

000110571

DATE  
7/1/96

**MEMORANDA**

"SAY IT IN WRITING"

TO Distribution	DEPT.	BLDG. T130F
FROM James R. Thomson	DEPT. E/C/D	BLDG. T130F
		PHONE 5124

SUBJECT: BUILDING 707 "F" MODULE GLOVE-BOX REMOVAL CHARACTERIZATION PLAN

DISCUSSION

Attached for your information and files is the Building 707 "F" Module Characterization Plan. Note that it has been determined that lead field test kits will be utilized to screen for the presence of lead paint. Additional sampling during the strip-out process may be required, however; if it is determined that additional samples need to be taken, the results will be added to the final completion characterization report at a later date.

RESPONSE REQUIREMENTS

No response is required. Questions concerning this characterization plan or sampling activities should be addressed to Mary T. Aycock at X5309.

MTA:dlu

Attachment:  
As Stated

Distribution:

DYNCORP

- B. L. Bateman - T130G
- D. W. Clark - T130G
- R. E. Clark - T130G

K-H

- C. Conger - T130F
- P. Scanlin - T130F
- R. E. Williams - T130F

RMRS

- M. T. Aycock - T130F
- G. W. Beers - T891C
- C. A. Bicher - T130F
- D. A. Booco - T130F

RMRS

- G. J. Bracken - T130B
- D. W. Coyne - T439D
- A. M. Dennis - T891C
- S. R. Garcia - T664
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- M. J. Nelson - T764B
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SSOC

- R. J. Ballenger - T883B
- J. E. Elkins - 750
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- M. D. Klein - 706
- G. M. Trieste - 750

  
SIGNATURE

V 18



Rocky Mountain  
Remediation Services, L.L.C.  
*. . . protecting the environment*

## Salt Residue Stabilization and Repack Project Building 707, Module F Characterization Plan

### ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

Prepared by

Rocky Mountain Remediation Services

REVIEWED FOR CLASSIFICATION

By W. G. Gomer

Date 6/20/96

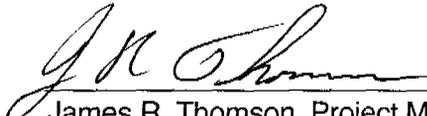
UNU

June 1996

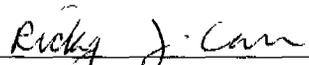
**Salt Residue Stabilization and Repack Project  
Building 707, Module F Characterization Plan**

**Revision 0  
June 1996**

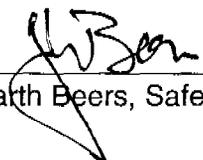
This characterization plan has been reviewed and approved by:

  
James R. Thomson, Project Manager

6/10/96  
Date

  
Ricky Carr, Industrial Hygiene Manager

6/12/96  
Date

  
Garth Beers, Safety and Health Supervisor

6/12/96  
Date

This characterization plan was prepared by:

  
Angie M. Dennis, Environmental Engineer, SEG, CO

6/10/96  
Date

10/10/96

# SALT RESIDUE STABILIZATION AND REPACK PROJECT BUILDING 707, MODULE F CHARACTERIZATION PLAN

## 1.0 INTRODUCTION

Preliminary characterization is being performed for this project to establish a baseline of information concerning the physical, chemical and radiological condition of the facility. This can include taking samples or conducting inspections designed to compliment the information from the screening characterization.

The Salt Residue Stabilization and Repack Subproject (Module F) is a subproject to the Residue Elimination Project. Rocky Mountain Remediation Services, L. L. C. (RMRS) is providing a subcontract service to Kaiser-Hill Company, L. L. C. (Kaiser-Hill) Project Management for the site preparation portion of the Salt Project. Safe Sites of Colorado (SSOC) Residue Stabilization provides for overall Residue Program Management. In this role, SSOC Residue Stabilization is Kaiser-Hill Project Management's customer. SSOC operates Building 707.

The following is a summary of the Salt Site Preparation scope for Module F. The project will include the removal of selected walls in the office area, twenty-four (24) pump down tables, three welders, three chillers, an updraft hood, pipes, control panels, and miscellaneous other equipment, desks and tables.

The project includes removal of the following equipment:

- 16 automated pump down tables including computer/ electronic equipment, pumps and piping
- 8 manual pump down tables including pumps and piping
- Contamination Control/ Updraft Hood in the pump down table room
- 1 Pigma Welder
- 2 EB Welders, three B-boxes, and all internal accessories and external appurtenances
- Vacuum and diffusion pumps and their assemblies
- 2 high voltage discharge tanks
- Power supplies, electrical consoles, distribution panels, and control panels
- Fixed and mobile test tables, benches and carts
- Platforms, handrails, walkways, doors
- Miscellaneous materials and walls in rooms 181, 182, 183, and 196
- Cabinets, lockers, shelves, desks, chairs, computers and accessories, and other miscellaneous office equipment.

## **2.0 PURPOSE AND SCOPE**

The purpose of the proposed sampling activities is (1) to quantify and qualify the physical and chemical characteristics of radiological and hazardous material contamination and the extent of contaminant distribution; (2) to quantify and qualify environmental parameters that effect potential human exposure from existing and residual radiological or hazardous material contamination; (3) to support evaluation of detailed planning of a preferred approach for decontamination, equipment removal, and waste disposal; (4) to support required project plan considerations of dose assessments and As Low As Reasonably Achievable (ALARA) analyses to support selection of cleanup criteria and approach; and (5) to support the estimate of waste to be generated during site preparation operations.

## **3.0 BACKGROUND RADIATION SURVEYS AND ACTIVITY LEVELS**

The radiological survey data collected during the characterization activities will consist of two types (1) field measurements using portable instruments, and (2) sample analyses using fixed laboratory equipment or systems.

Contamination surveys have been conducted in accordance with the Radiological Operating Instructions (ROIs) Manual for the Building 707 Module "F". The results of selected contamination surveys are included as Attachment A. Additional surveys will be conducted by Radiological Operations personnel and Nuclear Safeguards prior to the start of construction and the results will be included in the final characterization report. Results from media and swipe samples collected will also be included in the final report.

Holdup measurements may be performed in conjunction with various strip-out activities associated with the project if warranted based on findings during removal activities.

## **4.0 FACILITY INVESTIGATION REPORTS AND DOCUMENTS**

The following documents serve as references for preliminary characterization of the Module "F" equipment:

Waste Stream and Residue Description and Characterization, Modules B through H, Process Number 707-35, WSRIC Manual 707-V5.0.

Integrated Work Control Program (IWCP) package titled "Module F Office Furniture Removal" Work Control Number: 368400-01

IWCP package titled "Module F Utilities Disconnection" Work Control Number: 368400-05.

IWCP package titled "Module F Welders Removal" Work Control Number: 368400-08.

IWCP titled "Wall Modification (Office Areas - Mod "F")" Work Control Number: 368400-010.

IWCP titled "Door Modification Module F, and Hood removal" Work Control Number: 368400-014.

Sampling needs were also determined by reviewing the Module "F" inventory of chemicals, equipment and miscellaneous items. This inventory is contained in the project files.

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## 5.0 FACILITY DRAWINGS

Facility drawings that are related to this project have been included in the work control packages listed above beginning with the prefix Number 368400. These drawings were reviewed and used during the facility walk-down to identify specific areas, equipment, process lines, and other details of the project which may require detailed characterization review.

## 6.0 FACILITY WALK-DOWN

A facility walk-down was conducted on April 16, 1996 and April 23, 1996 to identify areas where samples would be taken. Health and Safety personnel, Construction Management, the field sampling supervisor, Waste Management representatives, and the project engineers participated in the walk-down. Areas requiring sampling were identified during the walk-through. In addition, process lines were examined to determine if they could be accessed for sampling without modification. From this review it was determined that "cold taps" may have to be used to access some lines for sampling.

## 7.0 SAMPLING PLAN

Data collected during the characterization activities will consist of two types: (1) field measurements using portable instruments or test kits and (2) sample analyses of media using fixed laboratory equipment or systems.

Radiological surveys will be performed by trained RMRS Radiological Control Technicians (RCTs) using field instrumentation in accordance with the ROI Manual. Samples will also be collected for laboratory assay.

Samples collected for the sole purpose of meeting Occupational Safety and Health Act (OSHA) requirements (29 CFR 1926.1101) for building inspection for asbestos-containing materials (ACM) will be collected in accordance with Asbestos Hazard Emergency Response Act (AHERA). A Colorado state certified AHERA inspector or a Certified Industrial Hygienist shall perform the asbestos sampling and the samples will be analyzed in accordance with EPA/600/R-93/116, Test Method for Determination of Asbestos in Bulk Building Materials.

The tables in Appendices B & C list the locations and types of samples that will be required for characterization purposes. Sampling personnel trained in proper EPA, AHERA, and/or health and safety sampling techniques will be used to perform the sampling activities required for characterization purposes. Analysis for characterization purposes will be performed using Environmental Protection Agency (EPA) approved procedures using laboratory facilities located on site. Data Quality Objectives (DQOs) are established for the analytical methods referenced and are available through the on site Kaiser-Hill Analytical Projects Office (APO) in Building 881. Most samples will undergo an Alpha Beta Screen, Gross Alpha/Beta assay and RCRA Fingerprint analyses.

### 7.1 Liquids Sampling

The table in Attachment B lists the equipment sampling points and pieces of ancillary piping or associated reservoirs where accumulated liquids are expected. Sampling of pipes or drain lines may require cold tapping at low points. Such samples would be obtained by first draining some liquid from the pipe through the cold tap into one-liter "catch" containers. The samples would then be pored from the container. The one-liter containers are designed to meet CSOL requirements.

If the amount of liquid remaining in a pipeline is expected to fill the sample containers without any excess, the one-liter containers will not be used in order to minimize waste generation. Instead, after taking precautions to prevent spills or drips, the sample containers will be placed under the tap or valve in succession. In other cases, the one-liter catch containers may be emptied as a result of poring the samples. These emptied one-liter containers will be transferred to the Building 707 Environmental Coordinator for proper disposition. Drained liquids contained in excess of sample amounts will be immediately transferred to the Building 707 Environmental Coordinator for proper storage pending final characterization.

In order to reduce the quantity of pipe liquids that would be characterized as line generated, some pipes may be drained and sampled during the removal process. The pipes and any liquids remaining in the one-liter containers will be managed by the Building 707 Environmental Coordinator for proper temporary storage pending final characterization. This situation probably will apply only to the drain pipe under the updraft hood in Room 126.

If oils are suspected of containing PCBs (because of equipment type or age), samples will be taken and analyzed for PCBs. The liquid remaining in the two high voltage discharge tanks for the two EB Welders will be sampled and analyzed for PCBs.

Instead of sampling the process cooling water supply and return lines on each piece of equipment, the chiller process cooling water main supply and return lines will be sampled instead in Rooms 125 and 126 because these are closed loop systems. These lines will undergo Gross Alpha/Beta analysis and Alpha Beta Screen. The findings from these results will be applied to the process cooling lines for all connected equipment.

## **7.2 Solids Sampling**

The table in Attachment C lists the types of solid materials that will be sampled. A few types of solid materials will be characterized based upon knowledge gained from sampling and analysis already completed for other Building 707 Modules. Because metal covered with paint from other modules tested positive for lead, paint on the metal surrounding the doors planned for removal will be tested for lead using field test kits. If all results from the field kits are negative one or two confirmation samples will be collected and tested for Total Metals. If any of the fields lead tests show positive, then a lead content will be assumed and a lead compliance plan implemented.

If adhesive used between shielding layers on the pumpdown tables, updraft hood, B-Box hoods, or other equipment as observed in Module "F" looks similar to that previously sampled and analyzed for ACM in Module "D" gloveboxes; then those results will qualify as process knowledge to characterize the similar materials in Module "F." OSHA regulations require a presumption of ACM in thermal system insulation (TSI) until sampling and analysis demonstrates otherwise. TSI may be sampled to demonstrate that no ACM is present unless knowledge gained from similar sampling activities in other modules has shown that the TSI does have ACM.

The walls to be removed in rooms 181, 181A, 181B, 182A, 182B and 182C will be sampled for ACM. The appropriate number and locations of samples to be taken from each wall will be determined by a Colorado state certified AHERA inspector or a Certified Industrial Hygienist. The mastic and floor tiles in room 182C will also be sampled and analyzed for ACM.

## **8.0 DOCUMENTATION**

During characterization activities, several direct, indirect and sample media samples will be measured, obtained, and analyzed for radiological and hazardous material contaminants. The results will be used to determine the extent and magnitude of the contaminants and the basis for estimating waste quantities and decontamination options. Sample collection, analysis, and the associated documentation will follow standard written procedures and meet the recommendations and requirements of applicable regulatory agencies. A "chain of custody" sample tracking form

will be used for each sample collected to account for the sample from collection to the point of analysis. Samples will be collected and documented in accordance with Laboratory Procedure No. L-6294-A "Sampling Within an RBA/CA." Asbestos samples will be collected and documented in accordance with the Industrial Hygiene Procedures Manual.

Results of all characterization activities will be documented in applicable field notebooks and summarized in a summary characterization report. Any sampling and analysis changes necessitated by findings during construction will be documented in interim characterization reports and/or the final characterization report, as necessary. This report will be distributed to appropriate project personnel to support decisions made for waste management, industrial hygiene, decontamination, and other activities which may involve hazardous and radiological contaminants. Radiation protection for the sampling event and the sampling team will be addressed under a Radiological Work Permit (RWP). Additional personal protective equipment for the Industrial Hygiene (IH) sampling activity will be as specified by the IH manager.

## 9.0 REFERENCES

The Department of Energy (DOE)/EM-0142P Decommissioning Handbook, March 1994, U.S. DOE Office of Environmental Restoration

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, U.S. EPA SW-846, 1986, Third Edition.

Transmittal of Final Data and Reports for Plutonium Holdup in Untoward Areas, Building 707-RDC-168-93, EG&G memorandum dated August 13, 1993.

Waste Stream and Residue Description and Characterization, Modules B through H, Process Number 707-35, WSRIC Manual 707-V5.0.

Integrated Work Control Program (IWCP) titles Module F, Work Control Numbers: 368400-01, 368400-05, 368400-08, 368400-010, 368400-011.

Health and Safety Plan for F Module, B-707, to be provided by J.A. Jones.

DOE Decommissioning Handbook (DOE/EM-0142P), March 1994.

**ATTACHMENT A**

**Selected Radiological Survey Results**

June 10, 1996

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# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## CONTAMINATION SURVEY ALPHA - SWIPE

INSTRUMENT DATA		
MFG. <u>Eberline</u>	MFG. <u>Eberline</u>	MFG. <u>Eberline</u>
MODEL <u>Sa-4</u>	MODEL <u>Sa-4</u>	MODEL <u>Sa-4</u>
SERIAL # <u>836</u>	SERIAL # <u>924</u>	SERIAL # <u>948</u>
CAL DATE <u>3-96</u>	CAL DATE <u>3-96</u>	CAL DATE <u>1-96</u>
CAL DUE <u>9-96</u>	CAL DUE <u>9-96</u>	CAL DUE <u>2-96</u>
BKG. <u>&lt;1.0</u>	BKG. <u>&lt;1.0</u>	BKG. <u>&lt;1.0</u>
MFG. _____	MFG. _____	MFG. _____
MODEL _____	MODEL _____	MODEL _____
SERIAL # _____	SERIAL # _____	SERIAL # _____
CAL DATE _____	CAL DATE _____	CAL DATE _____
CAL DUE _____	CAL DUE _____	CAL DUE _____
BKG. _____	BKG. _____	BKG. _____

**BUILDING 707**  
**BASELINE - MODULE F**

RWP # 95-707-1002

DATE: 5-22-96 TIME: 0125

RCT \_\_\_\_\_ EMP.# \_\_\_\_\_

**COMMENTS**

NOV 22 1995 15:45 FU FAB/PYROCHEM JO'S

# 40 to 45 High CONTAMINATION AREA

# 38, 47, 51, 52, 53, 56 & 57 Equipment

### CONTAMINATION RESULTS

DPM/100cm<sup>2</sup> REMOVABLE (SWIPE)

1. <u>&lt;18</u>	16. <u>&lt;18</u>	31. <u>&lt;18</u>	46. <u>&lt;18</u>	61. <u>&lt;18</u>	76. _____
2. <u>&lt;18</u>	17. <u>&lt;18</u>	32. <u>&lt;18</u>	47. <u>—</u>	62. <u>&lt;18</u>	77. _____
3. <u>&lt;18</u>	18. <u>&lt;18</u>	33. <u>&lt;18</u>	48. <u>&lt;18</u>	63. <u>&lt;18</u>	78. _____
4. <u>&lt;18</u>	19. <u>&lt;18</u>	34. <u>&lt;18</u>	49. <u>&lt;18</u>	64. <u>&lt;18</u>	79. _____
5. <u>&lt;18</u>	20. <u>&lt;18</u>	35. <u>&lt;18</u>	50. <u>&lt;18</u>	65. <u>&lt;18</u>	80. _____
6. <u>&lt;18</u>	21. <u>&lt;18</u>	36. <u>&lt;18</u>	51. <u>—</u>	66. <u>&lt;18</u>	81. _____
7. <u>&lt;18</u>	22. <u>&lt;18</u>	37. <u>24</u>	52. <u>—</u>	67. _____	82. _____
8. <u>&lt;18</u>	23. <u>&lt;18</u>	38. <u>—</u>	53. <u>—</u>	68. _____	83. _____
9. <u>&lt;18</u>	24. <u>&lt;18</u>	39. <u>&lt;18</u>	54. <u>36</u>	69. _____	84. _____
10. <u>&lt;18</u>	25. <u>&lt;18</u>	40. <u>&lt;18</u>	55. <u>&lt;18</u>	70. _____	85. _____
11. <u>&lt;18</u>	26. <u>&lt;18</u>	41. <u>&lt;18</u>	56. <u>—</u>	71. _____	86. _____
12. <u>&lt;18</u>	27. <u>&lt;18</u>	42. <u>&lt;18</u>	57. <u>—</u>	72. _____	87. _____
13. <u>&lt;18</u>	28. <u>&lt;18</u>	43. <u>&lt;18</u>	58. <u>&lt;18</u>	73. _____	88. _____
14. <u>&lt;18</u>	29. <u>&lt;18</u>	44. <u>&lt;18</u>	59. <u>&lt;18</u>	74. _____	89. _____
15. <u>&lt;18</u>	30. <u>&lt;18</u>	45. <u>&lt;18</u>	60. <u>&lt;18</u>	75. _____	90. _____

DATE REVIEW \_\_\_\_\_



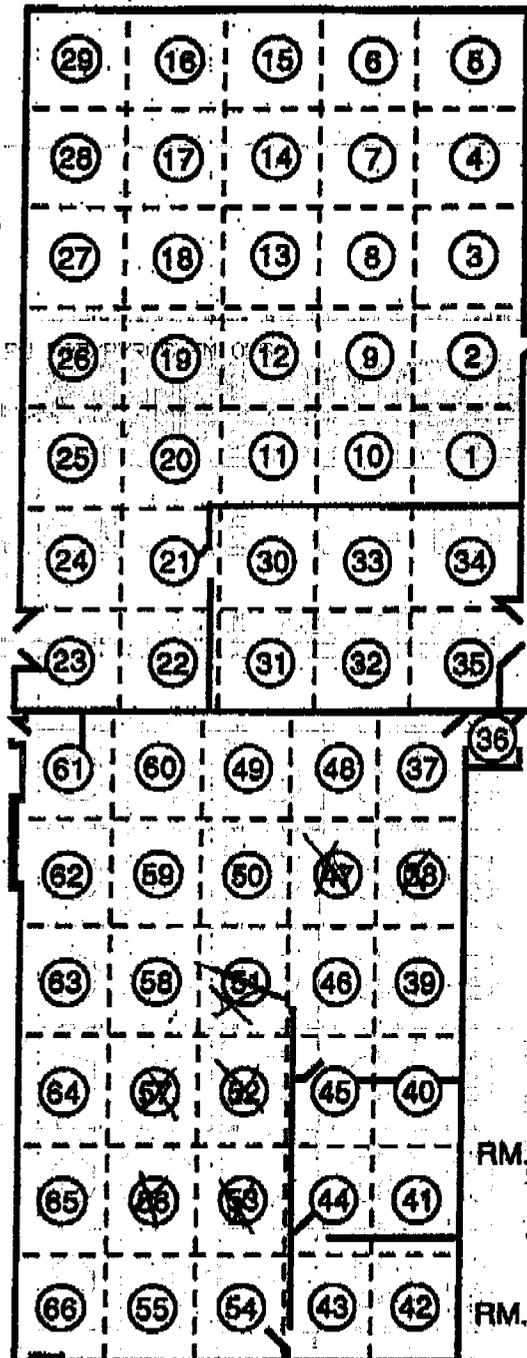
# MODULE F - BASELINE

Drawing Showing Survey Points



RM. 126

1 REPRESENTATIVE SWIPE IN APPROX.  
1 SQUARE METER PER 10 SQUARE  
METER AREA.



RM. 127

RM. 125

RM. 125B

RM. 125A

⊕ 66 - Total Survey Points

# ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

## CONTAMINATION SURVEY ALPHA

### INSTRUMENT DATA

MFG. <u>Ludlum</u>	MFG. _____	MFG. _____
MODEL <u>12-1A</u>	MODEL _____	MODEL _____
SERIAL # <u>96598</u>	SERIAL # _____	SERIAL # _____
CAL. DATE <u>7/95</u>	CAL. DATE _____	CAL. DATE _____
CAL. DUE <u>9/96</u>	CAL. DUE _____	CAL. DUE _____
BKG <u>2.52 c/p</u>	BKG _____	BKG _____
MFG. _____	MFG. _____	MFG. _____
MODEL _____	MODEL _____	MODEL _____
SERIAL # _____	SERIAL # _____	SERIAL # _____
CAL. DATE _____	CAL. DATE _____	CAL. DATE _____
CAL. DUE _____	CAL. DUE _____	CAL. DUE _____
BKG _____	BKG _____	BKG _____

**707**  
**OVERHEAD MODULE F**

#### AREA STATUS:

- WITHIN LIMITS
- LIMITS EXCEEDED
- POSTED
- DEPOSITED
- SURVEY COPY POSTED

### COMMENTS

MAY 29 1996 10:47 SU FHB/PYROCHEM UPS  
40-45 inaccessible

### CONTAMINATION RESULTS (WIPE DPM)

1. <u>1.500</u>	26 <u>1.500</u>	51 <u>1.500</u>	76 _____
2. <u>1.500</u>	27 <u>1.500</u>	52 <u>1.500</u>	77 _____
3. <u>1.500</u>	28 <u>1.500</u>	53 <u>1.500</u>	78 _____
4. <u>1.500</u>	29 <u>1.500</u>	54 <u>1.500</u>	79 _____
5. <u>1.500</u>	30 <u>1.500</u>	55 <u>1.500</u>	80 _____
6. <u>1.500</u>	31 <u>1.500</u>	56 <u>1.500</u>	81 _____
7. <u>1.500</u>	32 <u>1.500</u>	57 <u>1.500</u>	82 _____
8. <u>1.500</u>	33 <u>1.500</u>	58 <u>1.500</u>	83 _____
9. <u>1.500</u>	34 <u>1.500</u>	59 <u>1.500</u>	84 _____
10. <u>1.500</u>	35 <u>1.500</u>	60 <u>1.500</u>	85 _____
11. <u>1.500</u>	36 <u>1.500</u>	61 _____	86 _____
12. <u>1.500</u>	37 <u>1.500</u>	62 _____	87 _____
13. <u>1.500</u>	38 <u>1.500</u>	63 _____	88 _____
14. <u>1.500</u>	39 <u>1.500</u>	64 _____	89 _____
15. <u>1.500</u>	40 _____	65 _____	90 _____
16. <u>1.500</u>	41 _____	66 _____	91 _____
17. <u>1.500</u>	42 _____	67 _____	92 _____
18. <u>1.500</u>	43 _____	68 _____	93 _____
19. <u>1.500</u>	44 _____	69 _____	94 _____
20. <u>1.500</u>	45 _____	70 _____	95 _____
21. <u>1.500</u>	46 <u>1.500</u>	71 _____	96 _____
22. <u>1.500</u>	47 <u>1.500</u>	72 _____	97 _____
23. <u>1.500</u>	48 <u>1.500</u>	73 _____	98 _____
24. <u>1.500</u>	49 <u>1.500</u>	74 _____	99 _____
25. <u>1.500</u>	50 <u>1.500</u>	75 _____	100 _____

DATE: 1/20/96

TIME: 1809

RWP # 95-707-1002

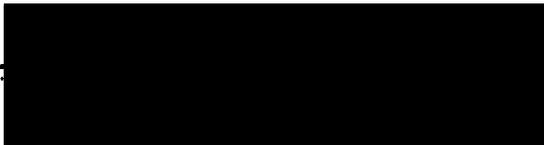


RCT \_\_\_\_\_

EMP. # \_\_\_\_\_

DATE REVIEWED:

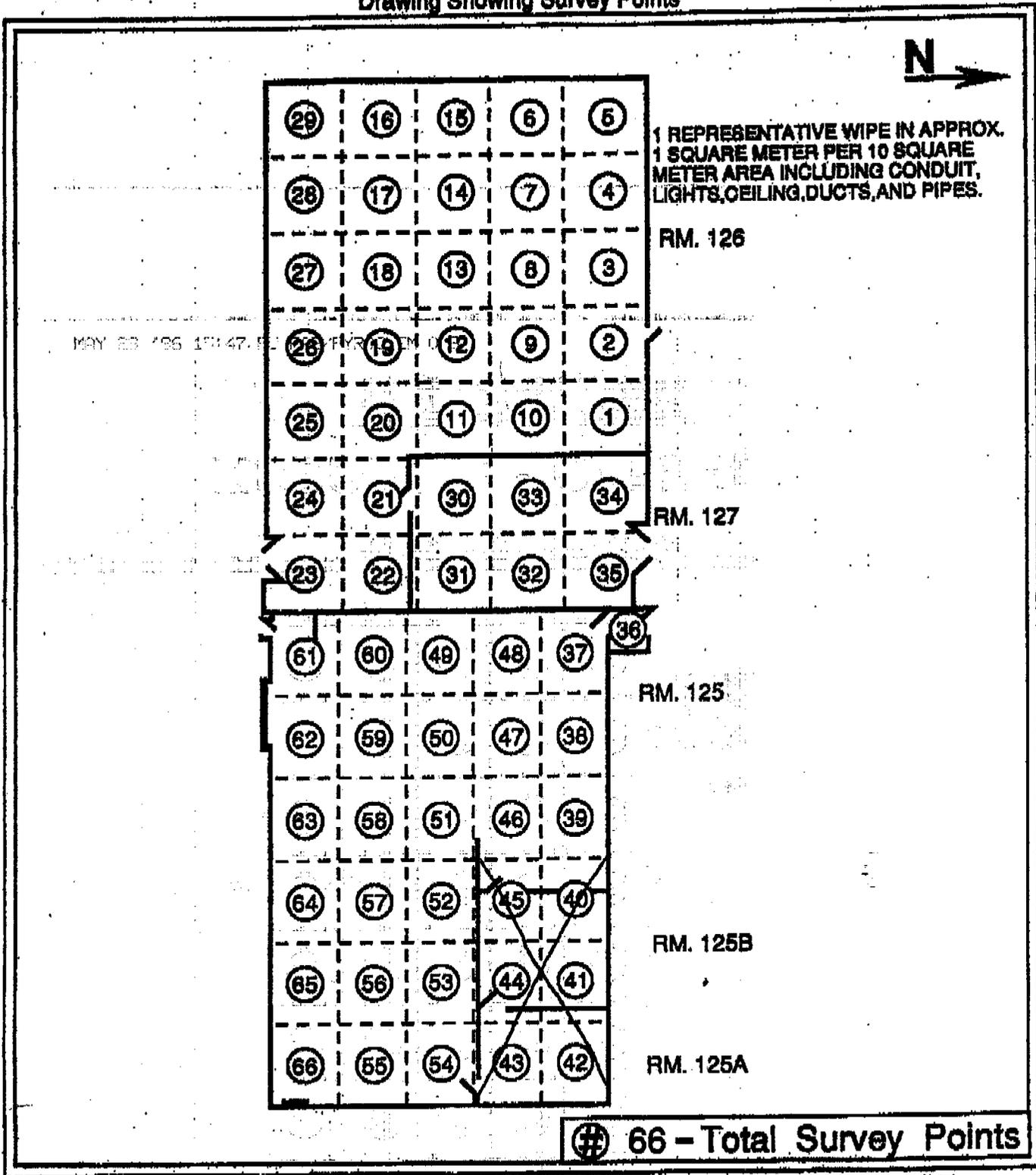
1/22/96



**RADIOLOGICAL OPERATIONS**

# MODULE F - OVERHEAD

Drawing Showing Survey Points



**ATTACHMENT B**  
**Liquids Sampling Points**

<b>Equipment</b>	<b>Piece</b>	<b>Property Number</b>	<b>Analysis</b>	<b>Comments</b>
Pigma Welder	Hydraulic Reservoir	Adjacent to pump # Tyrone P1-20AF	Gross A/B* A/B Screen** Fingerprint	
Pigma Welder	Vacuum Pump	Plant Inventory # 707-1760D-1-9991	Gross A/B A/B Screen Fingerprint	
EB Welder 13	Vacuum Pump	27289899A4UC	Gross A/B A/B Screen Fingerprint	
EB Welder 21	Vacuum Pump	GT-101-0949-N05	Gross A/B A/B Screen Fingerprint	
EB Welder 13	Diffusion Pump	5K47MG5462	Gross A/B A/B Screen Fingerprint	
EB Welder 21	Diffusion Pump	TBD	Gross A/B A/B Screen Fingerprint	
EB Welder 13	Diffusion Holding Pump	TBD	Gross A/B A/B Screen Fingerprint	
EB Welder 21	Diffusion Holding Pump	TBD	Gross A/B A/B Screen Fingerprint	
EB Welder 13	High Voltage Tank	616	Gross A/B A/B Screen Fingerprint PCBs	
EB Welder 21	High Voltage Tank	035	Gross A/B A/B Screen Fingerprint PCBs	
Room 125	Cooling Water Main Header Return Line	TBD	Gross, A/B A/B Screen	In lieu of sampling cooling water in and out of each piece of equipment
Manual Pump Down Table 13	Vacuum Pump	5KH3UHA0454T	Gross A/B A/B Screen Fingerprint	

Equipment	Piece	Property Number	Analysis	Comments
Manual Pump Down Table 16	Vacuum Pump	177858	Gross A/B A/B Screen Fingerprint	
Manual Pump Down Table 19	Vacuum Pump	178127	Gross A/B A/B Screen Fingerprint	
Manual Pump Down Table 20	Vacuum Pump	168094	Gross A/B A/B Screen Fingerprint	
Manual Pump Down Table 21	Vacuum Pump	17493	Gross A/B A/B Screen Fingerprint	
Manual Pump Down Table 22	Vacuum Pump	132201	Gross A/B A/B Screen Fingerprint	
Manual Pump Down Table 23	Vacuum Pump	162189	Gross A/B A/B Screen Fingerprint	
Manual Pump Down Table 24	Vacuum Pump	172593	Gross A/B A/B Screen Fingerprint	
Post-Fill Table	Vacuum Pump	171655	Gross A/B A/B Screen Fingerprint	
Pumpdown Room Chiller	Process Cooling Water Return	101	Gross A/B A/B Screen	
Pumpdown Room Chiller	Process Cooling Water Return	103	Gross A/B A/B Screen	
Pumpdown Room Chiller	Process Cooling Water Return	105	Gross A/B A/B Screen	
Auto Pump Down Table 1	Vacuum Pump	174046	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 2	Vacuum Pump	174141	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 3	Vacuum Pump	174174	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 4	Vacuum Pump	1745179	Gross A/B A/B Screen Fingerprint	

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Equipment	Piece	Property Number	Analysis	Comments
47Auto Pump Down Table 5	Vacuum Pump	174183	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 6	Vacuum Pump	174089	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 18	Vacuum Pump	174156	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 19	Vacuum Pump	174112	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 20	Vacuum Pump	174161	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 21	Vacuum Pump	174088	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 22	Vacuum Pump	174149	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 23	Vacuum Pump	174143	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 24	Vacuum Pump	174166	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 25	Vacuum Pump	174114	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 26	Vacuum Pump	174175	Gross A/B A/B Screen Fingerprint	
Auto Pump Down Table 27	Vacuum Pump	174157	Gross A/B A/B Screen Fingerprint	
Under Table Center of Room 126	Vacuum Pump	129443	Gross A/B A/B Screen Fingerprint	
Under Table Center of Room 126	Vacuum Pump	176165	Gross A/B A/B Screen Fingerprint	
Under Table Center of Room 126	Vacuum Pump	47210	Gross A/B A/B Screen Fingerprint	

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Equipment	Piece	Property Number	Analysis	Comments
Near Post Fill Table	Vacuum Pump	777-2180-32665	Gross A/B A/B Screen Fingerprint	
Updraft Hood in Pumpdown Room 126	Process Waste Drain Line	107	Verify Empty	Gross A/B A/B Screen Fingerprint if not empty

\*Gross A/B = Gross Alpha/Beta

\*\*A/B Screen = Alpha Beta Screen

**ATTACHMENT C**  
**Types of Solids Sampling**

<b>Location</b>	<b>Material</b>	<b>Analysis</b>	<b>Comments</b>
Room 181B	West Wall	ACM*	Number of samples in each wall TBD by Colorado State AHERA certified inspector or CIH
Room 181A	North and East Walls	ACM	"
Room 181B	West Wall and Hallway Wall on South side	ACM	"
Room 181C	South and West Walls	ACM	"
Room 182A	South Wall	ACM	"
Room 182C	Mastic and Tiles	ACM	Number of samples in mastic and floor tile TBD by Colorado State AHERA certified inspector or CIH
Room 125	Paint on the metal surrounding double doors	Lead using field testing kit	Sample where cutting most likely to occur. Collect and analyze 1 confirmatory sample if all field tests show negative lead.
Room 125	Paint on the metal surrounding the four single submarine doors	Lead using field testing kit	Sample where cutting most likely to occur. Collect and analyze 1 confirmatory sample from one door if all field tests show negative lead.

\*ACM Asbestos Containing Material

June 10, 1996

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