

ATG Inc.

INTERIM REPORT

PROJECT MANAGER'S LOG

Radiological Characterization

Fort McClellan, Building 3192 and Grounds  
Anniston, AL

November, 1994

Fort McClellan - Building 3192  
Characterization Surveys - Project Manager Log

10/31/94 - All personnel travelled and arrived safe and sound. People present - O'Dou, Ruprecht, Young, and Spicuzza.

Sample bottles purchased for urine samples and film purchased for survey documentation.

The objective should continuously be: Gather as much information as we can to effect complete remediation at the lowest cost.

11/1/94 - Initial arrival on-site, we all met with John May and Lisa Kingsbury. John is the facility RSO, and Lisa is the Head of the Environmental Section. We discussed the expectations John has regarding the conduct of work and needed services and supplies. A telephone at the facility would be too costly, a phone is available most of the time in the Military Police museum. Toilets are also available there.

We arrived at the building 3192 site and setup our counting lab in the building office. This place was a mess when we arrived, there was trash all over, barrels scattered throughout the building, samples from Chem Nuclear sampling piled in the shower, and the building obviously was not cleaned in many years. John May gave us a very good tour of the facility and explained most of the questions we had thusfar. We discussed the area where the tanks were outside, the control pit was excavated according to John May. This is a discrepancy from the Chem Nuclear report which indicated the contamination levels in the pit and the need for decon and/or removal of the pit.

The background is a little high on the Ludlum 2929 in the office, due to the hot cell opening at the just outside of the office. Beta/gamma background about 115 CPM, Alpha about 1 cpm. There is concern over possible fluctuations in line voltage, but a surge suppressor will not work, a constant voltage transformer is appropriate but not available.

An initial general area survey of the building revealed spotty areas of contamination, mostly in the rafters and on top of objects in the overhead.

J.R. made initial efforts at mapping the facility, most sketches done. Some material was released after frisking. Our criteria is no detectable counts above background.

The hot cell door was opened after finding the right circuit breaker (transfer switch), a brief survey of the cell found activity concentrations in the range of 1000 to 5000 dpm/wipe loose. The table in the cell is covered with oil due to leakage from the shield window. This window is filled with mineral oil and has dimensions of 18" X 30" X 34". This corresponds to a volume of approximately 5.5 cubic feet. Since the window has lost some of it's oil over the years, it may contain as much as 35 gallons of oil.

Fort McClellan - Building 3192  
Characterization Surveys - Project Manager Log

Safety and site specific work plan training were completed.

11/2/94 - We continued to map the facility, the grass was cut which will be a great help when the sampling crew gets here from Mobile tomorrow. We gained access to the hot cell and scoped out the major portions of that room. The crane works good. We pulled one of the plugs into the floor. These plugs are made of solid metal (steel or steel and lead) and provided shielding for the multicurie sources which were stored or fabricated there.

Contact was made with Pope Engineering of Mobile AL. They will be here tomorrow for sampling of the tank/control pit area to a depth of 12 feet. I asked John May if there would be any interference from underground services. John indicated that all services were removed by Chem Nuclear when the tanks were removed. I also stated my concern for the discrepancy in the Chem Nuclear report that the control pit was not removed at that time. John indicated that the Control Pit was removed.

We discussed the survey methods for the ventilation system. We attempted to rent a saws-all and a drill. The rental store owner could not take credit cards and would not rent to anyone from out-of-town. We opted to buy the equipment to facilitate doing the survey. The saws-all will be used to cut an opening into the vent duct walls and provide an entry point to survey from. Bought several miscellaneous items for surveys.

Barrels were moved to a location down the road from the building in order to allow more room in the building, and decrease the radiation fields inside the building.

Met with Mike Styvaert and discussed project to this point.

Sample bags purchased for the adventure in sampling tomorrow.

11/3/94 - The sampling crew arrived today to cut the core samples down to 12 feet. Pope Engineering representatives began at 0830 to cut the holes and take samples. Dan worked with them for coverage. There is significant concrete in the vicinity of where the Valve Control Pit was located. It appears that this area may have simply been filled with soil. A bore hole was attempted in this area, concrete was found at a depth of about 6 feet, and rock was encountered below the concrete.

Received tyveks, gloves, forms etc. from Fremont.

Conducted wide area survey of the facility room perimeters.

Jamie worked on the ventilation system exterior survey. J.R. continued to collect data for mapping, and constructed survey maps in preparation for survey of the facility.

Fort McClellan - Building 3192  
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The hot cell has two radiation detectors, one for the waste disposal pit, and one for the hot cell back wall.

Bought boxes for shipping samples and bioassays, and chalk line for gridding hot cell.

Prepared a list of items to be deconned, and a list of things likely to be waste. This is planned to be continued to determine a cost of waste disposal and remediation of areas and components which could be deconned or simply surveyed and released.

11/4/94 - Sampling continued today with two more cores taken. Some soils were found to contain activity at higher elevations of the core holes during scintillation detector surveys of the holes. The Pope Engineering people left site around 10 am.

The valve control pit area could not be penetrated beyond 6 feet. There was much concrete in that area and it looks like most of the pit structure was left. Question: Does anybody have release surveys for the valve control pit??

Depth profile surveys of the holes drilled for sampling were completed today. Two holes have profiles which indicate the presence of activity at about 1 foot into the soil. Most others did not indicate any activity above background.

Hot cell work commenced today. We scraped the surfaces of the cell that had seriously peeling paint to reveal the under surface for survey. The paint is held in a separate bag pending determination of the lead content of the paint.

The shield plugs were removed, surveyed, and replaced into their shrouds in the hot cell. Each plug has a shroud which is removable within the steel plate. It appears as though it could be easier than originally anticipated to remove the shields and plate assembly. The levels identified ranged from 10,000 CPM to >500,000 CPM inside the shrouds with the cylindrical sodium iodide crystal (2" x 2"). The activity on the shields was measured with a pancake probe, and up to 500 CPM (gross) was observed. There was no alpha activity on any of the surfaces surveyed.

Survey of the air conditioning building is complete with mostly fixed activity found outside the vent unit itself. Mostly, the fixed activity exists in the top surfaces of the walls and on the structural components of the roof.

A portapotty was delivered to the site at about 10:30 am. This will assist in completion of work without delays this weekend. General area swipe surveys were completed for the classroom area.

Fort McClellan - Building 3192  
Characterization Surveys - Project Manager Log

John May and Sgt. Baugh visited the site for a short while near the end of the day. I asked that the B-25 box be moved to the back of building 3180, and asked for surveys that were done to release the valve control pit. John indicated that he would look for the surveys.

11/5/94 - Continued survey of the hot cell. Removed the hot cell table to facilitate gridding of entire cell and to further reduce background radiation in the cell. The table had levels up to 5000 dpm/wipe and up to 800 CPM/frisk. The table was wrapped and taped and placed in the classroom for temporary storage. When attempting to cut the legs off the table, 4 sawsall blades were broken. We opted to remove the table from the frame prior to wrapping and cover the contaminated portions of the frame (feet etc.) to facilitate storage in the clean area.

Completed gridding of the hot cell into one square meter grids, and highlighted grid corners with paint. Conducted direct frisk readings on the walls of the cell in at least three areas of each grid square. Also identified highest reading areas in each grid. In general, the cell is not a hazard. No respiratory protection is required and dosimetry although used would not be required by regulation.

Smear counting is our biggest slowdown. With a two minute counting time, the 2929 is minimally acceptable - two systems would be much better.

Received the pipe probe from Richland today and also received the safety harness from Fremont. Thank you for your support!

Exterior surveys of the building were completed with the 2" by 2" Sodium Iodide probe and Model 3 Ratemeter. Some spots were identified above background, one remote from the building or the tank burial site but within the fenced area.

John May visited the site, we discussed the valve control pit (which was reviewed but never released by NRC). We also reviewed the work completed to this point and preferred remediation plans.

11/6/94

Conducted swipe survey of hot cell walls, crane components, crane tracks and hot cell roof. Swipes to be counted at 2 minutes due to need for time and to obtain information indicating >200 DPM.

Prepared soil samples and bioassays for shipment - to go tomorrow.

Fort McClellan - Building 3192  
Characterization Surveys - Project Manager Log

Collected surface soil samples in all areas external to building 3192. All samples to be sent to TMA Eberline for analysis.

Began expedition into the overhead areas. Direct readings on top of the shield door - 6000 CPM. Seems to be a large fraction of this is loose. A swipe taken in that area read 2000 CPM. This provides even more reason to move the door past it's normal positions during remediation.

General area surveys in the overhead range from 100 to 10000 dpm/100 cm<sup>2</sup>.

Continued exterior surveys of the building grounds. Identified several locations above background.

11/7/94 - Began cutting into ventilation and survey of ventilation system. Insulation was removed from four areas three in the exhaust vent lines, and one in the return line from the classroom. Five cuts were then made into the ducts to facilitate survey through the holes. Only low level contamination <200 CPM gross found inside. The ducts seem to be easily deconned.

We asked that Ken make up some copies of the floor plans for the building. Those were delivered by Ken at 10:15. I asked that Ken set up an exit meeting for me to meet with John May tomorrow for an exit briefing. The briefing will present the results of our surveys and projected remediation thoughts. I briefed Ken on the minor amounts of contamination found both inside and outside the building.

Lisa Kingsbury and Ken Baugh returned about 1100 and scoped out moving of the B-25 box to the back of the other building to support low level survey of the area.

Completed counting of smears from inside the hot cell. The hottest smears are from the wall on the west side of the cell in the area where the ventilation duct was removed from.

Completed survey of the hot cell door trough. The trough has low level fixed contamination and the door has low level fixed and smearable contamination. The remediation of the door will be difficult because of it's weight and position. It may be possible to jack it back away from the door opening and then jack up one side to facilitate decon. Then the motor and movement mechanism could be removed, deconned, and reinstalled. The wheels represent another challenge. It may also be possible that the door will not be recoverable without removal. In the case of removal, a crane will have to be used to lift it out of the roof over the hot cell area on the east side of the building. Surveyed back side of hot cell door.

Fort McClellan - Building 3192  
Characterization Surveys - Project Manager Log

Exterior surveys, surface soil sampling outside, and sample preparation are complete.

Completed interior surveys on top of the hot cell and in the overhead.

Conducted meeting with crew to go over objectives and ensure completion of all aspects of the project prior to exit tomorrow.

11/8/94 - Completed final surveys of office space.

Completed accountability lists for equipment and surveys. Ensured accountability of all surveys, air samples and other data.

Shipped samples of soil, water, sludge, and initial bioassays.

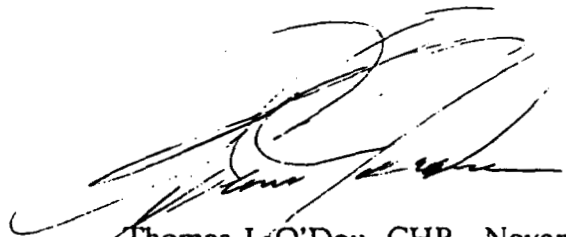
Packaged equipment for transport back to Genoa.

Conducted exit interview with site personnel at 1330 in Siebert hall.

Conducted cleanup of the building and grounds.

11/9/94 - All personnel traveled home.

Note: This log is for information purposes only. It is the intent of this project manager to review this log for identification of important aspects of the project to ensure timely notification of the customer regarding the radiological status of the facility characterized. This document may change as it is reviewed and evolved into the final log of activity during the job.



11/15/94

Thomas J. O'Dou, CHP - November 8, 1994

ATG Inc.

INTERIM REPORT

Radiological Characterization

of

Fort McClellan, Building 3192 and Grounds  
Anniston, AL

Prepared By:

Allied Technology Group, Inc.  
1515 Main Street  
Genoa, OH 43430

November, 1994



**Radiological Characterization  
Fort McClellan, Building 3192 and Grounds  
Anniston, AL - 1994 - ATG Inc.**

**1.0 INTRODUCTION**

This report discusses the completion of characterization of Building #3192 and grounds for radioactive materials at the Army Chemical School at Fort McClellan, AL. including facility condition and recommendations for remediation. Included in the report are discussion and results of surveys completed and samples taken to assure appropriate preparation for remediation of the site. This is an interim report because sample results will not be received for at least three weeks from the issue date of this report.

Work on the characterization of the facility began Tuesday, November 1, 1994. Allied Technology Group, Inc. (ATG) management coordinated the project with Fort McClellan contacts for any problems that may be encountered.

The work for this job included use of material release criteria from the guidance given in USNRC regulatory guide 1.86, **Termination of Operating Licenses for Nuclear Reactors** dated June 1974 and a USNRC policy letter **Guidelines for Decontamination of Facilities and Equipment Prior to release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material** dated August 1987. Surveys conducted to release materials from control as radioactive demonstrate compliance with this criteria. It is noted that this criteria is the only applicable guidance for this type of facility remediation.

Included in this interim report are a copy of the radiation and contamination surveys (attachment 1.) Sample analysis results will be included with an evaluation and recommended remediation methods for outside the facility. Also attached are list of materials released during this characterization, materials recommended for release during the remediation phase, and materials likely to be waste from the remediation phase.

**2.0 PROJECT PERSONNEL**

- 2.1 The initial crew consisted of a Project Manager, Site Supervisor and two (2) Senior Health Physics Technicians.
- 2.2 A brief abstract of information from resumes of personnel involved in the characterization effort is included as attachment 2.
- 2.3 All personnel attended a pre-job training session at which job scope and the details of the project work plan were discussed. This session included specific safety details for the work and the type hazards expected.

**Radiological Characterization  
Fort McClellan, Building 3192 and Grounds  
Anniston, AL - 1994 - ATG Inc.**

**3.0 DISCUSSION OF WORK**

- 3.1 The first two days on site at Fort McClellan consisted primarily of performing Site Health and Safety training, required OSHA training, setting up the count room, and performing radiological pre-work survey of the interior and exterior of building 3192 areas.
- 3.2 Maps were made of all facility walls, floors, and ceiling spaces in the hot cell, office, air conditioning room, shower, and in the classroom.
- 3.3 Any excess materials which would be in the way or cause increased background levels of radiation during the characterization survey were removed from the building for release as clean after appropriate surveys or were labeled and wrapped, then moved outside for storage.
- 3.4 Samples were taken in the area where radioactive material storage tanks had previously been placed until their removal in 1985. These samples were taken as deep as 12 feet when possible and were separated into 3', 6', 9', and 12' samples when available.
- 3.5 Questions about the existence of a valve control pit as described in the Chem Nuclear exit report were somewhat resolved with a partial excavation of the area by sampling. The base RSO, John May indicated that the valve control pit was cleaned by his staff, and the remainder of the pit was left in place and filled in with clean fill after appropriate removal of radioactive material and surveys.
- 3.6 The hot cell was surveyed thoroughly to get a complete picture of the radiological control profile for the facility. Loose surface contamination was found to be most prevalent on the walls surrounding the position where the work table was located. The table had previously been cleaned, removed from the cell, wrapped, and stored as radioactive material.
- 3.7 The ventilation system was surveyed thoroughly to identify contamination levels and the most important radiological hazards in this system.
- 3.8 A list of all materials which could be surveyed and released or remediated, surveyed, and released was prepared. Also, a list of all materials which would likely be considered waste was made. These lists will facilitate preparation of the work plan for the remediation, they are included as attachment 3.

**Radiological Characterization  
Fort McClellan, Building 3192 and Grounds  
Anniston, AL - 1994 - ATG Inc.**

**4.0 PROJECT STATISTICS**

- 4.1 Total manhours expended at the site was 308. Travel accounted for a total of 80 man-hours, the total characterization including travel, 372 man-hours.

Day	1	2	3	4	5	6	7	8	9	10
Man-hours	40	32	36	32	37	38	39	48	40	40
Travel Days	T									T

- 4.2 The most significant items which will present a challenge during remediation are:
- a. The hot cell door, 8' x 7' x 3' solid steel and concrete, estimated at 5 tons.
  - b. The facility drain lines which have been filled with concrete and are embedded in the high density concrete of the hot cell shield. It is estimated that this shield floor is at least 4 feet thick. Also, other drain lines from the facility.
  - c. The shield plugs and shield plug shrouds within the hot cell. There are 16 plugs, each plug is 2'6" long by 6" diameter. Each shroud is welded to a steel plate 1" thick and extends into the concrete floor to fully enclose the shielded material when present.
  - d. The hot cell crane, a one ton suspension crane is in very good condition and should not represent significant removal problems. The crane will be needed in the beginning days of the remediation to remove the shield plugs from their shrouds.
- 4.3 The estimated total activity at the facility is less than 0.5 millicuries. This is based on a rough calculation of surface area activity concentrations and the levels identified during the surveys.

**Radiological Characterization  
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**5.0 CONCLUSION**

- 5.1 The Fort McClellan Radiation Safety Officer was provided with copies of the following:

The Project Managers Log at the exit meeting.

- 5.2 A post work briefing was held with the Fort McClellan Radiation Safety Officer on Tuesday, November 8, 1994 at 1330. A discussion of all job activities was conducted at that time. Neither Fort McClellan management nor ATG personnel were aware of any unresolved items. The people at Fort McClellan were very cooperative during the job and provided assistance, when requested, in a timely manner.

- 5.3 Work at the facility does not represent a radiological health hazard.

ATG Inc.

Appendix 1

Radiological Characterization

of

Fort McClellan, Building 3192 and Grounds  
Anniston, AL

Radiological Control Surveys

Allied Technology Group, Inc.  
1515 Main Street  
Genoa, OH 43430

November, 1994

# RADIATION/CONTAMINATION SURVEY LOG

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ATGS #	DATE	TIME	PROJECT	DESCRIPTION OF SURVEY	# OF PAGES	TECHNICIAN INITIALS
FM-001	11-2-94	1000	FM-001	HOT CELL TRENCH	2	JK
FM-002	11-2-94	1015		Shower Rm Floor	2	JK
FM-003	11-2-94	1045		Ventilation Unit	2	JK
FM-004	11-3-94	0710		Floor	1	JK
FM-005	11-3-94	0730		Sewer Tank	1	JK
FM-006	11-3-94	0800		CLASS Rm. WALL & CEILING	6	JK
FM-007	11/3/94	1400		Release of MATERIALS	2	JK
FM-008	11/3/94	1000		CLASS Rm Shield Wall (RAD)	1	JK
FM-009	11/3/94	1200		CLASS Room AREA (RAD)	1	JK
FM-010	11/4/94	1015		Free Release Drilling Equipment	2	JK
FM-011	11/4/94	1030		Core Sample Holes	1	JK
FM-012	11-4-94	1330		HALLWAY WALLS, OUTSIDE FRONT OF HOT CELL, VENTILATION	10	JK
FM-013	11-4-94	1700		Hot Cell Source Walls	2	JK
FM-014	11-4-94	1700		Hot Cell Shield Plugs	2	JK
FM-015	11-5-94	1330		RELEASE of MATERIALS	3	JK
FM-016	11-6-94	1100		119 Survey - Hot Cell	1	JK
FM-017	11-6-94	0630		Old Bldg. 3192	2	JK
FM-018	11-6-94	0630		Walkdown 144-10	2	JK
FM-019	11-6-94	1530		Old Bldg. 3192	2	JK
FM-020	11-7-94	0800		Walkdown 144-10	2	JK
FM-021	11-7-94	1000		55 Gallon DRUMS	1	JK
FM-022	11-7-94	1030		Bldg. 3192	2	JK
FM-023	11-7-94	1035		Room Vent	2	JK
FM-024	11-7-94	1454		Top of Hot Cell	2	JK
FM-025	11-7-94	1730		Hot Cell Ducts	2	JK
FM-026	11-7-94	1035		N. Ext. Fan	2	JK
FM-027	11-7-94	1454		Bldg. 3192 Crawl	3	JK
FM-028	11-7-94	1730		Hot Cell Door	3	JK
FM-029	11-7-94	1730		Quarrelled	4	JK
FM-030	11-8-94	0745		Bldg. 3192	3	JK
FM-031	11-8-94	0800		OFFICE Rm. Bldg. 3192	2	JK
FM-032	11-8-94	0800		Hot Cell Floor	2	JK
FM-033	11-6-94	1400		Ceiling of Hot Cell	4	JK

ATGF-002

09/93

Dispersed 11-8-94

RADIATION/CONTAMINATION  
SURVEY LOG

Page 2 of 2[illegible]

09/92

① Special 11-84

## MATERIAL RELEASE LOG

Project/Location: At. McClellan / Bldg 3197

Date	ATGS#	Item Description	Technician Print/Sign	Evaluator Signature or NA	Release Approval H.P. Supervisor Signature
11-3-94	FM-001	Toshiba Misc. Items	D. Spruill	NA	D. Spruill
11-4-94	FM-010	Drilling Equipment	D. Spruill	NA	D. Spruill
11-5-94	FM-015	Manipulator Pieces	J. Young	NA	D. Spruill
NA					

ATGF-005
09/93

D Spruce 11-8-24



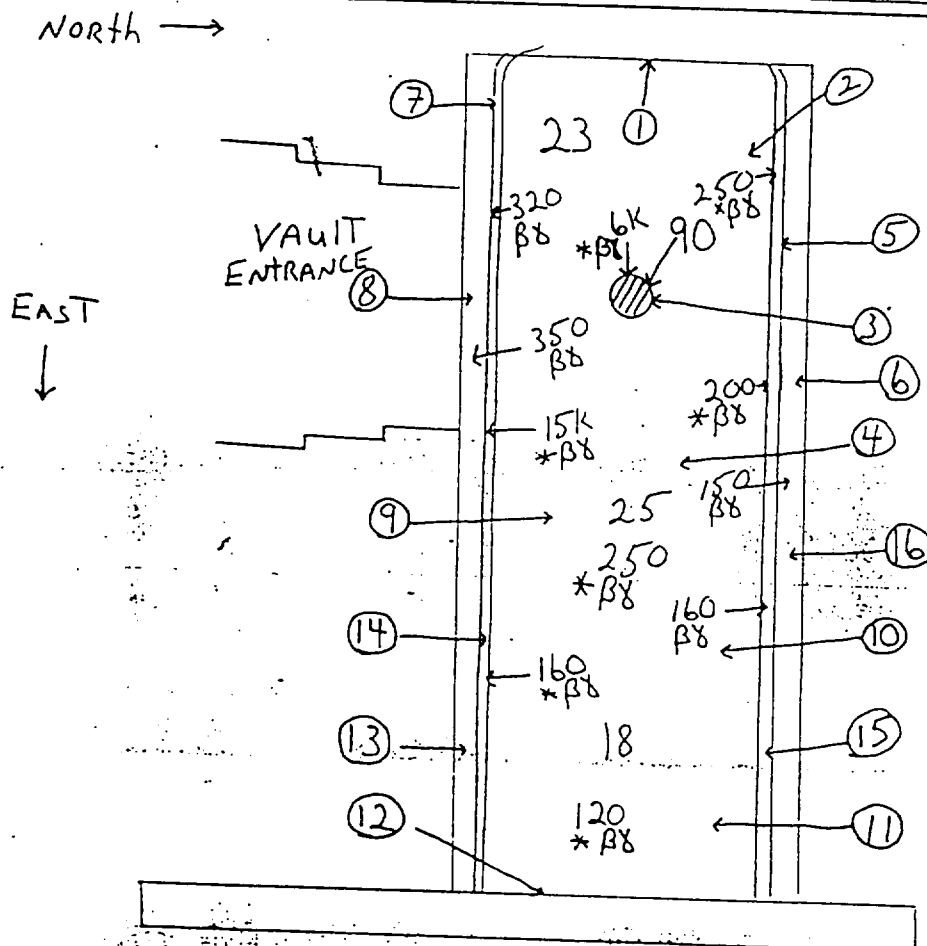
# RADIOLOGICAL SURVEY REPORT

ATGS #: Fm-001

DATE <u>11-2-94</u>	INSTRUMENTATION USED				
TIME <u>1000</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. Young</u>	<u>M-3B8</u>	<u>102498</u>	<u>10</u>	<u>70</u>	<u>4-5-94</u>
LOCATION <u>Bldg 319a</u>	<u>M-19</u>	<u>98112</u>	<u>NATO #4</u>	<u>15</u>	<u>4-5-94</u>
REVIEWED BY <u>[Signature]</u>	<u>2929</u>	<u>89043</u>	<u>350</u>	<u>9.5cm</u>	<u>3-19-94</u>
	<u>2929</u>	<u>99043</u>	<u>18 B8</u>	<u>98cm</u>	<u>3-19-94</u>
	<u>N A</u>	<u>N A</u>	<u>N A</u>	<u>N A</u>	<u>N A</u>
Smear Locations Circled; Dose Rates <u>MR/HR 70</u>					

PURPOSE OF SURVEY: CHARACTERIZATION  
OF HOT CELL TRENCH ALL READINGS  
IN MR/HR, OR IN CPM

SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED



SEE  
 ATTACHED  
 SHEET

Remarks: \* DENOTES DIRECT B8 READING  
 ALL SMEARS < MDA

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-2-94

Analysis Performed by: \_\_\_\_\_

INSTRUMENT ID: <u>99043</u>	COUNTING SYSTEM DATA	<u>43-10-1</u>
EFICIENCIES: $\alpha$ <u>35%</u> $\beta\gamma$ <u>18%</u>	DETECTOR ID: <u>098327</u>	
MDA: $\alpha$ <u>13 dpm</u> $\beta\gamma$ <u>188 dpm</u>		
PERFORMED BY: <u>J. Young</u>		

Sample Count Time: 2 min

Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: .9 cpm

$\beta\gamma$  Background: 98 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	1	96	0.1	-2	<MDA	<MDA
2	.5	106	-0.4	8		
3	2.5	99	1.6	1		
4	2	99.5	1.1	1.5		
5	1.5	97.5	0.6	-0.5		
6	1	113	0.1	15		
7	0	116	-0.9	18		
8	1	101	0.1	3		
9	.5	101.5	-0.4	3.5		
10	.5	107.5	-0.4	9.5		
11	0	105.5	-0.9	7.5		
12	0	107	-0.9	9		
13	1	96	0.1	-2		
14	0	96.5	-0.9	-1.5		
15	1	96	0.1	-2		
16	1.5	113	0.6	15		
N A						
N A						

Remarks: TRENCH IN FRONT OF HOT CELL DOOR

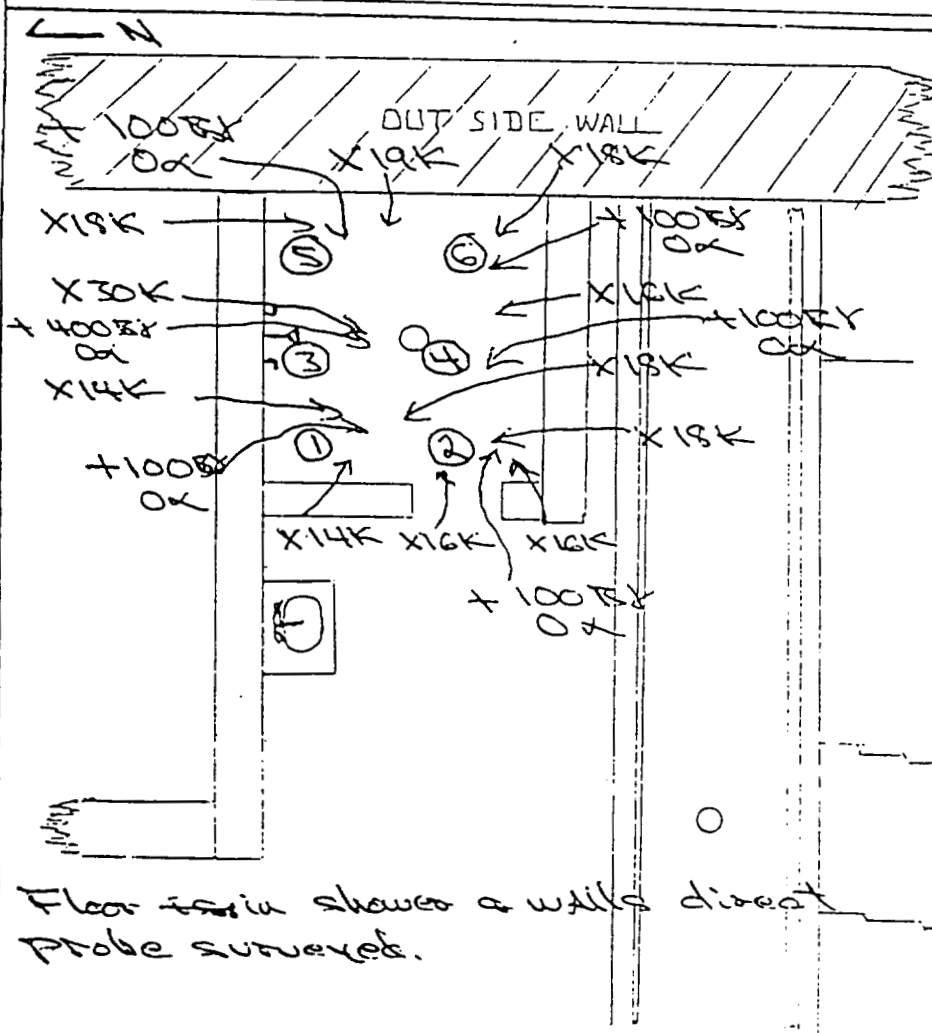
D. Spina  
 Reviewed by

11-2-94  
 Date

## RADIOLOGICAL SURVEY REPORT

ATGS #: FW-001

DATE	<u>11-2-94</u>	INSTRUMENTATION USED				
TIME	<u>1015</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	<u>D. Spivey</u>	<u>W-38</u>	<u>97961</u>	<u>NA</u>	<u>W-38</u>	<u>4-5-94</u>
LOCATION	<u>Shower</u>	<u>W-38</u>	<u>101488</u>	<u>10%</u>	<u>80-38</u>	<u>4-5-94</u>
REVIEWED BY	<u>D. Spivey</u>	<u>W-38</u>	<u>97961</u>	<u>10%</u>	<u>80-38</u>	<u>4-5-94</u>
Smear Locations Circled; Dose Rates= mR/hr		<u>W-38</u>	<u>99043</u>	<u>23%</u>	<u>98-38</u>	<u>4-5-94</u>

PURPOSE OF SURVEY: CharacterizationSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTEDRemarks: None K=1,000 cpmNo detectable contamination found.

ATGS-001 + - Denotes direct probe reading in gross cpm with 44-10 probe in gross cpm probe.

X - Denotes reading with 44-10 probe in gross cpm probe.



## RADIOLOGICAL SURVEY REPORT

ATGS #: FM-003

DATE <u>11-2-94</u>	INSTRUMENTATION USED				
TIME <u>1045</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>D Spicuzza</u>	<u>M-32</u>	<u>97447</u>	<u>10</u>	<u>00PM</u>	<u>4-5-95</u>
LOCATION <u>Bldg 3197</u>	<u>M-35</u>	<u>101498</u>	<u>10</u>	<u>80PM</u>	<u>4-5-95</u>
REVIEWED BY <u>D Spicuzza</u>	<u>M-299</u>	<u>99048</u>	<u>235</u>	<u>90PM</u>	<u>4-5-95</u>
			<u>EX 18</u>	<u>99PM</u>	
Smear Locations Circled; Dose Rates = mR/hr					

PURPOSE OF SURVEY: CharacterizationSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

This is a survey of the  
ventilation unit in Bldg. 3197.  
See Page 3 of 3 for  
MAP.

# By α

See

Attached  
Sheet

MAP

Remarks: None

Date: 11-2-94

Analysis Performed by: J. Young

INSTRUMENT ID: 99043 COUNTING SYSTEM DATA 43-10-1  
 EFICIENCIES:  $\alpha$  35%  $\beta\gamma$  18% DETECTOR ID: 098327  
 MDA:  $\alpha$  13 dpm  $\beta\gamma$  188 dpm  
 PERFORMED BY: A. Huang P. S. S. S. S.

Sample Count Time: 2 min Activity Report In: ☒ dpm ☐  $\mu\text{Ci}$

$\alpha$  Background: 9 cpm

BY Background: 98 cpm

[illegible]

Remarks: Ventilation INSIDE; All smears  $\leq$  MGA

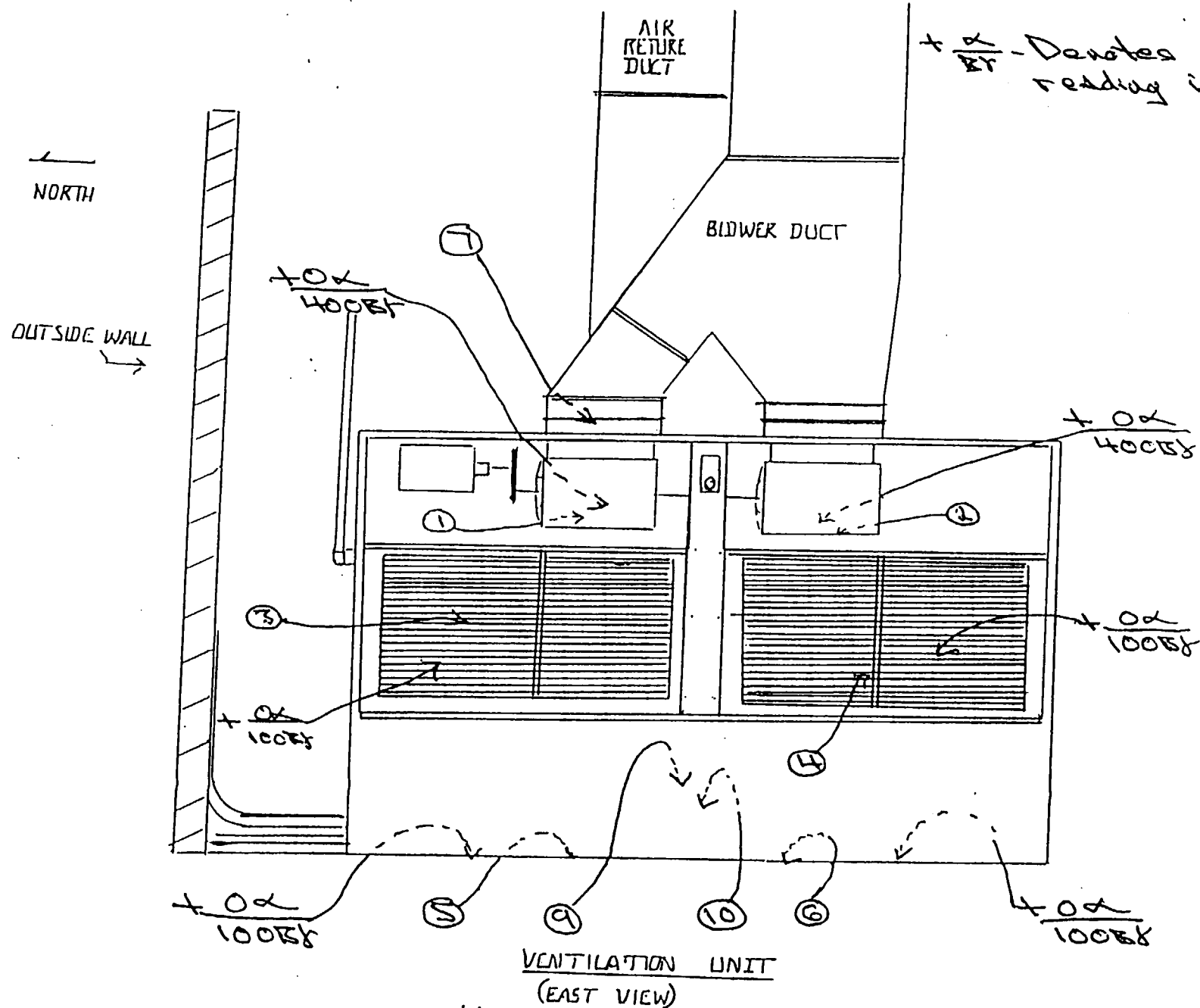
Reviewed by

Date \_\_\_\_\_

# RADIOLOGICAL SURVEY REPORT

ATGS #: FM-003

*D. J. Miller*



+ 0.4 / 40058 - Denotes direct probe reading in gross cpm.

11/6/74

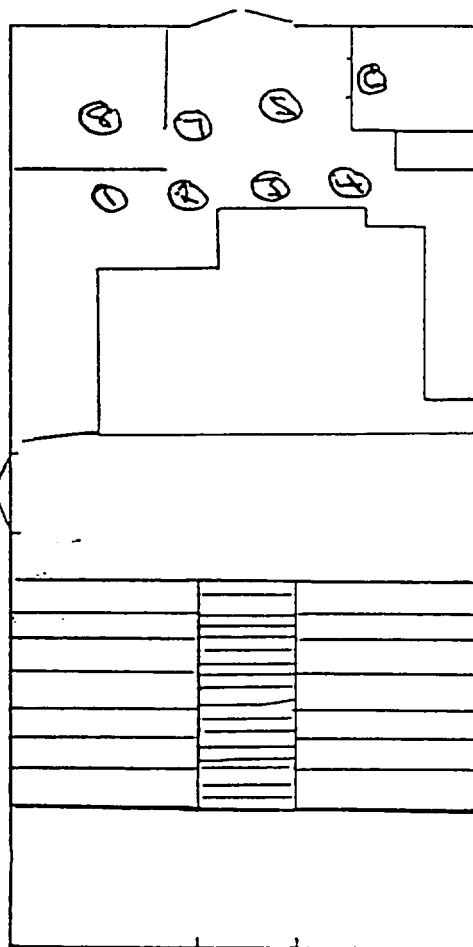
## RADIOLOGICAL SURVEY REPORT

ATGS #: FW-004

DATE <u>11-3-94</u>	INSTRUMENTATION USED				
TIME <u>0710</u>	MODEL <u>1949</u>	S/N <u>99043</u>	EFF. % <u>235</u>	BKRD <u>9cm</u>	CAL. DUE DATE <u>3-19-95</u>
SURVEYOR <u>D. Spawrd</u>	<u>1949</u>	<u>99043</u>	<u>235</u>	<u>9cm</u>	<u>3-19-95</u>
LOCATION <u>Bldg 3192</u>	<u>1949</u>	<u>99043</u>	<u>235</u>	<u>9cm</u>	<u>3-19-95</u>
REVIEWED BY <u>D. Spawrd</u>	<u>1949</u>	<u>99043</u>	<u>235</u>	<u>9cm</u>	<u>3-19-95</u>
Smear Locations Circled; Dose Rates = mR/hr					

PURPOSE OF SURVEY: Smear survey  
of floorSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

BUILDING 3192 FLOOR AREA



NORTH

Remarks: None



## SMEAR COUNTING ANALYSIS REPORT

Date: 11-3-94

Analysis Performed by: \_\_\_\_\_

INSTRUMENT ID: <u>99043</u>		COUNTING SYSTEM DATA		DETECTOR ID: <u>43-10-11098317</u>	
EFICIENCIES:	<u>a 35%</u>	BY	<u>1994</u>		
MDA:	<u>a 13 dpm</u>	BY	<u>181 dpm</u>		
PERFORMED BY:	<u>D Spritzer</u>				

Sample Count Time: 1 minActivity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$ Background: <u>.9</u> cpm		$\beta\gamma$ Background: <u>101</u> cpm				
SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	1	97	.1	-4	<MDA	<MDA
2	2	103	1.1	2		
3	1.5	97	.6	-4		
4	1	106	.1	5		
5	0	103	-.9	2		
6	.5	108	-.4	7		
7	1.5	102	.6	1		
8	1	106	.1	5		
N/A						

Remarks: Smear survey of floorReviewed by D SpritzerDate 11-3-94

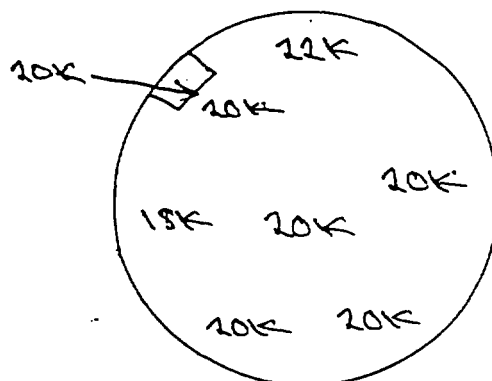
## RADIOLOGICAL SURVEY REPORT

ATGS #: FW-005

DATE	11-3-94					INSTRUMENTATION USED	
TIME	0730	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE	
SURVEYOR	<u>D. Spicuzza</u>	<u>W-318</u>	<u>97901</u>	<u>NA</u>	<u>NA</u>	<u>4-5-95</u>	
LOCATION	<u>Sewer Tank</u>						
REVIEWED BY	<u>[Signature]</u>						
Smear Locations Circled; Dose Rates = mR/hr							

PURPOSE OF SURVEY: Characterization of Sewer TankSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

1 sludge & 1 H<sub>2</sub>O sample  
obtained on 11-2-94.  
O<sub>2</sub> level: 20.9% CO: 0 ppm HS: 0 ppm  
% LEL: 00% GX-86 S/N 9437283

~3" of H<sub>2</sub>O in tank.

Tank ~4' in diameter.

Remarks: Readings taken ~2 1/2' off of surface  
K=1.000 cpm

ATGP-001

Tank ~8' deep.

09/93

DATE <u>11-3-94</u>	INSTRUMENTATION USED				
TIME <u>0800</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. Young</u>	<u>M-30</u>	<u>92134</u>	<u>20</u>	<u>0 cpm</u>	<u>4-5-95</u>
	<u>M-30X</u>	<u>10050</u>	<u>10</u>	<u>80 cpm</u>	<u>4-5-95</u>
LOCATION <u>Bldg. 3192</u>	<u>2125</u>	<u>47043</u>	<u>35</u>	<u>7 cpm</u>	<u>3-19-95</u>
			<u>190X</u>	<u>101 cpm</u>	<u>3-19-95</u>
REVIEWED BY <u>[Signature]</u> <u>11/1/94</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Smear Locations Circled; Dose Rates= mR/hr					

PURPOSE OF SURVEY: CHARACTERIZATION

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

THIS IS A SURVEY OF DESIGNATED  
AREAS IN CLASS Rm. of Bldg. 3192

#	By	α
---	----	---

SEE  
ATTACHED  
SHEET

Remarks: *NONE*

## SMEAR COUNTING ANALYSIS REPORT

Date: 11-3-94Analysis Performed by: J. YoungINSTRUMENT ID: 99043

## COUNTING SYSTEM DATA

EFICIENCIES:  $\alpha$  35% $\beta\gamma$  19%DETECTOR ID: 45-10-11098317MDA:  $\alpha$  13 dpm $\beta\gamma$  181 dpmPERFORMED BY: D. SpivackSample Count Time: 1 minActivity Report In: ☒ dpm ☐  $\mu$  Ci $\alpha$  Background: .9 cpm $\beta\gamma$  Background: 101 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	.5	97	-0.4	-4	<MDA	<MDA
2	1	99	0.1	-2		
3	1.5	114	0.6	13		
4	3.5	110.5	2.6	9.5		
5	.5	103.5	-0.4	2.5		
6	2	100	1.1	-1		
7	1.5	97.5	0.6	-3.5		
8	1.5	107.5	0.6	6.5		
9	0	109.5	-0.9	8.5		
10	2	94	1.1	-7		
11	1	105.5	0.1	4.5		
12	.5	101.5	-0.4	.5		
13	.5	99	-0.4	-2		
14	.5	105	-0.4	4		
15	.5	93	-0.4	-8		
16	.5	107.5	-0.4	6.5		
17	2	107.5	1.1	6.5		
18	1	96.5	0.1	-4.5		
19	0	104	-0.9	3		

Remarks: ALL SMEARS < MDAReviewed by [Signature]

11/6/94

Date

SMEAR COUNTING ANALYSIS REPORT

Date: 11-3-94

Analysis Performed by: J. Young

INSTRUMENT ID: <u>99043</u>		COUNTING SYSTEM DATA		DETECTOR ID: <u>43-10-1/098327</u>	
EFICIENCIES:	$\alpha$ <u>35%</u>	$\beta\gamma$ <u>19%</u>			
MDA:	$\alpha$ <u>13 dpm</u>	$\beta\gamma$ <u>181 dpm</u>			
PERFORMED BY: <u>S. S. [Signature]</u>					

Sample Count Time: 2 min Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: .9 cpm  $\beta\gamma$  Background: 101 cpm

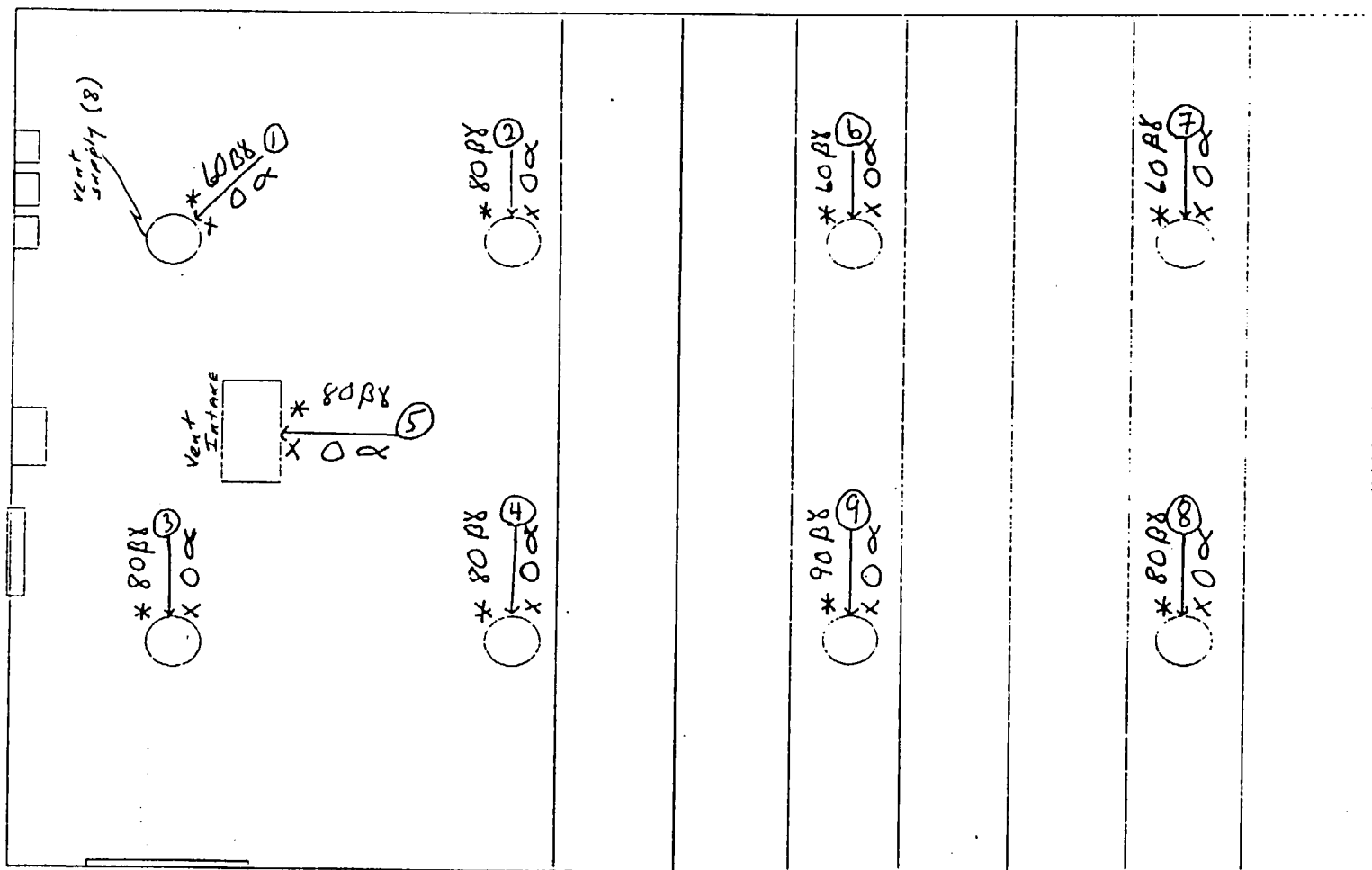
SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
20	1	98	0.1	-3	<MOA	<MOA
21	2	92.5	1.1	-8.5		
22	1.5	96.5	0.6	-4.5		
23	1.5	94.5	0.6	-6.5		
24	1	101.5	0.1	0.5		
25	1	95	0.1	-6		
26	1.5	106.5	0.6	5.5		
27	.5	101.5	-0.4	0.5		
28	2.5	105	1.6	4		
29	0	100.5	-0.9	-0.5		
30	.5	94	-0.4	-7		
31	1	106	0.1	5		
32	1.5	106.5	0.6	5.5		
33	1	101.5	0.1	0.5		
34	1.5	101	0.6	0		
35	1	98	0.1	-3		
36	.5	94	-0.4	-7		
37	1	100.5	0.1	-0.5		
38	.5	107.5	-0.4	6.5		
39	.5	93	-0.4	-8		

Remarks: ALL SMEARS < MOA

Reviewed by: [Signature] 11/6/94

Date

# RADIOLOGICAL SURVEY REPORT

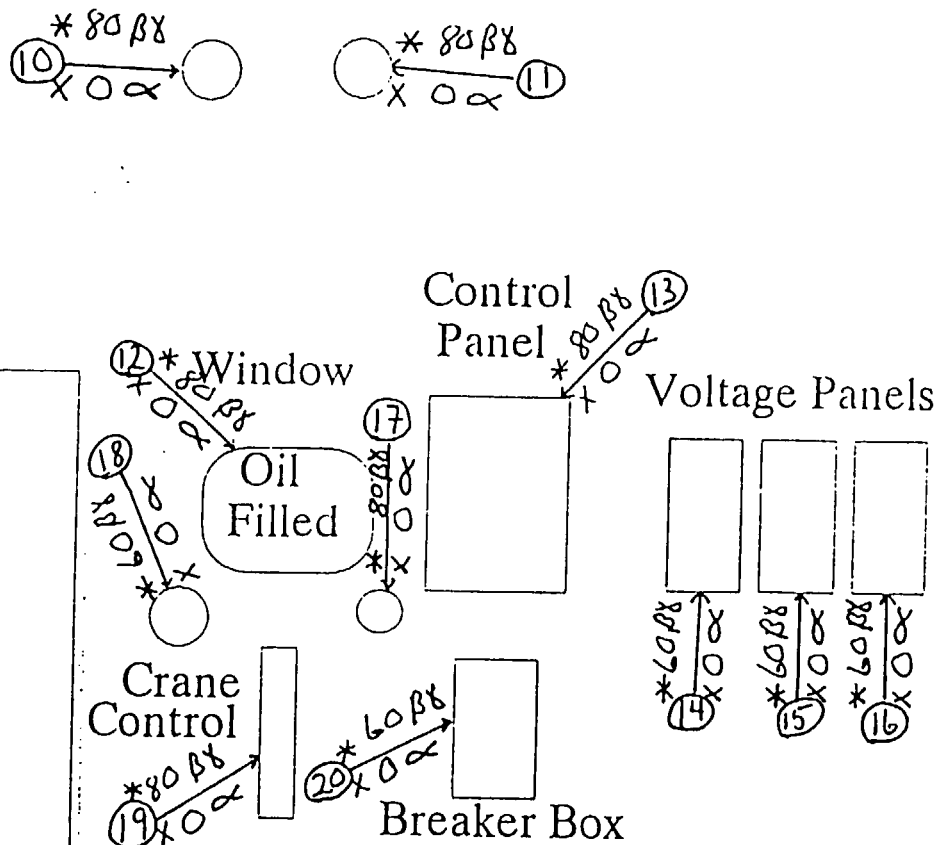
ATGS #: FM-006


\*  $\frac{BX}{\alpha}$  - DENOTES DIRECT PROBE READING IN GROSS CPM.

12/11/194

ATGS #: FM-006 **RADIOLOGICAL SURVEY REPORT**

Ports - 8.5" Dia, 34" Deep

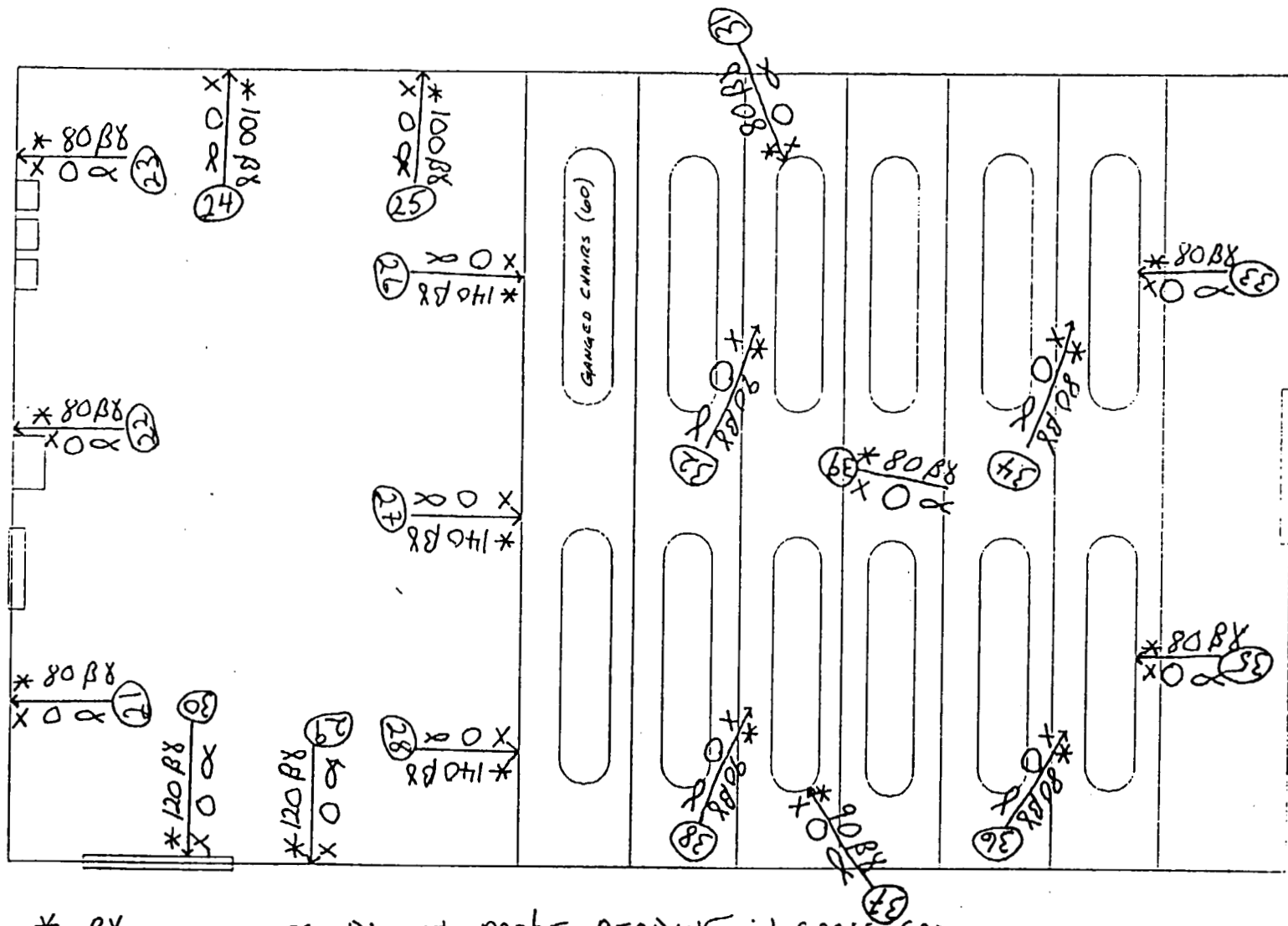


\* Bx - DENOTES DIRECT PROBE READING IN GROSS CPM  
X O

TR 11/6/64

# RADIOLOGICAL SURVEY REPORT

ATGS #: FM-006



\*  $\frac{BY}{X \propto}$  - DENOTES DIRECT PROBE READING IN GROSS <sup>(FF)</sup> cpm.

11/6/54  
J.2.



## RADIOLOGICAL SURVEY REPORT

ATGS #: 70544194 FM 007

DATE <u>11/3/94</u>		INSTRUMENTATION USED					
TIME <u>1400</u>		MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE	
SURVEYOR <u>T. S. D. Jones</u>		<u>3144-9</u>	<u>100502</u>	<u>10</u>	<u>50 cpm</u>	<u>4/5/95</u>	
LOCATION <u>Building #3192</u>		<u>3144-9</u>	<u>102498</u>	<u>10</u>	<u>50 cpm</u>	<u>4/5/95</u>	
REVIEWED BY <u>[Signature]</u>		<u>3143-65</u>	<u>97427</u>	<u>20</u>	<u>0 cpm</u>	<u>4/5/95</u>	
Smear Locations Circled; Dose Rates <u>mr/hr</u>							
PURPOSE OF SURVEY: <u>Release of Material from building #3192. Material in uncontrolled area</u>					SMEAR RESULTS RESULTS = DPM/100cm <sup>2</sup> UNLESS NOTED		
<p>④ 3' x 5' Metal Panels (room dividers)</p> <p>④ 2' x 5' Fiberglass Panels</p> <p>Pieces of broken plastic light cover</p> <p>④ 6' pieces of 1" gas line with valves</p> <p>* ① Positioning mirror 5' x 3' x 2'</p> <p>④ sets of sawhorse legs</p> <p>② sawhorse cross members</p> <p>④ bags of trash</p> <p>⑤ room divider legs</p> <p>* 150 cpm on leg bottom, removed with knife - removal, no detectable activity.</p>					#	By	α
					Remarks: <u>All materials no detectable activity by direct fault</u>		

UNCONDITIONAL RELEASE OF EQUIPMENT OR ITEMS

DATE: 11-3-94

DESCRIPTION OF EQUIPMENT OR ITEMS: Misc items See  
Survey Page 1 of 2 for items  
description.

SURVEY EQUIPMENT:

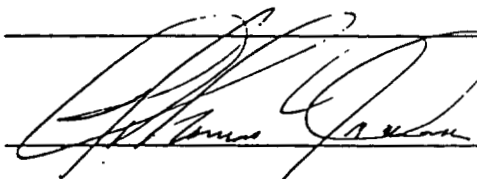
MODEL NO.: <u>3</u>	S/N: <u>100502</u>	CAL.DUE DATE: <u>4-5-95</u>
MODEL NO.: <u>3</u>	S/N: <u>101498</u>	CAL.DUE DATE: <u>4-5-95</u>
MODEL NO.: <u>3</u>	S/N: <u>97427</u>	CAL.DUE DATE: <u>4-5-95</u>

	By	$\alpha$	
REGULATORY RELEASE			
LIMITS:	<u>&lt; 1000</u>	<u>&lt; 20</u>	dpm/100 cm <sup>2</sup> REMOVABLE
	<u>&lt; 15000</u>	<u>&lt; 300</u>	dpm/100 cm <sup>2</sup> MAX FIXED
	<u>&lt; 5000</u>	<u>&lt; 100</u>	dpm/100 cm <sup>2</sup> AVERAGED

THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED EQUIPMENT OR ITEMS HAS BEEN SURVEYED AND FOUND TO BE WITHIN ACCEPTABLE SURFACE CONTAMINATION LEVELS AS REQUIRED BY REG. GUIDE 1.86.

Don Spivia H.P. Sub  
SIGNATURE / TITLE

DISPOSITION OF EQUIPMENT OR ITEMS: Items free release



HEALTH AND SAFETY OFFICER

11/6/94

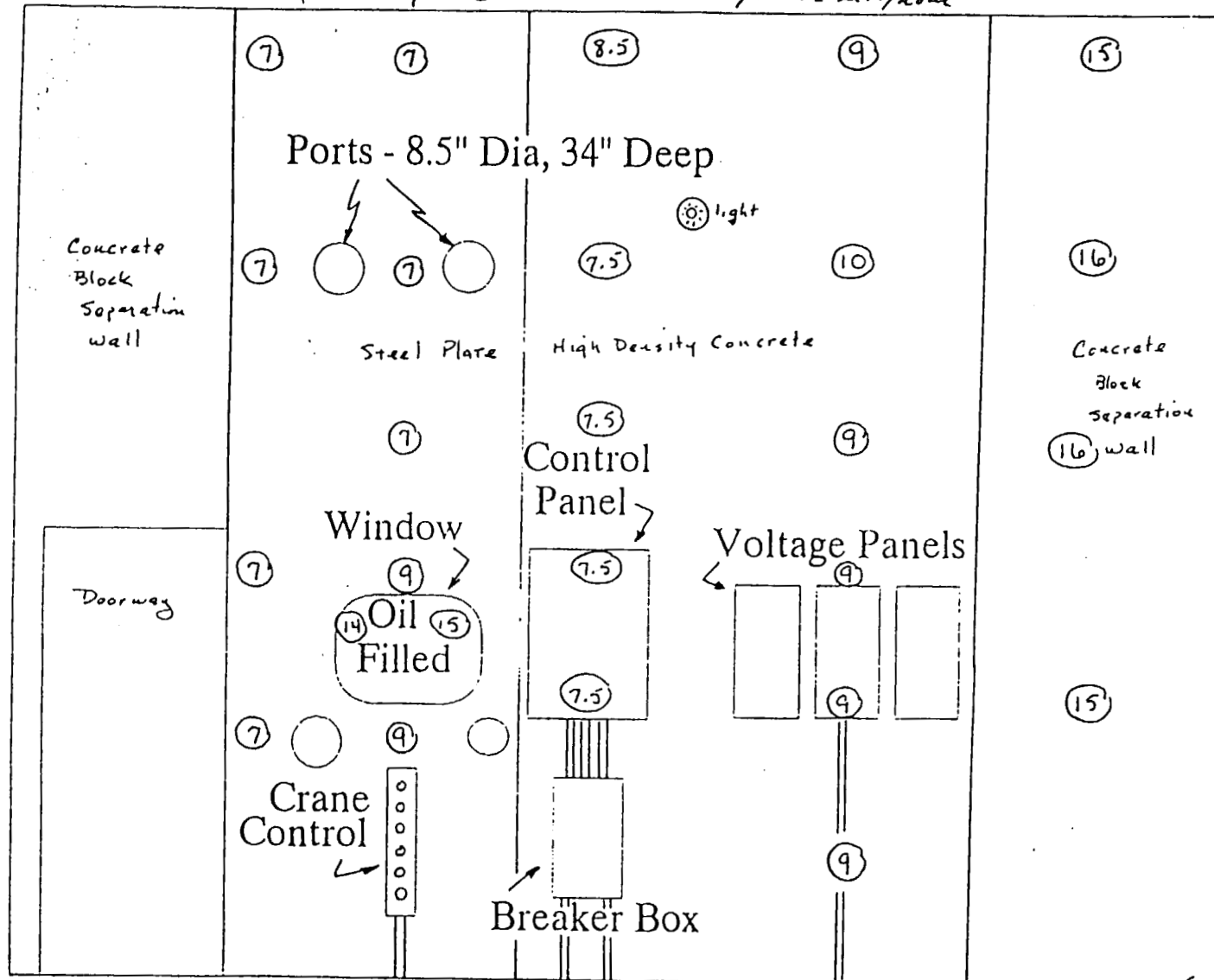
DATE

# RADIOLOGICAL SURVEY REPORT

ATGS #: ~~FO H394~~ + FMO08

Classroom shield wall to hot cell + Associated Equipment

Radiation Survey - ⑦ - Contact readings in MR/room



Ludlum Model 19  
Micro-R Meter  
Serial # 98102  
Calibration Due  
4/5/95

*[Signature]*  
11/3/94  
1000

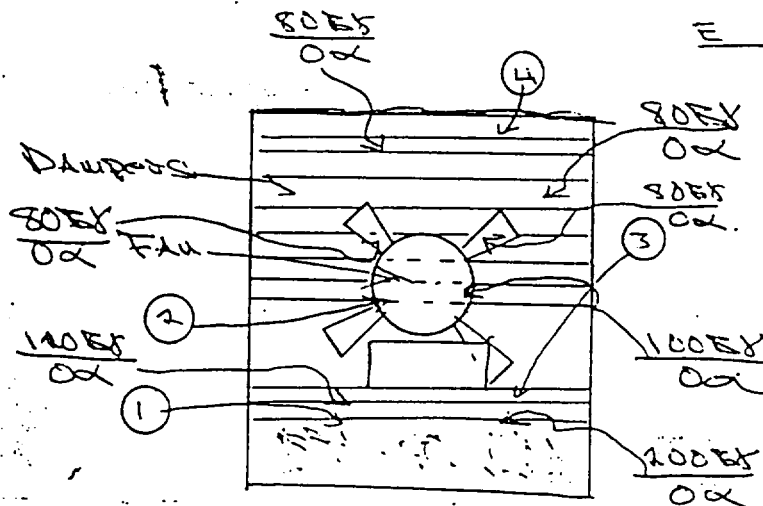
DATE	INSTRUMENTATION USED					
TIME	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE	
11-7-94						
1035						
SURVEYOR	W-3	100502	-10-	SCDM	4-5-95	
LOCATION	W-3	97134	-10-	SCDM	4-5-95	
REVIEWED BY	W-3	99045	235	SCDM	3-19-95	

Smear Locations Circled; Dose Rates = mR/hr

PURPOSE OF SURVEY: Characterization

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

Readings recorded in gross count



Remarks: ~ 12' off of ground.

Drawing not to scale

# SMEAR COUNTING ANALYSIS REPORT

Date: Feb 11-7-94

Analysis Performed by: D. Spindler

INSTRUMENT ID: 99043

## COUNTING SYSTEM DATA

EFICIENCIES:  $\alpha$  5540

$\beta\gamma$  1840

DETECTOR ID: 45-10-1108527

MDA:  $\alpha$  12 dpm

$\beta\gamma$  192 dpm

PERFORMED BY: D. Spindler

Sample Count Time: 1 min

Activity Report In: ☒ dpm ☐  $\mu$  Ci

$\alpha$  Background: 8 cpm

$\beta\gamma$  Background: 10.2 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	0	142	-0.8	40	<MDA	222
2	1	111	0.2	9		<MDA
3	1	121	0.2	19		
4	2	118	1.2	16		
5	2	114	1.2	12		
6	1	137	0.2	35		194
7	2	122	1.2	20		<MDA
8	0	108	-0.8	6		
9	1	115	1.2	13		
10	4	129	3.2	27		
11	2	106	1.2	4		
<div>W A</div>						

Remarks: Inside Supply & Exhaust Ducts

Reviewed by: D. Spindler

11-7-94  
Date

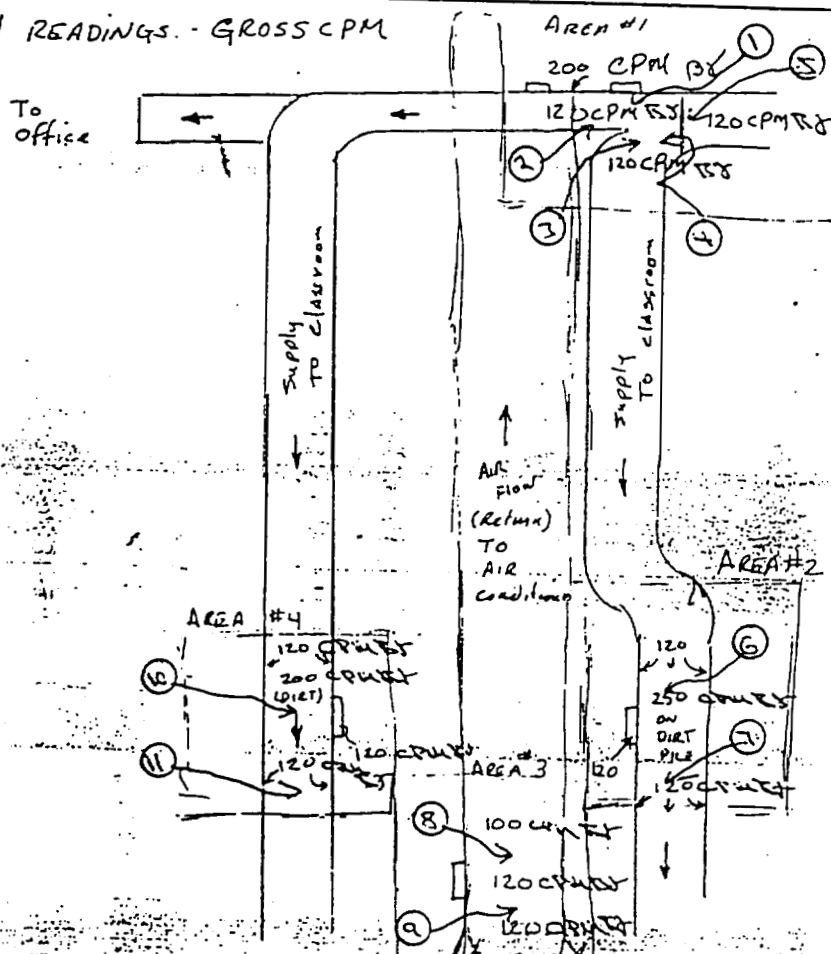
## RADIOLOGICAL SURVEY REPORT

ATGS #: FM-022

DATE	11/7/94	INSTRUMENTATION USED				
TIME	1030	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	DAN SPICUZEA	3/44-9 3/43-65	100507 97134	10-- 10	SCORW 00PM	4-5-95 4-5-95
LOCATION	VENTILATION IN BLG 3192 OVERHEAD - Fr McClellan	44919	99048	235 EX 18	SCORW 1010PM	3-19-95
REVIEWED BY	<u>D. L. L. L.</u>					
Smear Locations Circled; Dose Rates = mR/hr						

PURPOSE OF SURVEY: IDENTIFY CONTAMINATION INSIDE VENT DUCTSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

All READINGS - GROSS CPM

Remarks: Background 80 CPM  
Alpha - No ResponseNo Alpha Activity detected

ATGS-001

2 ft x 2 ft surveyed in each Area.

09/93

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-7-94

Analysis Performed by: J. Young

INSTRUMENT ID: 99043  
COUNTING SYSTEM DATA  
EFICIENCIES:  $\alpha$  35%  $\beta\gamma$  1840  
MDA:  $\alpha$  12  $\beta\gamma$  192  
PERFORMED BY: J. Young

DETECTOR ID: 43-10-1/098327

Sample Count Time: 2 min

Activity Report In: ☒ dpm ☐ pCi

$\alpha$  Background: .8 cpm

$\beta\gamma$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	1	82	0.2	-20	<MDA	<MDA
2	0	117	-0.8	15		
3	1	109	0.2	-7		
4	1	98	0.2	-4		
5	1	94	0.2	-8		
6	0	78	-0.8	-24		
7	1.5	269	0.7	167		927.8
8	1	102	0.2	0		<MDA
9	1	137	0.2	35		194
10	0	101	-0.8	-1		<MDA
11	0	114	-0.8	12		
12	0	118	-0.8	16		
13	0	108	-0.8	6		
14	1	98	0.2	-4		
15	1	116	0.2	14		
16	0	110	-0.8	8		
17	1	113	0.2	11		
18	2	104	1.2	2		
19	1	413.5	0.2	311.5		1730.6
20	.5	575	-0.3	473		2627.8

Remarks:

Reviewed by

Date

Smear Locations Circled; Dose Rates  $\text{mR/hr}$  *Th*

Box readings = 94005 CPM, other  $\mu R/m$

[illegible]

36K 20 40 20K 130 \* B8 10  
\* B8 25 16K \* B8 12 18 150 110  
36 \* B8 19 \* B8 \* B8 10

Remarks: TOP DOOR \* TOP ENTRANCE DENOTES DIRECT B.B. READINGS



# SMEAR COUNTING ANALYSIS REPORT

Date: 11-7-94

Analysis Performed by: D. Spencer

COUNTING SYSTEM DATA

INSTRUMENT ID: 99045 DETECTOR ID: 45-10-11095527

EFICIENCIES: a 35% BY 1992

MDA: a 11 dpm BY 1992 dpm

PERFORMED BY: D. Spradlin

Sample Count Time: 2 min

Activity Report In: ☒ dpm ☐  $\mu$ Ci

α Background: 08 cpm

By Background: 101 cpm

[illegible]

Remarks: Scot. vent

Reviewed by

Date \_\_\_\_\_

## RADIOLOGICAL SURVEY REPORT

ATGS #: FW-020

DATE	<u>11-7-94</u>	INSTRUMENTATION USED				
TIME	<u>0800</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	<u>D Spivey</u>	<u>M-3</u>	<u>10050A</u>	<u>10</u>	<u>90cm</u>	<u>4-8-95</u>
LOCATION	<u>Bldg 5192 Root Vent</u>	<u>M-3</u>	<u>99045</u>	<u>5.35</u>	<u>80cm</u>	<u>3-19-95</u>
REVIEWED BY	<u>D Spivey</u>					

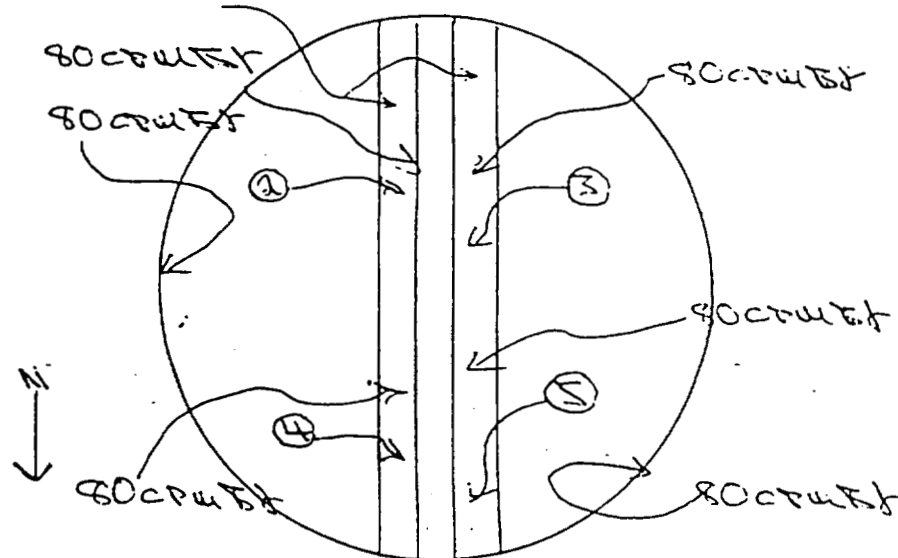
Smear Locations Circled; Dose Rates = mR/hr

PURPOSE OF SURVEY: Characterization of Bldg 5192 Root VentSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

Smear #1 taken inside vent cover.

Readings recorded in gross cpm.

I-beams

Remarks: None

DATE	11-6-94	INSTRUMENTATION USED				
TIME	1530	MODEL	S/N	EFF.%	BKRD	CAL. DUE DATE
SURVEYOR	D. Spivey	M-19	98112	NA	101R	4-5-95
LOCATION	Bldg 3192	<del>---</del>	<del>---</del>	<del>---</del>	<del>---</del>	<del>---</del>
REVIEWED BY	<del>D. Spivey</del>	<del>---</del>	<del>---</del>	<del>Act</del>	<del>---</del>	<del>---</del>
Smear Locations Circled;		Dose	Rates = mR/hr			

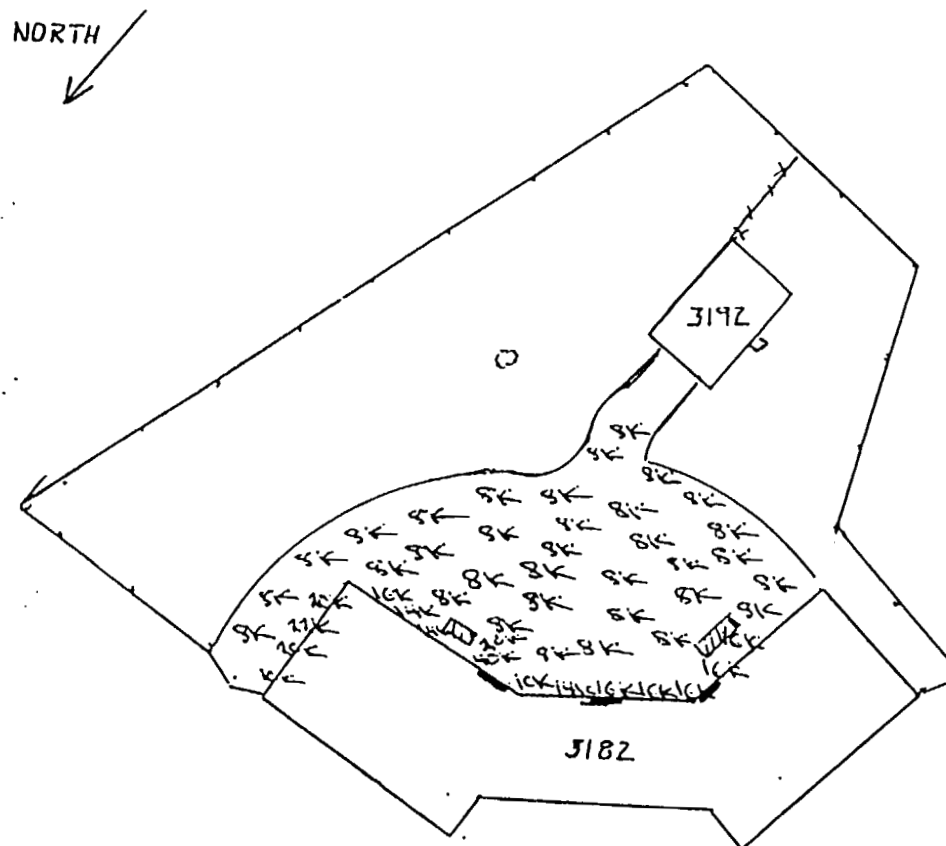
SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

#1 - 16 UR/hr  
#2 - 18 UR/hr  
#3 - 14 UR/hr  
#4 - 16 UR/hr  
#5 - 16 UR/hr  
#6 - 12 UR/hr  
#7 - 16 UR/hr  
#8 - 200 UR/hr  
#9 - 80 UR/hr

09/93

RADIOLOGICAL SURVEY REPORT  
ATGS #: FW-018

11-6-94  
415  
D. [signature]



OVER VIEW OF SITE GROUNDS

## RADIOLOGICAL SURVEY REPORT

ATGS #: FW-018

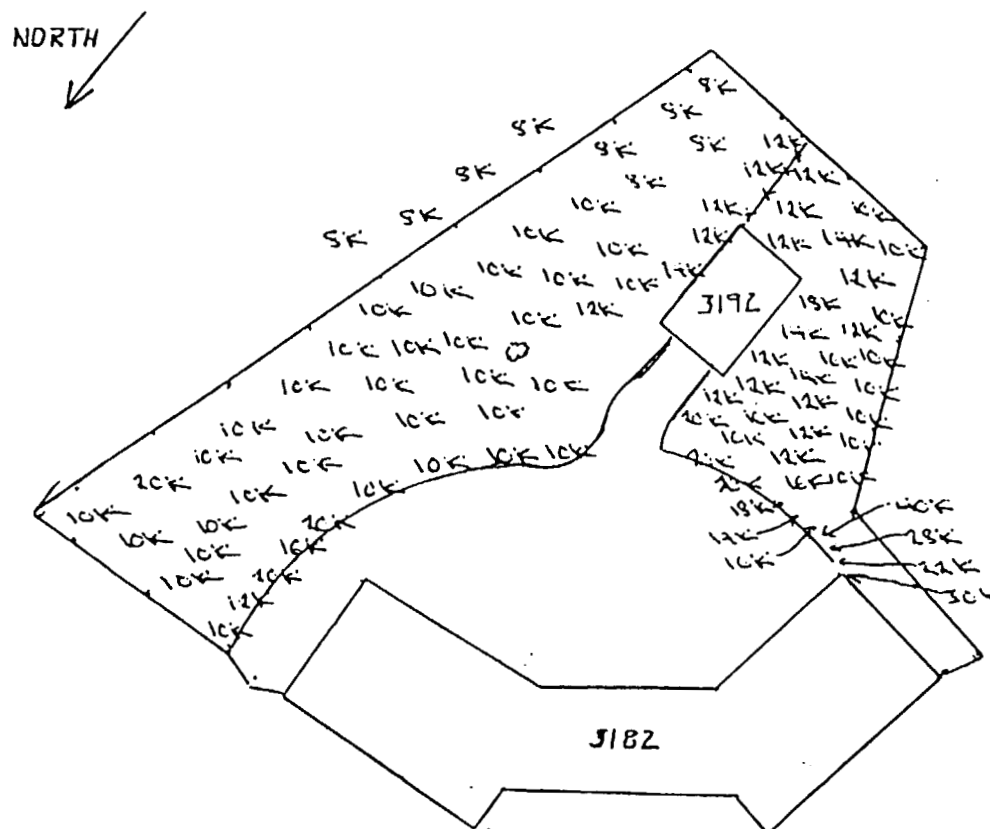
DATE <u>11-6-94</u>	INSTRUMENTATION USED					
TIME <u>1115</u>	MODEL <u>44-3</u>	S/N <u>97901</u>	EFF.% <u>100</u>	BKRD <u>SK-100</u>	CAL. DUE DATE <u>4-5-95</u>	
SURVEYOR <u>D. Spicard</u>	<u>44-10</u>					
LOCATION <u>015 Bldg 3192</u>						
REVIEWED BY <u>D. Spicard</u>						
Smear Locations Circled; Dose Rates= mR/hr <u>K= 1.000 cpm</u>						
PURPOSE OF SURVEY: <u>Characterization of outside areas of Bldg 3192 &amp; 3182</u>				SMEAR RESULTS RESULTS = DPM/100cm <sup>2</sup> UNLESS NOTED		
<p>Readings recorded in gross cpm &amp; Bldg. 3182 o/s wall blocks reading 18K cpm evenly distributed on o/s contact. 1</p> <p>See survey map for readings</p> <p>Readings taken at a rate of 2 6" / second. (Scanning speed) with instrument on flat response.</p> <p>Remarks: <u>Readings taken at 2 4" - 6" off of ground</u></p>				#	By	$\alpha$

ATGS #:

## RADIOLOGICAL SURVEY REPORT

11-6-94  
0630

D. Spaword

OVER VIEW OF SITE GROUNDS

## RADIOLOGICAL SURVEY REPORT

ATGS #: EW-017

DATE <u>11-6-94</u>	INSTRUMENTATION USED				
TIME <u>0630</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. Spivey</u>	<u>M-3-44-10</u>	<u>27901</u>	<u>100</u>	<u>SK-CRW</u>	<u>4-5-95</u>
LOCATION <u>OS Bldg 3192</u>	<u>1</u>	<u>---</u>	<u>---</u>	<u>1</u>	<u>---</u>
REVIEWED BY <u>① Spivey</u>	<u>---</u>	<u>---</u>	<u>100</u>	<u>---</u>	<u>---</u>
Smear Locations Circled; Dose Rates = mR/hr <u>K = 1,000 CPM</u>					

PURPOSE OF SURVEY: Characterization of  
outside Areas of Bldg 3192  
3192

SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED

Readings recorded in gross cpm  
 Bldg. 3192 OS wall blocks reading  
 18K cpm evenly distributed on OS.  
 contact.

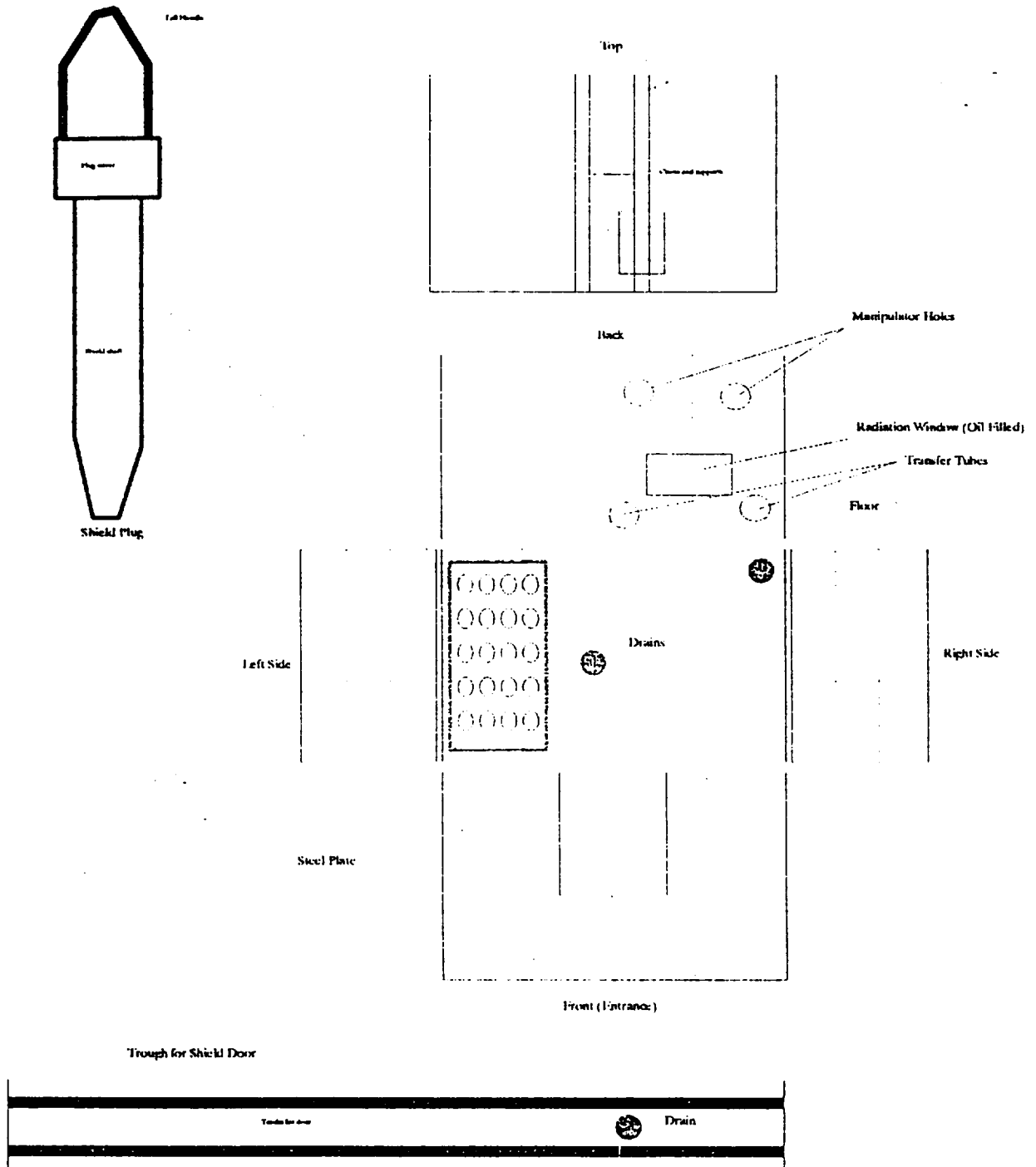
See survey map for readings.

Readings taken at a rate of  
 ~ 6"/second. (Sweeping speed)  
 with instrument on fast response

Remarks: Readings taken at ~  
4" - 6" off of ground.

# Hot Cell Diagram

Fort McClellan - Bldg 3192





ATGS #: FM-016

Smear Locations Circled; ~~Dose Rates~~ mR/hr <sup>Cy</sup>

PURPOSE OF SURVEY: Characterization - 84g outside  
+ vault ~ 20 m<sup>2</sup>/hr in logs

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

Remarks:

# SMEAR COUNTING ANALYSIS REPORT

date: 11-5-94

Analysis Performed by: J. Young

INSTRUMENT ID: 99043 COUNTING SYSTEM DATA  
 EFFICIENCIES:  $\alpha$  36%  $\beta\gamma$  18% DETECTOR ID: 43-10-1/098327  
 MDA:  $\alpha$  12 dpm  $\beta\gamma$  184 dpm  
 PERFORMED BY: T. Young D. Spivey  
 Sample Count Time: 2 min Activity Report In: ☒ dpm ☐ pCi

a Background: .9 cpm

βγ Background: 99 cpm

[illegible]

Remarks: WITNESS FREE RELEASE EQUIPMENT

Reviewed by

11/6/94  
Date

Ref. Survey No. FM-015

UNCONDITIONAL RELEASE OF EQUIPMENT OR ITEMS

DATE: 11-5-94

DESCRIPTION OF EQUIPMENT OR ITEMS: MANIPULATOR PIECES

SURVEY EQUIPMENT:

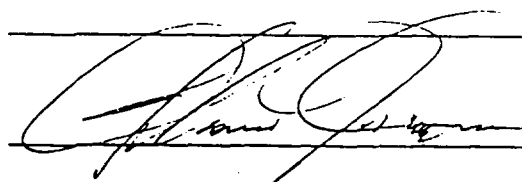
MODEL NO.: <u>M-3 BX</u>	S/N: <u>102498</u>	CAL.DUE DATE: <u>4-5-95</u>
MODEL NO.: <u>M-3 α</u>	S/N: <u>97134</u>	CAL.DUE DATE: <u>4-5-95</u>
MODEL NO.: <u>2929</u>	S/N: <u>99043</u>	CAL.DUE DATE: <u>3-19-95</u>

	By	α	
REGULATORY RELEASE			
LIMITS:	< 1000	< 20	dpm/100 cm <sup>2</sup> REMOVABLE
	< 15000	< 300	dpm/100 cm <sup>2</sup> MAX FIXED
	< 5000	< 100	dpm/100 cm <sup>2</sup> AVERAGED

THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED EQUIPMENT OR ITEMS HAS BEEN SURVEYED AND FOUND TO BE WITHIN ACCEPTABLE SURFACE CONTAMINATION LEVELS AS REQUIRED BY REG. GUIDE 1.86.

James Young / Sr Health Physics  
SIGNATURE / TITLE

DISPOSITION OF EQUIPMENT OR ITEMS: FREE RELEASE EQUIPMENT



HEALTH AND SAFETY OFFICER

11/6/94

DATE



SMEAR COUNTING ANALYSIS REPORT

Date: 11-5-94

Analysis Performed by: D. Spivey

COUNTING SYSTEM DATA

INSTRUMENT ID: 99043

DETECTOR ID: 43-10-1/098327

EFFICIENCIES: a 36%

BY 18%

MDA: a 12 dpm

BY 189 dpm

PERFORMED BY: D. Spivey

Sample Count Time: 1 min

Activity Report In: ☒ dpm ☐  $\mu$ Ci

a Background: 9 cpm

BY Background: 99 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	a	BY	a	BY	a	BY
1	0	102	-1.9	3	<MDA	<MDA
2	1	111	-1	12		
3	1	115	-1	16		
4	2	101	1.1	2		
5	2	116	1.1	17		
6	0	108	-1.9	9		
7	2	105	1.1	6		
8	2	118	1.1	119		661
9	1	114	-1	15		<MDA
10	2	110	1.1	11		
11	0	92	-1.9	-7		
12	1	95	-1	-4		
13	1	103	-1	4		
14	1	99	-1	0		
15	0	104	-1.9	5		
16	0	89	-1.9	-10		
17	3	943	2.1	844		4688

Remarks: Smear #17 taken inside drain opening in SW corner of hot cell (Table drain)

Reviewed by D. Spivey

Date 11-8-94

## RADIOLOGICAL SURVEY REPORT

ATGS #: FM-014

DATE	11-4-94				
TIME	1700				
SURVEYOR	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
<u>D. Spruett</u>	<u>44-32</u>	<u>97407</u>	<u>10</u>	<u>0.000</u>	<u>4-3-95</u>
<u>Hot Cell</u>	<u>44-32</u>	<u>101490</u>	<u>10</u>	<u>100.000</u>	<u>4-3-95</u>
<u>Bldg 3192</u>	<u>44-32</u>	<u>97901</u>	<u>NA</u>	<u>125</u>	<u>4-3-95</u>
REVIEWED BY <u>D. Spruett</u>	<u>44-32</u>	<u>99053</u>	<u>236</u>	<u>0.000</u>	<u>3-19-95</u>
Smear Locations Circled; Dose Rates= mR/hr <u>K=1,000 CPM</u>					

PURPOSE OF SURVEY: Characterization of  
Shield plugs inside hot cellSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTEDShield plug numbers correspond to  
source well tubes. See Survey  
# ATGS-FM-013.

Shield Plug #	Smear #	Gross CPM	Probe Readings Gross CPM
5	1	0	200
6	2	0	200
7	3	0	200
8	4	0	150
9	5	0	200
10	6	0	300
11	7	0	150
12	8	0	200
13	9	0	200
14	10	0	200
15	11	0	200
16	12	0	150
17	13	0	200
18	14	0	300
19	15	0	200
20	16	0	500

Remarks: Smear #17 taken inside table  
dorm in SW corner of hot cell

ATGS-001

Smears counted on 11-5-94 B-Basket at bottom of  
of Plug

SMEAR COUNTING ANALYSIS REPORT

ate: 11-5-94

Analysis Performed by: D. Spawert

COUNTING SYSTEM DATA

INSTRUMENT ID: 99043

DETECTOR ID: 43-10-1/098317

EFICIENCIES: a 36%

BY 18%

MDA: 912 dpm

BY 189 dpm

PERFORMED BY: D. Spawert

Sample Count Time: 2 min

Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: .9 cpm

$\beta$  Background: .99 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta$	$\alpha$	$\beta$	$\alpha$	$\beta$
ILS Source Wells						
#1	1.5	112	.6	13	<MDA	<MDA
#2	0	136	-.9	37		205
#3	1	116	.1	17		<MDA
#4	1	96	.1	-3		↓
#5	0	168	-.9	69		383
#6	0	91	-.9	-8		<MDA
#7	1	120	.1	21		↓
#8	3	116	2.1	17		↓
#9	0	120	-.9	21		↓
#10	1	165	.1	66		367
#11	2	110	1.1	11		<MDA
#12	4	2344	3.1	2145		12,472
#13	1	105	.1	6		<MDA
#14	1.5	167	.6	68		378
#15	3	109	2.1	10		<MDA
#16	0	121	-.9	22		↓
#17	2	108	1.1	9		↓
#18	1	121	.1	22		↓
#19	0	122	-.9	23		↓
#20	2	215	1.1	116	↓	644

Remarks: ILS Source Well Tubes

Reviewed by D. Spawert 11/6/94

11-5-94  
Date

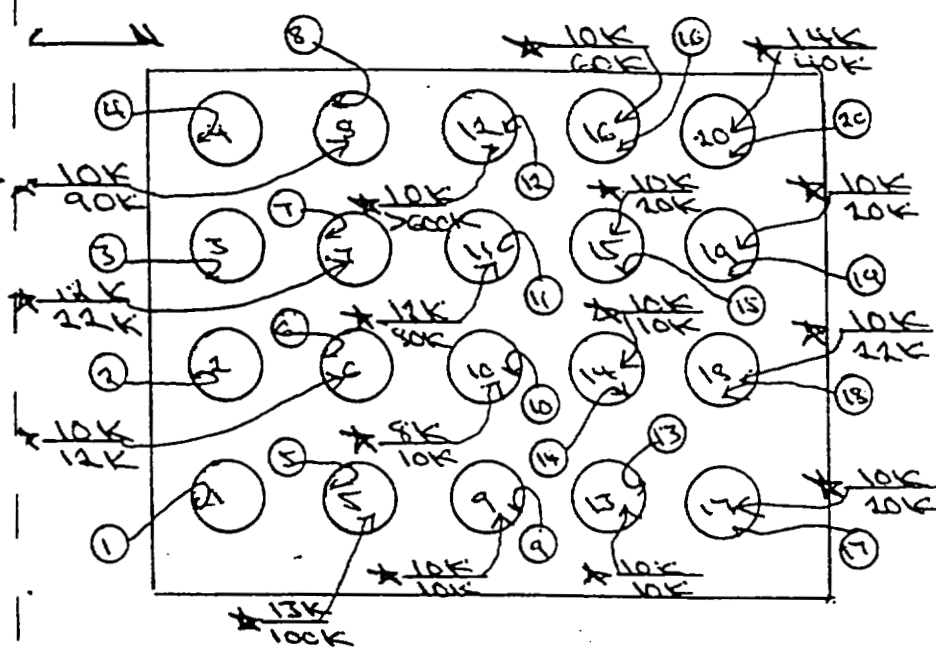
## RADIOLOGICAL SURVEY REPORT

A #: FW-013

DATE	11-4-94					
TIME	1700					
SURVEYOR	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE	
U-30x	97427	10	0.5%	4-5-95		
U-30x	101498	10	0.5%	4-5-95		
LOCATION	U-318	97901	NA	12K	4-5-95	
REVIEWED BY	U-1009	99043	1.3%	0.5%	3-19-95	
Smear Locations Circled; Dose Rates = mR/hr $K = 1,000$ cpm						

PURPOSE OF SURVEY: Characterization  
of Hot Cell Source Well  
Tubes

SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED



\*1' - Denotes U-318-10 reading at 1' a  
 Bottom Bottom in cpm (gross cpm).

Smears taken ~ 6" IIS holes.

Remarks: Shield plug survey

Completed See Survey ATCS-FW014

ATCF-001

Smears counted on 11-5-94.  
 Holes ~ 4" in diameter & ~ 4' deep  
 Holes #1 thru #14 ~ 8' deep. (#5 thru #20)

09/93



SMEAR COUNTING ANALYSIS REPORT

Date: 11-4-94

Analysis Performed by: J. Young

INSTRUMENT ID: <u>99043</u>		COUNTING SYSTEM DATA		DETECTOR ID: <u>098327</u>	
EFICIENCIES: $\alpha$ <u>35%</u>		$\beta$ <u>18%</u>			
MDA: $\alpha$ <u>12 dpm</u>		$\beta$ <u>187 dpm</u>			
PERFORMED BY: <u>A. S. [Signature]</u>					

Sample Count Time: 2 min Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: .8 cpm  $\beta$  Background: 96 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta$	$\alpha$	$\beta$	$\alpha$	$\beta$
20	0.5	97	-0.3	1	< MDA	< MDA
21	0	91.5	-0.8	-4.5		
22	2.5	100	1.7	4		
23	1.5	102.5	0.7	6.5		
24	1	91.5	0.2	-4.5		
25	0.5	106	-0.3	10		
26	0.5	105	-0.3	9		
27	1	100.5	0.2	4.5		
28	1.5	103.5	0.7	7.5		
29	.5	99.5	-0.3	3.5		
30	1.5	104.5	0.7	8.5		
31	1.5	102.5	0.7	6.5		
32	1.5	103.5	0.7	7.5		
33	1	106	0.2	10		
34	0	97	-0.8	1		
35	.5	99.5	-0.3	3.5		
N						

Remarks: All smears < MDA

Reviewed by: [Signature]

Date: 11/6/94

## SMEAR COUNTING ANALYSIS REPORT

Date: 11-14-94Analysis Performed by: J. Young

COUNTING SYSTEM DATA

INSTRUMENT ID: 99043 DETECTOR ID: 098317

EFICIENCIES: a 35% BY 18%

MDA: a 12 dpm BY 187 dpm

PERFORMED BY: D. Spicard

Sample Count Time: 2 minActivity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$ Background: <u>8</u> cpm		$\beta$ Background: <u>96</u> cpm					
SAMPLE ID OR DESCRIPTION		GROSS COUNTS		NET COUNTS		Activity	
		$\alpha$	$\beta$	$\alpha$	$\beta$	$\alpha$	$\beta$
1		0	107	-0.8	11	<MDA	<MDA
2		1	104.5	0.2	8.5	<MDA	<MDA
3		2	96	1.2	0		
4		1	103.5	0.2	7.5		
5		1	97	0.2	1		
6		.5	83.5	-0.3	-12.5		
7		0	98.5	-0.8	2.5		
8		.5	100.5	-0.3	4.5		
9		.5	97.5	-0.3	1.5		
10		.5	105	-0.3	9		
11		0	102.5	-0.8	6.5		
12		1	92	0.2	-4		
13		1.5	100.5	0.7	4.5		
14		0.5	106	-0.3	10		
15		0	99.5	-0.8	3.5		
16		0.5	103.5	-0.3	7.5		
17		1	88.5	0.2	-7.5		
18		0.5	85.5	-0.3	-10.5		
19		1.5	90.5	0.7	-5.5		

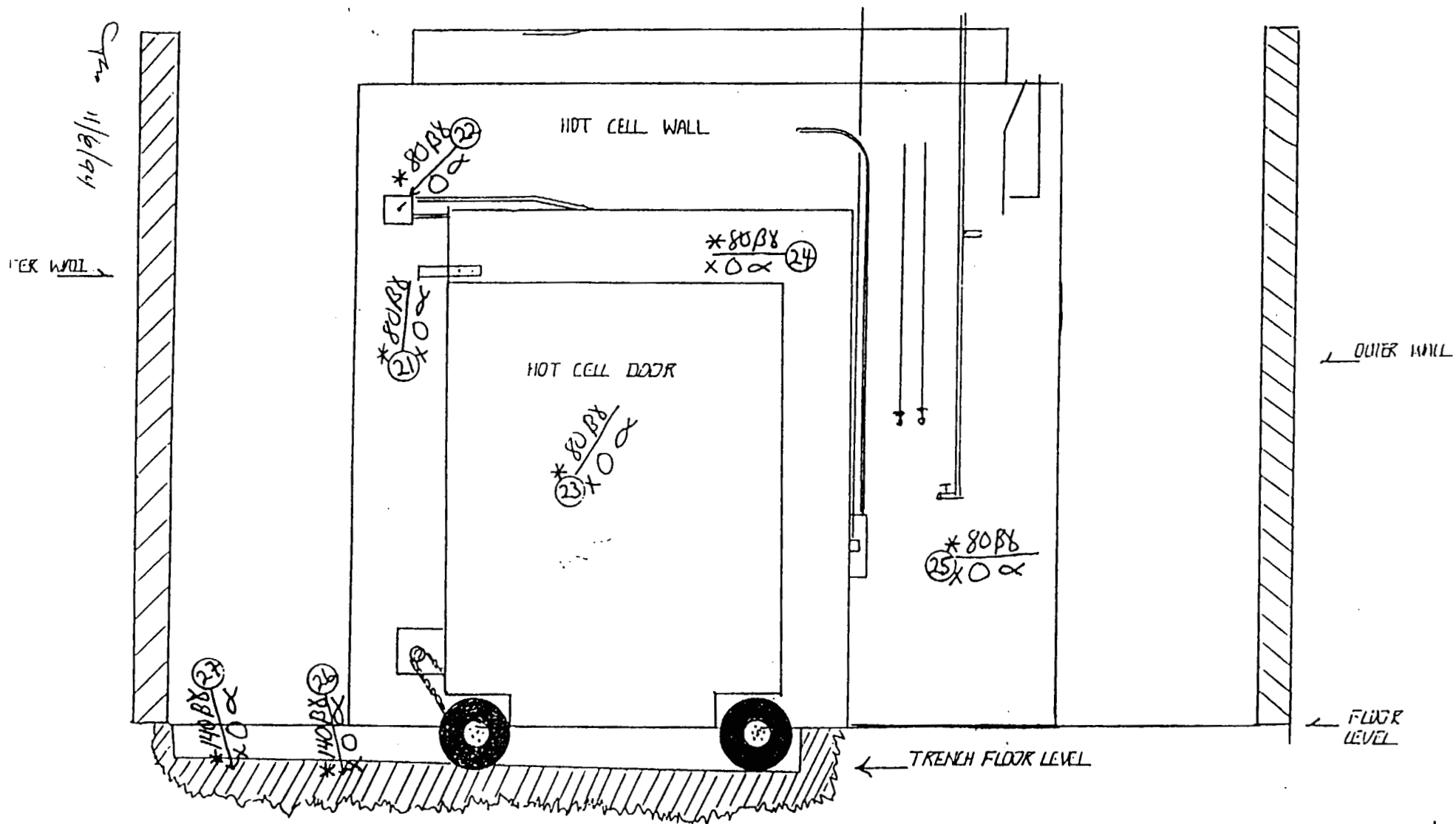
Remarks: ALL SMEARS < MDAReviewed by: [Signature]

11/16/94

Date

ATGS #: FM-012

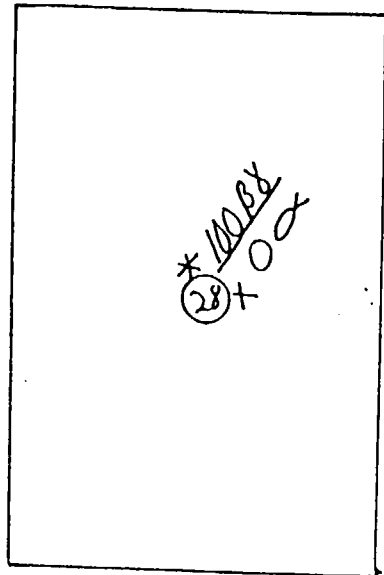
# RADIOLOGICAL SURVEY REPORT



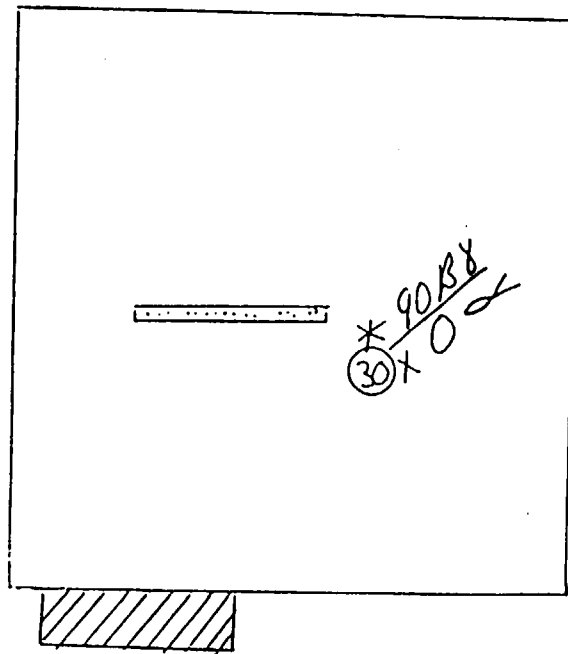
SOUTH VIEW OF HOT CELL ENTRANCE

hb/a/11 and

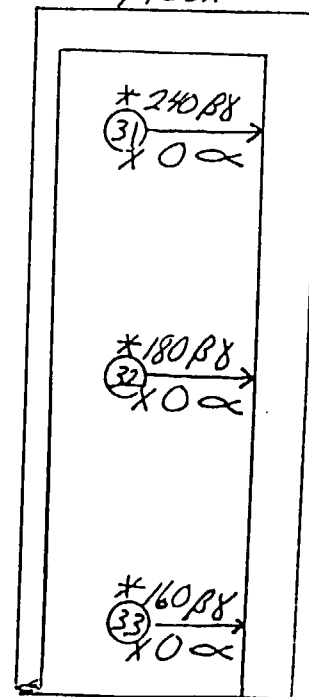
SOUTHWALL  
EAST SIDE OF HOT CELL



EAST WALL  
EAST SIDE OF HOT CELL

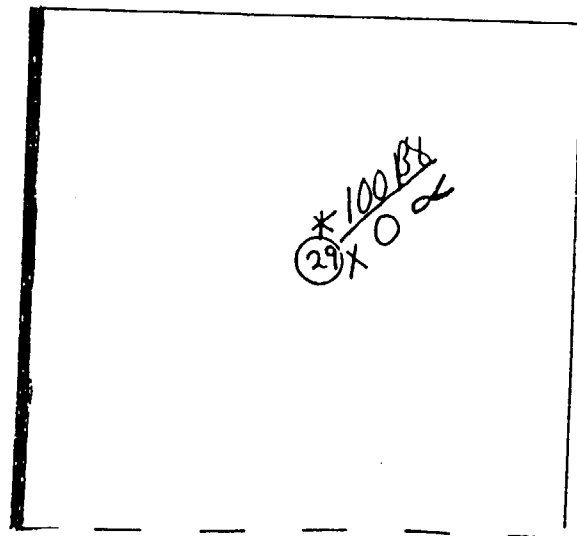


EAST & WEST SIDE  
OF HOT CELL  
FLOOR



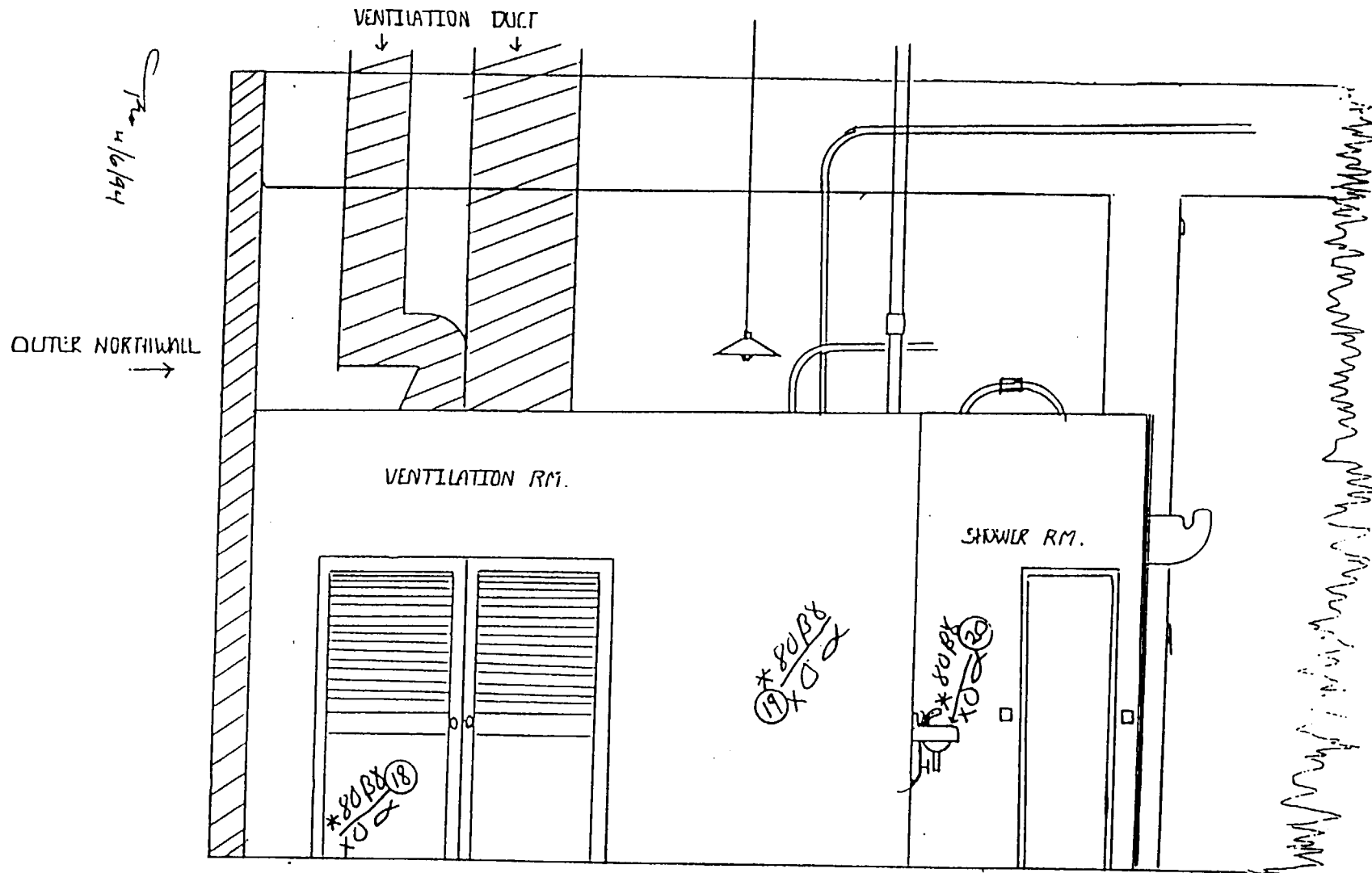
←  
EAST

WEST WALL  
EAST SIDE OF  
HOT CELL.



# RADIOLOGICAL SURVEY REPORT

ATGS #: EM-012

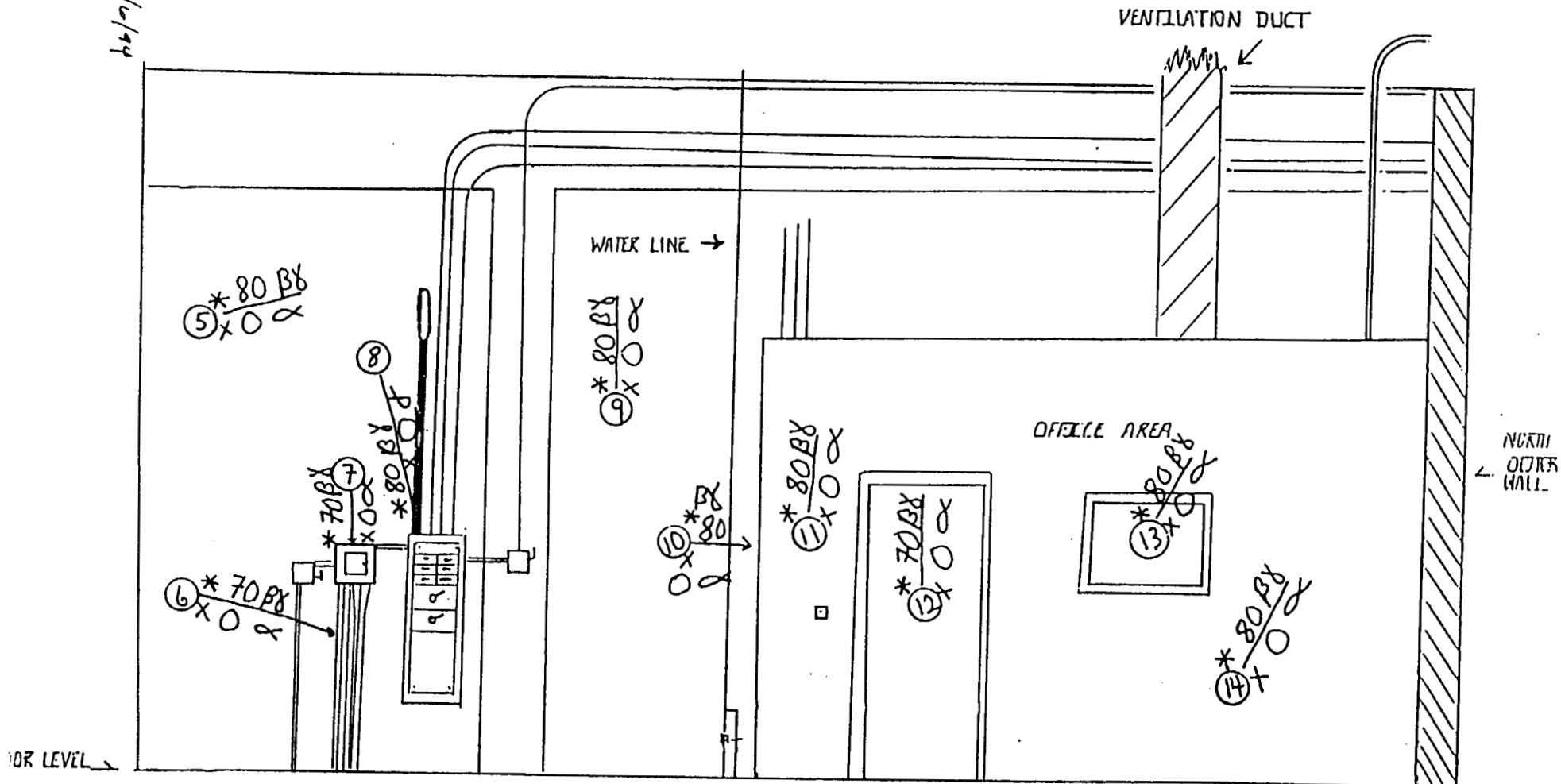


EAST WALL OF VENTILATION ROOM AND SHOWER

⌞ NORTH

60707

1/2 11/6/94



VIEW OF WEST WALL IN OFFICE AREA

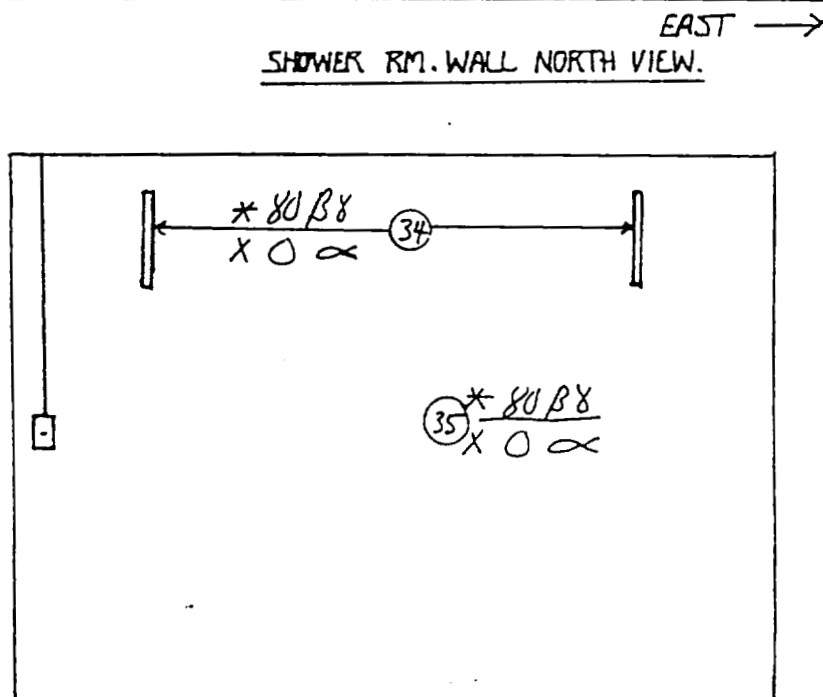
NORTH →

# RADIOLOGICAL SURVEY REPORT

ATGS #: FM-012

DATE <u>11-4-94</u>	INSTRUMENTATION USED				
TIME <u>1330</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. Young</u>	<u>M-3B8</u>	<u>102498</u>	<u>10</u>	<u>70cpm</u>	<u>4-5-95</u>
	<u>M-3A</u>	<u>47134</u>	<u>20</u>	<u>0cpm</u>	<u>4-5-95</u>
LOCATION <u>Bldg. 3192</u>	<u>2929</u>	<u>49043</u>	<u>35A</u>	<u>8cpm</u>	<u>3-19-95</u>
	<u>2924</u>	<u>99043</u>	<u>18B8</u>	<u>96cpm</u>	<u>3-19-95</u>
REVIEWED BY <u>[Signature]</u> <u>11/6/94</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Smear Locations Circled; Dose Rates = mR/hr					

 PURPOSE OF SURVEY: CHARACTERIZATION  
α & β readings in gross cpm

 SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED
Remarks: NONE

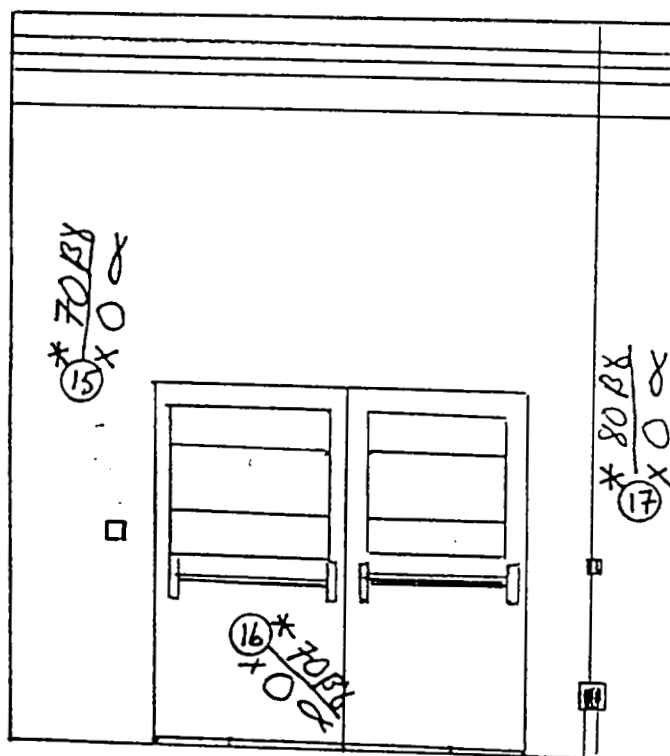
# RADIOLOGICAL SURVEY REPORT

ATGS #: FM-012

DATE <u>11-4-94</u>	INSTRUMENTATION USED				
TIME <u>1330</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. Young</u>	<u>M-3 BX</u>	<u>102498</u>	<u>-10-</u>	<u>70cpm</u>	<u>4-5-95</u>
	<u>M-3 α</u>	<u>97134</u>	<u>20</u>	<u>0cpm</u>	<u>4-5-95</u>
LOCATION <u>Bldg. 3192</u>	<u>2929</u>	<u>44043</u>	<u>35 α</u>	<u>.8cpm</u>	<u>3-19-95</u>
	<u>2929</u>	<u>99043</u>	<u>18 BX</u>	<u>46cpm</u>	<u>3-19-95</u>
REVIEWED BY <u>[Signature]</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Smear Locations Circled; Dose Rates = mR/hr					

PURPOSE OF SURVEY: CHARACTERIZATION  
α & β count rate in gross CPM

SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED



VIEW OF ENTRANCE (NORTH WALL)

Remarks: NONE



## RADIOLOGICAL SURVEY REPORT

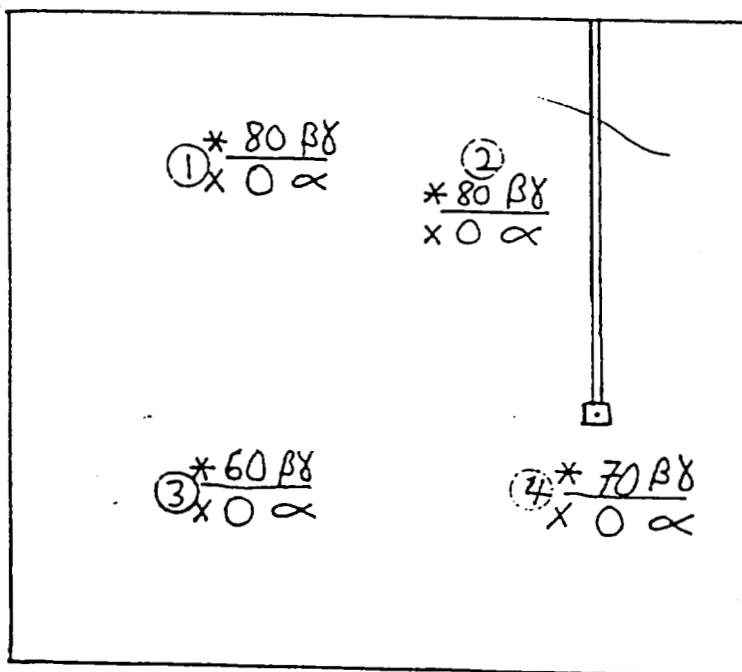
ATGS #: FM-012

DATE <u>11-4-94</u>	INSTRUMENTATION USED				
TIME <u>1330</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. Young</u>	<u>M-3 BX</u>	<u>102498</u>	<u>10</u>	<u>70 cpm</u>	<u>4-5-95</u>
	<u>M-3 α</u>	<u>97134</u>	<u>20</u>	<u>0 cpm</u>	<u>4-5-95</u>
LOCATION <u>Bldg. 8192</u>	<u>2429</u>	<u>94043</u>	<u>35 α</u>	<u>8 cpm</u>	<u>3-19-95</u>
	<u>2929</u>	<u>99043</u>	<u>18 BX</u>	<u>46 cpm</u>	<u>3-19-95</u>
REVIEWED BY <u>[Signature]</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Smear Locations Circled; Dose Rates = mR/hr					

 PURPOSE OF SURVEY: CHARACTERIZATION  
α & β readings in gross cpm

 SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED

EAST HALLWAY WALL



SEE ATTACHED SHEET

N/A

Remarks: NONE

# RADIOLOGICAL SURVEY REPORT

ATGS #: FM-012

DATE <u>11-4-94</u>	INSTRUMENTATION USED				
TIME <u>1330</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. Young</u>	<u>M-3 BX</u>	<u>102448</u>	<u>10</u>	<u>70 cpm</u>	<u>4-5-95</u>
	<u>m-3 α</u>	<u>97134</u>	<u>20</u>	<u>0 cpm</u>	<u>4-5-95</u>
LOCATION <u>Bldg. 3192</u>	<u>2424</u>	<u>99043</u>	<u>35 α</u>	<u>8 cpm</u>	<u>3-19-95</u>
	<u>2929</u>	<u>99043</u>	<u>18 BX</u>	<u>96 cpm</u>	<u>3-19-95</u>
REVIEWED BY <u>[Signature]</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>

Smear Locations Circled; Dose Rates = mR/hr

PURPOSE OF SURVEY: CHARACTERIZATION

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

THIS IS A SURVEY OF THE WEST WALL  
IN OFFICE AREA; SOUTH WALL OF HOT CELL  
ENTRANCE; EAST WALL OF VENTILATION AND  
SHOWER; NORTH WALL OF FRONT DOOR ENTRANCE  
EAST SIDE OF HOT CELL WALL, FLOOR; AND  
TRENCH

\* - DENOTES DIRECT READING  $\beta\gamma$  (CPM)X - DENOTES DIRECT READING  $\alpha$  (CPM)Remarks: NONE

SEE  
ATTACHED  
SHEET

## RADIOLOGICAL SURVEY REPORT

ATGS #: FIM-011

DATE <u>11-4-94</u>	INSTRUMENTATION USED				
TIME <u>1020</u>	MODEL <u>415</u> <u>4470</u>	S/N <u>71901</u>	EFF. % <u>NA</u>	BKRD <u>SKD</u>	CAL. DUE DATE <u>4-5-95</u>
SURVEYOR <u>D. Spicuzza</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
LOCATION <u>015 R4g 3192</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
REVIEWED BY <u>D. Spicuzza</u> <u>11/6/94</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Smear Locations Circled; Dose Rates = mR/hr					

PURPOSE OF SURVEY: Depth characterization of core sample holes.SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

Holes ~ 4" in diameter.						#	By	$\alpha$
↑ 10K	↑ 14K	↑ 80K	↑ 15K	↑ 8K	↑ 14K			
12K	16K	20K	17K	3' 8K	18K			
13K	17K	19K	16K	10K	20K			
14K	17K	20K	17K	↓ 10K	21K			
18K	20K	19K	17K	↓ 10K	22K			
19K	20K	20K	19K	#5	22K			
20K	20K	20K	17K	11"	21K			
20K	20K	20K	↓ 17K		21K			
20K	20K	20K	#4		21K			
Rock	21K	21K			21K			
#1	Rock	Rock			Rock			
	#2	#3			#6			
↑ 40K	10K							
20K	10K							
22K	15K							
22K	22K							
21K	22K							
21K	21K							
22K	22K							
22K	21K							
21K	21K							
22K	22K							
22K	22K							
Rock	Rock							
#7	#8							

Remarks: Readings taken every 1'

ATGP-001

K = 1,000 cpm

09/93

## UNCONDITIONAL RELEASE OF EQUIPMENT OR ITEMS

DATE: 11-4-94DESCRIPTION OF EQUIPMENT OR ITEMS: 3 drill sections,  
2 hollow auger sections

## SURVEY EQUIPMENT:

MODEL NO.: <u>3</u>	S/N: <u>101408</u>	CAL.DUE DATE: <u>4-5-95</u>
MODEL NO.: <u>3</u>	S/N: <u>97417</u>	CAL.DUE DATE: <u>4-5-95</u>
MODEL NO.: <u>1919</u>	S/N: <u>99043</u>	CAL.DUE DATE: <u>4-5-95</u>

	By	$\alpha$	
REGULATORY RELEASE			
LIMITS:	< 1000	< 20	dpm/100 cm <sup>2</sup> REMOVABLE
	< 15000	< 300	dpm/100 cm <sup>2</sup> MAX FIXED
	< 5000	< 100	dpm/100 cm <sup>2</sup> AVERAGED

THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED EQUIPMENT OR ITEMS HAS BEEN SURVEYED AND FOUND TO BE WITHIN ACCEPTABLE SURFACE CONTAMINATION LEVELS AS REQUIRED BY REG. GUIDE 1.86.

Don Spriggs H.S. Spriggs  
SIGNATURE / TITLE

DISPOSITION OF EQUIPMENT OR ITEMS: Free released

[Signature]

HEALTH AND SAFETY OFFICER

11/4/94

DATE



## RADIOLOGICAL SURVEY REPORT

ATGS #: FM-010

DATE <u>11-4-94</u>	INSTRUMENTATION USED				
TIME <u>1015</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>D. Spicutt</u>	<u>W-555</u>	<u>101498</u>	<u>10</u>	<u>80000</u>	<u>4-5-95</u>
	<u>W-30</u>	<u>97497</u>	<u>10</u>	<u>0000</u>	<u>4-5-95</u>
LOCATION <u>Bldg 3192 O/S</u>	<u>W-1919</u>	<u>99083</u>	<u>10</u>	<u>80000</u>	<u>4-5-95</u>
REVIEWED BY <u>D. Spicutt</u>				<u>06000</u>	<u>3-19-95</u>
Smear Locations Circled; Dose Rates = mR/hr					

PURPOSE OF SURVEY: Free Release of  
Pope Engineering Co drilling  
equipment.

SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED

Items Surveyed:

3 ~ 5' drill sections.

2 ~ 5' hollow Auger sections.

3 ~ 4' hollow sampler sections.

All items 100% direct probe  
 surveyed. All items were  
≤ Bkrd. BxL.

# By α

See

Attached  
Sheet

Remarks: Free released items

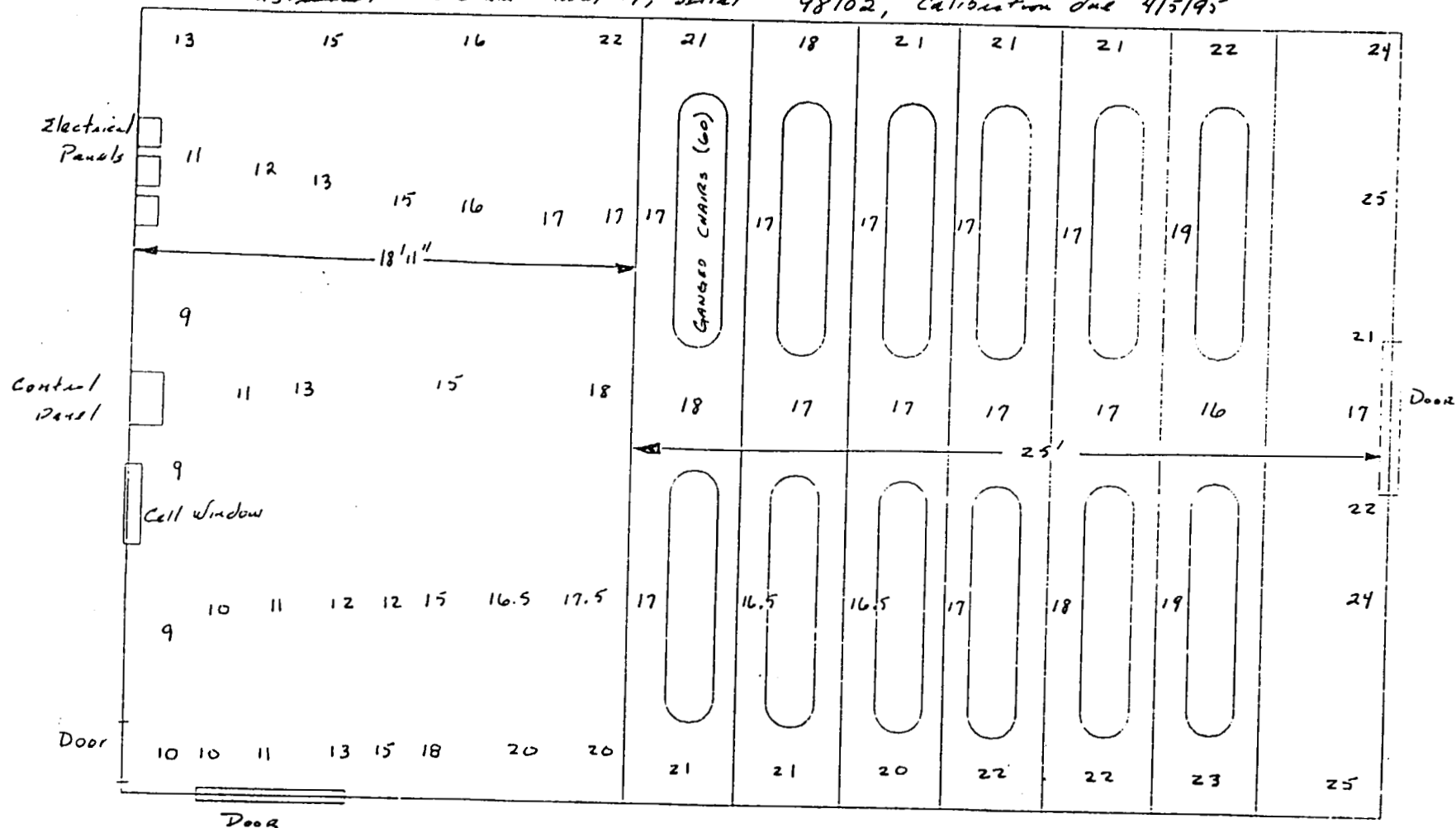
## RADIOLOGICAL SURVEY REPORT

ATGS #: ~~FO 11394~~ 2 FM009

11/13/94

Classroom general area - All readings at waist level in  $\mu R/hr$ 

Instrument - Ludlum Model 19, Serial # 98102, Calibration due 4/5/95



*Thomas J. O'Don, CAP*  
 Thomas J. O'Don, CAP 11/13/94  
 120

Analysis Performed by: D. Spina

DETECTOR ID: 43-10-11000527

Activity Report In: ☒ dpm ☐  $\mu\text{Ci}$ 

BY Background: 101 cpm

Remarks: N. Wall Ex. Ex

Date \_\_\_\_\_



# RADIOLOGICAL SURVEY REPORT

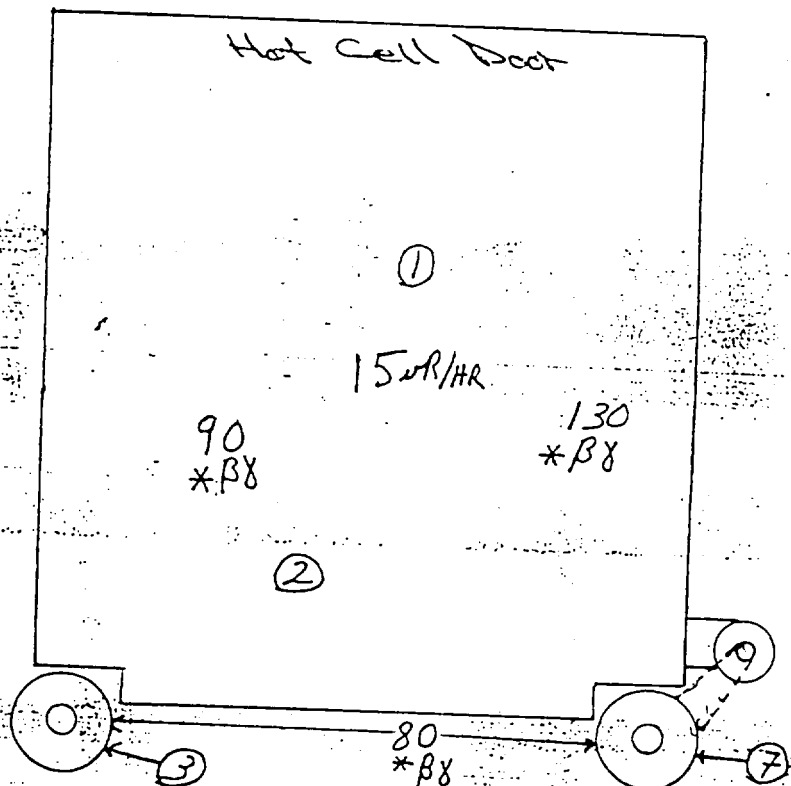
ATGS #: FM-024

DATE <u>11-7-94</u>	INSTRUMENTATION USED				
TIME <u>1454</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. V. 0426</u>	<u>M-3 BX</u>	<u>102498</u>	<u>10</u>	<u>6 DPM</u>	<u>4-5-95</u>
LOCATION <u>Bldg. 3192</u>	<u>M-19</u>	<u>98112</u>	<u>NA 10 BX</u>	<u>10 DPM</u>	<u>4-5-95</u>
REVIEWED BY <u>[Signature]</u>	<u>2829</u>	<u>99043</u>	<u>35 α</u>	<u>8 DPM</u>	<u>3-19-95</u>
	<u>2929</u>	<u>99043</u>	<u>18 BX</u>	<u>102 DPM</u>	<u>3-19-95</u>
	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

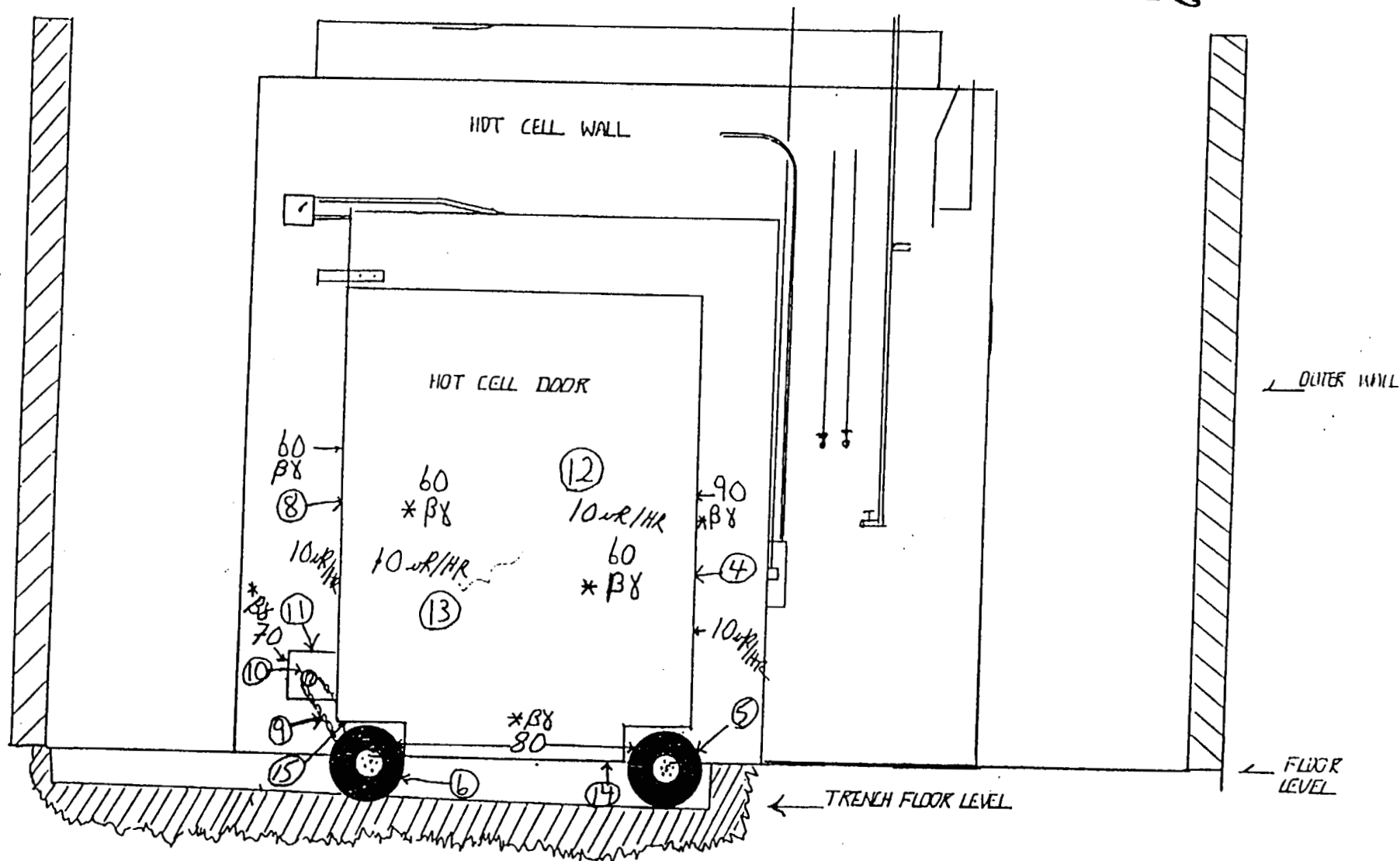
Smear Locations Circled; Dose Rates = mR/hr

PURPOSE OF SURVEY: CHARACTERIZATION  
Hot Cell Door (REAR FACE) (INSIDE)

SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED

Remarks: NONE

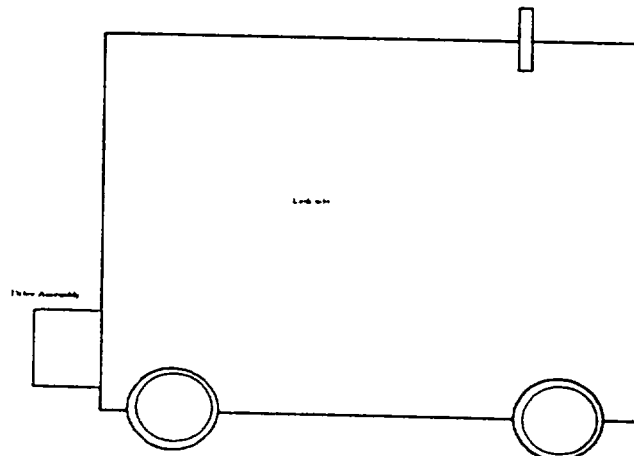
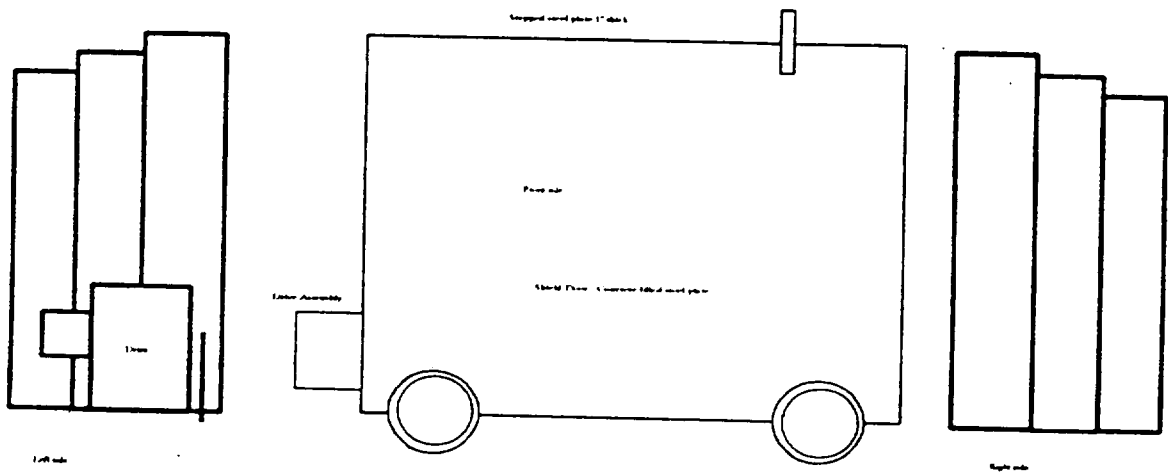
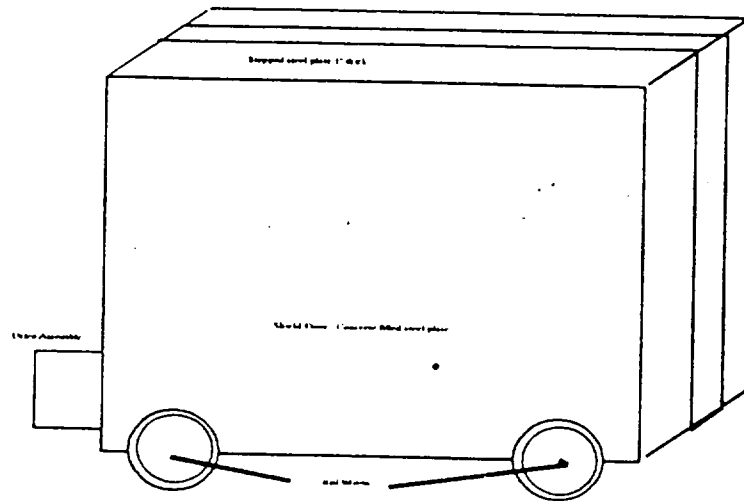
ATGS #: FM-024 **RADIOLOGICAL SURVEY REPORT**



SOUTH VIEW OF HOT CELL ENTRANCE

# Hot Cell Door

Fort McClellan - Bldg 3192



# SMEAR COUNTING ANALYSIS REPORT

Date: 11-7-94

Analysis Performed by: J. Young

INSTRUMENT ID: <u>99043</u>		COUNTING SYSTEM DATA	
EFICIENCIES: $\alpha$ <u>35%</u>	$\beta\gamma$ <u>18%</u>	DETECTOR ID: <u>43-10-1/098327</u>	
MDA: $\alpha$ <u>12</u>	$\beta\gamma$ <u>192</u>		
PERFORMED BY: <u>J. Young</u> <u>D. Spivey</u>			

Sample Count Time: 2 min Activity Report In: ☒ dpm ☐ pCi

$\alpha$  Background: .8 cpm  $\beta\gamma$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	1	280	0.2	178	<MDA	988.9
2	1.5	177.5	0.7	75.5	<MDA	419.4
3	2	104.5	1.2	2.5		<MDA
4	2.5	99.5	1.7	-2.5		
5	0	112.7	-0.8	10.5		
6	0	114	-0.8	12	<MDA	<MDA
7	1	88	0.2	-14		
8	.5	92	-0.3	-10		
9	1	101.5	0.2	-0.5		
10	1	105.5	0.2	3.5		
11	1	100.5	0.2	-1.5		
12	2	87.5	1.2	-14.5		
13	1	123	0.2	21		
14	1	106.5	0.2	4.5		
15	.5	99	-0.3	-3		
A N						

Remarks: NONE

Reviewed by: Don Spivey Date: 11/9/94

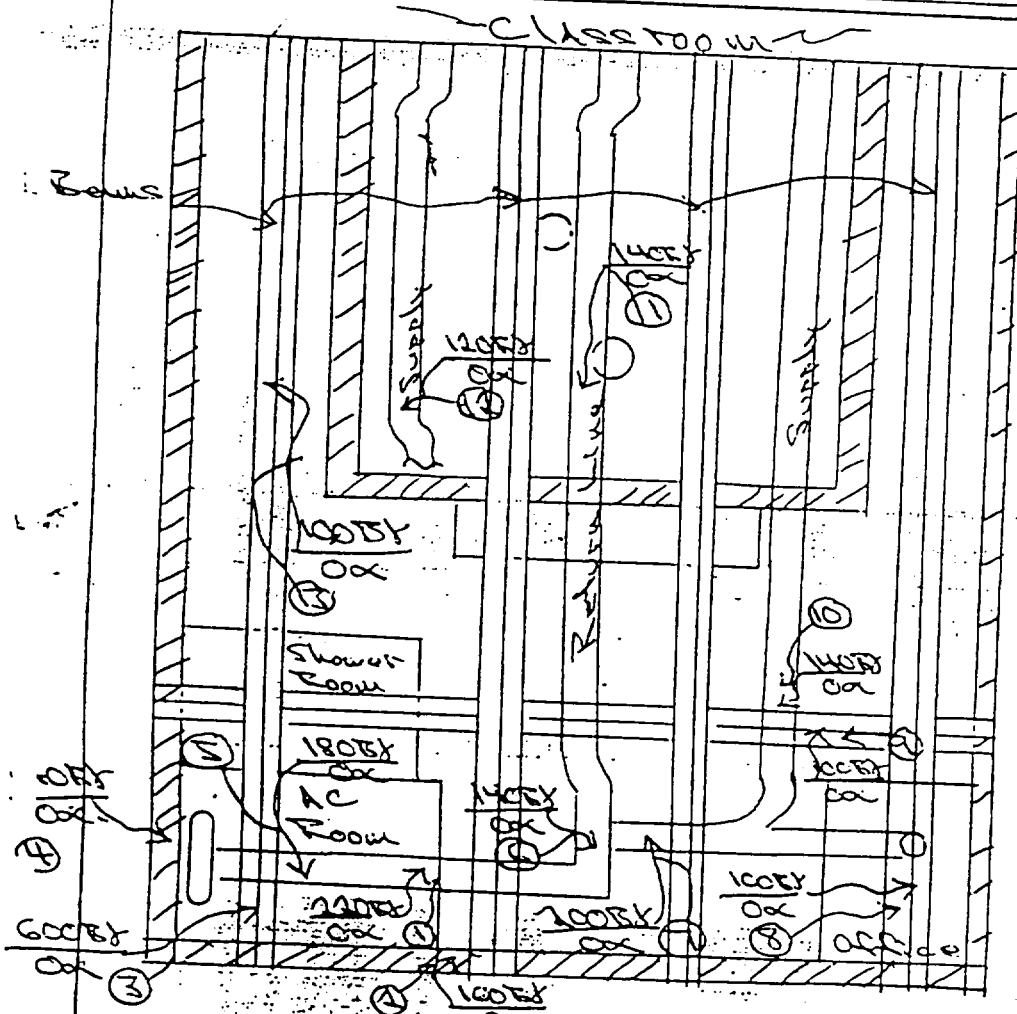
# RADIOLOGICAL SURVEY REPORT

ATGS #: FM-015

DATE	TIME	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
11-7-94	1730	W3	100501	10	SCM	4-5-95
SURVEYOR: D. Spicard		W3	97134	10	SCM	4-5-95
LOCATION: 543192 O.Hd		W3	99047	10	SCM	4-5-95
REVIEWED BY: D. Spicard		W3	100501	10	SCM	4-5-95

Smear Locations Circled; Dose Rates = mR/hr

PURPOSE OF SURVEY: Characterization

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED


#	By	α
1	See	
2	Attached	
3	Sheets	
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Remarks: Top of wall has surveyed  
~ 1000 Area surveyed each spot

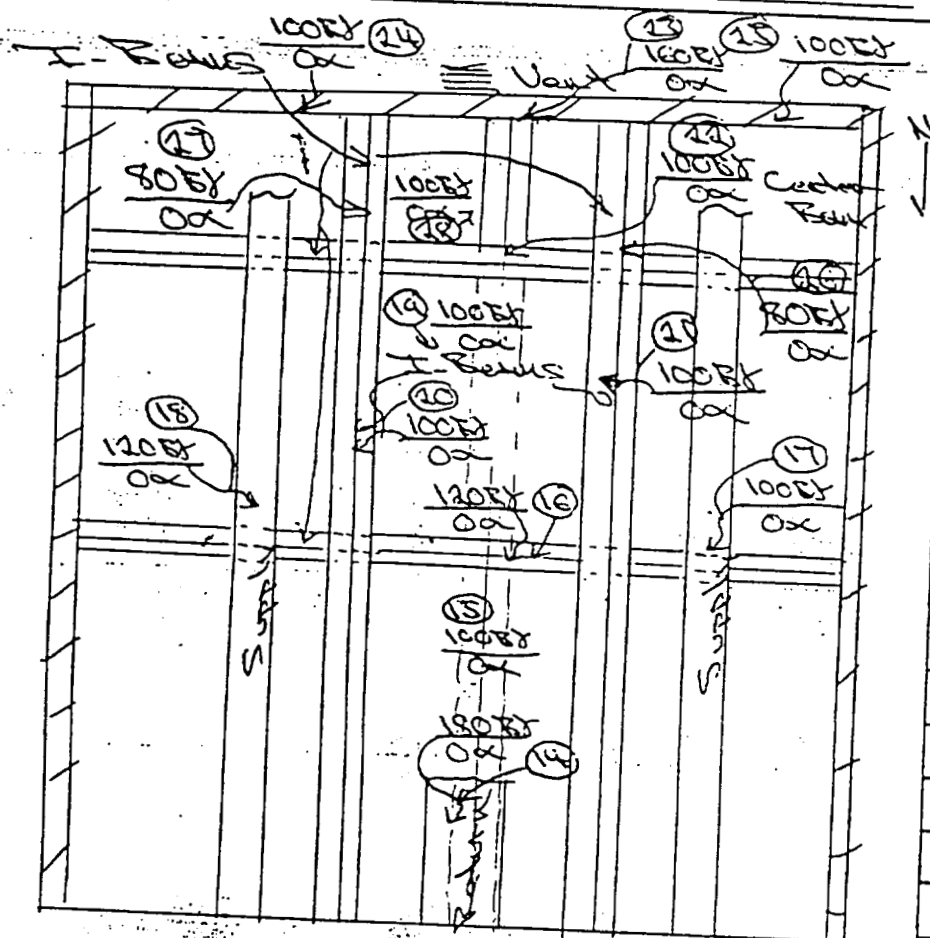
ATGS-001

#BX Denotes direct probe readings in gross of W

09/93

ATGS #: FW-02

PURPOSE OF SURVEY: Characterization

[illegible]

Hot Cell

Remarks: See Page 1 of 4, for  
summary

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-7-94

Analysis Performed by: D.S. Spawert

INSTRUMENT ID: 99043

## COUNTING SYSTEM DATA

EFICIENCIES:  $\alpha$  35%

$\beta$  18%

DETECTOR ID: 43-10-1109837

MDA:  $\alpha$  12 dpm

$\beta$  192 dpm

PERFORMED BY: D.S. Spawert

Sample Count Time: 4 min

Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: 8 cpm

$\beta$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta$	$\alpha$	$\beta$	$\alpha$	$\beta$
1	2	118	1.2	16	<MDA	<MDA
2	1	109	.2	7		
3	4	95	3.2	-7		
4	0	104	-.8	2		
5	0	96	-.8	-6		
6	1	110	.2	8		
7	3	105	2.2	3		
8	1.5	97	.7	-5		
9	0	117	-.8	15		
10	1	109	.2	7		
11	1	111	.2	9		
12	0	129	-.8	27		
13	0	118	-.8	14		
14	0	108	-.8	6		
15	2.5	100	-2.3	-2		
16	0	188	-.8	86		478
17	1	109	.2	7		<MDA
18	0	100	-.8	-2		
19	1	105	.2	3		
20	4	132	3.2	30		

Remarks: Blkg. 3192 Overhold

Reviewed by: D.S. Spawert

Date: 11-9-94

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-7-94

Analysis Performed by: D. Spawen

INSTRUMENT ID: 99043

COUNTING SYSTEM DATA

EFICIENCIES: a 35%

BY 180%

DETECTOR ID: 43-10-1109852

MDA:

a 12 dpm

BY 194 dpm

PERFORMED BY: D. Spawen

Sample Count Time: 1 min

Activity Report In: ☒ dpm ☐ pCi

a Background: 28 cpm

BY Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	a	BY	a	BY	a	BY
21	2	266	1.2	164	<MDA	911
22	1	108	.2	6		<MDA
23	0	123	-.8	21		
24	1	132	.2	30		
25	2	123	1.2	21		
26	2	149	1.2	47		261
27	0	154	-.8	52		289
28	0	128	-.8	26		<MDA
<div style="text-align: center; font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">             ALL A           </div>						

Remarks: Slag 3192 Overhold

Reviewed by D. Spawen

11-8-94  
Date



# RADIOLOGICAL SURVEY REPORT

ATGS #: FM-026

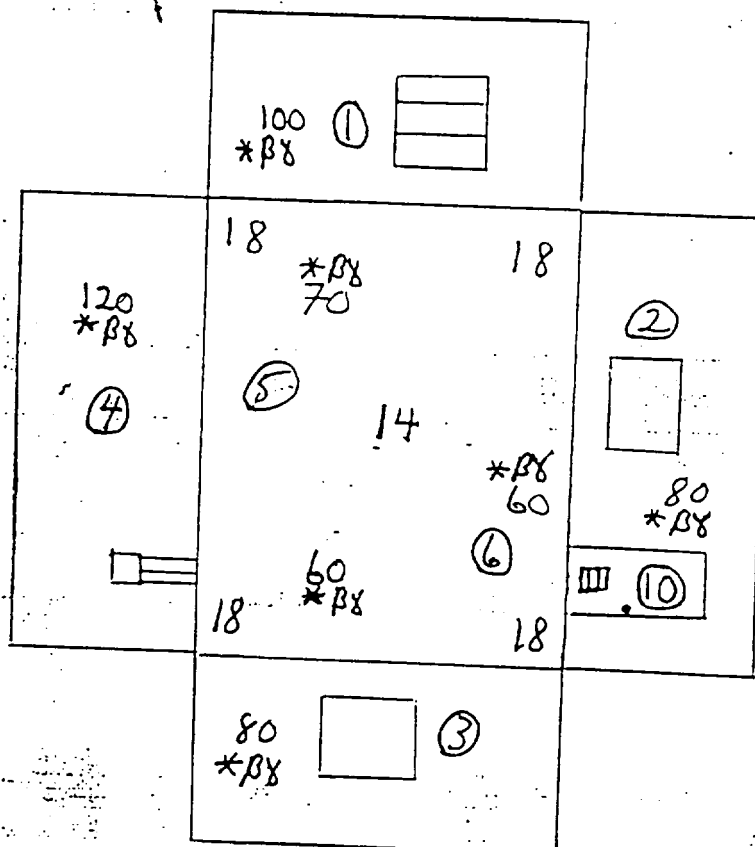
DATE <u>11-8-94</u>	INSTRUMENTATION USED				
TIME <u>0745</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>J. Young</u>	<u>M-3 BX</u>	<u>102498</u>	<u>10</u>	<u>60</u>	<u>4-5-95</u>
LOCATION <u>Bldg. 3192</u>	<u>M-3</u>	<u>92134</u>	<u>20</u>	<u>0</u>	<u>4-5-95</u>
REVIEWED BY <u>D. [Signature]</u>	<u>M-19</u>	<u>98112</u>	<u>NA</u>	<u>14</u>	<u>4-5-95</u>
	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
	<u>2929</u>	<u>99043</u>	<u>36</u>	<u>8</u>	<u>3-17-95</u>
	<u>2929</u>	<u>99043</u>	<u>18 BX</u>	<u>99</u>	<u>3-17-95</u>

Smear Locations Circled; Dose Rates = mR/hr

PURPOSE OF SURVEY: CHARACTERIZATIONBY readings in 5000 cpm, other mR/hrSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

\* DENOTES DIRECT BX READING

↑  
NORTH

Remarks: NONE

# RADIOLOGICAL SURVEY REPORT

ATGS #: FM-026

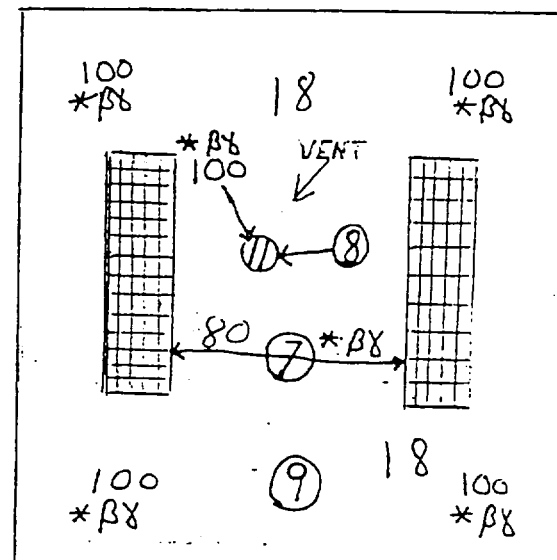
DATE	11-8-94	INSTRUMENTATION USED				
TIME	0745	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	J. Young	M-3 BX	102498	--10--	--60--	--4-5-95--
		M-3 α	97134	--20--	--0--	--4-5-95--
LOCATION	Bldg. 3192	M-19	98112	--2A--	--14--	--4-5-95--
		NA	NA	NA	NA	NA
REVIEWED BY	<i>[Signature]</i>	2529	99043	--36α--	--49--	--3-19-95--
		2929	99043	--18 BX--		--3-19-95--

Smear Locations Circled; Dose Rates= mR/hr

 PURPOSE OF SURVEY: CHARACTERIZATION  
BX reading in gross CPM, others in mR/hr

 SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED

\* DENOTES DIRECT BX READING

Remarks: NONE

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-8-94

Analysis Performed by: D. Spiller

INSTRUMENT ID: 99043 COUNTING SYSTEM DATA  
 EFFICIENCIES:  $\alpha$  30%  $\beta\gamma$  18% DETECTOR ID: 43-10-11098327  
 MDA:  $\alpha$  1.2 dpm  $\beta\gamma$  1.9 dpm  
 PERFORMED BY: D. Spiller

Sample Count Time: 1 min

Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: 28 cpm

$\beta\gamma$  Background: 99 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	0	89	-0.8	-10	<MDA	<MDA
2	2	98	1.2	-1		
3	0	102	-0.8	3		
4	2	96	1.2	-3		
5	0	119	-0.8	20		
6	0	100	-0.8	1		
7	3	92	2.2	-7		
8	1	120	0.2	21		
9	1	110	0.2	11		
10	0	99	-0.8	0		

Remarks: Edge 3192 OFFICE

Reviewed by Dan Spiller

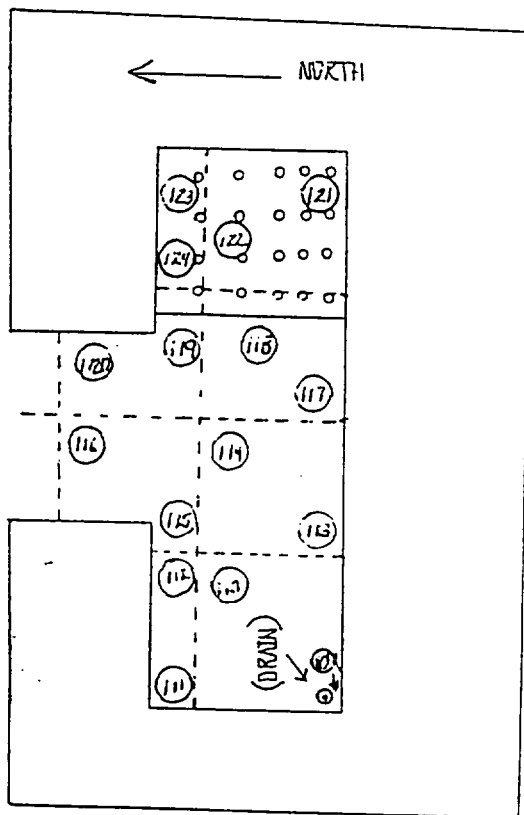
Date 11-8-94

ATGS #: FM 026

Smear Locations Circled; Dose Rates = mR/hr

PURPOSE OF SURVEY: SMEAR SURVEY OF CELL FLOOR

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED



HOT CELL ENTRANCE AND FLOOR

Remarks: ALL SIMILAR 100 CM<sup>2</sup>.

SEE ATTACHED SHEET FOR SMEAR RESULTS

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-8-94

Analysis Performed by: Buchanan & Associates

COUNTING SYSTEM DATA			
INSTRUMENT ID: <u>99043</u>	DETECTOR ID: <u>43 10 1 098327</u>		
EFICIENCIES: $\alpha$ <u>36%</u>	BY <u>15%</u>		
MDA: $\alpha$ <u>12 DPM</u>	BY <u>159 DPM</u>		
PERFORMED BY: <u>DAN SPICUZA</u>			

Sample Count Time: 2 MIN.

Activity Report In: ☒ dpm ☐  $\mu$  Ci

$\alpha$  Background: .8 cpm

BY Background: 99 cpm

	SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
		$\alpha$	BY	$\alpha$	BY	$\alpha$	BY
	109						
2	110	0	115	- .8	16	< MDA	< MDA
3	111	1	170	.2	71		394
4	112	2	254	1.2	160		888
5	113	0	213	- .8	114		633
6	114	1	259	1.2	160		888
7	115	0	213	- .8	114		633
8	116	1	93	.2	- 6		< MDA
9	117	1	92	.2	- 7		
10	118	3	120	2.2	21		
11	119	2	104	1.2	5		
12	120	1	110	.2	11		
13	121	0	112	- .8	13		
14	122	1	93	.2	- 6		
15	123	0	114	- .8	15		
16	124	3	108	2.2	9	✓	✓
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

Remarks: Floor of Hot Cell

Reviewed by Dan Spicuza

Date 11-8-94

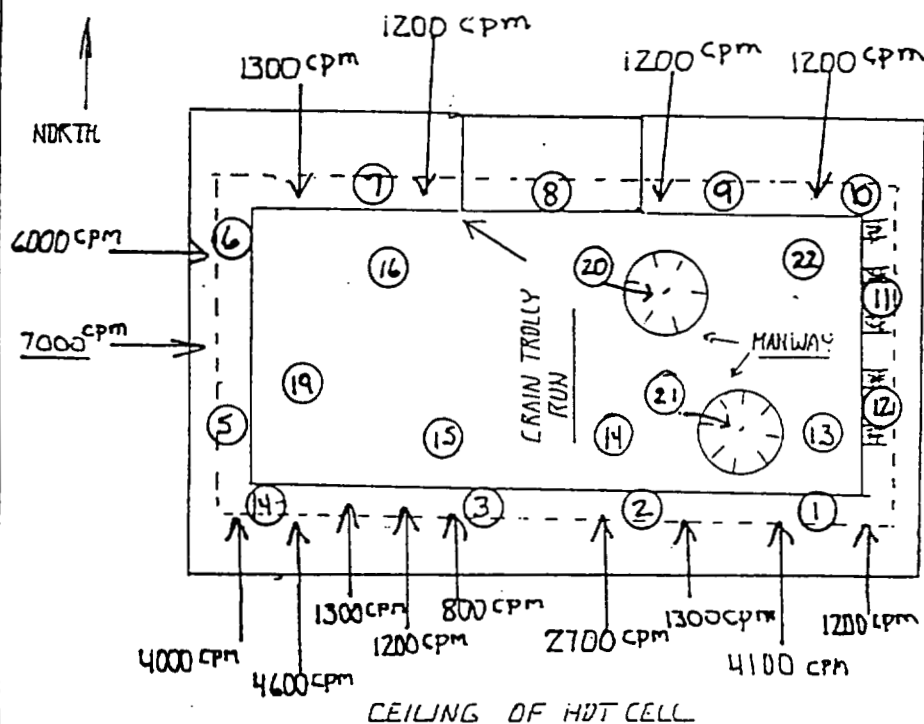
# RADIOLOGICAL SURVEY REPORT

ATGS #: FM 027

DATE	11 6 94	INSTRUMENTATION USED				
TIME	1400	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	<i>Richard A. Ruppel</i>	LODUM 292	99093	18% <del>21</del>	102 <del>102</del>	3-19-95
LOCATION	HOT CELL CEILING	LODUM 3	102498	36% <del>36</del>	150 <del>150</del>	NA
REVIEWED BY	<i>Don Spruiell</i>	LODUM 3	97134	NA	NA	NA
		43-65	PK 096929	NA	NA	NA
Smear Locations Circled; Dose Rates = mR/hr						

PURPOSE OF SURVEY: CONTAMINATION SURVEY FOR  
FIXED SURFACE AND LOOSE CONTAMINATION

SMEAR RESULTS  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED

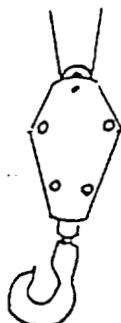
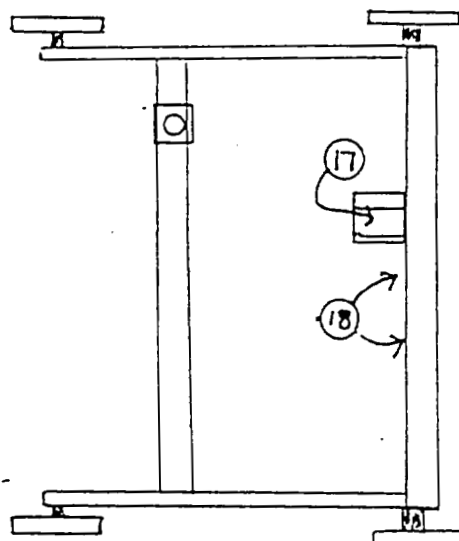


Remarks: NO ALPHA CONTAMINATION INDICATED  
SEE ATTACHED SURVEY FOR SMEAR RESULTS.

## RADIOLOGICAL SURVEY REPORT

TGS #: FM 027

DATE <u>11 6 94</u>	INSTRUMENTATION USED				
TIME <u>1400</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>Richard A. Rupert</u>	<u>40061929</u>	<u>99043</u>	<u>12.7%</u> <u>36% α</u>	<u>102 Dpm</u> <u>.5 Dpm</u>	<u>3.19.95</u>
LOCATION <u>HOT CELL</u>	<u>40061929</u>	<u>102478</u>	<u>10%</u>	<u>150 cpm</u>	<u>4.5.93</u>
REVIEWED BY <u>Don Spiller</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
	<u>43-65</u>	<u>97184</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
		<u>PR096929</u>	<u>10% α</u>	<u>0</u>	<u>4.5.93</u>
Smear Locations Circled; Dose Rates = mR/hr					

PURPOSE OF SURVEY: CONTAMINATION SURVEY FOR LOOSE SURFACE AND FIX CONTAMINATION.SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTEDHOT CELL OVER HEAD CRAN HOOK AND TROLLEYRemarks: DIRECT FRISK USING ALPHA PROBE  
SHOWED NO INDICATION OF ALPHA CONTAMINATION

ATCF-001 SEE ATTACHED FOR SMEAR RESULTS.

09/93

SMEAR COUNTING ANALYSIS REPORT

Date: 11.6.94

Analysis Performed by: Richard A. Ruppert

COUNTING SYSTEM DATA

INSTRUMENT ID: 99043 DETECTOR ID: 43-D-1 / 098327

EFICIENCIES:  $\alpha$  35%  $\beta\gamma$  18%

MDA:  $\alpha$  11 dpm  $\beta\gamma$  197 dpm

PERFORMED BY: DAN SPICUZZA

Sample Count Time: 2 Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: .5 cpm  $\beta\gamma$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	1	128	.2	26.	<MDA	<MDA
2	1	125	.2	23.		
3	1	106	.2	4.		
4	1	120	.2	18.		
5	2	103	1.2	1.		
6	3	135	2.2	33.		
7	0	104	-0.8	2.		
8	0	115	-0.8	13.		
9	0	114.	-0.8	12.5		
10	1.5	132	.7	30.		
11	1	117	.2	15.		
12	0	103	-0.8	1.		
13	1	108	.2	6.		
14	1.5	112.5	.7	10.5		
15	0	111	-0.8	9.		↓
16	0	106	-0.8	4.		<MDA
17 HOIST MOTOR	1	301	.2	199.		1105.5
18 TROLLEY	1	536.5	.2	434.5		2413.8
19 CEILING (WEST END OF CELL)	1	100	.2	-2.	↓	<MDA
20 MANWAY NEAREST ENTRANCE	1	103.5	.2	1.5	<MDA	<MDA

Remarks:

Reviewed by Dan Spicuzza

Date 11-8-94



# SMEAR COUNTING ANALYSIS REPORT

Date: 11 6 94

Analysis Performed by:

## COUNTING SYSTEM DATA

INSTRUMENT ID: 99043

DETECTOR ID: 43 10 1 / 098327

EFICIENCIAS:  $\alpha$  35%  $\beta$  18%

MDA: a 11 DPM BY 192 DPM

PERFORMED BY: D. S. Snow

Sample Count Time: 2

Activity Report In: ☒ dpm ☐  $\mu$ Ci

a Background: .5 cpm

BY Background: 102 cpm

[illegible]

Remarks:

Reviewed by

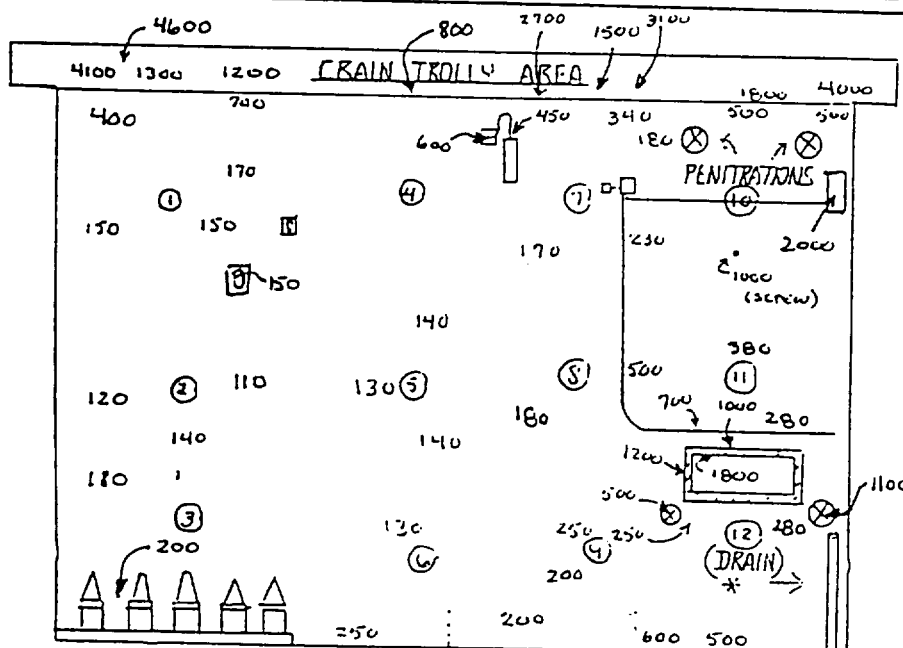
Date \_\_\_\_\_

ATGS #: FM 028 **RADIOLOGICAL SURVEY REPORT**

DATE <u>11/5/94</u>		INSTRUMENTATION USED				
TIME <u>1445</u>		MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>T.O. [Signature]</u> <u>J.R. Ruprecht</u>		<u>3</u>	<u>102446</u>	<u>10</u>	<u>Varies</u>	<u>9.5.95</u>
LOCATION <u>Fort McClellan</u> <u>Bldg 342-Hot Cell-South Wall</u>		<u>LUDLUM 3</u> <u>43-65</u>	<u>97134</u> <u>096424</u>	<u>20%</u> <u>NA</u>	<u>0.5cm</u> <u>NA</u>	<u>4.5.95</u> <u>NA</u>
REVIEWED BY <u>[Signature]</u>		<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Smear Locations Circled; Dose Rates <u>mr/hr</u>						

PURPOSE OF SURVEY: Bkg 130 ② 110 ③ 160  
④ 150 ⑤ 120 ⑥ 200 ⑦ 130 ⑧ 150  
⑨ 150 ⑩ 150 ⑪ 150 ⑫ 120 / Characterization

**SMEAR RESULTS**  
 RESULTS = DPM/100cm<sup>2</sup>  
 UNLESS NOTED



VIEW OF SOUTH WALL, INSIDE VAULT

\* Drain pipe removed - stub remains

① = grid number

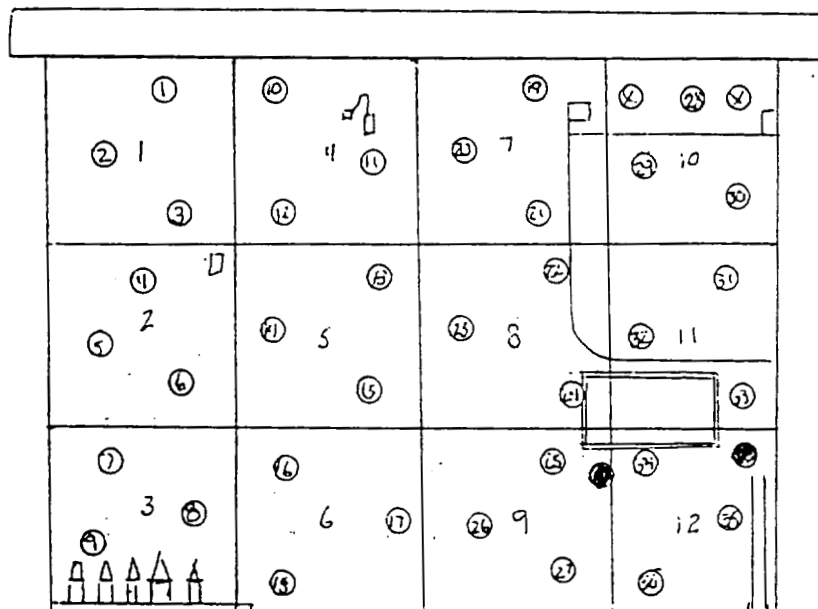
Remarks: All readings - Gross CPM

ALPHA FRISK SHOWED NO ACTIVITY GREATER THAN BACKGROUND.

## RADIOLOGICAL SURVEY REPORT

ATGS #: FM 028

DATE <u>11 6 94</u>	INSTRUMENTATION USED				
TIME <u>0900</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR <u>Richard K. Rupprecht</u>	<u>4101071929</u>	<u>49045</u>	<u>35.7%</u> <u>18.9%</u>	<u>18 cpm</u> <u>102 cpm</u>	<u>3-19-95</u> <u>NA</u>
LOCATION <u>HOT CELL SOUTH WALL</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
REVIEWED BY <u>D. Spivey</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>

Smear Locations Circled; Dose Rates = mR/hr 7.2PURPOSE OF SURVEY: CONTAMINATION SURVEYSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTEDVIEW OF INSIDE SOUTH WALL OF HOT CELLRemarks: ALL SMEARS 100<sup>cm</sup><sup>2</sup>SEE ATTACHED FOR SMEAR RESULTS.

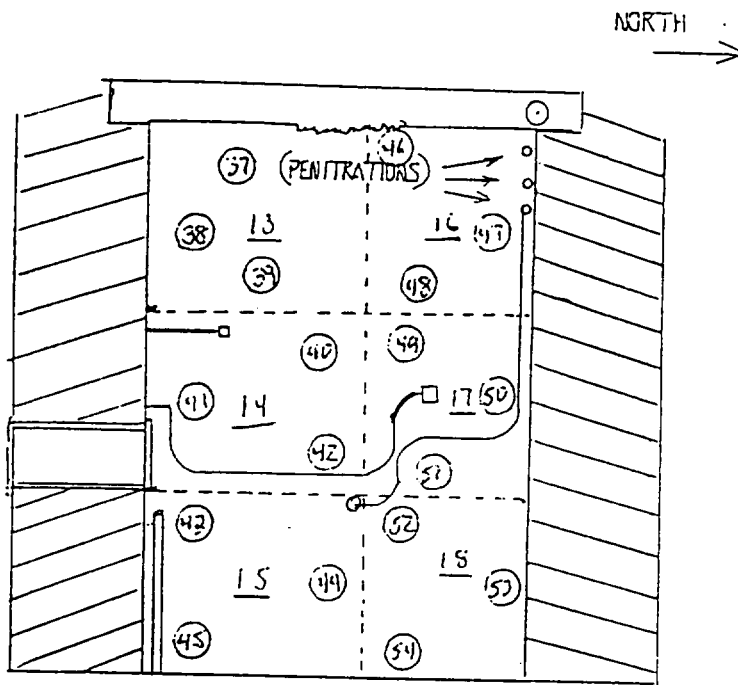
# RADIOLOGICAL SURVEY REPORT

ATGS #: FM 028

DATE <u>11 7 94</u>	INSTRUMENTATION USED				
TIME <u>0800</u>	MODEL <u>LODIN 2321</u>	S/N <u>99043</u>	EFF. % <u>35 %</u>	BKRD <u>5 CPM</u>	CAL. DUE DATE <u>11-95</u>
SURVEYOR <u>Robert J. Purnell</u>	<u>NA</u>	<u>NA</u>	<u>15 %</u>	<u>102 CPM</u>	<u>NA</u>
LOCATION <u>Hot Cell</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
REVIEWED BY <u>D. Spivey</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Smear Locations Circled; Dose Rates: <u>mr/hr</u>					

PURPOSE OF SURVEY: SMEAR SURVEY LOCATE AREAS OF REMOVABLE CONTAMINATION.

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED



VIEW OF WEST CELL WALLS

NOTE:  
UNDERLINED NUMBERS INDICATE GRID NUMBER.

Remarks: ALL SMEARS 100 CM<sup>2</sup>

SEE ATTACHED FOR SMEAR RESULTS.

ATGS #: FM 029 RADIOLOGICAL SURVEY REPORT

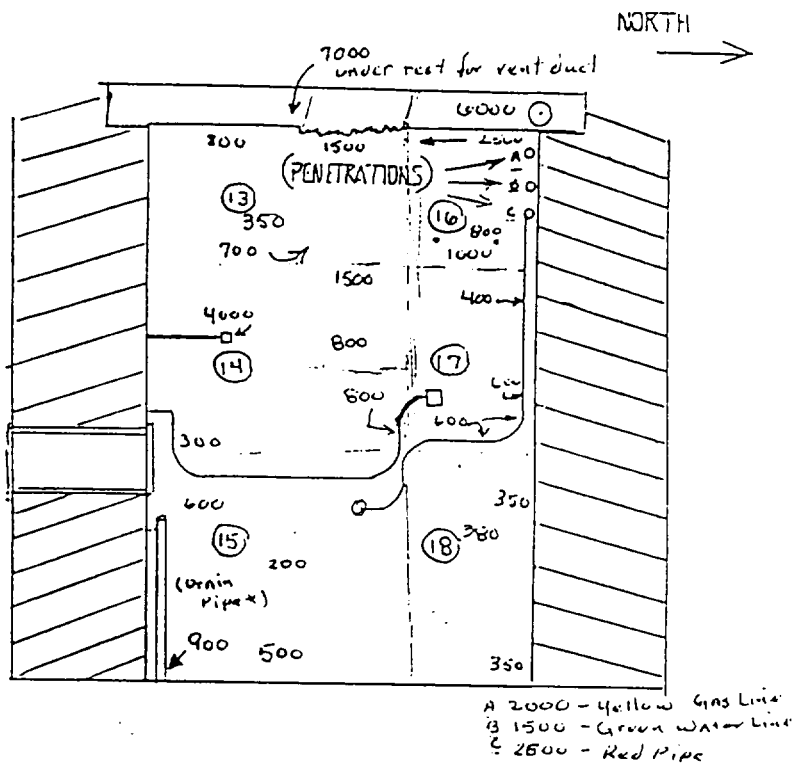
DATE 11/5/94

TIME	1530	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	T.O'Don J.R. Ruprecht	--3-- NA	--102498 N/A	--10-- N/A	VARIABLES SEE BELOW	--4.5.95--
LOCATION	Fort McClellan Bldg 3142 - Hot Cell - West Wall	LUDLUM 3 43-65	97134 096979	--20% NA	--0.5% NA	--4.5.95 N/A
REVIEWED BY	D. Spina	--N/A--	--N/A--	--N/A--	--N/A--	--N/A--
Smear Locations Circled; Dose Rates = mR/hr Direct Readings (pancake) = Gross CPM						

PURPOSE OF SURVEY: Characterization for remediation

Bkgd : (12) 130 (14) 150 (15) 170  
(16) 180 (17) 150 (18) 150

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED



VIEW OF WEST CELL WALLS

\* Drain pipe removed, only stub remains  
O = Grid number

Remarks: NO ALPHA ACTIVITY GREATER THAN BACKGROUND  
WAS INDICATED.

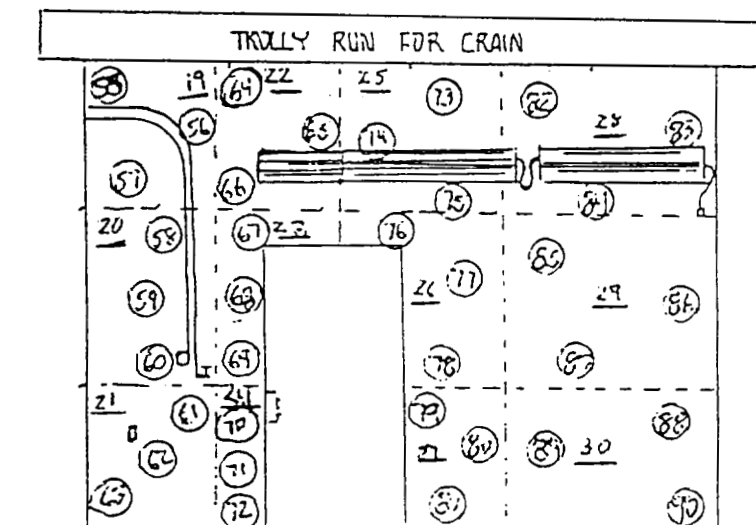
# RADIOLOGICAL SURVEY REPORT

ATGS #: FM 028

DATE	11 7 91				
TIME	0 5 30				
SURVEYOR	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
<u>R. L. V. / K. J. V.</u>	<u>WOLUTRA</u>	<u>971042</u>	<u>327.5</u> <u>150.5</u>	<u>3 CPM</u> <u>102 CPM</u>	<u>3-19-92</u> <u>N/A</u>
LOCATION	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
REVIEWED BY	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>
Smear Locations Circled; Dose Rates = <u>mR/hr</u> <u>120</u>					

PURPOSE OF SURVEY: SMEAR SURVEY IS TO LOCATE AREAS OF REMOVABLE CONTAMINATION.

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED



NORTH VIEW OF INNER CELL WALL

NOTE:

ALL UNDERLINED NUMBERS INDICATES GRID NUMBER.

Remarks: ALL SMEAR 100 CM<sup>2</sup>

SEE ATTACHED FOR SMEAR RESULTS.

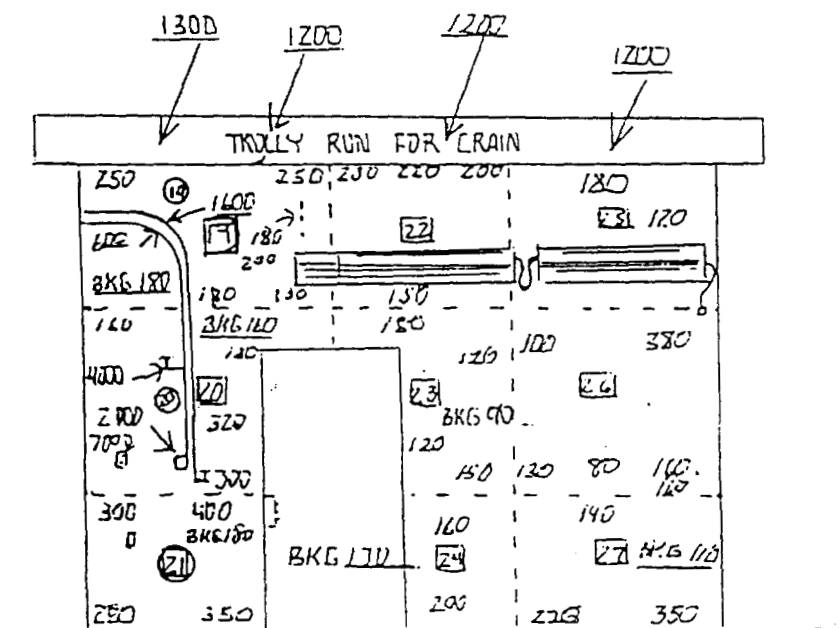
# RADIOLOGICAL SURVEY REPORT

ATGS #: FM 028

DATE	11 J 95					
TIME	0900					
SURVEYOR	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE	
<i>Richard A. Rupinski</i>	UDLUM-3	122438	100%	110CTM	9.8.95	
LOCATION	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE	
<i>HOT CELL</i>	UDLUM-3	97134	20.3%	000M	NA	
REVIEWED BY	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE	
<i>D. Spiller</i>	NA	NA	NA	NA	NA	
Smear Locations Circled; Dose Rates - mR/hr						

PURPOSE OF SURVEY: DIRECT PROBE SURVEY

SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED



NORTH VIEW OF INNER CELL WALL

Remarks: NO ALPHA ACTIVITY GREATER THAN BKG  
INDICATED.

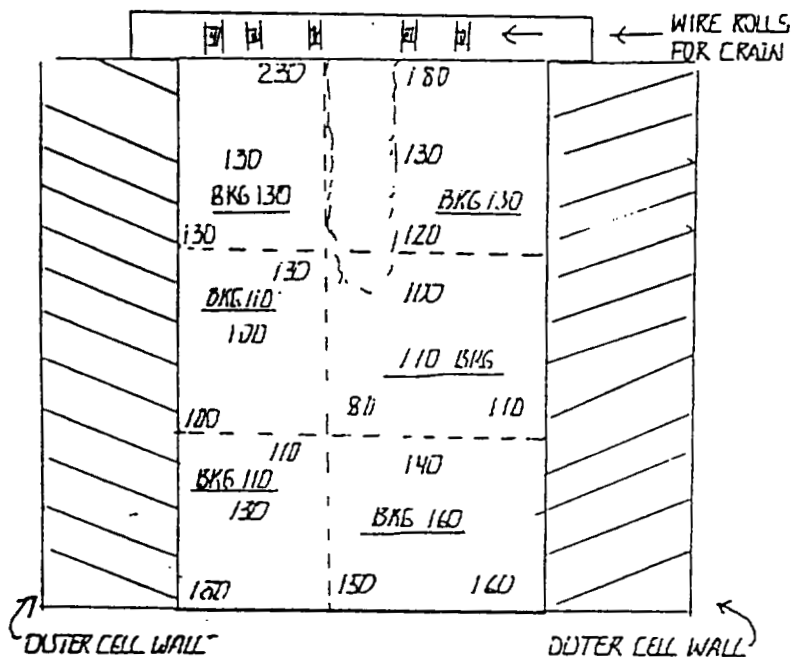
## RADIOLOGICAL SURVEY REPORT

TGS #: FM 028

DATE	11 8 94	INSTRUMENTATION USED				
TIME	0900	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	<i>Richard A. [signature]</i>	LUOLUM-3	102498 97184	-10% NA	-110cm NA	-4.5.95 NA
LOCATION	<i>HOT CELL</i>	LUOLUM-3	97184 43-65	-10% NA	-110cm NA	-4.5.95 NA
REVIEWED BY	<i>[signature]</i>	--11A--	--NA--	--11A--	--NA--	--NA--
Smear Locations Circled; Dose Rates = <i>mr/hr</i>						

PURPOSE OF SURVEY: FIXED-CONTAMINATION SURVEYSMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

← NORTH



Remarks: ALL SMEARS 107 CPM. DIRECT PROBE ALPHA FRISK  
SHOWED NO ACTIVITY GREATER THAN BKG.



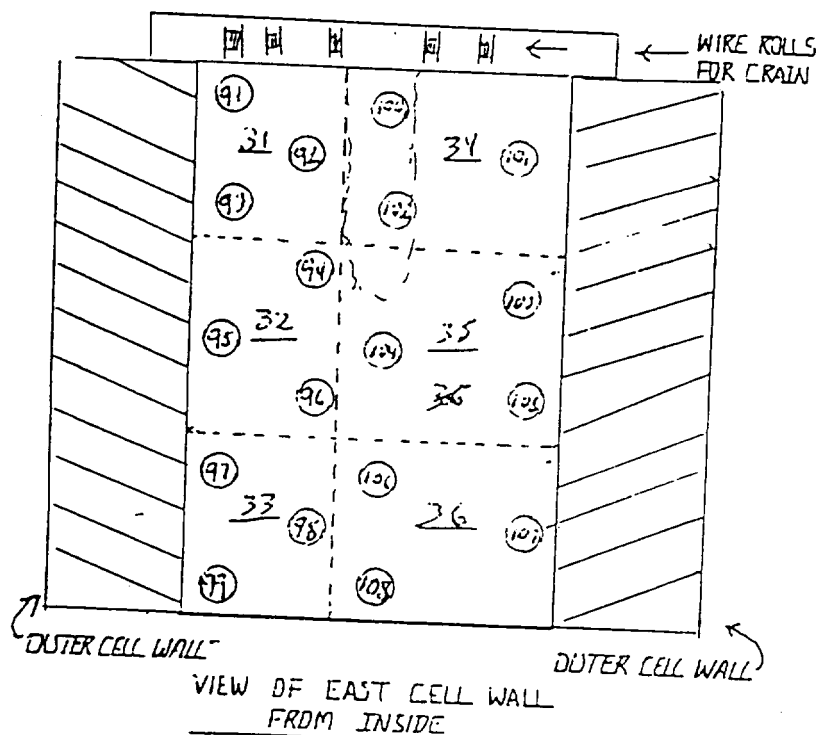
## RADIOLOGICAL SURVEY REPORT

TGS #: FM 028

DATE	11 7 94	INSTRUMENTATION USED				
TIME	0800	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	<u>Robert R. Ryan, MS</u>	<u>LUDUM 3</u>	<u>102498</u>	<u>10%</u>	<u>110 cpm</u>	<u>4.5.95</u>
LOCATION	<u>HOT CELL</u>	<u>LUDUM 224</u>	<u>99043</u>	<u>25%</u>	<u>110 cpm</u>	<u>3.19.95</u>
REVIEWED BY	<u>[Signature]</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
Smear Locations Circled; Dose Rates - <u>mR/hr</u>						

PURPOSE OF SURVEY: SMearable CONTAMINATION SURVEY  
OF WALLS.SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

← NORTH

NOTE UNDER LINED NUMBERS INDICATE GRID NUMBER.  
emarks: ALL SMEARS 100 CM<sup>2</sup>SEE ATTACHED FOR SMEAR RESULTS.

# SMEAR COUNTING ANALYSIS REPORT

ate: 11 6 94

Analysis Performed by: Robert L. Repetti

COUNTING SYSTEM DATA	
INSTRUMENT ID: <u>99043</u>	DETECTOR ID: <u>43 10-1 / 098327</u>
EFICIENCIES: $\alpha$ <u>35 %</u> $\beta\gamma$ <u>18 %</u>	
MDA: $\alpha$ <u>11 DPM</u> $\beta\gamma$ <u>192 DPM</u>	
PERFORMED BY: <u>DAN SPICUZZA</u>	

ample Count Time: 2 MIN Activity Report In: ☒ dpm ☐ pCi

$\alpha$  Background: .5 cpm  $\beta\gamma$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
1	0	87	-0.5	-15	<MDA	<MDA
2	.5	92	0.	-10	V	
3	0	99	-0.5	-3		
4	2	92	1.5	-10		
5	1	96.5	.5	5.5		
6	0	93.5	-0.5	8.5		
7	1.5	97	1.	-5		
8	5	97	0.	-5		
9	5	97	0.	-5		
10	1	100	.5	-3		
11	0	99	-0.5	-3		
12	1	95	.5	7.		
13	2	89	1.5	-13		
14	0	94.5	0.5	7.5		
15	5	96	-0.5	-6		
16	5	95	-0.5	-7		
17	1	98.5	.5	-3.5		
18	0	95.5		-6.5		
19	2.5	106.5	2.	4.5	V	V
20	0	131	-0.5	29	<MDA	<MDA

marks:

Reviewed by Dan Spicuzza

Date 11-8-94

# SMEAR COUNTING ANALYSIS REPORT

ate: 11-6-94

Analysis Performed by: Robert D. Resnick

## COUNTING SYSTEM DATA

INSTRUMENT ID: 99043

DETECTOR ID: 43-10-1 098327

EFICIENCIES:  $\alpha$  35%

$\beta\gamma$  18%

MDA:  $\alpha$  11 DPM

$\beta\gamma$  192 DPM

PERFORMED BY: DAN SPICUZZA

Sample Count Time: 2 MIN

Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: .5 cpm

$\beta\gamma$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
21	.5	95.5	0	6.5	<MDA	<MDA
22	0	12.5	-0.5	23		
23	.5	117	0	15		
24	3.5	111	3	9		
25	0	144	-0.5	42		233
26	0	109.5	.5	25		<MDA
27	.5	108.5	0	6.5		
28	1	104	.5	2		
29	.5	149.5	0	47.5		264
30	1	122.5	.5	20.5		<MDA
31	3.5	133.5	3	31.5		
32	.5	85	0	-17		
33	.5	127.5	0	25.5		
34	.5	118	0	16		
35	0	110.5	-0.5	8.5		
36	0	97.5	-0.5	-4.5		
37	1.5	254.5	1	53.5		297.2
38	0	120.5	-0.5	18		<MDA
39	.5	167.5	0	65.5		436.6
40	.5	111.5	0	9.5		<MDA

Remarks:

Reviewed by: Dan Spicuzza

Date: 11-8-94

SMEAR COUNTING ANALYSIS REPORT

ate: 11-7-94  
11-7-94

Analysis Performed by: Richard A. Ruppel

COUNTING SYSTEM DATA	
INSTRUMENT ID: <u>99047</u>	DETECTOR ID: <u>43 10 1 092577</u>
EFICIENCIES: $\alpha$ <u>35%</u> $\beta\gamma$ <u>15%</u>	
MDA: $\alpha$ <u>11 DPM</u> $\beta\gamma$ <u>192 dpm</u>	
PERFORMED BY: <u>D. Spiceman</u>	

Sample Count Time: 1 min Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: .5 cpm  $\beta\gamma$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
41	1	133.5	.5	31.5	<u>LMDA</u>	<u>LMDA</u>
42	.5	102.5	.5	.5		
43	1	127	.5	5		
44	1	96	.5	-6		
45	1	109	.5	7		
46	0	84	-0.5	-18		
47	2	97	1.5	5		
48	2	1270	1.5	1168		<u>6485</u>
49	0	125	-0.5	23		<u>LMDA</u>
50	2	122	1.5	20		
51	0	121	-0.5	7		
52	1	94	.5	-8		
53	0	120	-0.5	18		
54	2	113	1.5	11		
55	0	120	-0.5	18		
56	0	98	-0.5	-4		
57	0	98	-0.5	-4		
58	1	107.5	.5	<u>5.5</u> RAR		
59	0	131	-0.5	29		
60	0	96	-0.5	.6		

Remarks: \_\_\_\_\_

Reviewed by: D. Spiceman Date: 11-8-94

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-7-94  
4-1-94 AKA

Analysis Performed by: Richard M. Tupper, NIA

COUNTING SYSTEM DATA			
INSTRUMENT ID: <u>99043</u>	DETECTOR ID: <u>4310-1 95327</u>		
EFICIENCIES: $\alpha$ <u>35%</u>	$\beta\gamma$ <u>18%</u>		
MDA: $\alpha$ <u>12</u>	$\beta\gamma$ <u>192</u>		
PERFORMED BY: <u>DAN SPICUZZA</u>			

Sample Count Time: 1 MIN Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: 1 cpm  $\beta\gamma$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
61	1	94	.2	-5	<MDA	<MDA
62	2	95	1.2	-7		
63	0	116	-0.8	14		
64	0	118	-1.8	16		
65	1	101	.2	-1		
66	0	110	-0.8	8		
67	1	99	.2	-3		
68	1	103	.2	1		
69	1	93	.2	-9		
70	0	96	.2	-6		
71	0	99	.2	-3		
72	2	97	1.2	-5		
73	0	114	-0.8	12		
74	1	106	.2	4		
75	0	96	-0.8	-6		
76	0	99	-0.8	-3		
77	0	105	-0.8	3		
78	0	116	-0.8	14		
79	1	96	.2	-6		
80	1	102	.2	0		

Remarks:

Reviewed by Dan Spicuzza

11-8-94  
Date

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-7-94  
11-8-94

Analysis Performed by: Robert A. K. [Signature]

COUNTING SYSTEM DATA			
INSTRUMENT ID: <u>99043</u>	DETECTOR ID: <u>43 10 1 098327</u>		
EFICIENCIES: $\alpha$ <u>3570</u>	$\beta\gamma$ <u>1870</u>		
MDA: $\alpha$ <u>12 DPM</u>	$\beta\gamma$ <u>192 DPM</u>		
PERFORMED BY: <u>DAN SPICUZZA</u>			

Sample Count Time: 7 MIN Activity Report In: ☒ dpm ☐ pCi

$\alpha$  Background: .8 cpm  $\beta\gamma$  Background: 102 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
81	1	103	.2	1	<u>&lt;MDA</u>	<u>&lt;MDA</u>
82	0	116	-0.8	14		
83	2	109	1.2	6.		
84	3	92	2.2	-10		
85	2	93	1.8	-9		
86	0	102	-0.8	0		
87	0	97	-0.8	-5		
88	0	96	-0.8	-6		
89	0	116	-0.8	14		
90	0	100	-0.8	-2		
91	0	109	-0.8	7		
92	3	100	2.2	-2		
93	0	103	-0.8	1		
94	0	87	-0.8	-4		
95	2	95	1.2	-7		
96	0	98	-0.8	-4		
97	0	100	-0.8	-2		
98	0	117	-0.8	15		
99	0	120	-0.8	18		
100	1	124	.2	22		

Remarks:

Reviewed by [Signature]

Date 11-8-94

# SMEAR COUNTING ANALYSIS REPORT

Date: 11-7-94

Analysis Performed by: Richard A. Remondino

COUNTING SYSTEM DATA

INSTRUMENT ID: 99043 DETECTOR ID: 43-10-1 / 109E57

EFICIENCIES: a 35% BY 18%

MDA: a 12 DPM BY 192 DPM

PERFORMED BY: D. Spivey

Sample Count Time: 2 MIN.

Activity Report In: ☒ dpm ☐  $\mu$ Ci

a Background: 18 cpm

BY Background: 102 cpm

[illegible]

Remarks:

Reviewed by

Date \_\_\_\_\_

## RADIOLOGICAL SURVEY REPORT

ATGS #: FM 029

DATE	11 4 94	INSTRUMENTATION USED				
TIME	0800	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
SURVEYOR	Richard X. Kipure	Model 19	102478	1072	725PM	4.5.95
LOCATION	3192 Ventilation Rm.	Model 19	78102	NA	1500h	4.5.95
REVIEWED BY	D. Sperry	Model 19	97131	97124	NA	4.5.95
		92-65	006929	2090	NA	NA
		2928	98043	36024	9624	2.19.95
		NA	NA	1887	9924	NA

Smear Locations Circled; Dose Rates= mR/hr

PURPOSE OF SURVEY: CONTAMINATION DOSE RATES OF  
THE 3192 VENTILATION RM.SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

THIS IS A SURVEY OF THE VENTILATION  
RM. IT INCLUDES A SMEAR SURVEY, DOSE  
RATES IN MICRO R PER HOUR AND CONTACT  
READINGS IN AREA.

# By α

NA

Remarks: SEE ATTACHED FOR SMEAR LOCATIONS  
AND RESULTS.



# RADIOLOGICAL SURVEY REPORT

ATGS #: FM 029

DATE	INSTRUMENTATION USED				
<u>11 4 94</u>	MODEL	S/N	EFF. %	BKRD	CAL. DUE DATE
TIME <u>0800</u>					
SURVEYOR <u>Richard X. Riquelme</u>	<u>Model 19</u>	<u>102478</u>	<u>1072</u>	<u>725 PM</u>	<u>4.1.95</u>
LOCATION <u>3192 Ventilation Rm.</u>	<u>Model 19</u>	<u>78102</u>	<u>NA</u>	<u>13:00 hr</u>	<u>4.5.95</u>
REVIEWED BY <u>[Signature]</u>	<u>43-65</u>	<u>97134</u>	<u>2070</u>	<u>NA</u>	<u>4.5.95</u>
	<u>2929</u>	<u>99043</u>	<u>3672.4</u>	<u>NA</u>	<u>NA</u>
	<u>NA</u>	<u>NA</u>	<u>18 BT</u>	<u>99:00</u>	<u>NA</u>

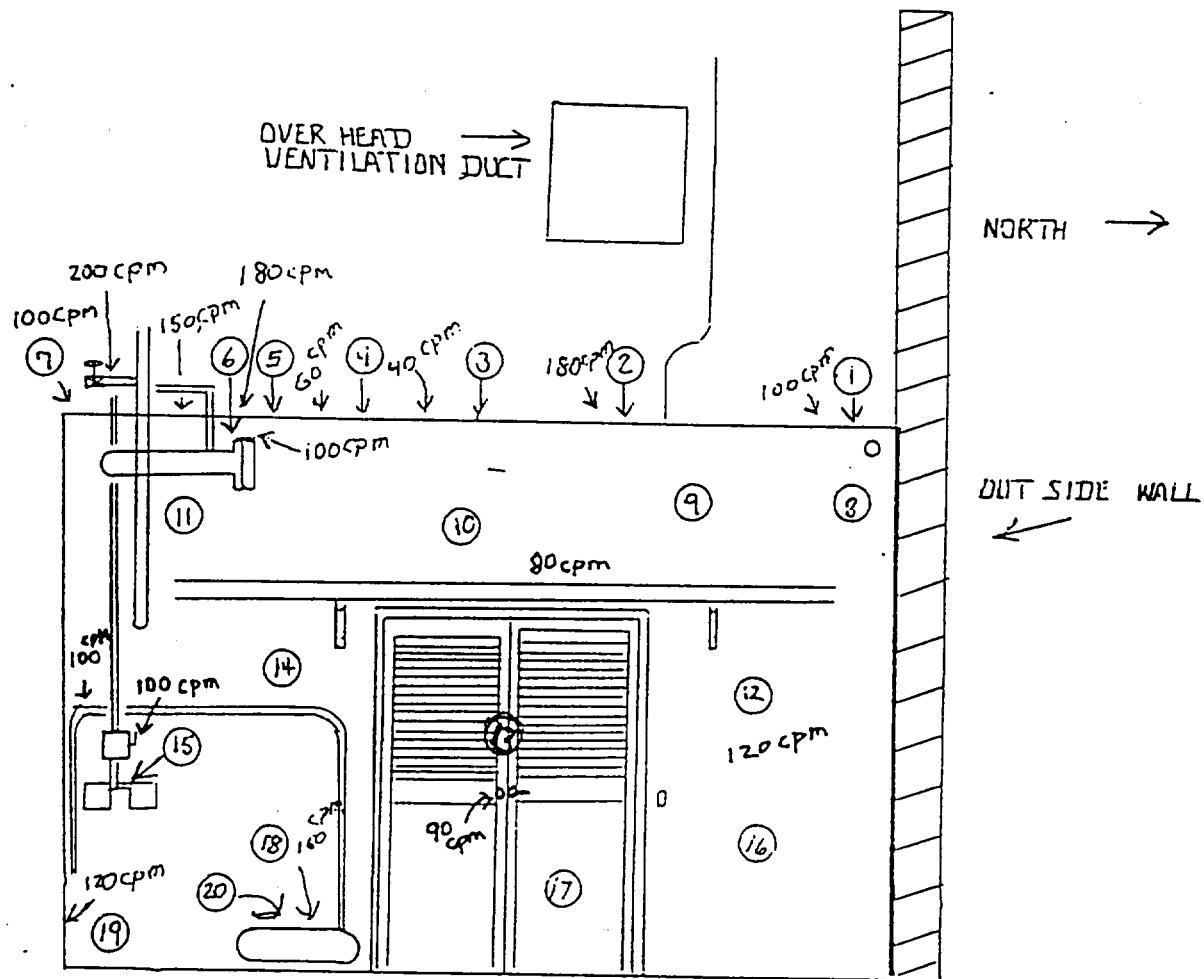
Smear Locations Circled; Dose Rates = mR/hr

PURPOSE OF SURVEY: CONTAMINATION DOSE RATES OF  
THE 3192 VENTILATION RM.SMEAR RESULTS  
RESULTS = DPM/100cm<sup>2</sup>  
UNLESS NOTED

THIS IS A SURVEY OF THE VENTILATION RM. IT INCLUDES A SMEAR SURVEY, DOSE RATES IN MICRO R PER HOUR AND CONTACT READINGS IN AREA.

Remarks: SEE ATTACHED FOR SMEAR LOCATIONS  
AND RESULTS.

# RADIOLOGICAL SURVEY REPORT

TGS #: FM 019
~~10/1~~


VIEW OF WEST WALL OF VENTILATION ROOM  
(FROM INSIDE ROOM)

NOTE:

○ = SMEAR LOCATIONS

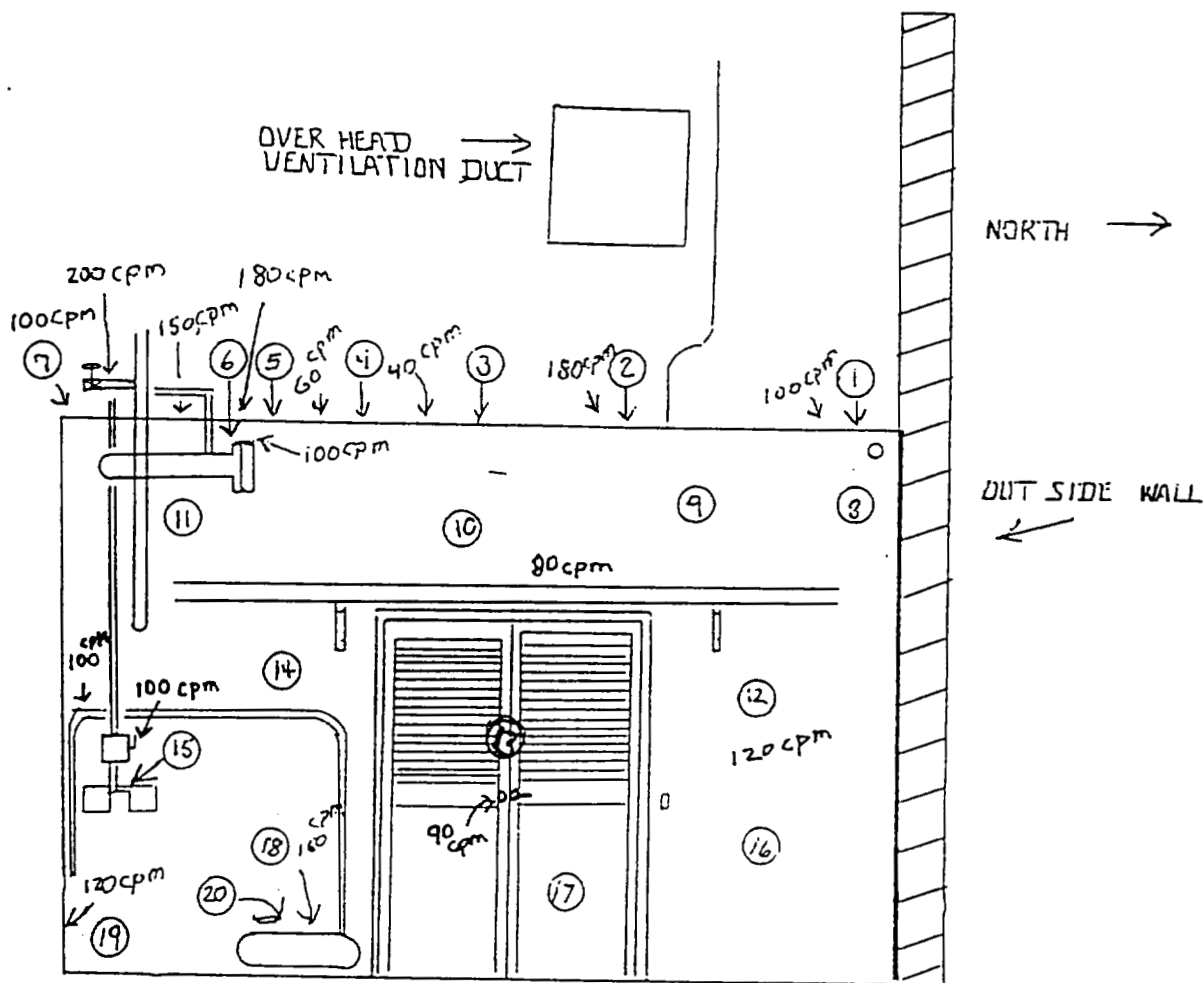
ALL SMEARS 100 CM<sup>2</sup>

ALL PROBE READING TAKEN AT CONTACT TO SURFACE

# RADIOLOGICAL SURVEY REPORT

TGS #: FM 019

*[Signature]*



VIEW OF WEST WALL OF VENTILATION ROOM  
(FROM INSIDE ROOM)

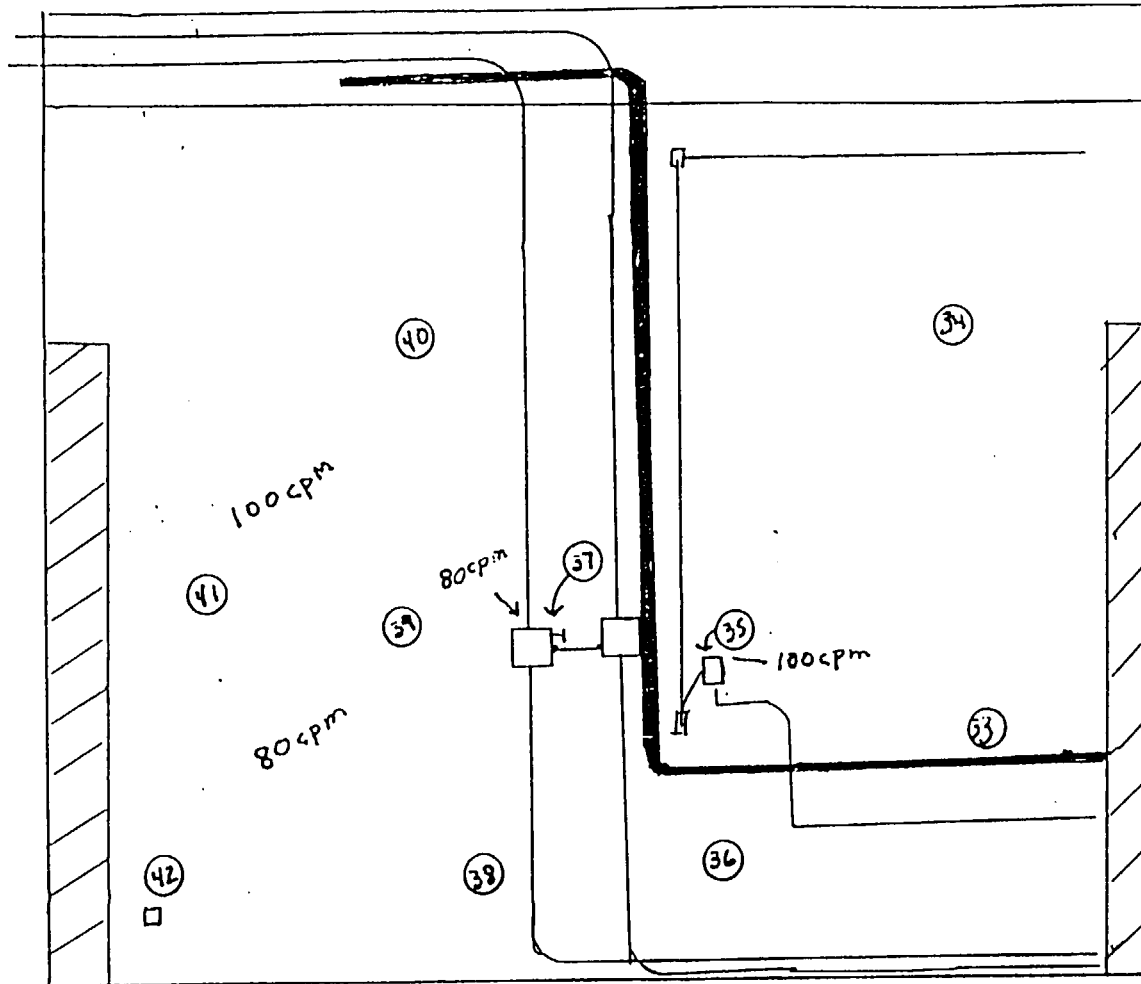
NOTE:

○ = SMEAR LOCATIONS

ALL SMEARS 100 CM<sup>2</sup>

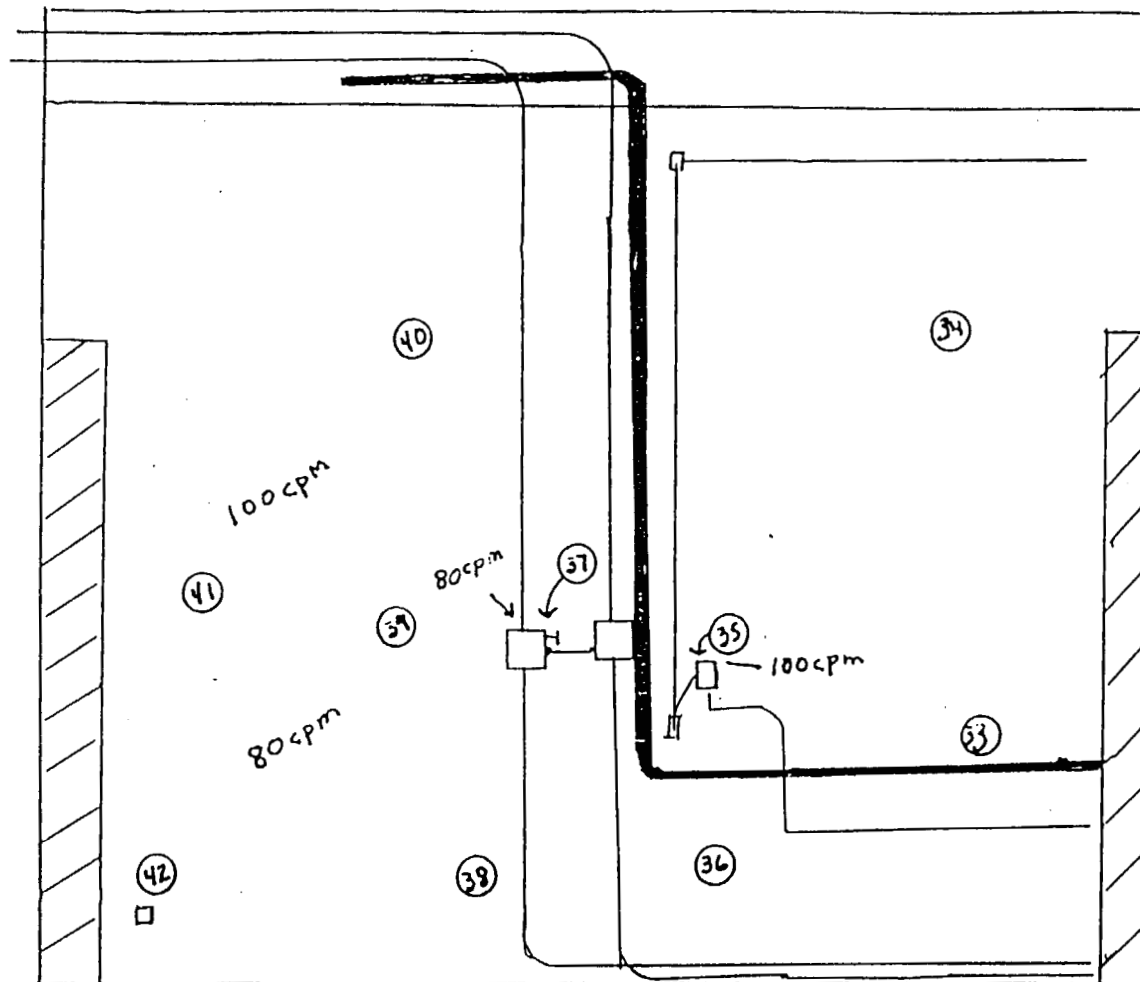
ALL PROBE READINGS TAKEN AT CONTACT TO SURFACE

214



VIEW OF NDRTH WALL OF VENTILATION ROOM

*Handwritten signature/initials*



VIEW OF NDRTH WALL OF VENTILATION ROOM

## SMEAR COUNTING ANALYSIS REPORT

Date: 11-4-94Analysis Performed by: Richard H. P.../11

INSTRUMENT ID: <u>99043</u>		COUNTING SYSTEM DATA		DETECTOR ID: <u>098247</u>	
EFICIENCIES: <u>a 35%</u>		BY <u>184%</u>			
MDA: <u>a 12 dpm</u>		BY <u>187 dpm</u>			
PERFORMED BY: <u>A. Spicard</u>					
Sample Count Time: <u>1 min</u>		Activity Report In: <input checked="" type="checkbox"/> dpm <input type="checkbox"/> $\mu$ ci			

$\alpha$ Background: <u>8</u> cpm			$\beta$ Background: <u>96</u> cpm			
SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta$	$\alpha$	$\beta$	$\alpha$	$\beta$
1	1	116	.2	18	<MDA	<MDA
2	0	83	-0.8	-13	<MDA	<MDA
3	0	104	-0.8	8	<MDA	<MDA
4	2.5	100	1.7	22	<MDA	<MDA
5	.5	97.5	-0.3	1.5	<MDA	<MDA
6	.5	104	-0.3	8	<MDA	<MDA
7	1.5	103	0.7	7	<MDA	<MDA
8	1	116	.2	18	<MDA	<MDA
9	.5	91.5	-0.3	-4.5	<MDA	<MDA
10	0	91.5	-0.8	-4.5	<MDA	<MDA
11	0	94	-0.8	-2	<MDA	<MDA
12	1	88.5	.2	-7.5	<MDA	<MDA
13	1	100	.2	4	<MDA	<MDA
14	1	123.5	.2	27.5	<MDA	<MDA
15	1	107	.2	11	<MDA	<MDA
16	.5	91	-0.3	-5	<MDA	<MDA
17	.5	92.5	-0.3	-3.5	<MDA	<MDA
18	.5	82.5	-0.5	-13.5	<MDA	<MDA
19	0	91.5	-0.8	-4.5	<MDA	<MDA
Remarks:						

Remarks:

Reviewed by: D. SpicardDate: 11-8-94

## SMEAR COUNTING ANALYSIS REPORT

Date: 11-14-94Analysis Performed by: Richard B. Reynolds

COUNTING SYSTEM DATA			
INSTRUMENT ID: <u>99043</u>	DETECTOR ID: <u>098217</u>		
EFICIENCIES: <u>a 35%</u>	BY <u>18%</u>		
MDA: <u>a 12 dpm</u>	BY <u>187 dpm</u>		
PERFORMED BY: <u>D. Spicard</u>			

Sample Count Time: 1 minActivity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$ Background: <u>8</u> cpm		BY Background: <u>96</u> cpm				
SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	BY	$\alpha$	BY	$\alpha$	BY
1	1	116	.2	18	<MDA	<MDA
2	0	83	-0.8	-13	<MDA	<MDA
3	0	104	-0.8	8	<MDA	<MDA
4	2.5	100	1.7	22	<MDA	<MDA
5	.5	97.5	-0.3	1.5	<MDA	<MDA
6	.5	104	-0.3	8	<MDA	<MDA
7	1.5	103	0.7	7	<MDA	<MDA
8	1	116	.2	18	<MDA	<MDA
9	.5	91.5	-0.3	-4.5	<MDA	<MDA
10	0	91.5	-0.8	-4.5	<MDA	<MDA
11	0	94	-0.8	-2	<MDA	<MDA
12	1	88.5	.2	-7.5	<MDA	<MDA
13	1	100	.2	4	<MDA	<MDA
14	1	123.5	.2	27.5	<MDA	<MDA
15	1	107	.2	11	<MDA	<MDA
16	.5	91	-0.3	-5	<MDA	<MDA
17	.5	92.5	-0.3	-3.5	<MDA	<MDA
18	.5	82.5	-0.5	<sup>-13.5</sup> 82.5 <sub>net</sub>	<MDA	<MDA
19	0	91.5	-0.8	-4.5	<MDA	<MDA

Remarks: \_\_\_\_\_

Reviewed by: D. SpicardDate: 11-8-94





SMEAR COUNTING ANALYSIS REPORT

Date: 11-4-94

Analysis Performed by: Richard A. Rickard

INSTRUMENT ID: <u>99043</u>		COUNTING SYSTEM DATA	
EFICIENCIES: $\alpha$ <u>36%</u> $\beta\gamma$ <u>18%</u>		DETECTOR ID: <u>43-10-1/098327</u>	
MDA: $\alpha$ <u>12 dpm</u> $\beta\gamma$ <u>189 dpm</u>			
PERFORMED BY: <u>D. Spicuzza</u>			

Sample Count Time: 2 min Activity Report In: ☒ dpm ☐  $\mu$ Ci

$\alpha$  Background: .9 cpm  $\beta\gamma$  Background: 99 cpm

SAMPLE ID OR DESCRIPTION	GROSS COUNTS		NET COUNTS		Activity	
	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$	$\alpha$	$\beta\gamma$
<del>40</del> 40	1.	89.5	0.1	9.5	<MDA	<MDA
<del>41</del> 41	1.5	98.	0.6	-1	<MDA	<MDA
<del>42</del> 42	0	92.5	-0.9	-6.5	<MDA	<MDA
<del>43</del> 43	.5	99.5	-0.4	0.5	<MDA	<MDA
<del>44</del> 44	.5	94.5	-0.4	-4.5	<MDA	<MDA
<del>45</del> 45	1.5	98.5	0.6	-0.5	<MDA	<MDA
<del>46</del> 46	1.5	98.5	0.6	-0.5	<MDA	<MDA
<del>47</del> 47	.5	105.5	-0.4	6.5	<MDA	<MDA
<del>48</del> 48	1.5	103.5	0.6	4.5	<MDA	<MDA
<del>49</del> 49	.5	96.	-0.4	-1.3	<MDA	<MDA
<del>50</del> 50	0	104.	-0.9	5	<MDA	<MDA
<del>51</del> 51	0	99.5	-0.9	.5	<MDA	<MDA
<del>52</del> 52	1.5	100	0.6	-4.9	<MDA	<MDA
<del>53</del> 53	1	103.5	.1	4.5	<MDA	<MDA

Remarks: \_\_\_\_\_

Reviewed by: Dan Spicuzza Date: 11-8-94

THOMAS J. O'DOU, CHP  
135 South Maple Street  
Oak Harbor, Ohio 43449-1428  
(419) 898-1527 Home  
(419) 855-7674 - 855-3006 Work

---

Certified Health Physicist  
Manager, Health Physics Technical Support  
Field Operations Radiation Safety Officer

EDUCATION:

University of Lowell, Lowell, MA  
Bachelor of Science, Radiological Health Physics, 1974  
Master of Science, Radiological Sciences and Protection, 1981

EXPERIENCE:

10/92 - Present      Allied Technology Group, Inc.  
Ohio Technical Support Office  
1515 Main Street  
Genoa, Ohio 43430

Responsibilities: Provide Health Physics technical support for decontamination, decommissioning, radioactive waste volume reduction, instrumentation use, and instrumentation calibration. Develop and conduct training programs for customers as needed. Assess company radiation protection programs and customer programs as required. Project dosimetry, field operations procedures review and approval.

Concurrent      RAD\*WARE Health Physics Computer Software  
135 South Maple Street  
Oak Harbor, Ohio 43449

Vice President/Technical Programmer. Maintain technical cognizance of health physics computer ventures. Design and develop applications software to assist the radiation safety industry. Provide technical support to current customers at >300 facilities around the world.

6/87 - 8/92      Toledo Edison, Davis-Besse Nuclear Power Station  
Oak Harbor, Ohio

(8/90 - 8/92) Senior Radiological Assessor, Independent Safety Engineering Group

Responsibilities: Through continuous assessment of radiological control operations, provide evaluation of program direction and make recommendations for improvement. Provide technical and administrative assistance as necessary to effect improvement of the

THOMAS J. O'DOU, CHP

(419) 855-7674 - 855-3006 Work

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Responsibilities: Through continuous assessment of radiological control operations, provide evaluation of program direction and make recommendations for improvement. Provide technical and administrative assistance as necessary to effect improvement of the

## EXPERIENCE - continued

6/75 - 10/75	Temple University Philadelphia, PA
	Health Physicist, Radiation Safety Office
6/74 - 8/74	Yankee Atomic Electric Company Rowe, MA
	Co-Op Student, Health Physics Section
6/73 - 8/73	Virginia Electric and Power Company, Surry Nuclear Plant Surry, VA
	Co-Op Student, Health Physics Section

## CERTIFICATIONS, AWARDS, MEMBERSHIPS

American Board of Health Physics Certification, 1990  
National Registry of Radiation Protection Technologists Registration, 1982  
Employee of the Month, Davis-Besse NPS, February 1992  
President, Northern Ohio Chapter Health Physics Society, 1994  
Plenary Member of Health Physics Society since 1976  
Member Great Lakes Chapter of Health Physics Society  
Member American Nuclear Society  
Assigned to ANS Special Committee for Development of Decommissioning Standards  
Alumni of Omicron PI Fraternity, University of Lowell

## PROFESSIONAL COURSES AND SYMPOSIA

Managing Radioactive and Mixed Waste, HPS Midyear, 2/94  
First Annual Decommissioning Forum, Jacksonville, FL, 8/94  
Idaho Health Physics Society Midyear, 12/93  
NRC Meeting, Dallas, TX 3/93  
Fermco Waste Recycling Workshop, Cincinnati, OH, 10/93  
Small Business Management, 1992- 1993  
Environmental Health Physics, HPS Midyear, 1/93  
Operational Radiation Measurements, HPS Midyear, 1/92  
Communicating to Manage Performance, Centerior Energy, 9/91  
Management II, University of Michigan & Centerior Energy, 8/91  
Principles of Supervision, Centerior Energy, 5/91  
Health Physics Data Management Using Personal Computers, TMS, 5/91  
10CFR20 Changes and New NCRP Guidance, HPS Midyear, 1/91  
ODCM/RETS Training Course, Quantum Technology, 12/89  
Improving Presentation Skills, Toledo Edison, 9/89  
Survival Skills For Managers, Toledo Edison, 6/89  
Kepner-Tregoe Problem Solving and Decision Making, 11/88

## EXPERIENCE - continued

6/75 - 10/75	Temple University Philadelphia, PA  Health Physicist, Radiation Safety Office
6/74 - 8/74	Yankee Atomic Electric Company Rowe, MA  Co-Op Student, Health Physics Section
6/73 - 8/73	Virginia Electric and Power Company, Surry Nuclear Plant Surry, VA  Co-Op Student, Health Physics Section

## CERTIFICATIONS, AWARDS, MEMBERSHIPS

American Board of Health Physics Certification, 1990  
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First Annual Decommissioning Forum, Jacksonville, FL, 8/94  
Idaho Health Physics Society Midyear, 12/93  
NRC Meeting, Dallas, TX 3/93  
Fermco Waste Recycling Workshop, Cincinnati, OH, 10/93  
Small Business Management, 1992- 1993  
Environmental Health Physics, HPS Midyear, 1/93  
Operational Radiation Measurements, HPS Midyear, 1/92  
Communicating to Manage Performance, Centerior Energy, 9/91  
Management II, University of Michigan & Centerior Energy, 8/91  
Principles of Supervision, Centerior Energy, 5/91  
Health Physics Data Management Using Personal Computers, TMS, 5/91  
10CFR20 Changes and New NCRP Guidance, HPS Midyear, 1/91  
ODCM/RETS Training Course, Quantum Technology, 12/89  
Improving Presentation Skills, Toledo Edison, 9/89  
Survival Skills For Managers, Toledo Edison, 6/89  
Kepner-Tregoe Problem Solving and Decision Making, 11/88

PAPERS - continued

SIMPLE EVALUATION OF EXPECTED vs. ACTUAL EFFLUENT MONITOR RESPONSE;  
Presented at the HPS Midyear Symposium, Dearborn, MI, January 1992.

DK - A COMPUTER PROGRAM FOR SIMPLE RADIOACTIVE DECAY CALCULATIONS;  
Copyright 1991.

SEARCH - A COMPUTER PROGRAM FOR ACCESSING RADIONUCLIDE INFORMATION;  
Copyright 1991.

RADIOLOGICAL CONTROLS AT DAVIS-BESSE NUCLEAR POWER STATION; Presented at the  
Medical College of Ohio, Physician Seminar.

RADON: FACT OR FICTION; *Ohio Engineer*, 10/89. Presented at the OE Public Information Forum,  
Columbus, OH 5/90

COMPUTER PROGRAMS FOR PREPARATION TO TAKE ABHP PART 1 (HPEXAM) AND THE  
NRRPT (RPTEXAM) EXAMINATIONS; Copyright 1989, 1990, 1991.

ALARA CONTROL - A COMPUTER PROGRAM FOR DOSE ESTIMATION OF A SUBMARINE  
WORK PACKAGE; Portsmouth Naval Shipyard, 1987.

CHARACTERIZATION OF THE UNIFORMITY INDEX AS USED TO DETERMINE THE  
PRESENCE OF POINT SOURCES OF RADIOACTIVITY IN A FOUR DETECTOR WASTE  
COUNTING SYSTEM; Portsmouth Naval Shipyard, 1985.

THE CALCULATION OF SKIN DOSE DUE TO BETA EMITTING RADIOACTIVITY ON THE  
SKIN; Portsmouth Naval Shipyard, 1983.

A PROGRAM FOR RADIATION SAFETY TRAINING OF RADIOGRAPHY PERSONNEL;  
MASTER OF SCIENCE THESIS, University of Lowell, 1981.

PAPERS - continued

SIMPLE EVALUATION OF EXPECTED vs. ACTUAL EFFLUENT MONITOR RESPONSE;  
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ALARA CONTROL - A COMPUTER PROGRAM FOR DOSE ESTIMATION OF A SUBMARINE  
WORK PACKAGE; Portsmouth Naval Shipyard, 1987.

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PRESENCE OF POINT SOURCES OF RADIOACTIVITY IN A FOUR DETECTOR WASTE  
COUNTING SYSTEM; Portsmouth Naval Shipyard, 1985.

THE CALCULATION OF SKIN DOSE DUE TO BETA EMITTING RADIOACTIVITY ON THE  
SKIN; Portsmouth Naval Shipyard, 1983.

A PROGRAM FOR RADIATION SAFETY TRAINING OF RADIOGRAPHY PERSONNEL;  
MASTER OF SCIENCE THESIS, University of Lowell, 1981.

10/92 - 10/23/92      Allied Technology Group • Sunflower Ammunitions Depot DeSoto, KS

ANSI 3.1 Senior Health Physics Technician. Research and development for the Filtration of depleted uranium from oil; system setup and monitoring of radiological conditions.

2/92 - 7/92            DDH Nuclear, Inc. • Battelle Memorial Institute, Columbus, Ohio

ANSI 3.1 Senior Health Physics Technician. Support for the Decontamination/Decommissioning program. In charge of free release program and procedure writing for D&D decon effort.

8/91 - 10/91          Nuclear Energy Services, Inc. • General Electric Tungsten Wire Plant, Lighting Group, Cleveland, Ohio

ANSI 3.1 Senior Health Physics Technician. Performed characterization of facility using radioactive thorium in a process to manufacture thoriated tungsten wire. Included surveys using alpha and beta gamma instruments, air sampling and smear counting.

5/91 - 6/91            Nuclear Energy Services, Inc. • Brown St. Plant, St. Louis, MO

Environmental Technician. Demonstration of process used to remove P.C.B.'s from concrete floors using a blast tract. Sampling of concrete and air. Decontamination of plant. Recertified in Personnel Protection and Safety for Hazardous Waste Removal.

8/90 - 1/91            Kelly Kote Instrument Company • Cincinnati, Ohio

ANSI 3.1 Senior Health Physics Technician. Final release survey for EPA project. Demolition of final facility.

5/90 - 7/90            General Electric Aircraft Engine Plant • Cincinnati, Ohio

ANSI 3.1 Senior Health Physics Technician. Final release surveys for building.

3/89 - 12/89          Applied Technology Group • Sprague Electric North Adams, MA

ANSI 3.1 Senior Health Physics Technician. Decommissioning of Piezoelectric Ceramic Capacitor facility using uranium oxide powder in the process. Routine radiation and contamination surveys and volatile organic contaminants. Asbestos surveys.



10/92 - 10/23/92	<p>Allied Technology Group • Sunflower Ammunitions Depot DeSoto, KS</p> <p>ANSI 3.1 Senior Health Physics Technician. Research and development for the Filtration of depleted uranium from oil; system setup and monitoring of radiological conditions.</p>
2/92 - 7/92	<p>DDH Nuclear, Inc. • Battelle Memorial Institute, Columbus, Ohio</p> <p>ANSI 3.1 Senior Health Physics Technician. Support for the Decontamination/Decommissioning program. In charge of free release program and procedure writing for D&amp;D decon effort.</p>
8/91 - 10/91	<p>Nuclear Energy Services, Inc. • General Electric Tungsten Wire Plant, Lighting Group, Cleveland, Ohio</p> <p>ANSI 3.1 Senior Health Physics Technician. Performed characterization of facility using radioactive thorium in a process to manufacture thoriated tungsten wire. Included surveys using alpha and beta gamma instruments, air sampling and smear counting.</p>
5/91 - 6/91	<p>Nuclear Energy Services, Inc. • Brown St. Plant, St. Louis, MO</p> <p>Environmental Technician. Demonstration of process used to remove P.C.B.'s from concrete floors using a blast tract. Sampling of concrete and air. Decontamination of plant. Recertified in Personnel Protection and Safety for Hazardous Waste Removal.</p>
8/90 - 1/91	<p>Kelly Kote Instrument Company • Cincinnati, Ohio</p> <p>ANSI 3.1 Senior Health Physics Technician. Final release survey for EPA project. Demolition of final facility.</p>
5/90 - 7/90	<p>General Electric Aircraft Engine Plant • Cincinnati, Ohio</p> <p>ANSI 3.1 Senior Health Physics Technician. Final release surveys for building.</p>
3/89 - 12/89	<p>Applied Technology Group • Sprague Electric North Adams, MA</p> <p>ANSI 3.1 Senior Health Physics Technician. Decommissioning of Piezoelectric Ceramic Capacitor facility using uranium oxide powder in the process. Routine radiation and contamination surveys and volatile organic contaminants. Asbestos surveys.</p>

pipng removal, reactor sump desludging, under vessel hydrolasing, tool decontamination and waste packaging, decontamination of chemical decon system heat exchanger using freon pump and filtration system, scram volume header hydrolasing.

7/83 - 8/83

Nuklearna Electrama Krsko • KRSKO Yugoslavia

Decontamination Supervisor/Junior Health Physics Technician. Supervised the decontamination of reactor cavity using strippable coating method. Upon completion, upgraded to Junior Technician performing stay time calculations, dosimetry package setup, dose tabulation in support of steam generator modification project.

4/83 - 12/78

Decontamination Technician for the following Utilities:

Boston Edison, Pilgrim Nuclear Power Station  
General Public Utilities, Three Mile Island Nuclear Station  
Connecticut Yankee Atomic Power Company, Haddam Neck Station  
Carolina Power and Light Company, Brunswick Steam & Generation

#### REFERENCES

Furnished Upon Request

pipng removal, reactor sump desludging, under vessel hydrolasing, tool decontamination and waste packaging, decontamination of chemical decon system heat exchanger using freon pump and filtration system, scram volume header hydrolasing.

7/83 - 8/83

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Boston Edison, Pilgrim Nuclear Power Station  
General Public Utilities, Three Mile Island Nuclear Station  
Connecticut Yankee Atomic Power Company, Haddam Neck Station  
Carolina Power and Light Company, Brunswick Steam & Generation

#### REFERENCES

Furnished Upon Request

2/91 - 3/91

Public Service Electric & Gas, Salem Generating Station

Junior Health Physics Technician. Pre-decon survey and post-decon surveys. Operation of high/low volume air samplers. Dose rating trash and PC's with R02, R02A and E520. Frisking material out of the RCA and operation of Control Point computer stations.

12/90 - 2/91  
9/89 - 11/89

Public Service Electric & Gas, Hope Creek Generating Station

Junior Health Physics Technician. Pre-decon survey and post-decon surveys. Operation of high/low volume air samplers. Dose rating trash and PC's with R02, R02A and E520. Frisking material out of the RCA and operation of Control Point computer stations.

4/89 - 6/89

Public Service Electric & Gas, Salem Generating Station

Junior Health Physics Technician. Pre-decon survey and post-decon surveys. Operation of high/low volume air samplers. Dose rating trash and PC's with R02, R02A and E520. Coverage for the releasing of Radioactive contaminated materials and equipment from containment and RCA. Assisted in underwater diving operations, dress and undress of Steam Generator Jumpers, assistance to Chemistry and Health Physics Departments in chloride swipe in containment under power. Experience with Tri-Nuke System, RCP decontamination, tool and equipment decontamination, Alara Strippable coating and Isolock coating, footage recovery and Radwaste disposal.

1/89 - 3/89

Westinghouse contracted to Con-Edison Power Co., Indian Point II

Radwaste Support Specialist. Decontamination and control coverage of lead shielding blankets inside pit using an air line respirator as needed for job. Trained in usage of forklifts applicable to Radwaste only. Specialized in usage of Freon Units and Bead Blasting.

9/88 - 12/88

Arkansas Power & Light, Arkansas Nuclear I & II

Senior Decontamination Support Specialist. Refueling cavity decontamination via strippable paint, hydrolazing of reactor vessel, steam generator tube sleeving decontamination, control floor scrubber operation, dry and wet vacuum decontamination. Control coverage of valve seal replacement, material and equipment for Quadrex. Skilled on Freon Units, Glove Units and operation of Underwater Vacuum Cleaning System.

(10/87 - 11/87) - Senior Decontamination Support Specialist, Training

2/91 - 3/91

Public Service Electric & Gas, Salem Generating Station

Junior Health Physics Technician. Pre-decon survey and post-decon surveys. Operation of high/low volume air samplers. Dose rating trash and PC's with R02, R02A and E520. Frisking material out of the RCA and operation of Control Point computer stations.

12/90 - 2/91  
9/89 - 11/89

Public Service Electric & Gas, Hope Creek Generating Station

Junior Health Physics Technician. Pre-decon survey and post-decon surveys. Operation of high/low volume air samplers. Dose rating trash and PC's with R02, R02A and E520. Frisking material out of the RCA and operation of Control Point computer stations.

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**WORK EXPERIENCE**

**30 Nov 92 - Present**

**Location:** Randolph A.F.B. San Antonio, TX  
Defense Logistics Agency Superfund Site, DeSoto, KS  
Defense Logistics Agency Curtis Bay Depot, Baltimore, MD  
Lake City Army Ammunition Plant, Independence, MO  
Sacramento Army Depot, Sacramento, CA  
Yuma Proving Grounds, Yuma, AZ

**Responsibilities:** ANSI 3.1 Senior Radiation Protection Technician Supervisor. Providing radiological/safety job supervision for the recovery and packaging of buried radioactive waste, solidification of oil contaminated with depleted uranium and solvents, and decontamination of building contaminated with monazite sand containing natural thorium, radiological characterization of ammunition plant firing range, and decontamination of radium contaminated laboratory, removal and bulk packaging of depleted uranium contaminated soil. Duties also include: writing of procedures, final reports, performance of final release surveys, forklift operation, and operation of distillation unit for the recovery of solvents from contaminated oil.

**Employed by:** Allied Technology Group Inc.

**19 Oct 92 - 23 Oct 92**

**Location:** Defense Logistics Agency Superfund Site, DeSoto, KS

**Responsibilities:** ANSI 3.1 Senior Radiation Protection Technician. Performed research and development for the filtration of depleted uranium from used oil. Duties included: system setup and operation, monitoring of radiological conditions.

**Employed by:** Allied Technology Group Inc.

**29 Sept - 16 Oct 92**

**Location:** Sprague Electric Co. North Adams, MA

**Responsibilities:** ANSI 3.1 Senior Radiation Protection Technician. Performed contamination surveys for the unconditional free release of empty 55 gallon drums and equipment.

**Employed by:** DDH Nuclear Inc.

**12 Feb 92 - 31 July 92**

**Location:** Battelle Memorial Laboratories Decontamination and Decommissioning Project, Columbus, OH

**Responsibilities:** ANSI 3.1 Senior Radiation Protection Technician. Provided job coverage of waste compacting and decontamination crews. Also performed routine and job coverage radiological surveys, procedure writing, setup of computer systems for data transfer and storage, and radiological surveillance to ensure compliance with 10 CFR 20 and DOE Order 5480.11.

**Employed by:** DDH Nuclear Inc.

**17 Jan 92 - 10 Feb 92**

**Responsibilities:** Performed asbestos and lead paint abatement.

**Employed by:** Associated Thermal Services Inc.

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## **WORK EXPERIENCE**

*(Continued)*

**12 Sept 88 - 9 Dec 88**

**Location:** Edwin I. Hatch Nuclear Power Plant, Baxley, GA

**Responsibilities:** ANSI 3.1 Senior Radiation Protection Technician. Provided job coverage in the drywell, condenser bay and hot machine shop. Jobs included: insulation removal, CRD removal and replacement, valve repairs, and condenser/heat exchanger repair work.

**Employed by:** Applied Radiological Controls Inc.

**22 July 85 - 30 August 88**

**Location:** Shippingport Atomic Power Station, Shippingport, PA

Shippingport Station Decommissioning Project

**Responsibilities:** Radiation Monitor, performed radiation, contamination, and air quality surveys to support decontamination crews. Also performed area decontamination. Additional qualifications included rad waste disposal systems operator decontamination worker, asbestos worker, plant system tender, boiler operator, rad waste packaging and shipping, and DOP testing of HEPA vacuum and ventilation units.

**Employed by:** McMillen Personnel Services Inc. for General Electric, and the Department of Energy.

**26 April 85 - 19 July 85**

**Location:** Perry Nuclear Plant, Perry, OH

**Responsibilities:** QC Technician III. Duties included the reading and interpretation of electrical conduit drawings and blueprints for documentation review for technical compliance.

**Employed by:** Comstock Engineering Inc.

**28 August 84 - 1 Dec 84**

**Location:** Davis-Besse Nuclear Power Station, Oak Harbor, OH

**Responsibilities:** Junior Radiation Protection Technician. Duties included decontamination of personal protective clothing and monitoring of cleaned clothing.

**Employed by:** Numanco Inc.

## **MILITARY EXPERIENCE**

**August '78 - August '84**

**U.S. Navy**

**Responsibilities:** Duties included the supervision, maintenance, operation and repair of nuclear and non-nuclear primary and secondary systems. Performed radiation control duties following qualification as a radiation monitor, such as control point access watch, and other control point functions.



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ATG Inc.

Appendix 3

Radiological Characterization

of

Fort McClellan, Building 3192 and Grounds  
Anniston, AL

Remediation Lists and Considerations

Allied Technology Group, Inc.  
1515 Main Street  
Genoa, OH 43430

November, 1994

ATG Inc.

Appendix 3

Radiological Characterization

of

Fort McClellan, Building 3192 and Grounds  
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Remediation Lists and Considerations

Allied Technology Group, Inc.  
1515 Main Street  
Genoa, OH 43430

November, 1994

Radiological Characterization  
Fort McClellan, Building 3192 and Grounds  
Anniston, AL - 1994 - ATG Inc.

16 steel plugs within the hot cell - 2.5 ft x 6" dia.

These plugs provided the primary shielding barrier for the sources stored in the vault. It would be wasteful to dispose of these items without a serious attempt at decontamination. These items would represent substantial disposal costs if required to be waste. The activity on them is not substantial.

Steel plate - 4' x 6' x 1".

This item has several inaccessible areas but decon is likely to be possible with minimal cutting.

16 plug shrouds (sleeves for plugs)

These items may represent the most contaminated and difficult to decon. However, they are stainless steel and may not be as much of a challenge as thought.

Wall shield plugs (4) 2 - 34" x 8" dia. 2 - 34" x 6" dia.

These items are large steel cylinders with minimal contamination.

Ventilation system and components

This could represent the most significant waste volume but appears to have only low level contamination and should be easily deconned. Note: The craft paper covers of the insulation on this vent duct will not be deconned.

Supply is approximately 10'x3'x1' + 20'x2'x1' + 12"dia.x8' + 10'x2'x1' + 10'x2'x1' + 20'x2'x1' + 20'x2'x1' + 30'x2'x1' + 30'x2'x1'

Return is approximately 50'x3'x1' + 15'x3'x1' + 8'x3'x1' + 6'x3'x1' + 5'x4'x1'

The circulation assembly has two squirrel cages with detectable contamination. The cooling fins and piping may be challenge to decon and survey but release is possible after minor decon.

Piping systems - heating, cooling, gas and water.

These systems are outside of the hot cell and have not been in contaminated areas and were not contaminated systems.

50' 2" pipe, 80' 1" pipe

Tank (2'x3'x1')

gauges, pumps, valves, heater (2.5' dia x 8")

Bathroom sink and Miscellaneous fixtures and supply for shower area.

Radiological Characterization  
Fort McClellan, Building 3192 and Grounds  
Anniston, AL - 1994 - ATG Inc.

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Radiological Characterization  
Fort McClellan, Building 3192 and Grounds  
Anniston, AL - 1994 - ATG Inc.

60 ganged chairs in classroom.

Not likely to be contaminated - release survey possible.

11 pieces of 4x8 plywood.

Not likely to be contaminated - release survey possible.

Classroom and office ceiling tiles and insulation.

Not likely to be contaminated - release survey possible.

Classroom floor tiles.

These tiles may be asbestos but appear to be radiologically clean and will not be difficult to dispose of.