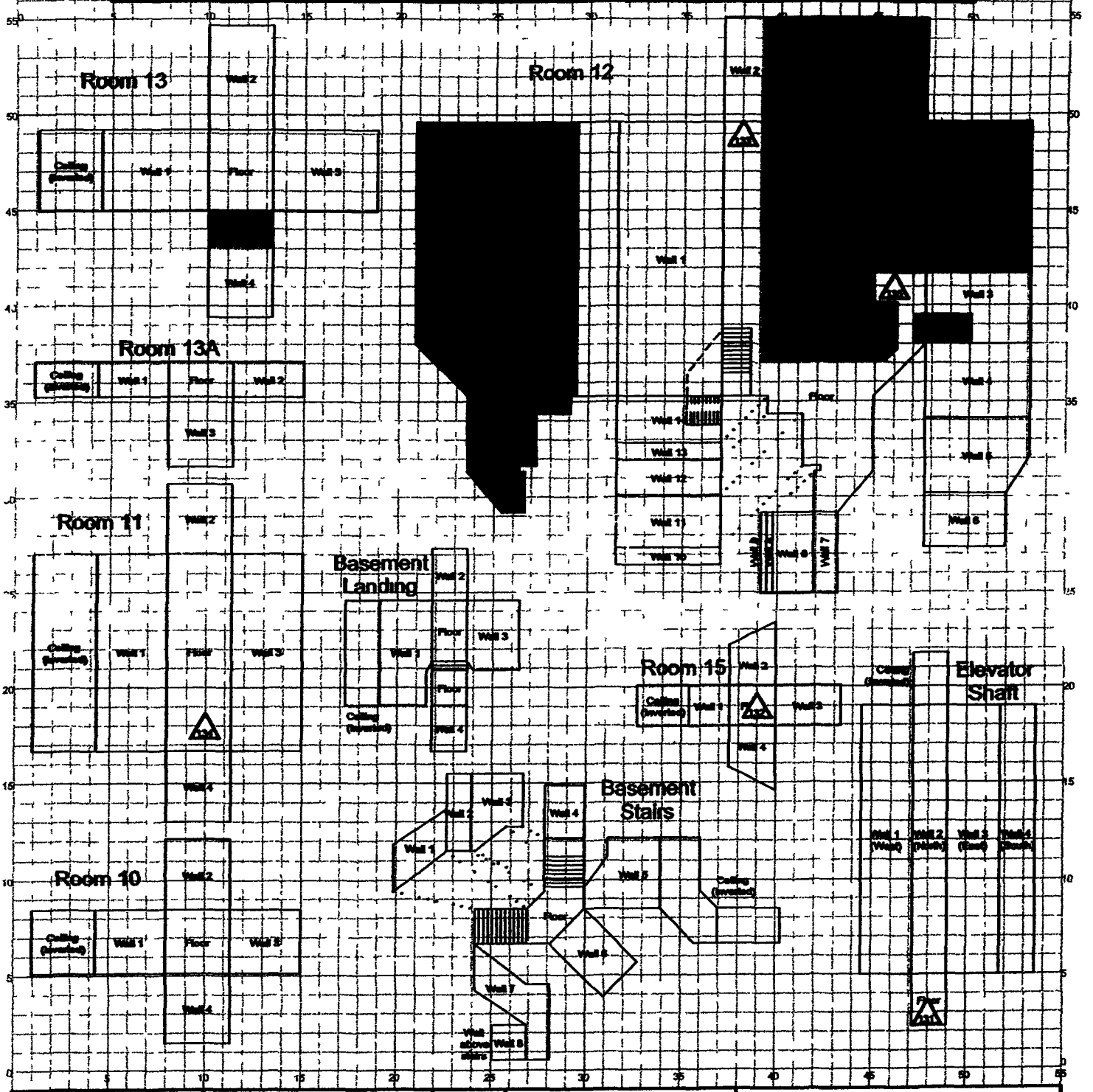
MAP ID: 02-0102[illegible]-6-BE

January 15, 2002

140

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 850



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&MS, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

Prepared for:

DynCorp
THE ART OF TECHNOLOGY

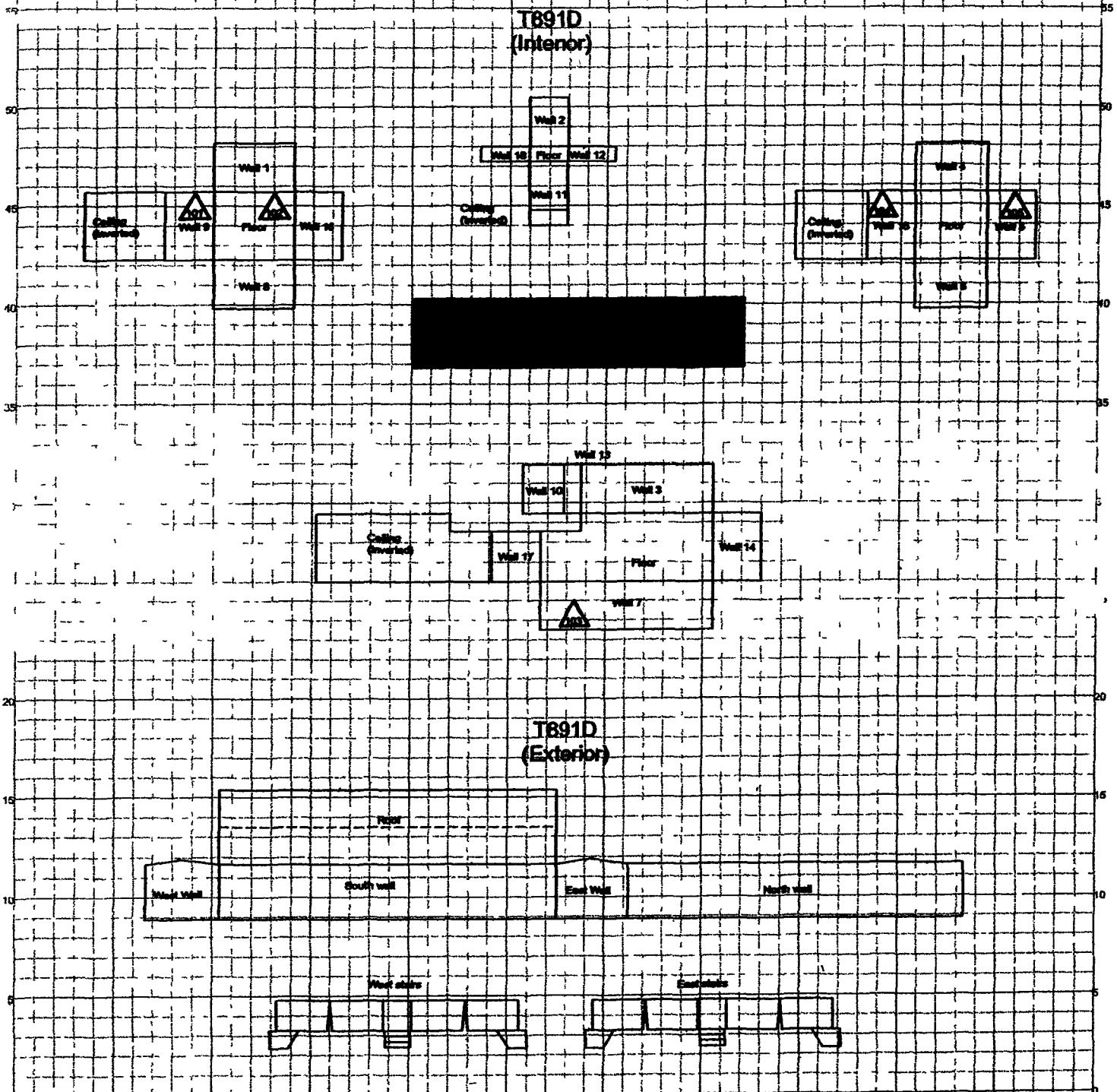
MAP ID: 02-0192/B850-9-BE

January 15, 2002

191

CHEMICAL SAMPLE MAP

Building: T891D Interior & Exterior



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp NSST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30
0 METERS 10

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

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

Prepared by: [illegible] Prepared for:

DynCorp
THE ART OF TECHNOLOGY

[redacted]

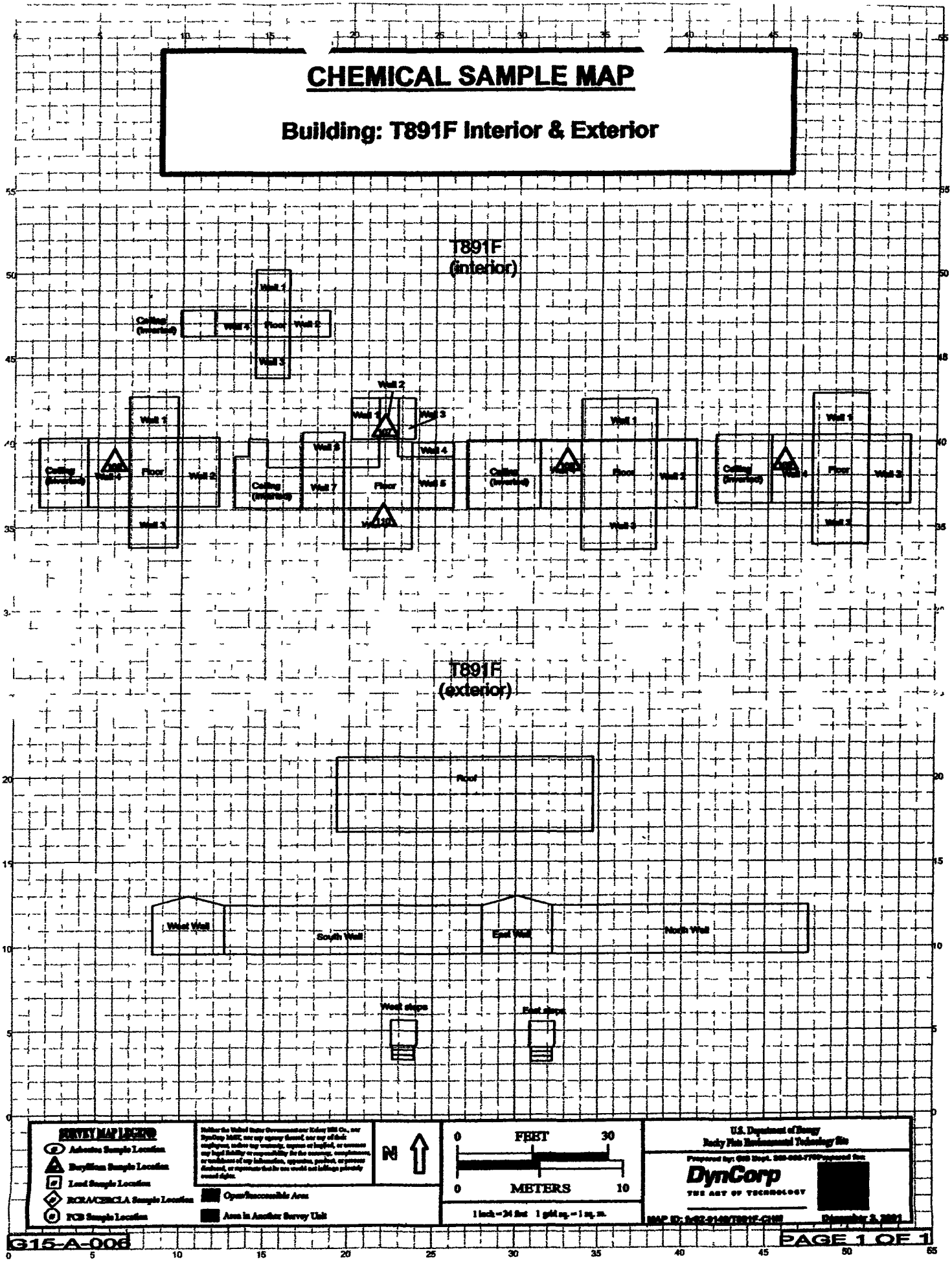
MAP ID: [illegible] Date: [illegible]

G15-A-004

192

CHEMICAL SAMPLE MAP

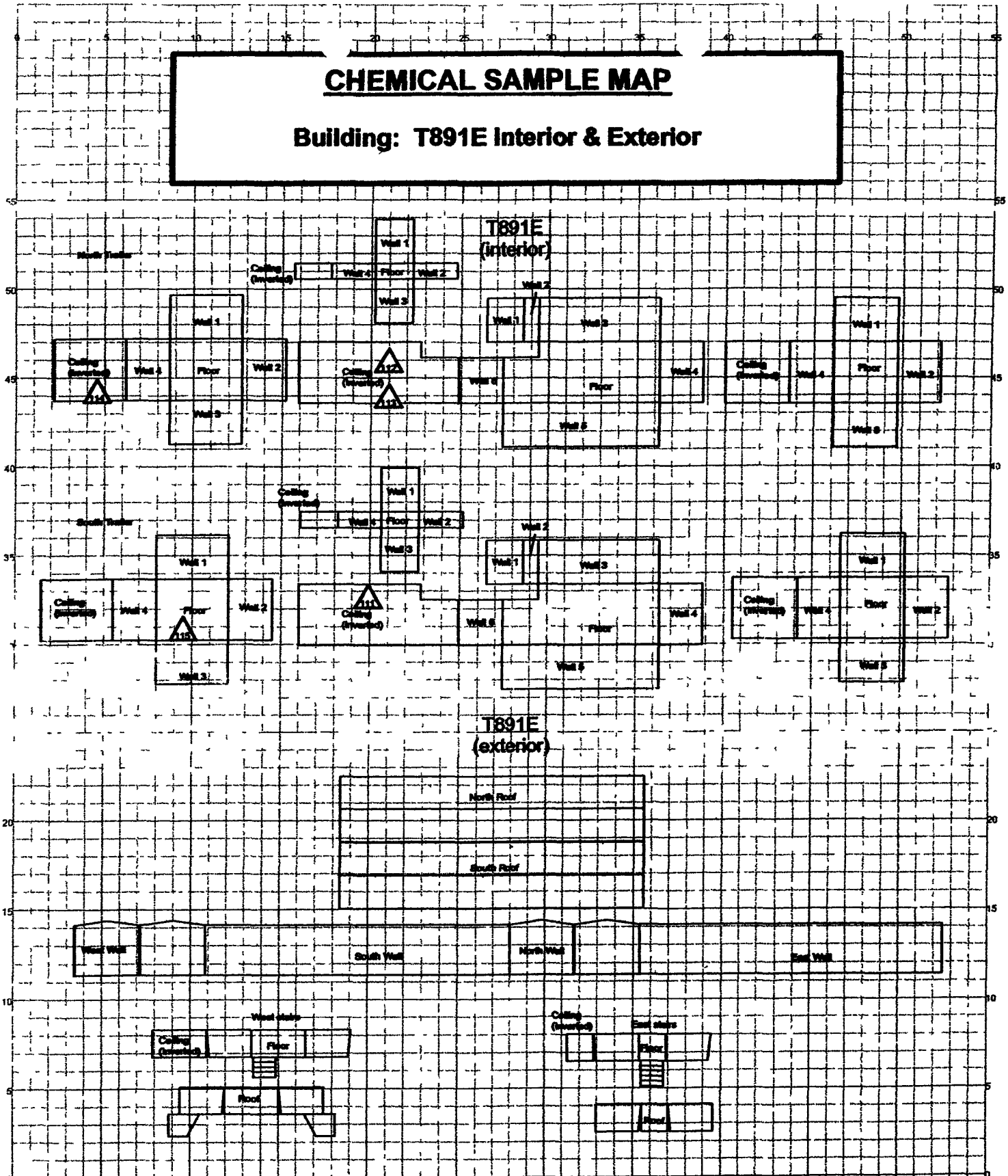
Building: T891F Interior & Exterior



193

CHEMICAL SAMPLE MAP

Building: T891E Interior & Exterior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MRS, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

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

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

Prepared by: GIS Dept. 303-966-7775 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

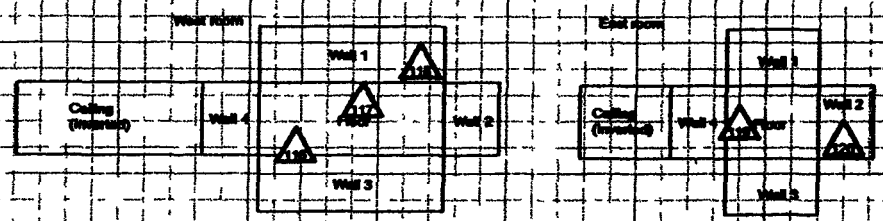
MAP ID: 1-02-F140/T891E-C150 December 3, 2001

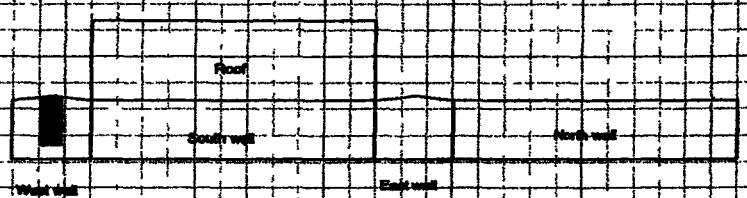
G15-A-005

194

CHEMICAL SAMPLE MAP

Building: T904A Interior & Exterior





SURVEY MAP LEGEND

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

Neither the United States Government nor Eaker MS Co., nor DynCorp EMSI, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

- 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: [illegible] Prepared for:

DynCorp
THE ART OF TECHNOLOGY

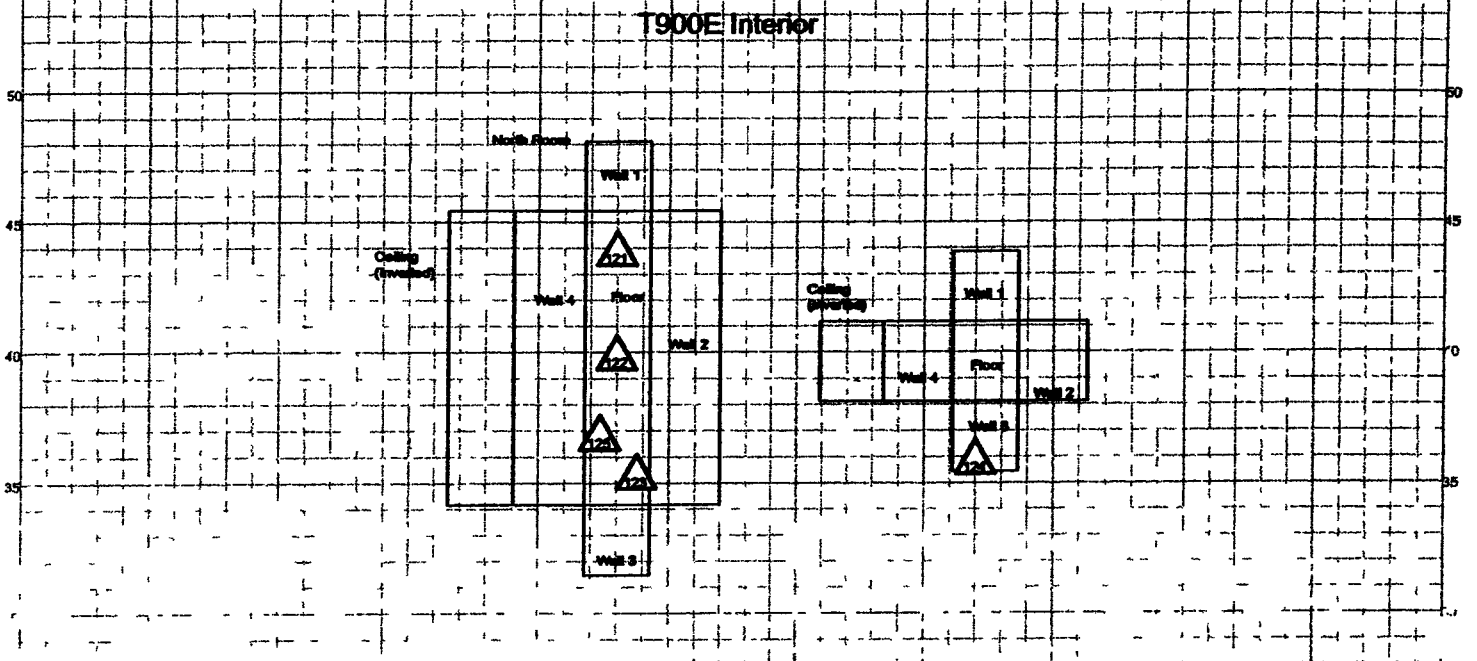
MAP ID: [illegible] December 3, 2001

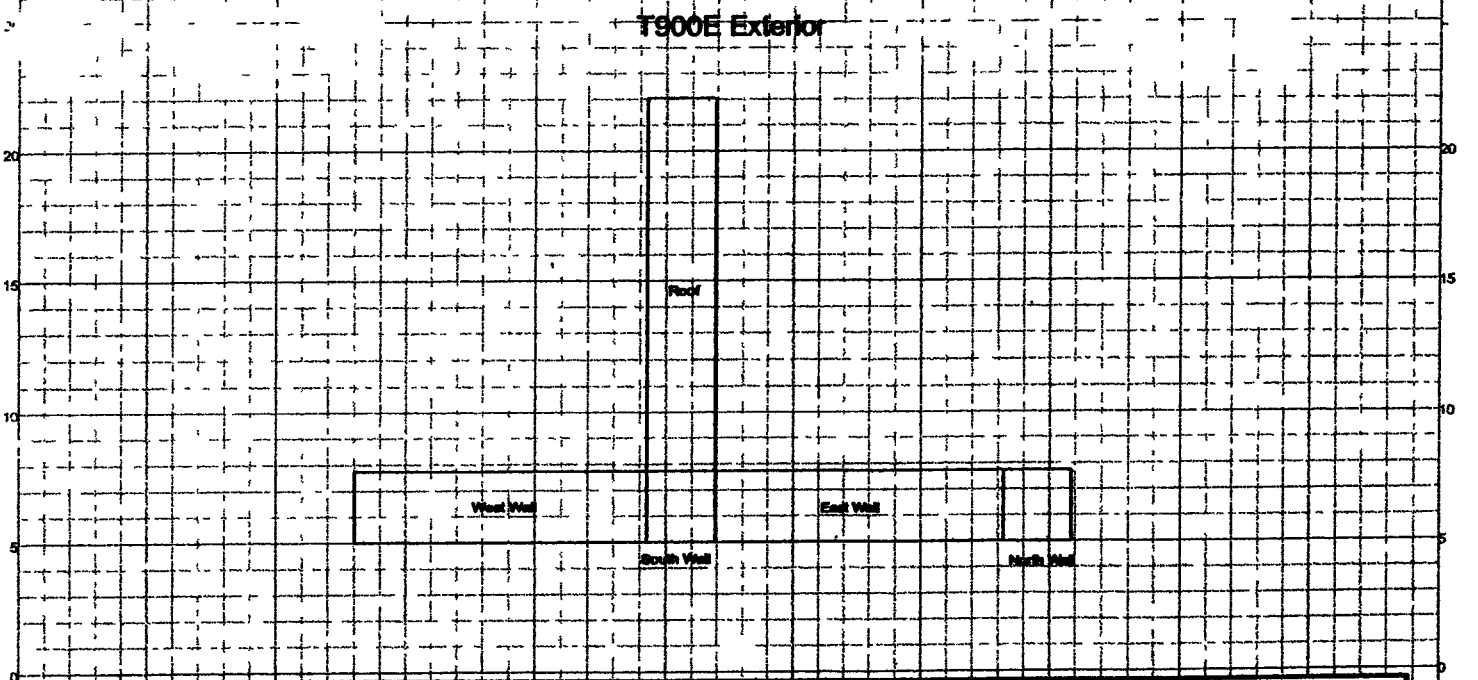
G15-A-011

195

CHEMICAL SAMPLE MAP

Building: T900E Interior & Exterior





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

Neither the United States Government nor Eclipse Hill Co., nor DynCorp MEST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: [illegible] Prepared for:

DynCorp
THE ART OF TECHNOLOGY

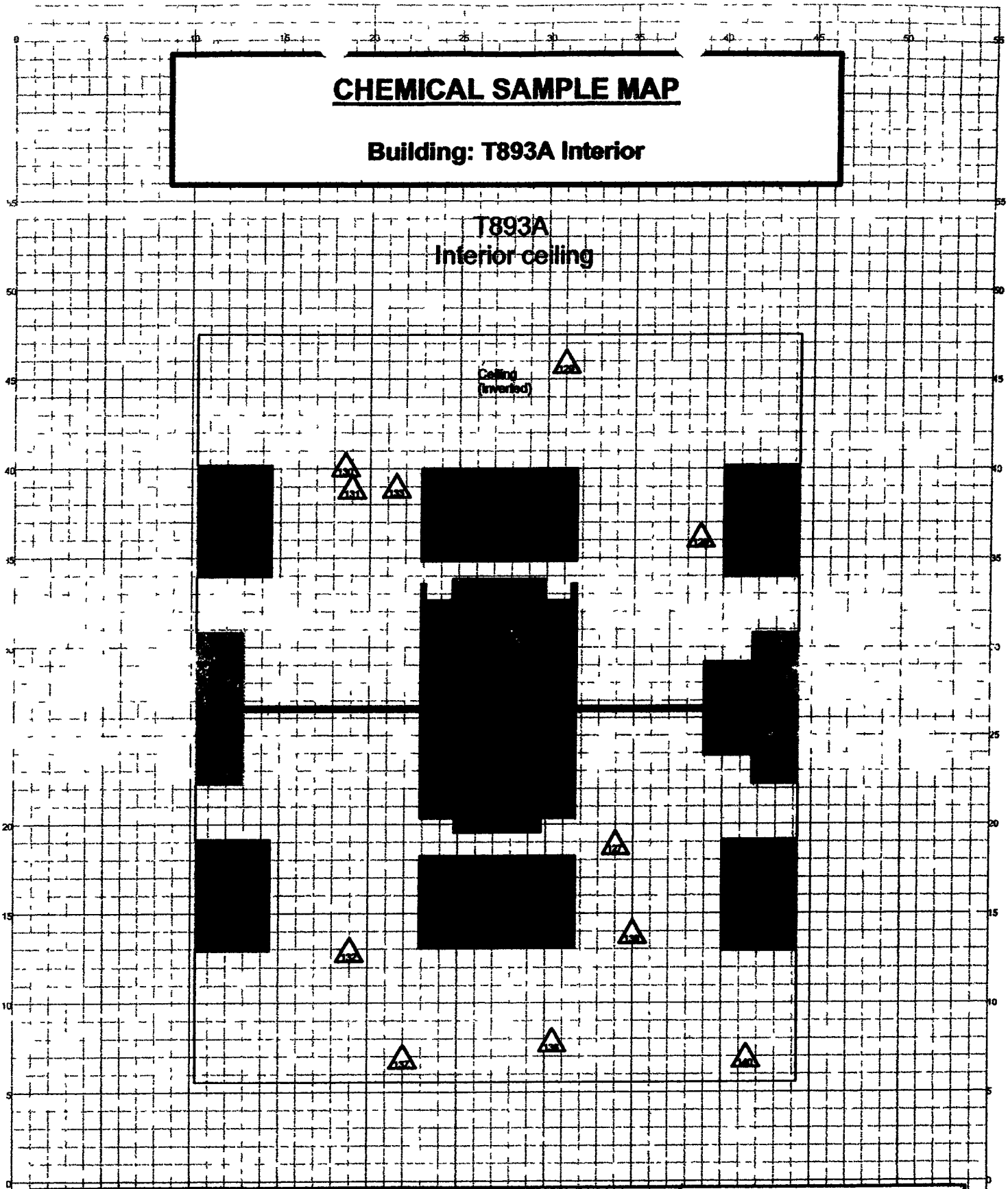
MAP ID: [illegible] December 3, 2001

G15-A-010

146

CHEMICAL SAMPLE MAP

Building: T893A Interior



SURVEY MAP LEGEND

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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp MRSI, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

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: [illegible] Dept. [illegible] Prepared for:

DynCorp
THE ART OF TECHNOLOGY

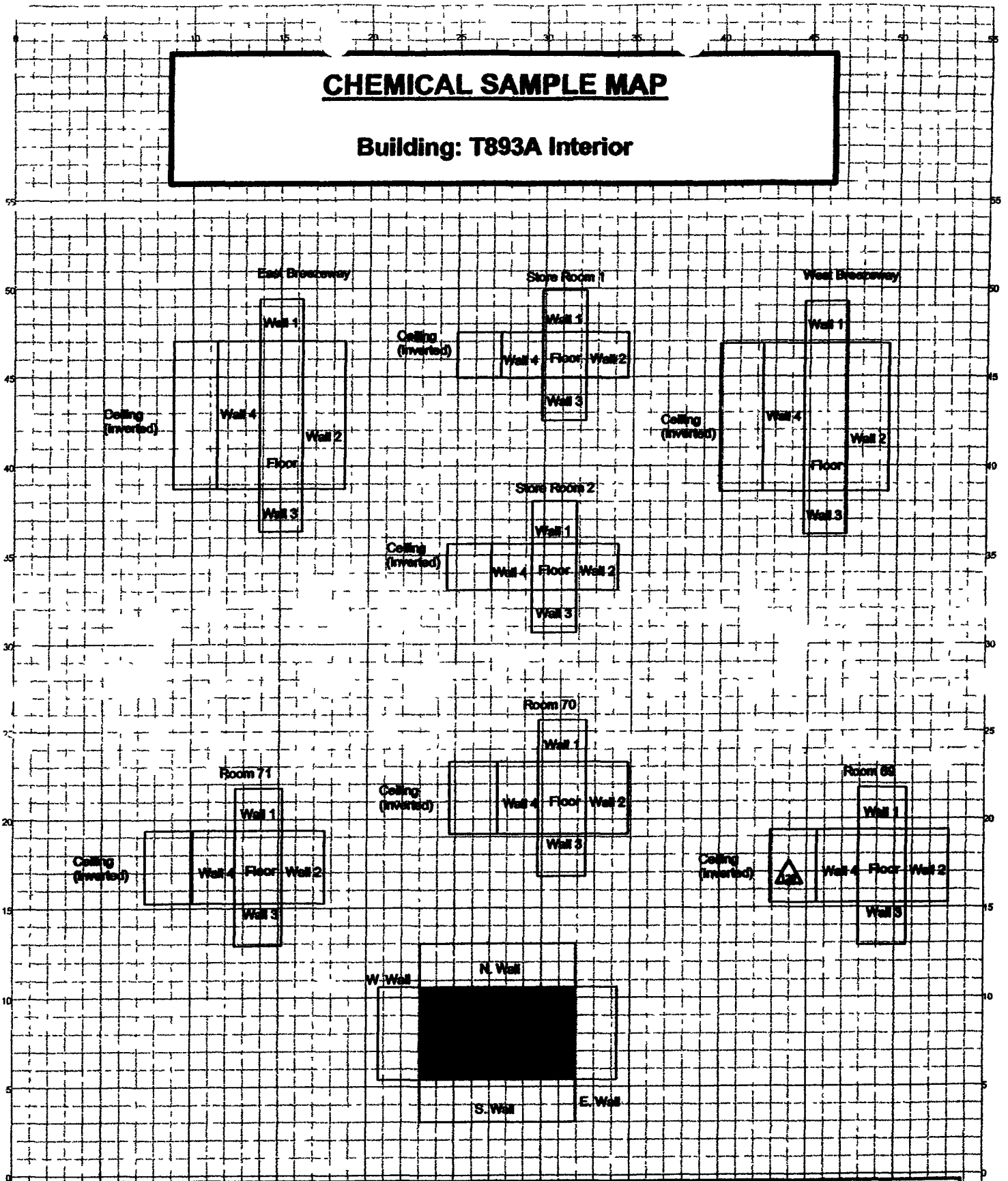
MAP ID: [illegible]-CHEM Date: [illegible]

G15-A-008

147

CHEMICAL SAMPLE MAP

Building: T893A Interior



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

Neither the United States Government nor Exlar Hill Co., nor DynCorp RMST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

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

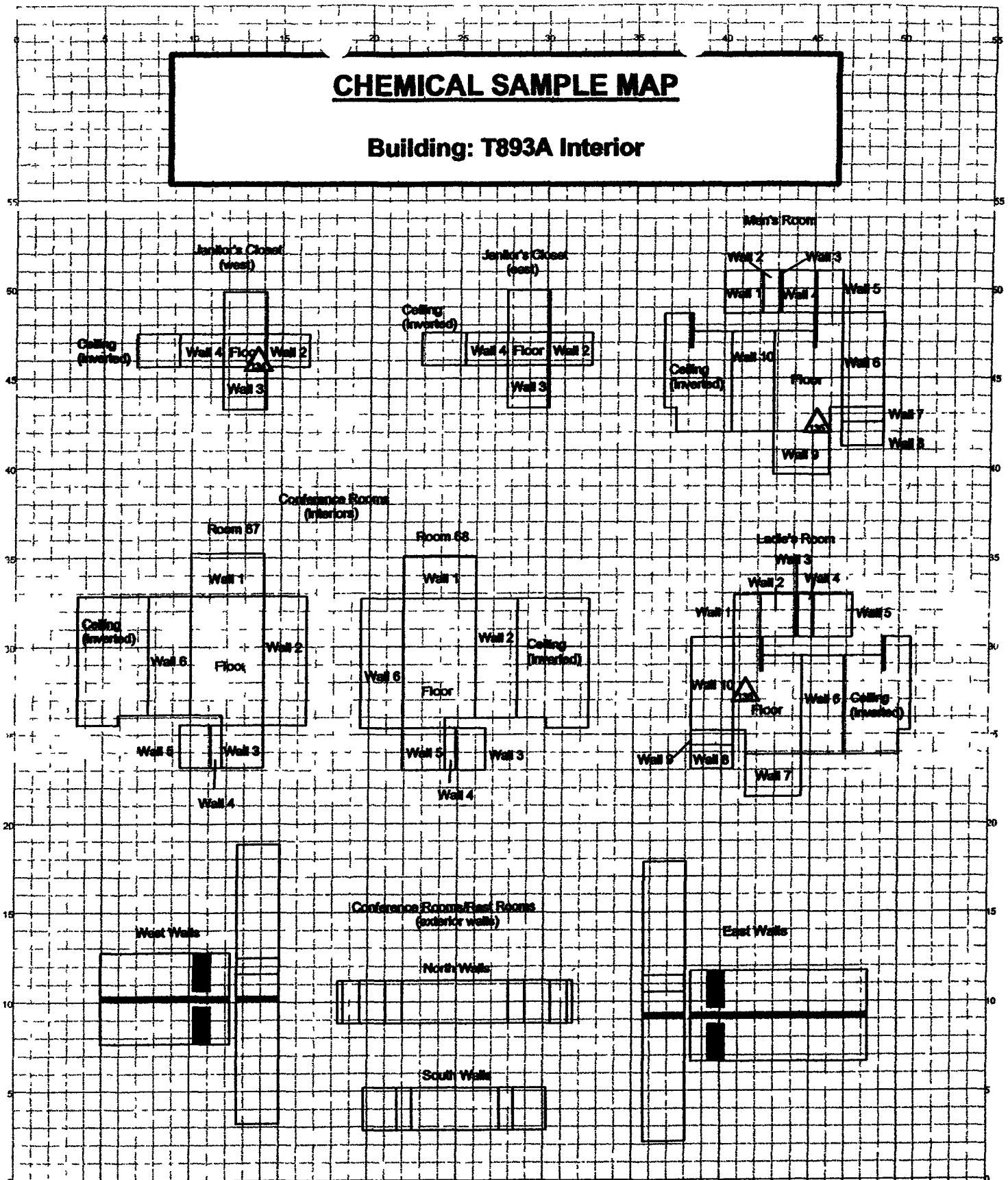
DynCorp
THE ART OF TECHNOLOGY

MAP ID: [redacted] December 3, 2001

148

CHEMICAL SAMPLE MAP

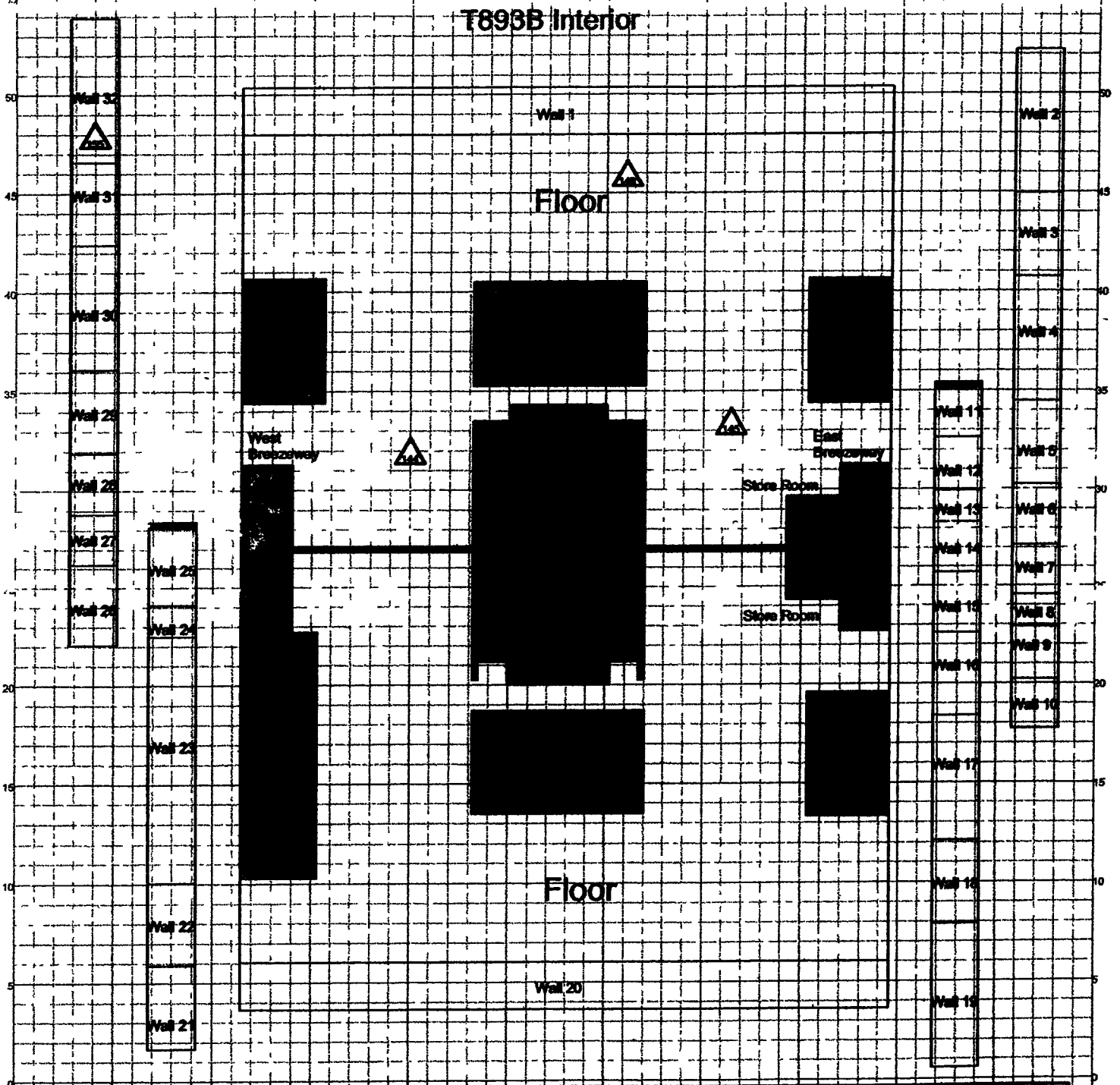
Building: T893A Interior



199

CHEMICAL SAMPLE MAP

Building: T893B Interior



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

Neither the United States Government nor Rocky Flats Co., nor DynCorp RMS, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7700 Prepared for:

DynCorp
THE ART OF TECHNOLOGY

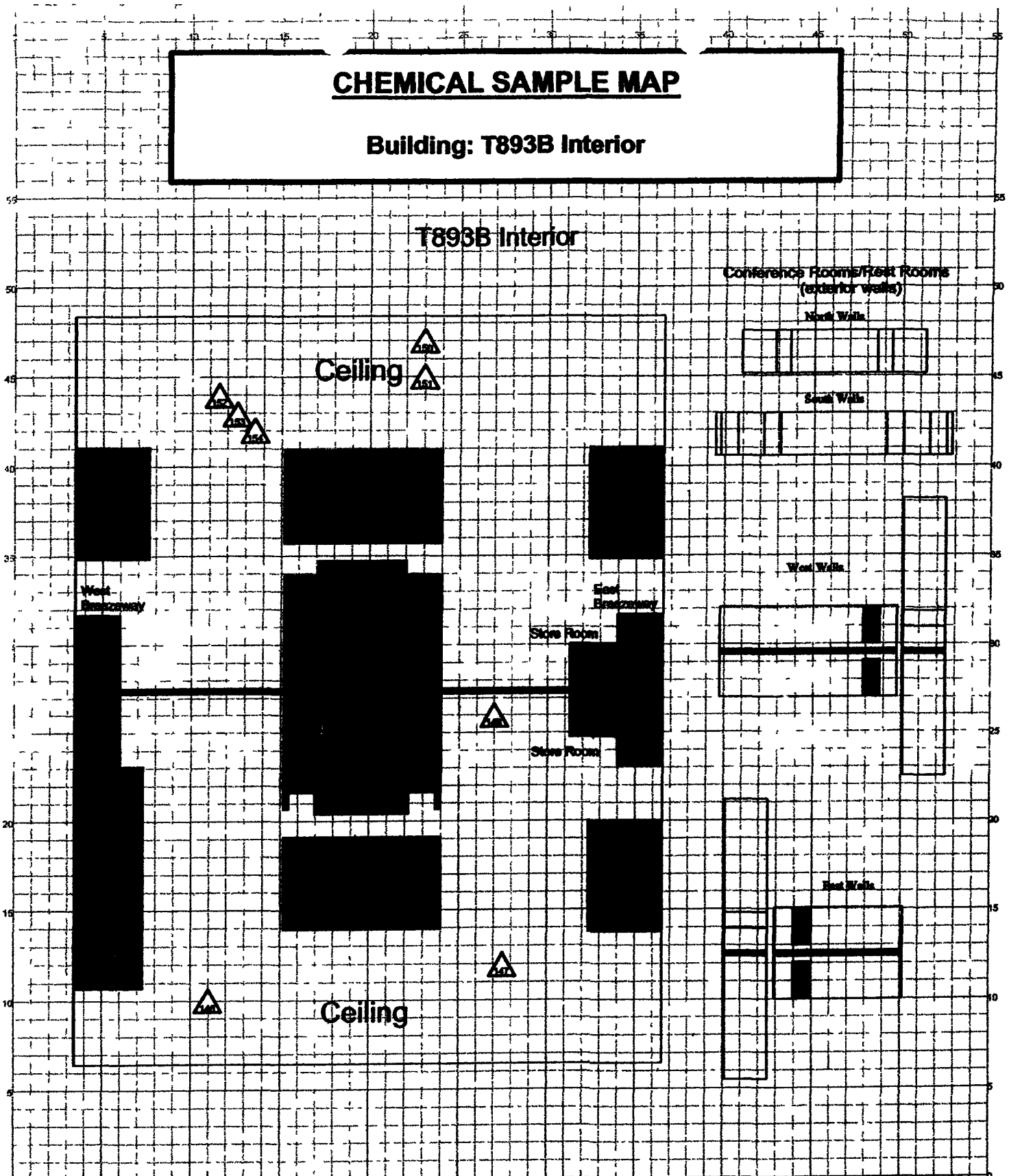
MAP ID: b02-01-07T893B-CH03 December 3, 2001

G15-A-009

200

CHEMICAL SAMPLE MAP

Building: T893B Interior



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

Neither the United States Government nor Rocky Flats Co., nor DynCorp IMEC, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30
0 METERS 10

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

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

Prepared by: [redacted] Prepared for:

DynCorp
THE ART OF TECHNOLOGY

[redacted]

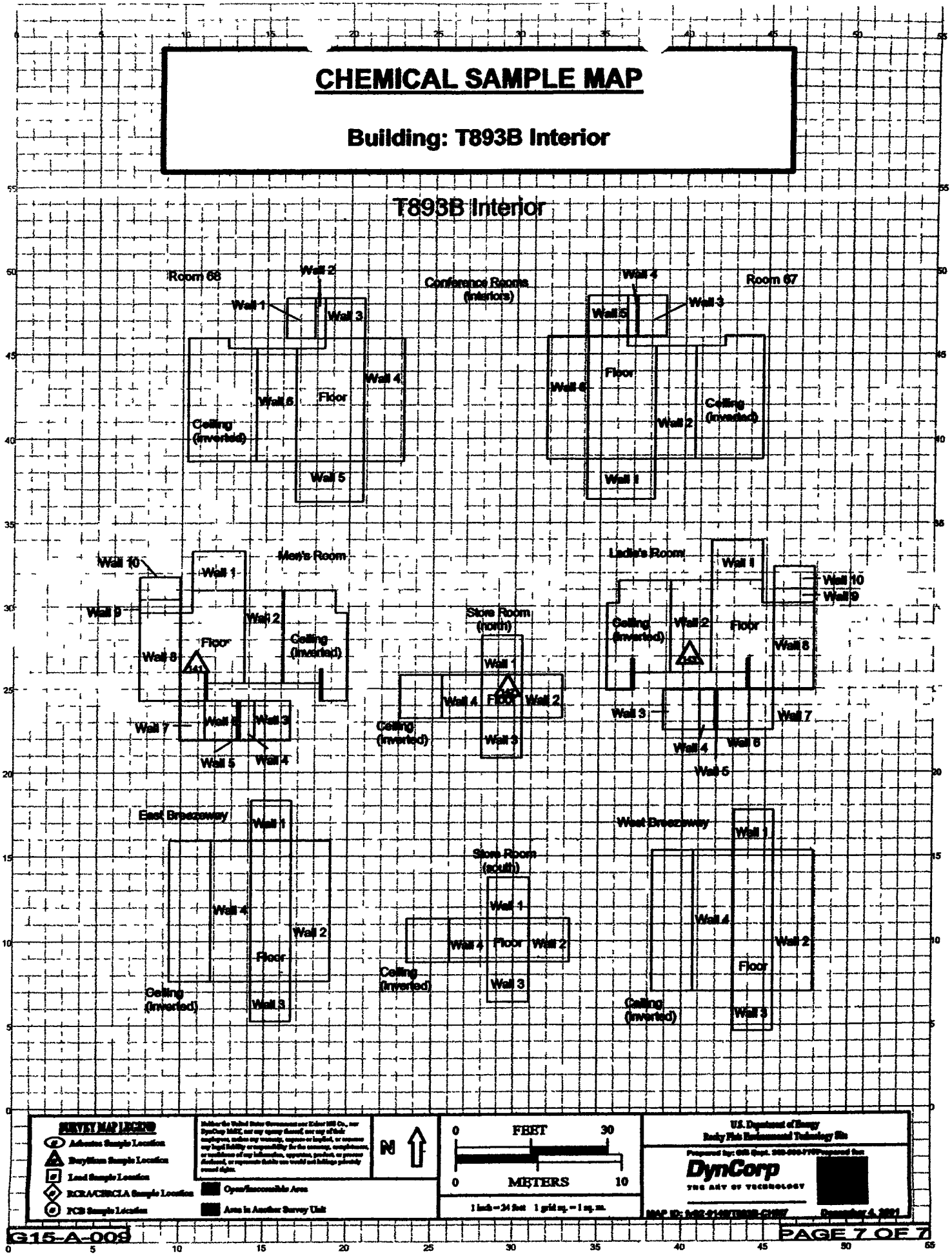
MAP ID: [illegible] December 3, 2001

G15-A-009

201

CHEMICAL SAMPLE MAP

Building: T893B Interior



202

PCB Data Summary

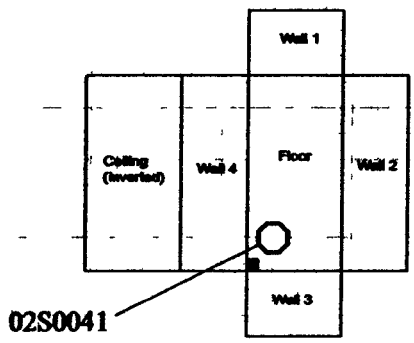
Sample Number	Map Sample Point Location	Sample Location	Arcolor	Results (ug/kg)
02S0041	1	Group 11, Bldg 890 Core sample from oil stain in SW quadrant of building	1254	47 (0 047 ppm)

Regulatory Limit for PCB's 50ppm

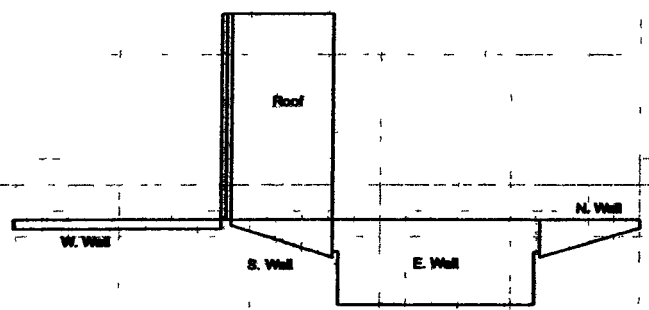
CHEMICAL SAMPLE MAP FOR GROUP 11

Building: 890 Interior/Exterior

Interior



Exterior



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp RMST, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

U.S Department of Energy
Rocky Flats Environmental Technology Site

Prepared by: GIS Dept. 303-966-7707

Prepared for:

DynCorp
THE ART OF TECHNOLOGY

MAP ID: 02-0102890-PCB

January 30, 2002

204

205

TCLP Metals Data Summary

[illegible]	[illegible]	[illegible]
C865 Sediment	02S0042-001 002	TCLP Metals less than regulatory limits

RCRA Metals

Analyte	Regulatory limit (mg/L)
Arsenic (D004)	5 0
Barium (D005)	100 0
Cadmium (D006)	1 0
Chromium (D007)	5 0
Lead (D008)	5 0
Mercury (D009)	0 2
Selenium (D010)	1 0
Silver (D011)	5 0

SERVICES

KAISER-HILL LLC

TCLP Metals Analysis Data Sheet

Lab Name:	STL DENVER	**Client Sample ID:**	02S0042-001 002
Lot/SDG Number:	02S0042	**Lab WorkOrder:**	EORKH
Matrix:	WATER	**Lab Sample ID:**	D1L190286-001
% Moisture:	N/A	**Date/Time Collected:**	12/17/01 9.30
Units:	MG/L	**Date/Time Received:**	12/19/01 13.35

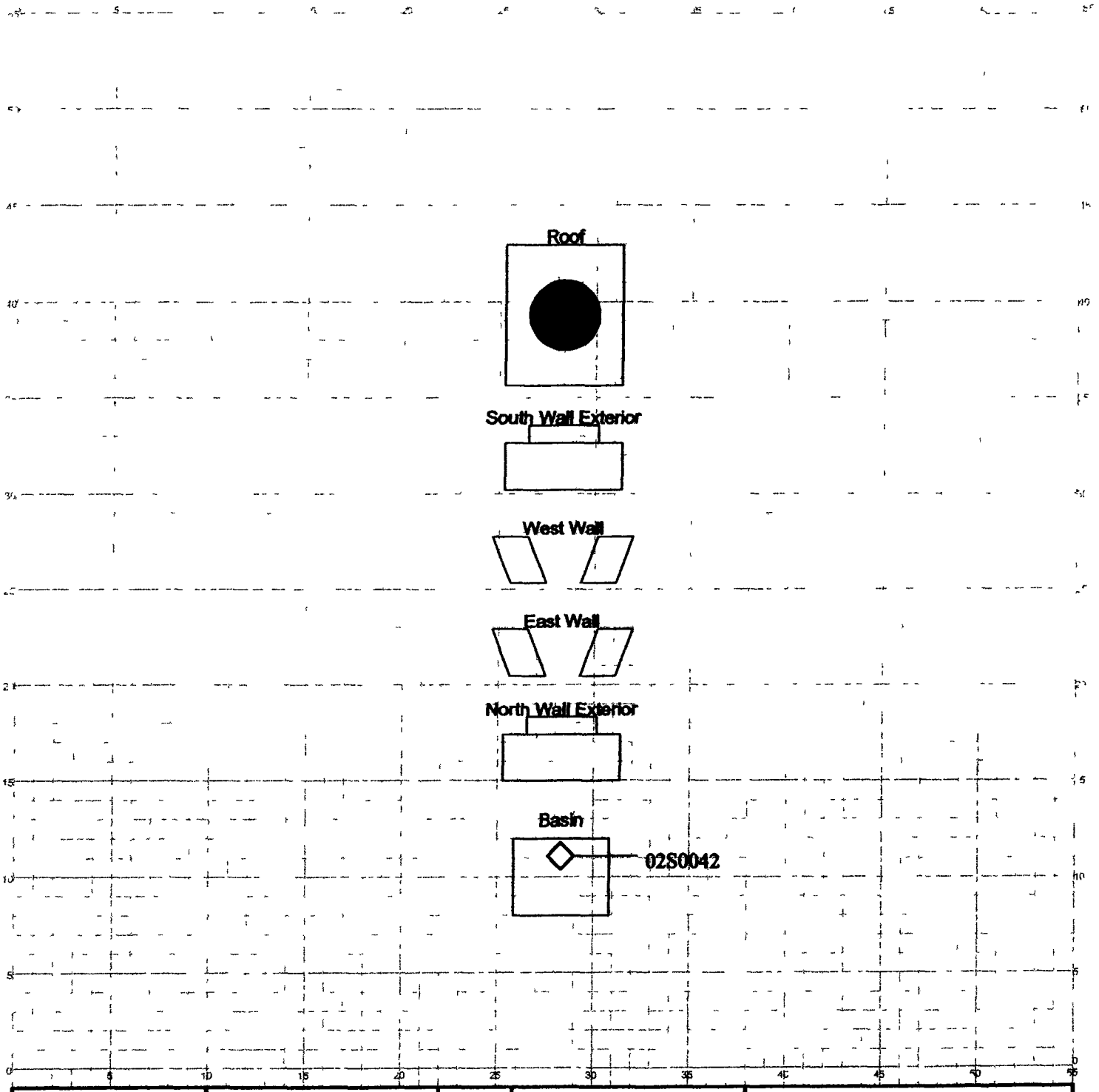
CAS No.	Analyte	Conc.	Q	RL	Dilution Factor	QC Batch ID	Method	Instrument ID	Analysis Date	Analysis Time
7440-38-2	Arsenic	0.0034	U	0.50	1	1361453	6010B	016	12/31/01	11.56
7440-39-3	Barium	0.82	B	10.0	1	1361453	6010B	016	12/31/01	11:56
7440-43-9	Cadmium	0.044		0.010	1	1361453	6010B	016	12/31/01	11.56
7440-47-3	Chromium	0.0036	B	0.060	1	1361453	6010B	016	12/31/01	11:56
7439-92-1	Lead	0.0078	B	0 070	1	1361453	6010B	016	12/31/01	11:56
7782-49-2	Selenium	0.0079	B	0.050	1	1361453	6010B	016	12/31/01	11:56
7440-22-4	Silver	0.0010	B	0.14	1	1361455	6010B	016	12/31/01	13:20

U Result is less than the reporting limit. (RL)
B Estimated result. Result is less than RL and greater than or equal to the IDL.

206

CHEMICAL SAMPLE MAP FOR GROUP 11

Building: C865



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

Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&MS, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

N

0 FEET 30

0 METERS 10

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

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

Prepared by: GIS Dept. 303-966-7707

DynCorp
THE ART OF TECHNOLOGY

Prepared for:

MAP ID: 02-0162/C865-RCRA

January 8, 2002

207

ATTACHMENT E

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 asbestos, beryllium, PCBs and metals.)

DQA criteria and results are provided in a tabular format for each suite of surveys or chemical analyses performed; the radiological survey assessment is provided in Table E-1, asbestos in E-2, beryllium in E-3, PCBs in E-4, and metals in E-5. A data completeness summary for all results is given in Table E-6.

All relevant Quality records supporting this report are maintained in the RISS Characterization Project Files. 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 RIN (Report Identification Number) and are traceable to the sample number and corresponding sample location.

Beta/gamma survey designs were not implemented for the Group 11 and Group 15 facilities based on the conservatism of the transuranic limits used as DCGLs in the unrestricted release decision process. Stated differently, based on the well-established suite of actinides historically used at the RFETS, all of these actinides would emit alpha radiation in exceedance of the applicable transuranic DCGLs before other DCGLs would be exceeded for their respective Uranium species – Technical Basis Document 00162, Rev. 0, *Technical Justification for Types of Surveys Performed During Reconnaissance Level Characterization Surveys and Pre-Demolition Surveys in RISS Facilities,* corroborates the use of this approach

Consistent with EPA's G-4 DQO process, the radiological survey design (for those survey units performed per PDS requirements) was optimized by checking actual measurement results (acquired during pre-demolition surveys) against model output with original estimates Use of actual sample/survey (result) variances in the MARSSIM DQO model confirms that an adequate number of surveys were acquired

SUMMARY

In summary, the data presented in this report have been verified and validated relative to the quality requirements and project decisions as stated in the original DQOs. All data are useable based on qualifications stated herein and are considered satisfactory without qualification All media surveyed and sampled yielded results less than their associated action levels and with acceptable uncertainties, except

- Seven samples of non-friable asbestos containing material identified in B890, B881G, and B850 (Group 11), and in T891F (Group 15) The black, brown and gray fibrous, tar, roofing materials sampled from Building 890 (3 samples) were 12% to 65%

209

Chrysotile by volume The brown resin adhesive sampled from Room 211 in Building 850 (1 sample) was 1 25% Chrysotile by Point Counting The black roofing tar in B881G (2 samples) was 5% Chrysotile by volume The brown caulking around the vent pipe in the restroom of T891F (1 sample) of Group 15 was 10% Chrysotile by volume The ACM will be managed in accordance with 29 CFR 1926.1101 and CDHPE Colorado Regulation Number 8 during building decommissioning and demolition activities

- Elevated readings (TSA) were also identified on the C865 roof, 2 locations (Group 11), and the T904A roof (Group 15) Coupon samples analyzed by gamma spectroscopy confirmed no DOE-added materials, therefore, samples meet unrestricted release levels Also, Survey Unit G15-A-008 had a $DCGL_w$ >50 (50.7). Target MDC is 50% of $DCGL_w$ per MARSSIM Guidelines – *"a" priori* for instrument is 48 Therefore, actual MDC of 50 7 is within acceptable MDC target limits per MARSSIM Guidelines.

One sediment sample from the cement basin below the C865 Cooling Tower was analyzed for metals and one stain in B890 was analyzed for PCBs. Both results were non-detect and below the associated action levels and supported the decision not requiring additional sampling for these constituents. Chain of Custody was intact, documentation was complete, hold times were acceptable (where applicable,) and packaging integrity/custody seals were maintained throughout the sampling/analysis process On this basis, the Survey Units and facilities identified in this RLCR (Group 11 and Group 15) meet the unrestricted release criteria with the confidences stated herein

230

Table E-1 V&V of Radiological Surveys For Group 11 and Group 15

V&V CRITERIA, RADIOLGICAL SURVEYS		K-H RSP 16.00 Series MARSSIM (NUREG-1575)		
QUALITY REQUIREMENTS				
	Parameters	Measure	frequency	COMMENTS
ACCURACY	initial calibrations	90%<x<110%	≥1	multi-point calibration through the measurement range encountered in the field, programmatic records
	daily source checks	80%<x<120%	≥1/day	Performed daily/within range
	local area background Field	typically < 10 dpm	≥1/day	all local area backgrounds were within expected ranges (i e , no elevated anomalies)
PRECISION	field duplicate measurements for TSA	≥5% of real survey points	≥10% of reals	N/A
REPRESENTATIVENESS	MARSSIM gridding methodology (Survey Areas G11-A-001, 003, 005, 006, 007, 008, 011 & 012 and G11-B-004 & 009/G15-A-004, 005, 006, 008, 009, 010 and 011)	statistical and biased	NA	random w/ statistical confidence
	Survey Maps	NA	NA	random and biased measurement locations controlled/mapped to ±1m
	Controlling Documents (Characterization Pkg, RSPs)	qualitative	NA	Refer to the Characterization Package (planning document) for field/sampling procedures (located in Project files), thorough documentation of the planning, sampling/analysis process, and data reduction into formats
COMPARABILITY	units of measure	dpm/100cm^2	NA	Use of standardized engineering units in the reporting of measurement results
COMPLETENESS	Plan vs Actual surveys usable results vs unusable	>95% >95%	NA	see Table E-6 for details
SENSITIVITY	detection limits	TSA ≤50 dpm/100cm^2 RA ≤10 dpm/100cm^2	all measures	MDAs ≤ ½ $DCGL_w$ per MARSSIM guidelines

Table E-2 V&V Of Chemical Results-Asbestos For Group 11 and Group 15

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		
ASBESTOS	METHOD: EPA 600/R-93/116	LAB ---->	Reservoirs Environmental, Inc	
QUALITY REQUIREMENT		RIN ---->	02D0650 (Gr 11) 02D0787 (Gr 15)	
		Measure	Frequency	COMMENTS
ACCURACY	Calibrations Initial/continuing	below detectable amounts	≥1	Semi-quantitative, per (microscopic) visual estimation
PRECISION	Actual Number Sampled LCSD Lab duplicates	all below detectable amounts	≥123 samples (Group 11) ≥76 samples (Group 15)	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	N/A
	Controlling Documents (Plans, Procedures, maps, etc)	Qualitative	NA	See original Chemical Characterization Package (planning document), for field/sampling procedures (located in project file,) thorough documentation of the planning, sampling/analysis process, and data reduction into formats
COMPARABILITY	Measurement Units	% by bulk volume	NA	Use of standardized engineering units in the reporting of measurement results
COMPLETENESS	Plan vs Actual samples Usable results vs unusable	Qualitative	NA	See Table E-6, final number of samples at Certified Inspector's discretion
SENSITIVITY	Detection limits	<1% by volume	all measures	N/A

Table E-3 V&V Of Chemical Results-Beryllium For Group 11 and Group 15

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		
BERYLLIUM	Prep: NMAM 7300 METHOD: OSHA ID-125G	LAB ---->	Johns Manville, Littleton, Co	
QUALITY REQUIREMENTS		RIN ---->	RIN02D0649 (Gr 11) RIN02D0788 (Gr 15)	
		Measure	frequency	COMMENTS
ACCURACY	Calibrations Initial	linear calibration	≥1	No qualifications significant enough to change project decisions, i e , classification of Type 1 facility confirmed All results were below associated action levels
	Continuing	80%<%R<120%	≥1	
	LCS/MS	80%<%R<120%	≥1	
	Blanks - lab & field	<MDL	≥1	
	interference check std (ICP)	NA	NA	
PRECISION	LCSD	80%<%R<120% (RPD<20%)	≥1	
	field duplicate	all results < RL	≥1	
REPRESENTATIVENESS	COC	Qualitative	NA	
	hold times/preservation	Qualitative	NA	
	Controlling Documents (Plans, Procedures, maps, etc.)	Qualitative	NA	
COMPARABILITY	measurement units	ug/100cm^2	NA	
COMPLETENESS	Plan vs Actual samples usable results vs unusable	>95% >95%	NA	
SENSITIVITY	detection limits	MDL of 0 012 ug/100cm^2	all measures	

Table E-4 V&V Of Chemical Results-PCBs For Group 11 and Group 15

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		
PCBs	METHOD: SW8082	LAB ---->	Severn-Trent, Denver, Co	
		RIN ---->	RIN02S0041	
QUALITY REQUIREMENT				COMMENTS
		Measure	frequency	No qualifications significant enough to change project decision, i e , classification of Type 1 areas confirmed, all PCB concentrations well below associated action levels (PCB sampling performed for Group 11 only)
ACCURACY	Calibrations Initial	r^2 >0 99	≥1/batch	
	Continuing	80%<%R<120%	≥1/batch	
	LCS	80%<%R<120%	≥1/batch	
	MS	75%<%R<125%	≥1/batch	
	Blanks - Lab	<MDL	≥1/batch	
PRECISION	MSD	75%<%R<125%	≥1/batch	
	field duplicate	all results < RL	≥1/batch	
REPRESENTATIVENESS	COC	Qualitative	NA	
	hold times/preservation	≤30 days extract ≤45 days analysis	NA	
	Controlling Documents (Plans, Procedures, maps, etc)	Qualitative	NA	
COMPARABILITY	Measurement units	ug/kg	NA	
COMPLETENESS	Plan vs Actual samples usable results vs unusable	>95% >95%	NA	
SENSITIVITY	detection limits	Various	all analytes	

Table E-5 V&V of Chemical Results-Metals For Group 11 and Group 15

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		
Metals (total)	METHOD: SW6010/6020	LAB ---->	Severn-Trent, Denver, Co	
		RIN ---->	RIN02S0042	
QUALITY REQUIREMENT				
		Measure	frequency	COMMENTS
ACCURACY	Calibrations Initial Continuing	linear calibration	≥1/batch	No qualifications significant enough to change project decision, i e , classification of Type 1 areas confirmed; TCLP results well below associated action levels (Metals sampling performed for Group 11 only)
		80%<%R<120%	≥1/batch	
	LCS	80%<%R<120%	≥1/batch	
	MS	75%<%R<125%	≥1/batch	
	Blanks - Lab	mg/kg	≥1/batch	
	Serial dilutions	%D<10%	≥1/batch	
	Interference check std (ICP)	80%<%R<120%	bracket batch	
PRECISION	MSD	RPD<30%	≥1/batch	
	field duplicate	all results < RL	≥1/batch	
REPRESENTATIVENESS	COC	Qualitative	NA	
	hold times/preservation	≤180 days	NA	
	Controlling Documents (Plans, Procedures, Maps, etc)	Qualitative	NA	
COMPARABILITY	Measurement units	mg/kg	NA	
COMPLETENESS	Plan vs Actual samples usable results vs unusable	>95% >95%	NA	
SENSITIVITY	detection limits	Various	all analytes	

Table E-6 Data Completeness Summary For Group 11 and Group 15

ANALYTE	Building/Area /Unit	Sample Number Planned (Real & QC)[A]	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Asbestos	Group 11 T690N (interior)	10 biased (interior)	10 biased (interior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650
Asbestos	Group 11 Bldg 850 (interior)	61 biased (interior)	61 real (interior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650
Asbestos	Group 11 Bldg 850 (exterior)	5 biased (exterior)	5 real (exterior)	ACM present > 1% by volume (1 sample location)	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650, brown resin adhesive, Rm 211 (sample location 296), 1.25% Chrysotile
Asbestos	Group 11 881CT2 – South Tower (ext.)	6 biased (exterior)	6 real (exterior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650
Asbestos	Group 11 881CT3 – East Tower (ext.)	7 biased (exterior)	7 real (exterior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650
Asbestos	Group 11 Bldg. 881 G&H (interior)	20 biased (interior)	20 real (interior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650
Asbestos	Group 11 Bldg 881 G&H (exterior)	6 biased (exterior)	6 real (exterior)	ACM present > 1% by volume (2 sample locations)	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650 5% Chrysotile, non-friable (samples 316 & 317)
Asbestos	Group 11 883CT4 – North Tower 883C (exterior)	5 biased (exterior)	5 real (exterior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650
Asbestos	Group 11 Bldg 890 (interior and exterior)	3 biased (exterior)	3 real (exterior)	ACM present > 1% by volume (3 sample locations)	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0650 3 roof locations (samples 201, 202, 203) were 12% to 65% Chrysotile (non-friable)

Table E-6 Data Completeness Summary For Group 11 and Group 15

ANALYTE	Building/Area /Unit	Sample Number Planned (Real & QC)[A]	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Asbestos	Group 15 T891D (int./ext.)	9 biased (interior)	9 real (interior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0787
Asbestos	Group 15 T891E (int./ext)	14 biased (interior)	14 real (interior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0787
Asbestos	Group 15 T891F (int./ext.)	6 biased (interior)	6 real (interior)	ACM present > 1% by volume (one sample location)	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0787 Restroom, 10% brown Chrysotile
Asbestos	Group 15 T893A (int./ext.)	21 biased (interior)	21 real (interior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0787
Asbestos	Group 15 T893B (interior)	21 biased (interior)	21 real (interior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0787
Asbestos	Group 15 T904A (int./ext.)	5 biased (interior)	5 real (interior)	No ACM present, all results < 1% by volume	40 CFR763 86, 5 CCR 1001-10, EPA 600/R-93/116 RIN02D0787
Beryllium	Group 11 T690N (interior)	5 biased (interior)	5 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0649 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
Beryllium	Group 11 B850 (interior)	20 biased (interior)	20 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0649 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
Beryllium	Group 11 B881 G & H (interior)	15 biased (interior)	15 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0649 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)

Table E-6 Data Completeness Summary For Group 11 and Group 15

ANALYTE	Building/Area /Unit	Sample Number Planned (Real & QC)[A]	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Beryllium	Group 11 B890 (ext./int)	5 biased (interior)	5 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0649 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
Beryllium	Group 15 T891D (int./ext.)	5 biased (interior)	5 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0788 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
Beryllium	Group 15 T891E (int./ext)	5 biased (interior)	5 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0788 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
Beryllium	Group 15 T891F (int./ext.)	5 biased (interior)	5 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0788 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
Beryllium	Group 15 T893A (interior)	15 biased (interior)	15 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0788 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
Beryllium	Group 15 T893B (interior)	15 biased (interior)	15 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0788 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
Beryllium	Group 15 T900E (int./ext.)	5 biased (interior)	5 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0788 No results above action level (0.2ug/100cm^2) or investigative level (0 1 ug/100cm^2).
Beryllium	Group 15 T904A (int./ext.)	5 biased (interior)	5 real (interior)	No contamination found at any location	OSHA ID-125G – RIN02D0788 No results above action level (0 2ug/100cm^2) or investigative level (0 1 ug/100cm^2)
PCBs	Group 11 B890	1 biased, 1 duplicate (interior)	1 real, 1 duplicate (solid)	No contamination due to PCBs	SW 8082 – RIN02S0041 All PCB concentrations below associated action levels
Metals	Group 11 C865 (ext.)	1 real, 1 duplicate (liquid)	1 real, 1 duplicate (liquid)	No metals exceeded the regulatory limit	SW 6010/6020 – RIN02S0042 TLCP results all below associated action levels

Table E-6 Data Completeness Summary For Group 11 and Group 15

ANALYTE	Building/Area /Unit	Sample Number Planned (Real & QC)[A]	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Unit Group 11 G11-A-001 T690N (int./ext.)	30 á TSA (15 random & 15 biased) & 30 á Smears (15 random & 15 biased) 2 QC TSA 5% scan	60 real, 2 QC 36 interior/24 exterior	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)
Radiological	Survey Unit Group 11 G11-A-003 B850 (interior)	110 á TSA (46 random/64 biased) & 110 á Smears (46 random/64 biased) 6 QC TSA 3% scan	220 real, 6 QC (interior)	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)
Radiological	Survey Unit. Group 11 G11-B-004 B850 (exterior)	40 á TSA (31 random/9 biased) & 40 á Smears (31 random/9 biased) 2QC TSA 3% scan	80 real, 2 QC (exterior)	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)
Radiological	Survey Unit Group 11 G11-A-005 C865 (exterior)	15 α TSA & 15 α Smears (random) 2 QC TSA 5% scan	30 real, 2 QC (exterior)	No contamination at any location, all values below unrestricted release levels	RIN02D0738. 2 survey locations > $DCGL_w$, one coupon (highest reading) sent to gamma spectroscopy confirmed no DOE-added materials All samples meet unrestricted release criteria.
Radiological	Survey Unit Group 11 G11-A-006 881C-South Tower (exterior)	15 α TSA & 15 α Smears (random) 2 QC TSA 5% scan	30 real, 2 QC (exterior)	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)

Table E-6 Data Completeness Summary For Group 11 and Group 15

ANALYTE	Building/Area /Unit	Sample Number Planned (Real & QC)[A]	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Unit Group 11 G11-A-007 881C-East Tower (exterior)	15 α TSA & 15 α Smears (random) 2 QC 5% scan	30 real, 2 QC (exterior)	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) Std Deviation >30 (35 3), calculated a new sign p based on actual Standard Deviation of 35 3, confirmed 15 samples were sufficient to comply with MARSSIM guidelines
Radiological	Survey Unit. Group 11 G11-A-008 B881 G&H (interior)	30 α TSA (15 random/15 biased) & 30 α Smears (15 random/15 biased) 2 QC TSA 5% scan	60 real, 2 QC (interior)	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)
Radiological	Survey Unit. Group 11 G11-B-009 B881 G&H (exterior)	25 α TSA (15 random/10 biased) & 25 α Smears (15 random/10 biased) 2 QC TSA 5% scan	50 real, 2 QC (exterior)	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)
Radiological	Survey Unit. Group 11 G11-A-011 B883C (exterior)	15 α TSA & 15 α Smears (random) 2 QC TSA 5% scan	30 real, 2 QC (exterior)	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)
Radiological	Survey Unit Group 11 G11-A-012 B890 (int./ext)	15 α TSA & 15 α Smears (random) 2 QC TSA 5% scan	30 real, 2 QC 18 interior/12 exterior	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)

Table E-6 Data Completeness Summary For Group 11 and Group 15

ANALYTE	Building/Area /Unit	Sample Number Planned (Real & QC)[A]	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Unit. Group 15 G15-A-004 T891D (int./ext.)	25 α TSA (15 random/10 biased) & 25 α Smears (15 random/10 biased) 2 QC TSA 5% scan	50 real, 2 QC 34 interior/16 exterior	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)
Radiological	Survey Unit Group 15 G15-A-005 T891E (int./ext.)	25 α TSA (15 random/10 biased) & 25 α Smears (15 random/10 biased) 2 QC TSA 5% scan	50 real, 2 QC 34 interior/16 exterior	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)
Radiological	Survey Unit Group 15 G15-A-006 T891F (int./ext.)	25 α TSA (15 random/10 biased) & 25 α Smears (15 random/10 biased) 2 QC TSA 5% scan	50 real, 2 QC 28 interior/22 exterior	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)
Radiological	Survey Unit. Group 15 G15-A-008 T893A (int./ext.)	70 α TSA (43 random/27 biased) & 70 α Smears (43 random/27 biased) 4 QC TSA 3% scan	140 real, 4 QC 92 interior/48 exterior •	No contamination at any location, all values below unrestricted release levels	$DCGL_w$ >50 (50.7) – Target MDC is 50% of $DCGL_w$ per MARSSIM Guidelines, "*a*" *priori* for instrument is 48, therefore, actual MDC of 50 7 is within acceptable MDC target limits per MARSSIM
Radiological	Survey Unit Group 15 G15-A-009 T893B (int./ext.)	70 α TSA (43 random/27 biased) & 70 α Smears (43 random/27 biased) 4 QC TSA 3% scan	140 real, 4 QC 86 interior/54 exterior	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)

222/222

Table E-6 Data Completeness Summary For Group 11 and Group 15

ANALYTE	Building/Area /Unit	Sample Number Planned (Real & QC)[A]	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Unit Group 15 G15-A-010 T900E (int./ext.)	20 α TSA (15 random/5 biased) & 20 α Smears (15 random/ 5 biased) 2 QC TSA 5% scan	40 real, 2 QC 32 interior/8 exterior	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)
Radiological	Survey Unit Group 15 G15-A-011 T904A (int./ext.)	20 α TSA (15 random/5 biased) & 20 α Smears (15 random/ 5 biased) 2 QC TSA 5% scan	40 real, 2 QC 30 interior/10 exterior	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) Standard Deviation >30 (37 7) due to elevated activity on roof sample (sample location 15) Coupon sample sent to gamma spectroscopy confirmed no DOE-added materials (RIN02D0817) All samples meet unrestricted release levels

[A] Number of asbestos samples required is an estimate only, final number of samples is at the discretion of the IH.
[B] Interior is int. and Exterior is ext.