Bayer HealthCare
Pharmaceuticals

July 9, 2007

Mr. Dennis R. Lawyer
Health Physicist
Commercial and R&D Branch
Division of Nuclear Materials Safety
United States Nuclear Regulatory Commission
Region 1
475 Allendale Road
Mail Control #140429
King of Prussia, PA 19406-1415

MS 16
J-6

Regarding: **Bayer Pharmaceuticals Corporation request for additional information concerning application for amendment to license, control #140429**

Bayer Pharmaceuticals Corporation
400 Morgan Lane
West Haven, CT 06516-4175

Phone: 203 812-2000

Dear Mr. Lawyer,

03030292

This is in reference to your letter dated May 18, 2007 to Mr. Joseph Catino requesting additional information regarding our request to amend our NRC License No. 06-13053-04.

Please continue with the review of our license termination. Included are the answers and supporting documentation to all of the concerns raised in your letter of 5/18/07.

If you have any additional questions or need additional information, please let me know.

Sincerely,

Gary Toczylowski

Gary Toczylowski
Manager, Health, Environment, Safety and Security

GT:kbf
enclosures

cc: Joseph Catino

140429

Bayer HealthCare
Pharmaceuticals

Docket No. 03030292

Control No. 140429

Bayer Pharmaceuticals Request for License Termination

Additional Information

Response documentation for Items 1-5

RESPONSE TO NRC COMMENTS

1. *Prior to termination of a license, 10 CFR 30.35(g), 30.36(k)(4), and 30.51 require that you submit to the NRC certain records. Please submit the following records, or explain why such records are not applicable.*

a. for unsealed materials with half-lives greater than 120 days, records for disposal made pursuant to 10 CFR 20.2002 (alternate disposal procedures, including burial authorized prior to January 28,1981), 20.2003 (disposals to the sanitary sewerage system), 20.2004 (incineration of wastes), 20.2005 (disposal of specific wastes including liquid scintillation cocktail and animal tissue), and 20.2103(b)(4), evaluations of effluent releases.

Alternate disposal procedures (10CFR 20.2002) were not necessary for the disposal of radioactive waste. All remaining radioactive materials on site were shipped for disposal to either NSSI in Houston Texas, or Pacific Ecosolutions in Richmond, Washington. Attached are copies of manifests containing information on all remaining radioactive waste on site, radioactive waste generated from decommissioning, liquid scintillation standards and quench sets, meter check and calibration sources, and other miscellaneous sources. Refer to response documentation Item #10 (Appendix L – Waste Manifests)

Attached are copies of sewer disposal data generated from radioactive sink disposal log sheets from 2006. Similar records have been kept for all previous years of licensed activity. Also included are the evaluations of the monthly average concentration for each radioisotope disposed through the sanitary sewer as required per 10 CFR 20.2003 and 20.2103(b)(4). No radioisotopes were disposed of through the sanitary sewer after December 2006. Refer to response documentation Item # 1a.

10 CFR 20.2004, Treatment or disposal by incineration is not applicable. Radioactive waste has never incinerated on site. Solid/hazardous radioactive waste has always been shipped off site for disposal.

10 CFR 20.2005 Disposal of specific wastes is not applicable. Liquid scintillation and animal waste was always shipped for treatment and disposal as radioactive waste.

b. *records important for decommissioning as described in 30.35(g), 40.36(f) and 70.25(g). Examples of such records include but are not limited to: records of contamination, identifying the radionuclides, quantities and concentrations; as-built drawings and modifications of structures and equipment in restricted areas and locations of inaccessible contamination such as buried pipes; a single list, updated at least every 2 years, of areas to which access is limited for the purpose of radiation protection (restricted areas); and records related to the provision of financial assurance.*

Other than Financial insurance documentation, the above mentioned regulations are not applicable for the following reasons:

1. In the event of a spill, all areas and items were decontaminated to background levels or removed. The latest decommissioning project decontaminated all areas and items to levels required for unrestricted use.

2. An evaluation of the sites duct work and plumbing was conducted during the decommissioning project and confirmed that all areas are within the limits for unrestricted use.

3. No areas on site were ever designated restricted as defined in 10 CFR 20.1003. There have never been any areas on the site that would present an undue risk. There have never been any significant exposures to employees working with radioactive materials. Radioactive materials are used in small quantities and the majority of radioisotopes used on site were low energy beta emitters. Exceptions are P-32 (higher energy beta) and I-125 (low energy gamma) which were easily controlled with shielding

The estimated cost for the decommissioning of the site was based on actual past decommissioning projects performed. Included are the 2007 financial assurance documents sent to the NRC on March 26, 2007. Refer to response documentation Item # 1b.

No license will be terminated until the required records are received by the NRC. Records may be transferred to the U.S. Nuclear Regulatory Commission, Region I, 475 Allendale Road, King of Prussia, Pennsylvania 19406.

2. *Submit NRC Form 314, "Certificate of Disposition of Materials," or equivalent information. Written confirmation from the recipient listed on NRC Form 314 (enclosed) that the materials has been transferred to them should be attached to the Form 314.*

Completed NRC FORM 314 Included. Refer to response documentation Item # 2

3. *For all sealed sources with which you were in possession within three years, provide results from the most recent leak tests demonstrating there has been no leakage and for sources that are have been out of your possession for greater than 3 years, state if there is any recorded or known history of source leakage at the facility.*

There was one Ni-63 ECD source remaining All Leak test and disposal information is provided. Refer to response documentation Item # 3

4. *Your facility is licensed to use the following greater then 120 day half life radioisotopes: calcium 45, iron 55, gadolinium 153, and chlorine 36 and they were not addressed in your Radiological Decommissioning Report dated February 16, 2007. Please determine areas of impact, detector efficiency, and survey results as compared to appropriate DCGL's of those areas of impact.*

The last order of Ca-45 received was on February 3, 1998 and no Gadolinium-153 has been received on the site since before 1991. Any potential contamination resulting from those radioisotopes would have undergone over 20 half-lives and any residual activity would have fully decayed.

The only Iron-55 used on site was a sealed source that never leaked and was disposed of on January 27, 1999. All of the Chlorine-36 on the site was in the form of liquid scintillation quench standards. All standards were accounted for and intact prior to disposal in February, 2007.

5. *Appendix D of your Radiological Decommissioning Report dated February 16, 2007, stated that various laboratories have recently been decommissioned. No surveys of those laboratories have been submitted to the Commission. Please submit survey results for all of the laboratories listed in the "Recent Decom." column of the table entitled, "Bayer Historical Decommissioning Activities."*

The laboratories in question were decommissioned over two decommissioning projects. The first project was conducted in April, 2005 by Scientech, now part of Energy Solutions, and the second in July 2006 by Philotechnics. Copies of these reports have been included. Refer to response documentation Item # 5.

6. *The following rooms have been listed in either inspection or licensing documents of this license, since the license was issued on December 2, 1987: RB014X, RB007C, RB111, RB121A, RB121B, RB232, D250, D-251, D252, RA105F, RA105G, RB232, RB233, Building A-42 lower level warehouse, and satellite radioactive storage in Building B-26. None of these areas appear to be a part of your current or previous decommissioning. Please perform surveys in these areas, state that the rooms had been renumbered to an area that has been surveyed, or state that no license material had been used in these areas.*

RB-014X	- Former "decay-in-storage" area decommissioned by Radiation Safety Associates (RSA) on 09/08/1999. Short-lived radioisotope storage only. * Copy of Decommissioning Certification included.
RB-007C	- No such room – May be a typographical error for RB-107C, or RB-207C.
RB-111	- Was Decommissioned on 07/29/98 by Radiation Safety Staff. * Copy of Survey included.
RB-121A&B	- Offices across from radiation use lab, No license materials used.

RB-232	- Iodination lab, Decommissioned on 11/18/1999 by Radiation Safety Staff. * Copy of Survey Included.
RB-233	- No such room – May be a typographical error for RB-231, or RB-232.
D-250, 251&252	- Plan to Convert to Radioactive Waste room was not implemented.- No license material used in rooms.
RA-105F&G	- Was Decommissioned on 06/23/03 by Radiation Safety Staff. * Copy of Survey included.
A-42	- Plans to store radioactive waste in A-42 were never implemented. No license materials have been used in the building.
B-26	- No such building, must be a typographical error for B-36.

Refer to response documentation Item # 6

7. *Licensed operations under 06-13053-01 was superceded by this license. License 06-13053-01 was issued from December 17, 1968 through July 15, 1993. Long term radionuclides included tritium and carbon 14. The following rooms have been listed in either inspection or licensing documents of this license not included in previous surveys or current surveys: A-124, C117, D104, A109, A114, and A141. One room D130A was licensed for long lived radionuclide I-129 as well as carbon 14 and tritium. The iodine was used for calibration but was not a sealed source. Please perform surveys in these areas, state that the rooms had been renumbered to an area that has been surveyed, or state that no licensed materials had been used in these areas.*

A-124	- Lab contained gas chromatographs with Ni-63 ECD sources. No sources ever leaked and no other licensed materials were used in the lab. Sources removed in January 2001 and disposed in June 2002.
C117	- No license materials have been used in this room.
D104	- Across from radioactive materials use laboratory, no license materials used.
A109	- Adjacent to radioisotope use lab. No license materials used.
A114	- Office, no license materials used.
A141	- Adjacent to radioisotope use lab. No license materials used.
D130A	- Part of D-130 (Between doors) – Decommissioned.

8. *Licensed operations under 06-20589-01 was superceded by this license. License 06-20589-01 was issued from April 20, 1983 through February 25, 1988. Long term radionuclides included tritium and carbon 14. The following rooms have been listed in either inspection or licensing documents of this license not included in previous surveys or current surveys: D131 and D236. Please perform surveys in these areas, state that the rooms had been renumbered to an area that has been surveyed, or state that no licensed materials had been used in these areas.*

D131	- Office, no license materials used in room.
D236	- No license materials used in room.

9. *Licensed operations under 06-20972-01 was superceded by this license. License 06-20972-01 was issued from March 13, 1986 through February 5, 1988. Long term radionuclides included tritium and carbon 14. The following rooms have been listed in either inspection or licensing documents of this license not included in previous surveys or current surveys: A109, A127A, A128, A138, A140, A141, and A142. Please perform surveys in these areas, state that the rooms had been renumbered to an area that has been surveyed, or state that no licensed materials had been used in these areas.*

A109	- Adjacent to radioisotope use lab. No license materials used.
A127A	- Utility closet. No license materials used.
A128	- Decommissioned by Health Physics Consulting Services, September 1997 * Copy of survey report included.
A138	- Adjacent to radioisotope use lab. No license materials used.
A140	- Adjacent to radioisotope use lab. No license materials used.
A141	- Adjacent to radioisotope use lab. No license materials used.

A142 - Adjacent to radioisotope use lab. No license materials used.

Refer to response documentation Item # 9

10. *On page 9 of your Radiological Decommissioning Report dated February 16, 2007, you state that Appendix L contains the shipping manifest of your waste shipment. There was no Appendix L contained in the report. Please submit a copy of your shipping manifest.*

Refer to response documentation Item # 10 (Appendix L)

11. *The static survey results and Minimum Detectable Concentration (MDC) appear to not include the efficiency of the source. On your MDA Worksheet Page 1 of 4 in Appendix E, the MDC formula includes an efficiency factor stating that it is 2 * geometry. The efficiency should be total efficiency which includes the product of 2 * instrument efficiency and source efficiency. Page 6-25 in NUREG 1775, Rev 1, states a source efficiency of 0.5 is recommended for beta emitters with maximum energies above 0.4 MeV. Alpha emitters and beta emitters with maximum beta energies between 0.15 and 0.4 MeV have a recommended source efficiency of 0.25. The efficiency was adjusted from the 2 * instrument efficiency by 0.5, however for carbon 14 and sulfur 35, the MDC should be twice your stated value. All static reading for carbon 14 and sulfur 35 should be twice as high. Additionally the surveys do not show which survey meter was used to determine the proper efficiency number. Please recalculate your static readings and adjust as compared to the DCGL, or state the reason for the using the given efficiency.*

Refer to Philotechnics response – response documentation Item #'s 11&12

12. *A note at the bottom of the Static Count MDC Calculations table in Appendix E states that the P-32 efficiency is estimated by Sr-90 efficiency. This appears to be a typographical error as no Sr-90 efficiency data is given but Tc-99 data given and used. Please confirm that the P 32 efficiency is estimated by the Tc-99 efficiency.*

Refer to Philotechnics response – response documentation Item #'s 11&12

13. *Some of the survey units did not include gamma static reading. Please confirm that no Iodine 125 or 131 were used in these locations.*

All survey units that did not include gamma static readings consisted of either non-use areas such as offices and corridors, or radioactive use laboratories where I-125 was last used before September 2005. Over 10 half-lives for I-125 have passed and it is unlikely that there is any I-125 contamination remaining since it was typically used in microcurie activities.

14. *Please discuss the disposition of all generally licensed materials and devices that may have been used at this location.*
The Bayer Pharma West Haven site is being sold to Yale University. As part of the sale, all generally licensed materials and devices are being transferred to Yale University.

15. *In support of an environmental assessment related to the release of your facility:*

a) Provide the name of the facility to be released
Bayer Pharmaceuticals Corporation, 400 Morgan Lane, West Haven, CT 06516

b) Provide the size of the complex in Acers and number of buildings affected. Please estimate the area being released in square feet.
The entire site entails 137 acres and has a total of 19 buildings.
The area impacted by our NRC license was associated with our research and development operations and entailed approximately 30 acres with 5 buildings and total of 350,000 square feet.

c) Describe the building use such as "general office and laboratory".
Building use in the research complex was for laboratory use and general office in support of research operations.

d) Describe the Surrounding area, Such as "residential", "Industrial", "commercial", "mixed residential/commercial", etc.
The site is bordered on the north by Interstate 95, by Morgan Lane and a commercial/industrial park on the East, and by Heffernan Drive and an Amtrak Rail Line on the South. The area is generally a mixed residential/commercial area.

e) Describe the general type of activities authorized on the license, such as "laboratory procedures typically performed on bench tops and in hoods.
In general the types of activities authorized to be performed by the license were research laboratory procedures that were typically performed on laboratory bench tops and in fume hoods.

f) State when you ceased licensed activities.
The research center license activities ceased operations in January, 2007. At that time we went into a full time decommissioning mode.

g) Would any of the buildings being released be considered a historical structure? Is so, please state the historical importance.
No. None of the buildings being released would be considered a historical structure.

Sanitary Sewer Disposal Information

Response to Item #1a

BAYER CORPORATION, WEST HAVEN, CT
EVALUATION OF DISCHARGE INTO THE SANITARY SEWER
IN COMPLIANCE WITH 10 CFR 20.2003
(All activities in uCi)
[FINAL REPORT]

CALENDAR YEAR:	2006	MONTHS:	12	DAYS PER MONTH:	30.4

1.) Water usage: Buildings A-16

Effluent rates are calculated from data generated by the Utilities department.

a. The calculated discharge to the Town of West Haven's POTW by Bayer Corporation through the Heffernan Drive sanitary sewer line is as follows:

Average gal/month:	**188.8**
Average gal/day:	**6.2**
Average ml/day:	**2.35E+04**

2.) Compliance with 10CFR20.2003 (a)(2), (3)(i)(ii)

ISOTOPE	LIQ DISPOSED BY R.S.O.	LAB SINK DISPOSAL	TOTAL LIQUID TO SEWER (uCi)	MONTHLY uCi/ml	M.A.C. uCi/ml	FRACTION of M.A.C.	%
H-3	0.00	0.00	0.00	0.00E+00	1.0E-02	0.00E+00	0.00%
C-14	0.00	0.00	0.00	0.00E+00	3.0E-04	0.00E+00	0.00%
P-32	0.00	0.00	0.00	0.00E+00	9.0E-05	0.00E+00	0.00%
P-33	0.00	0.00	0.00	0.00E+00	8.0E-04	0.00E+00	0.00%
S-35	0.00	0.00	0.00	0.00E+00	1.0E-03	0.00E+00	0.00%
I-125	0.00	0.00	0.00	0.00E+00	2.0E-05	0.00E+00	0.00%
			SUM of M.A.C. fractions:			**0.00E+00**	
			(must not exceed unity)				

3.) Water usage: Building B-24

a. The calculated discharge to the Town of West Haven's POTW by Bayer Corporation through the Morgan Lane sanitary sewer line is as follows:

Average gal/month:	**92,882.6**
Average gal/day:	**3,055.4**
Average ml/day:	**1.16E+07**

4.) Compliance with 10CFR20.2003 (a)(2), (3)(i)(ii)

ISOTOPE	LIQ DISPOSED BY R.S.O.	LAB SINK DISPOSAL	TOTAL LIQUID TO SEWER (uCi)	MONTHLY uCi/ml	M.A.C. uCi/ml	FRACTION of M.A.C.	%
H-3	7,940.30	210.00	8,150.30	1.93E-06	1.0E-02	1.93E-04	0.02%
C-14	1,755.00	43.00	1,798.00	4.26E-07	3.0E-04	1.42E-03	0.14%
P-32	0.00	0.00	0.00	0.00E+00	9.0E-05	0.00E+00	0.00%
P-33	970.00	0.00	970.00	2.30E-07	8.0E-04	2.87E-04	0.03%
S-35	4.10	968.00	972.10	2.30E-07	1.0E-03	2.30E-04	0.02%
CA-45	0.00	0.00	0.00	0.00E+00	2.0E-04	0.00E+00	0.00%
I-125	18.10	1,460.00	1,478.10	3.50E-07	2.0E-05	1.75E-02	1.75%
			SUM of M.A.C. fractions:			**1.96E-02**	
			(must not exceed unity)				

5.) **Water usage: Building B-31**

a. The calculated discharge to the Town of West Haven's POTW by Bayer Corporation through the Morgan Lane sanitary sewer line is as follows:

Average gal/month:	**234,958.0**
Average gal/day:	**7,728.9**
Average ml/day:	**2.93E+07**

6.) **Compliance with 10CFR20.2003 (a)(2), (3)(i)(ii)**

ISOTOPE	LIQ DISPOSED BY R.S.O.	LAB SINK DISPOSAL	TOTAL LIQUID TO SEWER (uCi)	MONTHLY uCi/ml	M.A.C. uCi/ml	FRACTION of M.A.C.	%
H-3	0.00	2.00	2.00	1.87E-10	1.0E-02	1.87E-08	0.00%
C-14	0.00	0.00	0.00	0.00E+00	3.0E-04	0.00E+00	0.00%
P-32	0.00	0.00	0.00	0.00E+00	9.0E-05	0.00E+00	0.00%
P-33	0.00	397.40	397.40	3.72E-08	8.0E-04	4.65E-05	0.00%
S-35	0.00	0.00	0.00	0.00E+00	1.0E-03	0.00E+00	0.00%
I-125	0.00	0.00	0.00	0.00E+00	2.0E-05	0.00E+00	0.00%
			SUM of M.A.C. fractions: (must not exceed unity)			**4.66E-05**	

7.) **Water usage: Building B-36**

a. The calculated discharge to the Town of West Haven's POTW by Bayer Corporation through the Morgan Lane sanitary sewer line is as follows:

Average gal/month:	**44,340.8**
Average gal/day:	**1,458.6**
Average ml/day:	**5.52E+06**

8.) **Compliance with 10CFR20.2003 (a)(2), (3)(i)(ii)**

ISOTOPE	LIQ DISPOSED BY R.S.O.	LAB SINK DISPOSAL	TOTAL LIQUID TO SEWER (uCi)	MONTHLY uCi/ml	M.A.C. uCi/ml	FRACTION of M.A.C.	%
H-3	0.00	524.80	524.80	2.61E-07	1.0E-02	2.61E-05	0.00%
C-14	0.00	659.20	659.20	3.27E-07	3.0E-04	1.09E-03	0.11%
P-32	0.00	0.00	0.00	0.00E+00	9.0E-05	0.00E+00	0.00%
P-33	0.00	8401.75	8,401.75	4.17E-06	8.0E-04	5.21E-03	0.52%
S-35	0.00	0.00	0.00	0.00E+00	1.0E-03	0.00E+00	0.00%
I-125	0.00	317.00	317.00	1.57E-07	2.0E-05	7.87E-03	0.79%
			SUM of M.A.C. fractions: (must not exceed unity)			**1.42E-02**	

5.) Compliance with 10CFR20.2003 (a)(4)

Totals for all radionuclides released by the Bayer Corporation, West Haven facility for the period January 1, 2001 through December 31, 2001.

TOTAL H-3:	8,677.10 uCi	0.17 % OF YEAR'S LIMIT
TOTAL C-14:	2,457.20 uCi	0.25 % OF YEAR'S LIMIT
ALL OTHERS:	12,536.35 uCi	1.25 % OF YEAR'S LIMIT

Evaluated By: PETER D. BABIN

Signature: [signature]

Date: 4-13-07

BUILDING 24 SEWER DISPOSAL - 2006

Building	Room	Date	3-H	14-C	32-P	33-P	35-S	125-I	45-Ca
B-24	RB-211	25-Jan-06	0	0	0	0	105	105	0
B-24	RB-211	30-Jan-06	0	0	0	0	0	35	0
B-24	RB-211	20-Feb-06	0	0	0	0	50	50	0
B-24	RB-211	07-Mar-06	0	0	0	0	0	130	0
B-24	RB-211	22-Mar-06	0	0	0	0	220	220	0
B-24	RB-211	13-Apr-06	0	0	0	0	261	261	0
B-24	RB-213	02-May-06	100	0	0	0	0	0	0
B-24	RB-213	11-May-06	0	0	0	0	0	100	0
B-24	RB-213	07-Jun-06	0	0	0	0	0	16	0
B-24	RB-231	09-Jan-06	0	0	0	0	0	23	0
B-24	RB-231	11-Jan-06	19	0	0	0	0	0	0
B-24	RB-231	17-Jan-06	0	0	0	0	0	13	0
B-24	RB-231	18-Jan-06	0	0	0	0	0	13	0
B-24	RB-231	20-Jan-06	0	0	0	0	0	13	0
B-24	RB-231	23-Jan-06	0	0	0	0	0	13	0
B-24	RB-231	24-Jan-06	0	0	0	0	0	13	0
B-24	RB-231	30-Jan-06	0	0	0	0	0	15	0
B-24	RB-231	31-Jan-06	0	0	0	0	0	15	0
B-24	RB-231	03-Feb-06	0	0	0	0	0	1	0
B-24	RB-231	08-Feb-06	0	0	0	0	0	18	0
B-24	RB-231	09-Feb-06	0	0	0	0	0	15	0
B-24	RB-231	10-Feb-06	0	0	0	0	0	12	0
B-24	RB-231	14-Feb-06	0	0	0	0	0	17	0
B-24	RB-231	01-Mar-06	0	0	0	0	0	20	0
B-24	RB-231	15-Mar-06	20	0	0	0	0	0	0
B-24	RB-231	17-Mar-06	0	0	0	0	0	10	0
B-24	RB-231	20-Mar-06	0	0	0	0	0	10	0
B-24	RB-231	21-Mar-06	0	0	0	0	0	1	0
B-24	RB-231	28-Mar-06	11	0	0	0	0	0	0
B-24	RB-231	29-Mar-06	32	0	0	0	0	0	0
B-24	RB-231	12-Apr-06	0	0	0	0	0	50	0
B-24	RB-231	21-Apr-06	0	0	0	0	0	8	0
B-24	RB-231	24-Apr-06	0	0	0	0	0	8	0
B-24	RB-231	02-May-06	2	0	0	0	0	0	0
B-24	RB-231	06-May-06	2	0	0	0	0	0	0
B-24	RB-231	15-May-06	0	0	0	0	0	15	0
B-24	RB-231	17-May-06	0	0	0	0	0	8	0
B-24	RB-231	30-May-06	0	0	0	0	0	16	0
B-24	RB-231	01-Jun-06	0	0	0	0	0	16	0
B-24	RB-231	09-Jun-06	5	0	0	0	0	4	0
B-24	RB-231	15-Jun-06	5	0	0	0	0	8	0
B-24	RB-231	26-Jul-06	0	0	0	0	188	188	0
B-24	RB-231	10-Aug-06	5	0	0	0	0	0	0
B-24	RB-231	15-Aug-06	5	0	0	0	0	0	0
B-24	RB-231	18-Aug-06	2	0	0	0	0	0	0
B-24	RB-231	21-Aug-06	2	0	0	0	0	0	0

B-24	RB-231	28-Sep-06	0	6	0	0	0	0	0
B-24	RB-231	05-Oct-06	0	37	0	0	0	0	0
B-24	RB-231	17-Oct-06	0	0	0	0	72	0	0
B-24	RB-231	23-Oct-06	0	0	0	0	72	0	0
			210	43	0	0	968	1460	0

SEWER DISPOSAL BY RADIATION SAFETY STAFF

Building	Room	Date	3-H	14-C	32-P	33-P	35-S	125-I	45-Ca
B-24	RB-010B	20-Feb-06	2850	583	0	1	0	0	0
B-24	RB-010B	20-Apr-06	0	0	0	2	0	0	0
B-24	RB-010B	16-Jun-06	0	0	0	1.5	0	11	0
B-24	RB-010B	16-Aug-06	0	0	0	1	2	2	0
B-24	RB-010B	15-Dec-06	46.3	0	0	699	0	3.1	0
B-24	RB-010B	20-Dec-06	0	0	0	1.5	0	0	0
B-24	RB-010B	24-Dec-06	4940	1143	0	132	1	1	0
B-24	RB-010B	29-Dec-06	104	29	0	132	1.1	1	0
			7940.3	1755	0	970	4.1	18.1	0

BUILDING 31 SEWER DISPOSAL - 2006

Building	Room	Date	3-H	14-C	32-P	33-P	35-S	125-I	45-Ca
B-31	RA-210	04-Jan-06	0	0	0	5	0	0	0
B-31	RA-210	19-Jan-06	0	0	0	5	0	0	0
B-31	RA-210	25-Jan-06	0	0	0	5	0	0	0
B-31	RA-210	27-Jan-06	0	0	0	5	0	0	0
B-31	RA-210	07-Feb-06	0	0	0	5	0	0	0
B-31	RA-210	14-Feb-06	0	0	0	5	0	0	0
B-31	RA-210	23-Feb-06	0	0	0	5	0	0	0
B-31	RA-210	02-Mar-06	0	0	0	5	0	0	0
B-31	RA-210	07-Mar-06	0	0	0	5	0	0	0
B-31	RA-210	23-Mar-06	0	0	0	5	0	0	0
B-31	RA-210	31-Mar-06	0	0	0	5	0	0	0
B-31	RA-210	06-Apr-06	0	0	0	5	0	0	0
B-31	RA-210	11-Apr-06	0	0	0	5	0	0	0
B-31	RA-210	12-Apr-06	0	0	0	5	0	0	0
B-31	RA-210	10-May-06	0	0	0	5	0	0	0
B-31	RA-210	22-Jun-06	0	0	0	5	0	0	0
B-31	RA-210	25-Jul-06	0	0	0	5	0	0	0
B-31	RA-210	02-Aug-06	0	0	0	5	0	0	0
B-31	RA-210	15-Aug-06	0	0	0	5	0	0	0
B-31	RA-210	24-Aug-06	0	0	0	5	0	0	0
B-31	RA-210	31-Aug-06	0	0	0	5	0	0	0
B-31	RA-210	06-Sep-06	0	0	0	5	0	0	0
B-31	RA-210	12-Sep-06	0	0	0	5	0	0	0
B-31	RA-210	15-Sep-06	0	0	0	5	0	0	0
B-31	RA-210	20-Sep-06	0	0	0	5	0	0	0
B-31	RA-210	05-Oct-06	0	0	0	10	0	0	0
B-31	RA-210	10-Oct-06	0	0	0	5	0	0	0
B-31	RA-210	25-Oct-06	0	0	0	5	0	0	0
B-31	RA-212	05-Jan-06	0	0	0	4	0	0	0
B-31	RA-212	06-Jan-06	0	0	0	5	0	0	0
B-31	RA-212	18-Jan-06	0	0	0	7.4	0	0	0
B-31	RA-212	25-Jan-06	0	0	0	3	0	0	0
B-31	RA-212	26-Jan-06	0	0	0	2	0	0	0
B-31	RA-212	27-Jan-06	0	0	0	2	0	0	0
B-31	RA-212	29-Jan-06	0	0	0	1	0	0	0
B-31	RA-212	30-Jan-06	0	0	0	2	0	0	0
B-31	RA-212	31-Jan-06	0	0	0	2	0	0	0
B-31	RA-212	01-Feb-06	0	0	0	5	0	0	0
B-31	RA-212	06-Feb-06	0	0	0	2	0	0	0
B-31	RA-212	08-Feb-06	0	0	0	10	0	0	0
B-31	RA-212	09-Feb-06	0	0	0	24	0	0	0
B-31	RA-212	15-Feb-06	0	0	0	3	0	0	0
B-31	RA-212	23-Feb-06	0	0	0	5	0	0	0
B-31	RA-212	02-Mar-06	0	0	0	3	0	0	0
B-31	RA-212	07-Mar-06	0	0	0	2	0	0	0
B-31	RA-212	09-Mar-06	0	0	0	5	0	0	0

B-31	RA-212	13-Mar-06	0	0	0	8	0	0	0
B-31	RA-212	16-Mar-06	0	0	0	1	0	0	0
B-31	RA-212	20-Mar-06	0	0	0	3	0	0	0
B-31	RA-212	22-Mar-06	0	0	0	10	0	0	0
B-31	RA-212	27-Mar-06	0	0	0	2	0	0	0
B-31	RA-212	29-Mar-06	0	0	0	5	0	0	0
B-31	RA-212	03-Apr-06	0	0	0	5	0	0	0
B-31	RA-212	04-Apr-06	0	0	0	2	0	0	0
B-31	RA-212	05-Apr-06	0	0	0	3	0	0	0
B-31	RA-212	12-Apr-06	0	0	0	5	0	0	0
B-31	RA-212	17-Apr-06	0	0	0	2	0	0	0
B-31	RA-212	19-Apr-06	0	0	0	7	0	0	0
B-31	RA-212	26-Apr-06	0	0	0	5	0	0	0
B-31	RA-212	10-May-06	0	0	0	2	0	0	0
B-31	RA-212	17-May-06	0	0	0	3	0	0	0
B-31	RA-212	22-May-06	0	0	0	5	0	0	0
B-31	RA-212	25-May-06	0	0	0	10	0	0	0
B-31	RA-212	30-May-06	0	0	0	2	0	0	0
B-31	RA-212	01-Jun-06	0	0	0	3	0	0	0
B-31	RA-212	08-Jun-06	0	0	0	5	0	0	0
B-31	RA-212	13-Jun-06	0	0	0	4	0	0	0
B-31	RA-212	21-Jun-06	0	0	0	6	0	0	0
B-31	RA-212	28-Jun-06	0	0	0	2	0	0	0
B-31	RA-212	19-Jul-06	0	0	0	2	0	0	0
B-31	RA-212	26-Jul-06	0	0	0	1	0	0	0
B-31	RA-212	27-Jul-06	0	0	0	2	0	0	0
B-31	RA-212	02-Aug-06	0	0	0	2	0	0	0
B-31	RA-212	16-Aug-06	0	0	0	1	0	0	0
B-31	RA-212	18-Aug-06	0	0	0	2	0	0	0
B-31	RA-212	23-Aug-06	0	0	0	5	0	0	0
B-31	RA-212	07-Sep-06	0	0	0	2	0	0	0
B-31	RA-212	13-Sep-06	0	0	0	3	0	0	0
B-31	RA-212	20-Sep-06	0	0	0	2	0	0	0
B-31	RA-212	27-Sep-06	0	0	0	1	0	0	0
B-31	RA-212	02-Oct-06	0	0	0	1	0	0	0
B-31	RA-212	04-Oct-06	0	0	0	3	0	0	0
B-31	RA-212	04-Oct-06	0	0	0	3	0	0	0
B-31	RA-212	13-Oct-06	0	0	0	1	0	0	0
B-31	RA-212	25-Oct-06	0	0	0	4	0	0	0
B-31	RA-212	30-Oct-06	0	0	0	2	0	0	0
B-31	RA-212	31-Oct-06	0	0	0	1	0	0	0
B-31	RA-212	08-Nov-06	0	0	0	2	0	0	0
B-31	RA-217	26-Sep-06	1	0	0	0	0	0	0
B-31	RA-217	28-Sep-06	1	0	0	0	0	0	0
B-31	RA-323	10-Feb-06	0	0	0	25	0	0	0
			2	0	0	397.4	0	0	0

BUILDING 36 SEWER DISPOSAL - 2006

Building	Room	Date	3-H	14-C	32-P	33-P	35-S	125-I	45-Ca
B-36	SINK	03-Jan-06	50	0	0	55	0	0	0
B-36	SINK	05-Jan-06	15	0	0	0	0	0	0
B-36	SINK	06-Jan-06	0	60	0	0	0	0	0
B-36	SINK	09-Jan-06	14	83.2	0	68	0	0	0
B-36	SINK	11-Jan-06	0	0	0	607	0	0	0
B-36	SINK	12-Jan-06	0	90	0	0	0	0	0
B-36	SINK	13-Jan-06	0	0	0	533.75	0	0	0
B-36	SINK	16-Jan-06	0	0	0	283	0	80	0
B-36	SINK	20-Jan-06	0	0	0	45	0	0	0
B-36	SINK	23-Jan-06	0	0	0	232	0	0	0
B-36	SINK	25-Jan-06	0	0	0	262	0	59	0
B-36	SINK	26-Jan-06	0	0	0	42	0	0	0
B-36	SINK	27-Jan-06	0	0	0	309	0	0	0
B-36	SINK	30-Jan-06	0	0	0	64	0	0	0
B-36	SINK	31-Jan-06	1	0	0	102	0	0	0
B-36	SINK	02-Feb-06	0	0	0	250	0	0	0
B-36	SINK	06-Feb-06	0	0	0	0	0	117	0
B-36	SINK	07-Feb-06	13	0	0	0	0	21	0
B-36	SINK	09-Feb-06	0	0	0	482	0	0	0
B-36	SINK	10-Feb-06	6	0	0	150	0	0	0
B-36	SINK	14-Feb-06	0	0	0	75	0	0	0
B-36	SINK	17-Feb-06	0	0	0	613	0	0	0
B-36	SINK	21-Feb-06	0	12	0	120	0	0	0
B-36	SINK	22-Feb-06	3	60	0	20	0	0	0
B-36	SINK	23-Feb-06	0	60	0	120	0	0	0
B-36	SINK	27-Feb-06	0	0	0	900	0	0	0
B-36	SINK	01-Mar-06	0	114	0	0	0	0	0
B-36	SINK	02-Mar-06	0	0	0	232	0	0	0
B-36	SINK	03-Mar-06	0	0	0	116	0	0	0
B-36	SINK	06-Mar-06	10	60	0	0	0	0	0
B-36	SINK	13-Mar-06	60	0	0	0	0	0	0
B-36	SINK	14-Mar-06	30	0	0	0	0	0	0
B-36	SINK	16-Mar-06	0	0	0	0	0	15	0
B-36	SINK	17-Mar-06	0	0	0	0	0	25	0
B-36	SINK	21-Mar-06	0	0	0	40	0	0	0
B-36	SINK	22-Mar-06	0	120	0	0	0	0	0
B-36	SINK	23-Mar-06	0	0	0	250	0	0	0
B-36	SINK	28-Mar-06	0	0	0	30	0	0	0
B-36	SINK	31-Mar-06	10.3	0	0	250	0	0	0
B-36	SINK	04-Apr-06	0	0	0	300	0	0	0
B-36	SINK	06-Apr-06	0	0	0	500	0	0	0
B-36	SINK	18-Apr-06	37.5	0	0	0	0	0	0
B-36	SINK	24-Apr-06	15	0	0	0	0	0	0
B-36	SINK	25-Apr-06	60	0	0	436	0	0	0
B-36	SINK	28-Apr-06	0	0	0	100	0	0	0
B-36	SINK	02-May-06	0	0	0	15	0	0	0

B-36	SINK	03-May-06	0	0	0	250	0	0	0
B-36	SINK	05-May-06	0	0	0	300	0	0	0
B-36	SINK	06-May-06	200	0	0	0	0	0	0
B-36	SINK	10-May-06	0	0	0	250	0	0	0
			524.8	659.2	0	8401.75	0	317	0

Financial Assurance

Response to Item #1b

This section entitled Response to #1b has been removed as it contains proprietary information.

Pages 19-33 were removed.

NRC
FORM 314

Response to
Item #2

NRC FORM 314 (6-2004)
10 CFR 30.36(j)(1); 40.42(j)(1); 70.38(j)(1); and 72.54(j)(1)

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF DISPOSITION OF MATERIALS

APPROVED BY OMB: NO. 3150-0028 EXPIRES: 06/30/2007

LICENSEE NAME AND ADDRESS	LICENSE NUMBER	DOCKET NUMBER
Bayer Corporation 400 Morgan lane West Haven, CT 06516	06-13053-04	030-30292
	LICENSE EXPIRATION DATE 07/31/2014	

A. LICENSE STATUS *(Check the appropriate box)*

☐ This license has expired. ☑ This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

☐ 1. No radioactive materials have ever been procured or possessed by the licensee under this license.

☑ 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner.

☐ a. Transfer of radioactive materials to the licensee listed below:

☑ b. Disposal of radioactive materials:

☐ 1. Directly by the licensee:

☐ 2. By licensed disposal site:

☑ 3. By waste contractor:
Philotechnics, Ltd. 200 Renovare Blvd., Oak Ridge, TN 37830 Phone: (865) 483-1551

☑ c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

☑ 1. A radiation survey was conducted by the licensee. The survey confirms:

☐ a. the absence of licensed radioactive materials

☑ b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.

☑ 2. A copy of the radiation survey results:

☐ a. is attached; or ☐ b. is not attached (Provide explanation); or ☑ c. was forwarded to NRC on: 04/17/2007 (Date)

☐ 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and

☐ a. The results of the latest leak test are attached; and/or ☐ b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE *(Include Area Code)*	E-MAIL ADDRESS
Gary Toczylowski	Director Health Environment and Safety	(203) 812-2339	gary.toczylowski.b@Bayer.com

Mail all future correspondence regarding this license to:
Gary Toczylowski, Health, Environment, and Safety, Bayer Healthcare Pharmaceuticals, 400 Morgan lane, West Haven, CT 06516

C. CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE	SIGNATURE	DATE
GARY TOCZYLOWSKI DIR, HES	Gary Toczylowski	6/22/07

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

140429

NRC FORM 314

Section B, Item 2

Decommissioning activities began in January 2007. All radioactive wastes on site prior to decommissioning activities were prepared for shipping and disposal in December 2006 including fully decayed waste from the "decay in storage" program. Additional waste was generated from decommissioning activities, including waste resulting from decontamination efforts, contaminated items, sources, counting standards, and remaining stock solutions. These wastes were disposed of within the first quarter of 2007. Dry waste and waste containing non-hazardous liquid scintillation cocktails were sent for vitrification at Pacific Eco Solutions in Richmond, Washington. Mixed wastes were sent for treatment and disposal at NSSI in Houston, Texas and Permafix in Gainesville, FL. Fully decayed waste from the "decay in storage" program was sent to Impact Services in Oak Ridge, TN for final surveying and disposal.

CERTIFICATE OF DISPOSITION OF MATERIALS

PLEASE READ THESE INSTRUCTIONS BEFORE COMPLETING NRC FORM 314.

Subpart E of 10 CFR Part 20 establishes the radiological criteria for license terminations/decommissioning of facilities licensed under 10 CFR Parts 30, 40, 50, 60, 61, 70, and 72, as well as other facilities subject to the Commission's jurisdiction under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended.

INSTRUCTIONS

Section B, Item 2.
Licensees should describe the specific radioactive material transfer actions. If radioactive wastes were generated in terminating this license, the licensee should describe the disposal actions taken, including the disposition of low-level radioactive waste, mixed waste, greater-than-Class-C waste, and sealed sources.

Section B, Item 2.a.
The information provided concerning the transfer of radioactive material to another licensee should specify the date of the transfer, the name of the licensee recipient, an individual contact name and telephone number for the licensee recipient, and the recipient's NRC or Agreement State license number.

Section B, Item 2.b.
For disposal of radioactive materials, licensees should describe the specific disposal method or procedure (e.g., decay-in-storage). For those cases when radioactive materials are disposed of by a licensed disposal site or by a waste contractor, the licensee should specify the name, address, and telephone number of the licensed disposal site operator or waste contractor.

Section B, Item 2.c.
"Residual radioactivity," as defined in 10 CFR 20.1003, means radioactivity in 'areas' (structures, materials, soils, etc.) remaining as a result of activities (licensed and unlicensed) under the licensee's control from sources used by the licensee, excluding background radiation. ALARA is defined in 10 CFR 20.1003.

FILE CERTIFICATES AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND CERTIFICATES TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND CERTIFICATES TO:

MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

IF YOU ARE LOCATED IN:

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND CERTIFICATES TO:

MATERIAL RADIATION PROTECTION SECTION
U. S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-8064

NSSI/SOURCES & SERVICES, INC.
P.O. BOX 34042 HOUSTON, TEXAS 77234
PH: (713) 641-0391 www.nssihouston.com FAX: (713) 641-6153

January 08, 2007

Attn: Pete Babin
Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

Dear Mr. Babin:

I am returning the original copy of the uniform hazardous waste manifest used for shipping wastes to our facility for treatment.

In compliance with 40 CFR 264.12(b), NSSI is permitted to receive your waste, has received your waste and will continue to receive future shipment of this waste.

Please retain the manifest in your files for possible review by Regulatory Agencies to show proper disposal.

Your use of NSSI/Recovery Services, Inc. for treatment is appreciated.

Sincerely,

Robert D. Gallagher

Robert D. Gallagher
President

RDG/vla
Ref. #omanfest.frm

CC : **Attn: Annette Hansen**
Philotechnics
201 Renovare Blvd.
Oak Ridge, TN 37830

EXPIRES: 06/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 540 (3-95) U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 2

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [X] YES [ ] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
000906186JJK

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-120506NSSI

CONTACT
Pete Babin

6. CARRIER - Name and Address
R & R Trucking
302 Thunder Road
Duenweg, MO 64841

Truck #:

Trailer #:

CONTACT
Mitch Lunsford

SIGNATURE - Authorized carrier acknowledging waste receipt

SHIPMENT ID NUMBER
0113-120506NSSI

X **COLLECTOR**
PROCESSOR
GENERATOR TYPE (Specify)

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

EPA I.D. NUMBER
MOR000501973

SHIPPING DATE
12/05/2006

TELEPHONE NUMBER (Include Area Code)
866-252-2784

DATE
12-5-06

7. FORM 540 AND 540A PAGE 1 OF 1 PAGE(S)
FORM 541 AND 541A NONE PAGE(S)
FORM 542 AND 542A NONE PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUMBER (Use this number on all continuation pages)
0113-120506NSSI

9. CONSIGNEE - Name and Facility Address
NSSI Recovery Services
Operated By NSSI Recovery Services
5709 Etheridge Street
Houston, TX 77087

CONTACT
Bob Gallagher

TELEPHONE NUMBER (Include Area Code)
(713) 641-0391

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
12/20/04

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE **TITLE** B Poker **DATE** 12-5-06

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S., (CONTAINS ACETONITRILE,TCA), 3, UN2924; PGII HAZ-LABPACK	NA	NA	LIQUID/METAL OXIDES	C-14 ; H-3	2.479000	(0.067000)	NA	4.10 ft^3	06-000968 (206093)
WASTE OXIDIZING SOLID, N.O.S., (CONTAINS THORIUM NITRATE), 5.1, UN1479; PGII; "Limited Quantity Radioactive Material" THORIUM NITRATE	NA	NA	SOLID/METAL OXIDES	TH-232	5.328000	(0.144000)	NA	0.68 ft^3	06-000969 (206109)

FOR CONSIGNEE USE ONLY

This is to inform the generator of the waste shipped on this manifest, that NSSI has the appropriate permits for, and will accept, the waste the generator is shipping.

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER D. BABIN (Print N) Signature 12-05-06 Date

PHILOTECHNICS

January 15, 2007

Mr. Pete Babin
Bayer Corp
400 Morgan Lane
West Haven, CT 06516

Subject: Shipment Receipt Acknowledgement

Dear Mr. Babin,

In accordance with the requirements of 10 CFR 20, Appendix G, Section III, C.1., the attached signed manifest copy is provided as your notice of receipt and acceptance of the radioactive waste materials specified on the manifest. Manifest No. 0113-121406Pe was received at Pacific EcoSolutions (Pecos) on December 6, 2006 and assigned Receipt Number LLR06-141.

This letter is acknowledgement of receipt only. Any manifest discrepancies found during unloading or processing will be reported at a later date.

Please contact me if you have any questions or require additional information. I can be reached at 888-RADWASTe or 865-285-3015 (direct), or via email at tmrichards@philotechnics.com.

Sincerely,

Philotechnics, Ltd.

Tina Richards

Tina Richards

NRC FORM 540 (3-95) U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

SHIPMENT ID NUMBER
0113-121406PE

X COLLECTOR
PROCESSOR
GENERATOR TYPE (Specify)

7. FORM 540 AND 540A PAGE 1 OF 5 PAGE(S)
FORM 541 AND 541A 18 PAGE(S)
FORM 542 AND 542A 1 PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUMBER (Use this number on all continuation pages)
0113-121406PE

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-121406PE

CONTACT
Pete Babin

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

9. CONSIGNEE - Name and Facility Address
Pacific EcoSolutions
Operated By Pacific EcoSolutions
2025 Battelle Blvd
Richland, WA 99352

CONTACT
Larry Morin

TELEPHONE NUMBER (Include Area Code)
(509) 375-5160 x7046

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 66

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [ ] YES [X] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
N/A

6. CARRIER - Name and Address
R & R Trucking
302 Thunder Road
Duenweg, MO 64841

Truck #:
Trailer #:

EPA I.D. NUMBER
MOR000501973

SHIPPING DATE
12/14/2006

CONTACT
Mitch Lunsford

TELEPHONE NUMBER (Include Area Code)
866-252-2784

SIGNATURE - Authorized carrier acknowledging waste receipt
Jason Cheppere

DATE
12-14-06

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
1-2-07

10. CERTIFICATION
This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE Jason Cheppere **TITLE** Broker **DATE** 12-14-06

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	0.074000	(0.002000)	NA	7.80 ft^3	06-001141 (206065)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	0.111000	(0.003000)	NA	7.80 ft^3	06-001142 (206066)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	16.946000	(0.458000)	NA	7.80 ft^3	06-001143 (206067)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	1.961000	(0.053000)	NA	7.80 ft^3	06-001144 (206068)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	2.294000	(0.062000)	NA	7.80 ft^3	06-001145 (206070)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	0.518000	(0.014000)	NA	7.80 ft^3	06-001146 (206071)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	122.914000	(3.322000)	NA	7.80 ft^3	06-001147 (206073)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	19.018000	(0.514000)	NA	7.80 ft^3	06-001148 (206087)

FOR CONSIGNEE USE ONLY

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER P. BABIN (Print Name) — (Signature) — 12-14-06 (Date)

CC

Contains Hazardous Materials

STRAIGHT BILL OF LADING

Original – Not Negotiable

Shipper's No.: 0113-121406IM

Carrier's No.:

Carrier: R&R Trucking

Date: 12/14/06

TO:		**FROM:**	
Consignee:	Impact Services	Shipper:	Philotechnics, Ltd for Bayer Corp
Street:	West Perimeter Road-Bldg. # 1310MP	Street:	400 Morgan Lane
Destination:	Oak Ridge, TN 37830	Origin:	West Haven, CT 06516

Route: Major Interstates & Hiways

Vehicle Number: 1653

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS – PROPER SHIPPING NAME)	Hazard Class	I.D. Number	Weight (Subject to Correction)	Rate	Labels Required (or exemption)
16		Fiber Drums Paper, Plastic, Glass			490 Kgs. / 1,078 (LBS)		NA
		(FULLY DECAYED MATERIAL)-(BSFR)					
		Nuclides: P-33, I-125, S-35 (NA)					
		Total Activity: 0 MBq 0 (mCi)					
		Description/Package ID: (See Attached Inventory)					
10		Metal Drums containing Scintillation Plates-(BSFR)			621 Kgs. / 1,367 (LBS)		NA
		(FULLY DECAYED MATERIAL)					
		Nuclides: P-33, I-125 (NA)					
		Total Activity: 0 MBq 0 (mCi)					
		Description/Package ID: **Drum ID # (See Attached Inventory)**					

This is to certify that the above-named materials are properly classified, described, packaged and labeled and are in proper condition for transportation according to applicable regulations of the Department of Transportation.

Per. Jason Rogers

Placards Requires	None Required	Placards Supplied	[ ] YES	[X] No Furnished by Carrier

Driver Signature:

Shipper:	Philotechnics, Ltd. for Bayer Corp.		Carrier:	R&R Trucking
Per:	Peter Babin		Per:	Jason C Rogers
Date:	12/14/06		Date:	12/14/06
Emergency Response Telephone #: (800) 424-9300 (CHEMTREC)			Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.	

Contains Hazardous Materials

Appendix B

Page 1 of 1
Incoming Shipment Material Weight Determination

For conveyances with one container: Scale Location_____
Scale Serial #_____

Tractor #	Trailer #	Original Container#	IMPACT Container #	Incoming Truck Wt. (lbs)	Outgoing Truck Wt. (lbs)	Container Tare Wt. (lbs)	Material Wt. (lbs)
6140	N	—	A	N/A	N/A	N/A	2412

Health Physics Technician — Date: 12-19-06

For shipments of more than one container: Scale Location_____
Scale Serial #_____

Original Container #	IMPACT Container #	Loaded container Wt (lbs)	Container Tare Wt (lbs)	Material Wt (lbs)
N				
				A

Yard Crew Representative — Date

For smaller packages: Scale Location 1310MP
Scale Serial # 017903

Original Package#	IMPACT Package #	Wt (lbs)	Original Package#	IMPACT Package #	Wt (lbs)	Original Package#	IMPACT Package #	Wt (lbs)
206053	100-1252	67	206047	100-1250	47	206088	100-1263	69
206092	100-1265	57	206096	100-1271	183	206083	100-1261	67
206090	100-1264	69	206095	100-1270	187	206079	100-1258	54
206052	100-1251	76	206094	100-1274	82	206075	100-1256	70
206081	100-1259	53	206097	100-1272	153	206076	100-1257	60
206084	100-1262	70	206012	100-1269	123	206100	100-1275	83
206074	100-1255	70	206098	100-1273	151			
206082	100-1260	69	206007	100-1268	126			
206069	100-1254	73	206002	100-1266	148			
206059	100-1253	74	206-005	100-1267	131			

Yard Crew Representative — Date: 12-19-06

NSSI/SOURCES & SERVICES, INC.
P.O. BOX 34042 HOUSTON, TEXAS 77234
PH: (713) 641-0391 www.nssihouston.com FAX: (713) 641-6153

February 21, 2007

Attn: Pete Babin
Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

Dear Mr. Babin:

I am returning the original copy of the uniform hazardous waste manifest used for shipping wastes to our facility for treatment.

In compliance with 40 CFR 264.12(b), NSSI is permitted to receive your waste, has received your waste and will continue to receive future shipment of this waste.

Please retain the manifest in your files for possible review by Regulatory Agencies to show proper disposal.

Your use of NSSI/Recovery Services, Inc. for treatment is appreciated.

Sincerely,

Robert D. Gallagher

Robert D. Gallagher
President

RDG/via
Ref. #omanfest.frm

CC: Annette Hansen
Philotechnics
201 Renovare Blvd.
Oak Ridge, TN 37830

EXPIRES: 08/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 540 (3-95) U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code): 800-424-9300

ORGANIZATION: CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? [ ] YES [X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 2

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [X] YES [ ] NO
If "Yes", provide Manifest Number ====> 000906241JJK

EPA MANIFEST NUMBER

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

SHIPMENT ID NUMBER: 0113-020107NSSI

X COLLECTOR
PROCESSOR
GENERATOR TYPE (Specify)

USER PERMIT NUMBER

SHIPMENT NUMBER: 0113-020107NSSI

CONTACT: Pete Babin

TELEPHONE NUMBER (Include Area Code): (203) 812-5633

6. CARRIER - Name and Address
Hittman Transport Services
628 GALLAHER ROAD
KINGSTON, TN 37763

Truck #:
Trailer #:

EPA I.D. NUMBER: TND-987783065

SHIPPING DATE: 02/01/2007

CONTACT: Karen Kirby

TELEPHONE NUMBER (Include Area Code): 800-233-9933

SIGNATURE - Authorized carrier acknowledging waste receipt: [signature] DATE: 02/01/07

7. FORM 540 AND 540A — PAGE 1 OF 1 PAGE(S)
FORM 541 AND 541A — NONE PAGE(S)
FORM 542 AND 542A — NONE PAGE(S)
ADDITIONAL INFORMATION — NONE PAGE(S)

8. MANIFEST NUMBER (Use this number on all continuation pages): 0113-020107NSSI

9. CONSIGNEE - Name and Facility Address
NSSI Recovery Services
Operated By NSSI Recovery Services
5709 Etheridge Street
Houston, TX 77087

CONTACT: Bob Gallagher

TELEPHONE NUMBER (Include Area Code): (713) 641-0391

SIGNATURE - Authorized consignee acknowledging waste receipt: [signature] DATE: 2/16/07

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE: [signature] TITLE: Philotechnics Shipper DATE: 02/01/07

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS TOLUENE), 3, UN1993; PGII HAZ-LSV	NA	NA	LIQUID/OXIDES	C-14 ; H-3	0.740000	(0.020000)	NA	4.10 ft³ 145.00000 lb	07-000239 (207017)
WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS TOLUENE), 3, UN1993; PGII HAZ-LABPACK	NA	NA	LIQUID/OXIDES	C-14 ; P-33	11.951000	(0.323000)	NA	4.10 ft³ 150.00000 lb	07-000240 (207012)

FOR CONSIGNEE USE ONLY

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER D. BABIN (Print Name) [signature] (Signature) 02/01/07 (Date)

PHILOTECHNICS

March 12, 2007

Mr. Pete Babin
Bayer Healthcare
400 Morgan Lane
Research Safety Dept.
West Haven, CT 06516-2000CT

Subject: Shipment Receipt Acknowledgement

Dear Pete:

In accordance with the requirements of 10 CFR 20, Appendix G, Section III, C.1., the attached signed manifest copy is provided as your notice of receipt and acceptance of the radioactive waste materials specified on the manifest. Manifest No. 0113-020107Pe was received at Pacific EcoSolutions (Pecos) on February 20, 2007 and assigned Receipt Number LLR07-0016.

This letter is acknowledgement of receipt only. Any manifest discrepancies found during unloading or processing will be reported at a later date.

Please contact me if you have any questions or require additional information. I can be reached at 888-RADWASTe or 865-285-3006 (direct), or via email at pseiber@philotechnics.com.

Sincerely,

Philotechnics, Ltd.

Patty Seiber

Patty Seiber
Customer Service

UR02-076

NRC FORM 540 (3-95) U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 29

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [ ] YES [X] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
N/A

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-020107PE

CONTACT
Pete Babin

6. CARRIER - Name and Address
Hittman Transport Services
628 GALLAHER ROAD
KINGSTON, TN 37763

Truck #:

Trailer #:

CONTACT
Karen Kirby

SIGNATURE - Authorized carrier acknowledging waste receipt
Truck #6002

SHIPMENT ID NUMBER
0113-020107PE

X COLLECTOR
PROCESSOR
GENERATOR TYPE (Specify)

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

EPA I.D. NUMBER
TND-987783065

SHIPPING DATE
02/01/2007

TELEPHONE NUMBER (Include Area Code)
800-233-9933

DATE
02/01/07

7. FORM 540 AND 540A — PAGE 1 OF 3 PAGE(S)
FORM 541 AND 541A — 8 PAGE(S)
FORM 542 AND 542A — 1 PAGE(S)
ADDITIONAL INFORMATION — NONE PAGE(S)

8. MANIFEST NUMBER (Use this number on all continuation pages)
0113-020107PE

9. CONSIGNEE - Name and Facility Address
Pacific EcoSolutions
Operated By Pacific EcoSolutions
2025 Battelle Blvd
Richland, WA 99352

JSF
UN
0/R

CONTACT
Larry Morin

TELEPHONE NUMBER (Include Area Code)
(509) 375-5160 x7046

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
2/2/07 2-20-07

10. CERTIFICATION
This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE

TITLE
Philotechnics Shipper

DATE
02/01/07

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT NON-HAZ LSV	NA	NA	LIQUID/OXIDES	C-14 ; H-3	0.296000	(0.008000)	NA	4.10 ft³ 168.00000 lb	07-000186 (207002)
Non-Radioactive per DOT NON-HAZ LSV	NA	NA	LIQUID/OXIDES	C-14 ; H-3	0.518000	(0.014000)	NA	4.10 ft³ 154.00000 lb	07-000187 (207014)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/OXIDES	C-14 ; H-3 ; P-33 ; S-35	287.046000	(7.758000)	NA	7.50 ft³ 147.00000 lb	07-000188 (207011)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	H-3 ; P-33 ; S-35	370.296000	(10.008000)	NA	7.80 ft³ 62.00000 lb	07-000189 (206115)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	H-3 ; P-33	0.740000	(0.020000)	NA	7.80 ft³ 47.00000 lb	07-000190 (206116)
Radioactive material, excepted package-limited quantity of material, 7, UN2910 DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	687.275000	(18.575000)	NA	7.80 ft³ 70.00000 lb	07-000191 (206117)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33	235.949000	(6.377000)	NA	7.80 ft³ 95.00000 lb	07-000192 (206118)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	H-3 ; I-125 ; P-33 ; S-35	319.754000	(8.642000)	NA	7.80 ft³ 59.00000 lb	07-000193 (206119)

FOR CONSIGNEE USE ONLY
2nd Carrier: R&R Trucking
302 Thunderer Rd
Duenweg, MO 64841
Driver: Date: 2/14/06
Truck #6002

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

Peter D. Babin — Print Name
Signature
02/01/07 — Date

NRC FORM 540 (3-95) U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 3

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [X] YES [ ] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
000906270JJK

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-032307PF

CONTACT
Pete Babin

6. CARRIER - Name and Address
Tri State Motor Transit
8141 East 7th Street
Joplin, MO 64801

Truck #:
Trailer #:

CONTACT
Cassie Gardner

SIGNATURE - Authorized carrier acknowledging waste receipt

SHIPMENT ID NUMBER
0113-032307PF

X COLLECTOR
PROCESSOR
GENERATOR TYPE (Specify)

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

EPA I.D. NUMBER
MOD095038998

SHIPPING DATE
03/23/2007

TELEPHONE NUMBER (Include Area Code)
800-234-8768

DATE
3-23-07

7. FORM 540 AND 540A PAGE 1 OF 1 PAGE(S)
FORM 541 AND 541A 2 PAGE(S)
FORM 542 AND 542A 1 PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
0113-0323077F

9. CONSIGNEE - Name and Facility Address
Perma-Fix of Florida
Operated By Perma-Fix of Florida
1940 NW 67th Place
Gainesville, FL 32606

CONTACT
Raymond Whittle

TELEPHONE NUMBER (Include Area Code)
(800) 365-6066

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
3/26/07

10. CERTIFICATION
This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE Donald E. Tadlo
TITLE Shipper
DATE 3.23.07

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS ETHANOL), 3, UN1993; PGII HAZ-LABPACK	NA	NA	LIQUID/OXIDES	C-14 ; H-3	41.440000	(1.120000)	NA	0.68 ft^3 22.00000 lb	07-001486 (207020)
WASTE OXIDIZING SOLID, N.O.S., (CONTAINS NITRATES), 5.1, (7), UN1479; PGII; "Limited Quantity Radioactive Material" URANYL NITRATE SOLID	NA	NA	SOLID/METAL OXIDES	U-238	0.943500	(0.025500)	NA	0.68 ft^3 13.00000 lb	07-001487 (207021)
WASTE OXIDIZING LIQUID, N.O.S., (CONTAINS NITRATES), 5.1, UN3139; PGII URANIUM COMPOUNDS	NA	NA	LIQUID/OXIDES	U-238	0.011100	(0.000300)	NA	0.68 ft^3 20.00000 lb	07-001488 (207022)

FOR CONSIGNEE USE ONLY

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER D. BABIN — Print Name
Signature
3-23-07 — Date

Sealed Source Disposal Information

Response to Item #3

Agilent Technologies

2850 Centerville Road
Wilmington, DE 19808

Bayer Corp
Pharmaceuticals Division
Attn:Peter Babin
400 Morgan Lane
West Haven CT 06516

3/1/07

Deleted: ¶
Date:¶

Reference: **Receipt of Radioactive Devices**

To Whom It May Concern:

This letter is to notify you that the Electron Capture Detectors listed below have been returned to, and are in possession of, Agilent Technologies Inc., 2850 Centerville Road, Wilmington, DE 19808, USA for further disposition.

Serial Number	Model Number	Date Received	Local Visa Number
K1461	G1533-69576	3/1/07	N/A

Please understand that this letter does not relieve you of your responsibility to notify either your state nuclear regulatory agency (if you reside in an Agreement State) or the Nuclear Regulatory Commission (if you do not) of the transfer in accordance with 10 CFR 31.5 (c) (8) (i) and (ii). If you are notifying the NRC of the transfer of the device, please note the following complete mailing address:

Director of Nuclear Material Safety and Safeguards
ATTN: GLTS
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Please contact your local Agilent Technologies, Inc. service representative if you have any questions.

Regards,

David S. Bennett
Radiation Safety Office, U.S. Operations

Document Owner: David S. Bennett
Revision Date: 12/28/05

Bayer HealthCare
Pharmaceuticals

February 27, 2007

ECD Laboratory
Agilent Technologies, Inc.
2850 Centerville Road
Wilmington, DE 19808-1610

To Whom it may concern,

I am sending you this 15 mCi Ni-63 source for disposal. It is a Hewlett Packard G1533A electron capture detector, serial number K1461. The $250 disposal charge will be paid with a Bayer Mastercard. The credit card information was given to Sue Monger.

Please let me know if you require any additional information.

Sincerely,

Peter D. Babin
Research Safety Specialist

Bayer Pharmaceuticals
Corporation
400 Morgan Lane
West Haven, CT 06516-4175

Phone: 203 812-2000
Fax: 203 812-2299

peter.babin.b@bayer.com

FedEx Express **US Airbill**

FedEx Tracking Number 8507 6484 0388

1 From *Please print and press hard.*

Date 2-27-07 Sender's FedEx Account Number 0065-0001-3

's PETER BABIN Phone (203) 812-5633

Company BAYER HEALTHCARE LLC

Address 400 MORGAN LN Dept./Floor/Suite/Room

City WEST HAVEN State CT ZIP 06516-4140

2 Your Internal Billing Reference First 24 characters will appear on invoice. RADIOACTIVE MATERIALS EXCEPTED PACKAGE UN 2911

3 To

Recipient's Name ECD LABORATORY Phone ( )

Company AGILENT TECHNOLOGIES, INC.

Recipient's Address 2850 CENTERVILLE ROAD

annot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

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(** To most locations)

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Tracking number	850764840388	**Reference**	RADIDACTIVE MATERIALS EX
Signed for by	J.BUSH		
Ship date	Feb 27, 2007	**Delivered to**	Shipping/Receiving
Delivery date	Mar 1, 2007 8:57 AM	**Service type**	FedEx 2Day Service
		Weight	5.0 lbs.
Status	Delivered		

Date/Time		Activity	Location	Details
Mar 1, 2007	8:57 AM	**Delivered**		
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	7:41 AM	At local FedEx facility	NEW CASTLE, DE	
Feb 28, 2007	10:18 PM	At dest sort facility	LINWOOD, PA	
	6:47 PM	Departed FedEx location	NEWARK, NJ	
Feb 27, 2007	7:46 PM	Left origin	NORTH HAVEN, CT	
	5:14 PM	Picked up	NORTH HAVEN, CT	

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Special Survey Calculations 2/2/2007

Item: Leak Test - Ni-63 ECD Hewlett Packard SN K1461
Contact: Christine Silverstrim
Where: RA-251
Printout: 2/2/2007 10:48

	Channel A (3H)	Channel B (14C)	Channel C (33P)
Critical Count (cpm)	65	70	87
MDA (dpm)	44	19	20
Efficiency	0.36	0.89	0.94
BKG (cpm)	49	53	68

yes no
✓) ( ) All wipes are below critical counts, and therefore are 0 uCi/ 100 cm^2. (If no, please look below.)

✓) ( ) All wipes are below action level (100 dpm/ 100 cm^2) and NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

Ni-63 Counting Efficiency <> 70%

	ITEM	COUNTS PER MINUTE A	B	C	DPM A	B	C
Hewlett Packard K1461	Housing	16	24	34	<MDA	<MDA	<MDA
	Exit	14	20	29	<MDA	<MDA	<MDA
	Entrance	9	18	20	<MDA	<MDA	<MDA

All Sample counts are less than Critical count.

Signed:

Date: 2-2-07

Ni-63 ECD LEAK TEST HP SN K1461

Protocol #:16 Name:RADSAFETY I 02-Feb-2007 10:48
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 1.00 QIP = tSIE ES Terminator = Count
SWIPE TEST RESULTS

S#	TIME	CPMA	CPMB	CPMC	tSIE	FLAG	
1	1.00	16.00	24.00	34.00	512.	-	HOUSING
2	1.00	14.00	20.00	29.00	529.	-	EXIT
3	1.00	9.00	18.00	20.00	519.	-	ENTRANCE
(15 missing vials)							
19	1.00	127949.	128794.	128800.	1010	-	3H } STANDARDS
20	1.00	25702.8	131546.	132616.	1062	-	36Cl } STANDARDS
21	1.00	15.00	21.00	28.00	870.	-	BKG

Past Decommissioning Projects

Response to Item #5

Final Status Survey Report

Document No. 82A9561

Final Status Survey Report of Building 24 and Building 31

Prepared For:
Bayer Pharmaceuticals Corporation

400 Morgan Lane
West Haven, CT 06516

April 2005

SCIENTECH

143 West Street • New Milford, CT 06776

FINAL STATUS SURVEY REPORT OF SELECTED AREAS OF BUILDING 24 AND BUILDING 31

CONTROLLED COPY No. 642

Prepared for:
Bayer Pharmaceuticals Corporation
400 Morgan Lane
West Haven, CT 06516

Prepared by:
Scientech, LLC
143 West Street
New Milford, CT 06776

April 2005

Project Application	*Prepared By*	*Date*
23562	Dwight Vann, PE	4/27/05

APPROVALS:

Title	*Signature*	*Date*
Radiological Engineer	Patricia M. López	4/27/05
Corporate RSO	Kenneth M. Kasper, CHP, CIH	4/27/05
Operations Manager	Lee G. Penney	4/27/05

REVISION LOG

Revision Number	Affected Pages	CRA Number	Approval

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APPENDICES

ABBREVIATIONS/ACRONYMS

Bayer	Bayer Pharmaceuticals Corporation
DAW	Dry Active Waste
FSS	Final Status Survey
LSC	Liquid Scintillation Counter
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MDC	Minimum Detectable Concentration
Scientech	Scientech, LLC

1.0 SCOPE OF WORK

Bayer Pharmaceuticals Corporation (Bayer) has ceased radiological operations in selected areas of B-24 and B-31 located at their West Haven, Connecticut site. The licensable materials used at these two buildings were tritium (hydrogen-3), sulfur-35, phosphorous-33, iodine-125 and carbon-14. Scientech, LLC (Scientech) was contracted to perform the Final Status Survey (FSS) of selected laboratories and rooms where radioactive materials were no longer in use. The following general tasks were implemented:

- Mobilization of personnel and equipment to West Haven, CT
- Decontamination of radiologically contaminated surfaces
- Performance of a FSS
- Demobilization upon completion of site work

Project activities commenced on March 16, 2005 and were completed on March 25, 2005. All FSS results were documented and are presented in this report.

2.0 FACILITY DESCRIPTION

A topographical map of the Bayer facility is shown in Figure 2-1. Maps of the floor plans are included as Figure 2-2, 2-3, 2-4 and 2-5.

Building 24 (60,000 ft^2), Building 31 (58,000 ft^2) and Room 103A in Building A-21 became radiologically contaminated as a result of pharmaceutical research and development work conducted. Sections 2.1 through 2.5 lists the areas included in the decontamination and survey work.

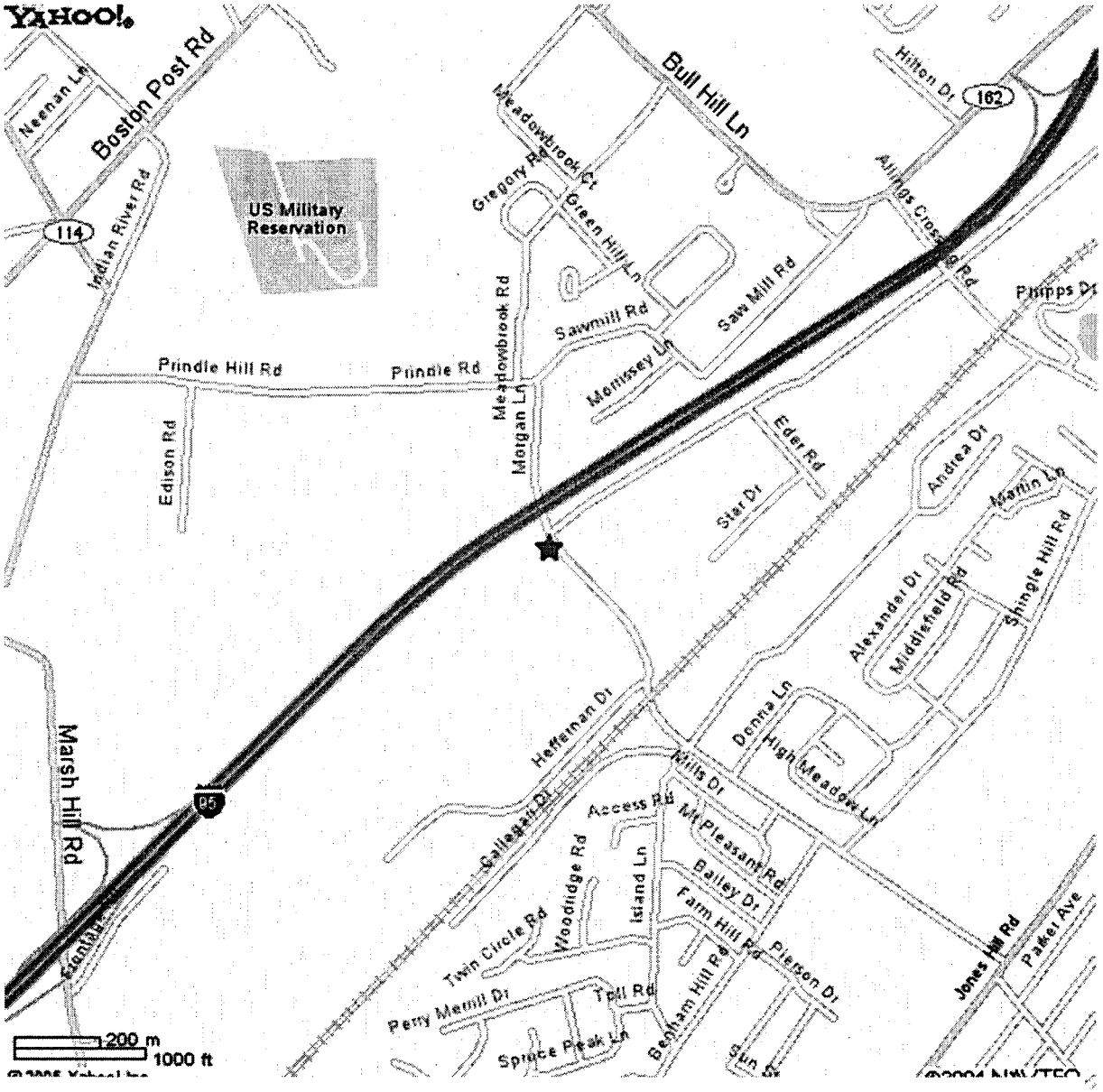


FIGURE 2-1
MAP OF THE LOCATION OF THE BAYER FACILITY IN WEST HAVEN, CT

FIGURE 2-2
MAP OF BUILDING 24, FIRST FLOOR PLAN

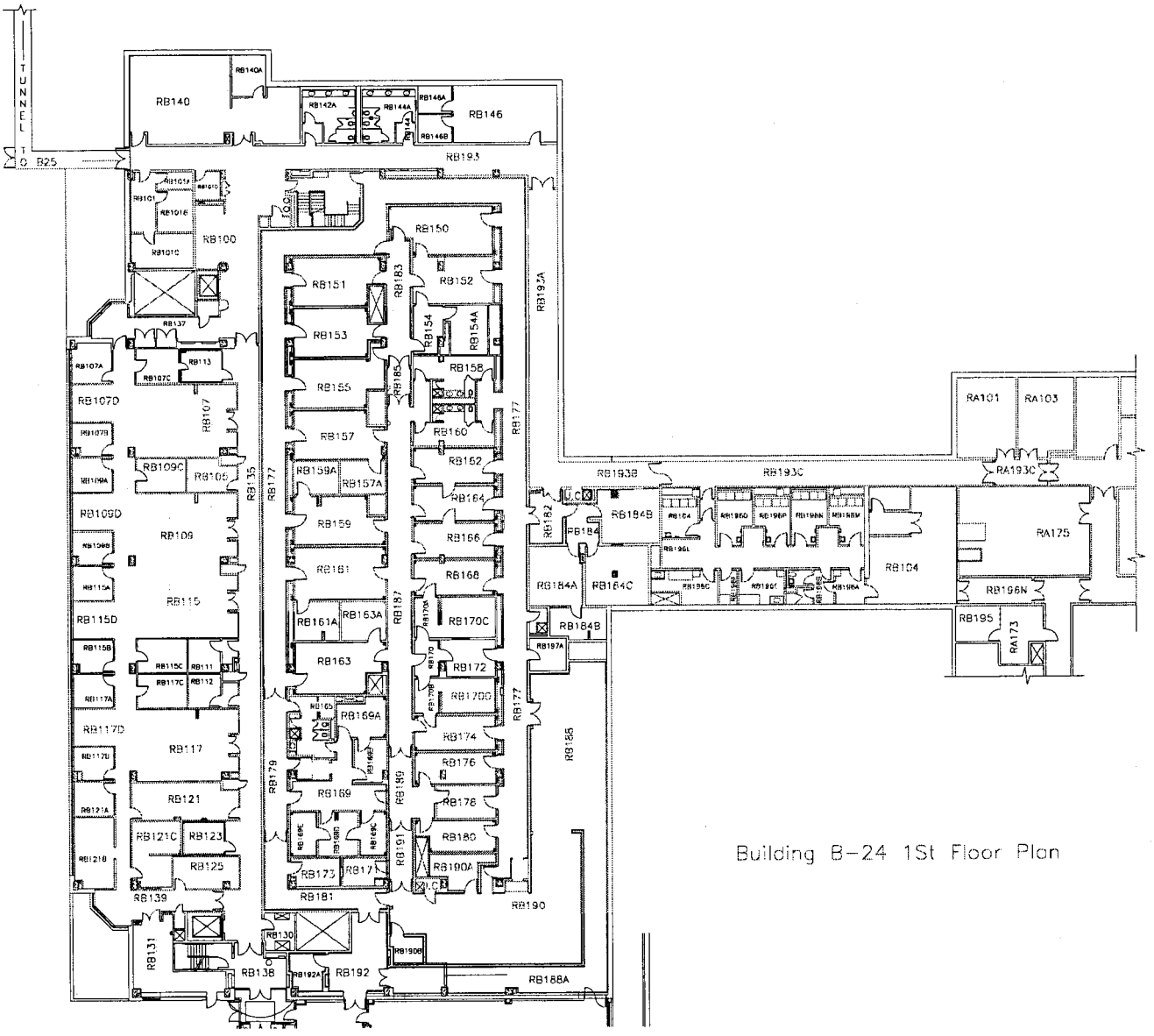


FIGURE 2-3
MAP OF BUILDING 24, SECOND FLOOR PLAN

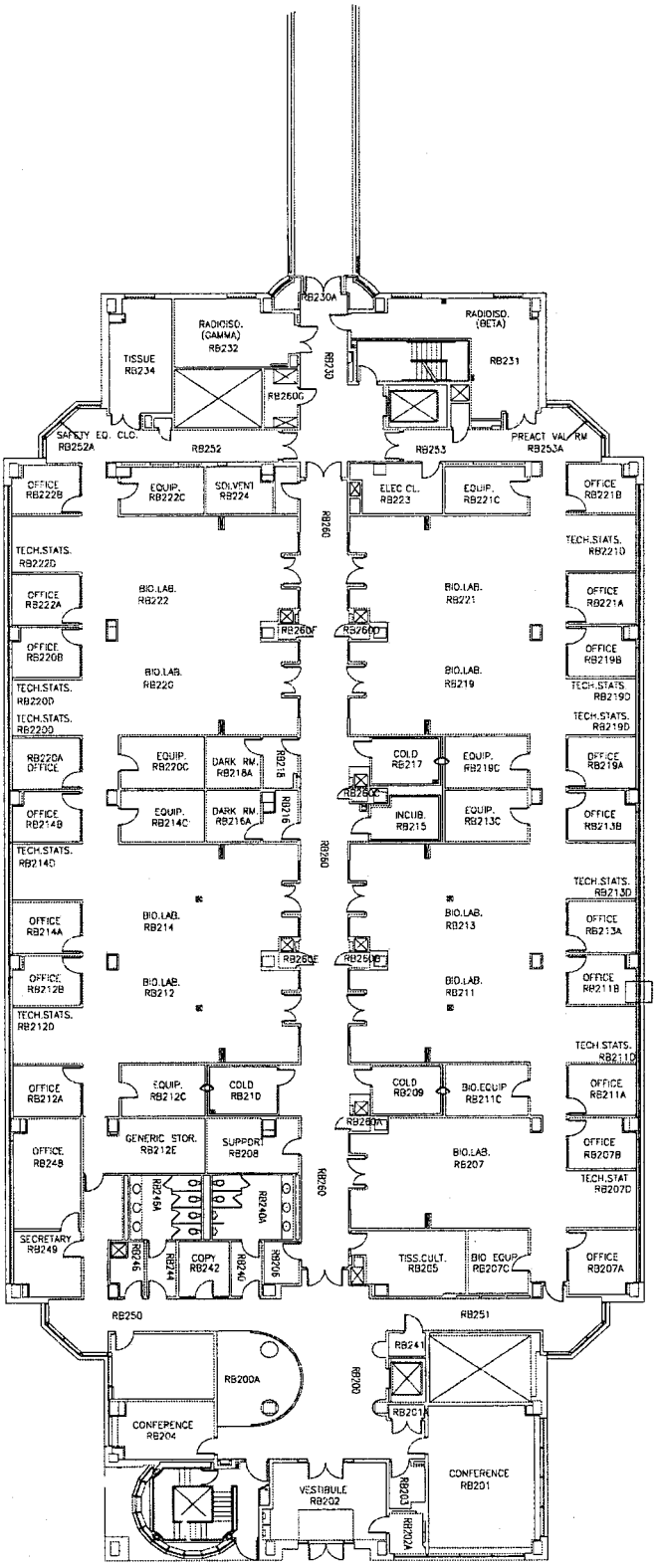
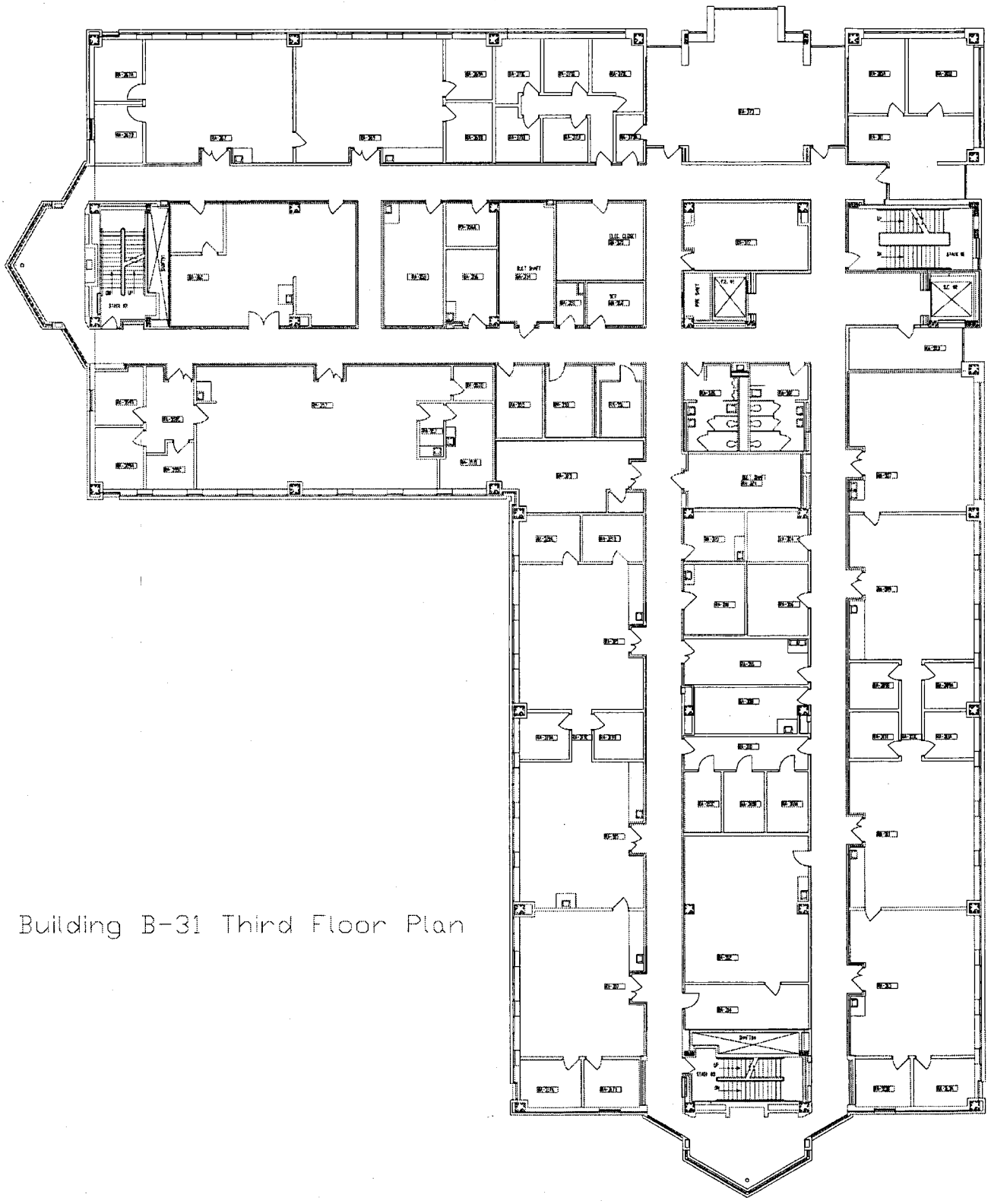


FIGURE 2-4
MAP OF BUILDING 31, SECOND FLOOR PLAN

FIGURE 2-5
MAP OF BUILDING 31, THIRD FLOOR PLAN



2.1 BUILDING 24, FIRST FLOOR

The first floor of Building 24 contained the following radiologically affected (Class 1) areas:

- 107
- 109
- 109C
- 115
- 115C
- 117
- 121
- 123

2.2 BUILDING 24, SECOND FLOOR

The first floor of Building 24 contained the following radiologically affected (Class 1) areas:

- 210
- 212
- 212C
- 214
- 214C
- 220
- 220C
- 221C
- 222
- 222C
- 234

The hallway of the second floor was surveyed as an unaffected (Class 3) area.

2.3 BUILDING 31, SECOND FLOOR

The second floor of Building 31 contained the following radiologically affected (Class 1) areas:

- RA205
- RA257
- RA259
- RA264

2.4 BUILDING 31, THIRD FLOOR

The third floor of Building 31 contained the following radiologically affected (Class 1) areas:

- RA306
- RA309
- RA311
- RA316
- RA317
- RA319
- RA321
- RA369

2.5 BUILDING A-21, ROOM 103A

Room 103A in Building A-21 was the only radiologically affected (Class 1) area in the building.

3.0 RELEASE CRITERIA

The isotopes used at the facility included tritium (hydrogen-3), sulfur-35, phosphorous-33, iodine-125 and carbon-14. All routinely and readily accessible areas were surveyed to verify compliance with the release limits specified in NRC Regulatory Guide 1.86[1], and are also specified in NUREG-1556, Volume 11[2], which is directly applicable to the license at this facility. The specific release limits used for the decommissioning for the isotopes of concern were as follows:

- Average - 5,000 dpm/100 cm^2 total surface contamination
- Maximum - 15,000 dpm/100 cm^2 total surface contamination
- Removable - 1,000 dpm/100 cm^2 removable surface contamination

All equipment removed from areas by Scientech were surveyed and released in accordance with the release criteria.

4.0 DECOMMISSIONING ACTIVITIES

The following sections describe the D&D activities performed onsite.

4.1 SITE MOBILIZATION AND GENERAL EMPLOYEE PREPARATATION

Site mobilization included establishing a field operations office, an equipment staging area, a counting room and radiological control points. Bayer provided Scientech personnel with a

[1] NRC Regulatory Guide 1.86, "Termination of Operating Licenses for Nuclear Reactors, Regulatory Guide." June 1974
[2] NRC Regulatory Guide 1556, Volume 11, "Consolidated Guidance About Materials Licenses Program-Specific Guidance About Licenses of Broad Scope, April 1999.

site-specific health and safety orientation and a familiarization tour of the facility. In addition, all workers were required to review Scientech's Radiation Worker training.

4.2 RADIOLOGICAL DECONTAMINATION

Radiological decontamination was required in various areas. Table 4-1 lists the items and the method of decontamination used.

TABLE 4-1
DESCRIPTION OF DECONTAMINATION OR DISPOSAL ACTIVITIES

Area/Room	Description	Decontamination/ Disposal Approach
Building 24 Room 212	Removable contamination above the release criteria (1,026 dpm/100cm^2) for tritium was discovered on the upper portion of the door to the lab. Fixed contamination through direct measurement above the release criteria (9,004 dpm/100cm^2) was found on the sink drain of a marked rad disposal sink in location FE6.	The door was wiped down and resurveyed. Post decon activity for the upper door was 20 dpm/100cm^2. Bayer was notified of the contaminated sink and it was left intact at their direction.
Building 24 Room 214	Tritium contamination was discovered at 4 locations on the floor. The contamination was as follows: Location — Activity (dpm/100cm^2) FC2 — 2,221 FG5 — 1,989 FH2 — 9,144 FE6* — 7,770	The 3 spots on the floor were wiped down and resurveyed. The post decon results were as follows: Location — Activity (dpm/100cm^2) FC2 — 32 FG5 — 30 FH2 — 21 FE6 — 15
Building 24 Room 214C	Removable tritium contamination above the release criteria (1,281 dpm/100cm^2) was found in the sink trap in room 214C.	The accessible portions of the sink were wiped down. The sink trap was removed but the drain was left intact at the direction of Bayer. Post decon activity for the sink is 19 dpm/100cm^2.
Building 24 Room 222C	Removable tritium contamination above the release criteria (1,219 dpm/100cm^2) was found in the sink trap in room 222C.	The accessible portions of the sink were wiped down. The sink trap was removed but the drain was left intact at the direction of Bayer. Post decon activity for the sink is 28 dpm/100cm^2.

* Note: Due to direct measurement limitations, tritium fixed levels are assumed to be 10 times greater than the removable contamination level (10% removable fraction).

4.3 WASTE PACKAGING AND DISPOSAL

The sink traps and the dry active waste (DAW) generated during the final survey activities were turned over to Bayer for incorporation into their waste stream.

4.4 FINAL STATUS SURVEY

A FSS was performed in order to verify the facility's compliance with the release criteria as specified in Section 3.0. The specific intent of the FSS was to show that:

1. Surface activity levels (total of fixed and removable activity) were at or below the release criteria.

2. Reasonable efforts were made to identify, evaluate and remove residual contamination even if the contamination existed below the release criteria.

3. Exposure rates were consistent with natural background.

Survey planning and procedures followed NRC requirements and applicable Scientech procedures. A detailed discussion of the methodology used to perform the FSS is provided in Section 5.0.

4.5 SITE HOUSEKEEPING AND DEMOBILIZATION

Once the FSS confirmed that items and areas were clean, all "Radioactive Material" labels were identified and removed. The Site Supervisor verified the removal of the labels on the final walk down with Bayer.

All Scientech equipment used in the decommissioning project was surveyed, decontaminated and released according to the release criteria. Demobilization served to terminate onsite operations in an efficient and safe manner and included:

- General housekeeping cleanup,
- Removal of obsolete signage,
- Notification and proper oversight for the termination of site services, and
- Verification of the safe and secure final site condition.

5.0 FINAL STATUS SURVEY APPROACH

The following text describes the FSS methodology used to ensure that the Bayer property within the scope of this project met the identified release criteria. Areas of known previous radioactive material use were identified as Class 1 areas (See Section 2.0). All other areas within the scope of this project were identified as Class 3 areas. At any time, if a Class 3 area was determined to contain activity at or above the release criteria, the area would have been reclassified as a Class 1 area and surveyed as such.

Note: In the survey data sheets, Class 1 areas are identified as "Affected" and Class 3 areas as "Unaffected."

5.1 FINAL STATUS SURVEY OF CLASS 1 AREAS

For the tasks identified by Bayer, a comprehensive MARSSIM-based survey was not deemed to be necessary by the NRC. Scientech, however, used the same foundation as that used for MARSSIM based surveys, which included the use of varying survey intensity in areas based upon the likelihood of finding contamination. Scientech combined these and other key MARSSIM attributes with the simplified survey approach as identified in NUREG-1757[3], Volume 1, which is quoted below.

"At a minimum, the licensee's termination survey should consist of the following:

- *100% scanning of all surfaces in the area of the facility where licensed material was used or stored;*
- *Evaluations for total and removable radioactive material at each area exhibiting elevated radiation levels, or at a frequency of one wipe comprising 100 cm^2 per 300 ft^2 (20 m^2); and*
- *Evaluations of radiation levels at one meter above surfaces.*

Particular attention should be afforded any drains, air vents, or other fixtures or equipment that may have become contaminated during licensed material use. This is especially significant in situations where renovations have occurred and potentially contaminated areas may be inaccessible under current conditions."

Although, the MARSSIM survey unit classification process was used in the Bayer FSS, the survey frequency used was in accordance with NUREG-1757. Each radiologically affected room was identified as its own Class 1 survey unit. To perform the final survey of the Class 1 areas, the floors were divided into grids to facilitate scanning and smear measurements. Surface contamination scans were performed on 100% of the floor areas and lower walls (below two meters) within the survey units and on work bench surfaces. The upper walls, ceilings, and overhead surfaces were treated as unaffected areas since they were not

[3] NRC Regulatory Guide, NUREG-1757 Volume 1, "Consolidated NMSS Decommissioning Guidance," September 2002.

suspected of being contaminated, and were surveyed to lesser extent than Class 1 areas. A minimum of 2 points were collected from the ceilings and upper walls of each room.

Smear measurements were taken at a minimum rate identified in NUREG-1757 and were directed at areas that indicated the highest levels of radioactivity during the scanning process. At a minimum, twelve points were taken per survey unit (room). Radiation measurements taken at one meter above floor surfaces were documented at several locations within the survey units. Drawers, drawer handles, utility spigots, cup sinks, drying racks and fixed laboratory furniture were surveyed to assure the release criteria was met.

5.2 FINAL STATUS SURVEY OF CLASS 3 AREAS

The Class 3 areas, included all remaining areas that were not defined as having known historical use of radiological materials. The hallway adjoining the Class 1 areas in Building 24 on the 2nd floor were designated a Class 3 area.

In Class 3 laboratories and work areas, radiological surveys were conducted to include smears, scan measurements and gamma dose rates at a rate of 10% of the process identified for Class 1 areas. As such, scans of surfaces in these areas covered a minimum of 10% of the floor and bench top surface area. Smears were taken at a rate of at least one for every 10m^2. In administrative and other general use area smears, scan measurements and gamma dose rates measurements were taken at locations where contamination could potentially accumulate.

5.3 ADDITIONAL SURVEYS

Although not required for a MARSSIM-based FSS, additional measurements were also performed at locations that were selected using professional judgment based on unusual appearance, locations adjacent to known contaminated areas, areas considered suspect from historical information provided by Bayer, and areas likely to accumulate residual radioactivity. These surveys included the following areas:

Vacuum System- (vacuum line valves and receiver tank/compressor and filter media for central vacuum system)- Removable contamination samples were obtained by disassembly of the vacuum valve suction heads in all workstations and fume hoods and swabbing of the inside of the valve bodies. Vacuum line surveys included 100% of the Class 1 area vacuum lines and 10% in Class 3 area vacuum lines.

Laboratory Waste Sewer Line- Total surface contamination measurements were used to evaluate sink traps and sink surfaces. Swipes were used to collect samples from sink traps for determination of removable contamination. Surveys included 100% of the Class 1 area sink traps and 10% in Class 3 area sink traps.

Fume Hoods- Surface scans were performed over 100% of the fume hood interior surfaces and removable contamination measurements were taken behind the hood baffles and inside the exhaust ducts. Surveys included 100% of the Class 1 area fume hoods and 10% in Class 3 area fume hood. In addition, all exhaust stacks were surveyed.

5.4 FINAL STATUS SURVEY MEASUREMENTS

Daily Instrument and Background Measurements- Daily instrument response checks were performed according to Scientech Document No. 82A8008, "General Radiological Survey and Air Sampling Procedure" (Scientech 2002). These measurements, made using NIST traceable radioactive check sources, were recorded in an instrument control log and checked twice a day (in the morning and mid-day) against a predetermined acceptable response range to ensure that instruments were operating properly.

Daily background measurements were recorded from the Scientech Laboratory. If the room background differed greatly from the Laboratory background, an area-specific background was used. Area-specific backgrounds are indicated on the survey data sheets. Background measurements were subtracted from survey unit measurements to estimate the net surface activity. Appendix B contains the instrument response checks and daily background data sheets.

Scans- Survey units received scans of the shelving, cabinet facing, drawer internals, bench tops, floors, fume hoods, and lower walls for total beta activity using closed-window, gas flow proportional detectors.

Fixed-Point Contamination Measurements- Survey units received the same number of fixed-point measurements using a random-start triangular grid pattern. Fixed-point measurement locations on upper walls and ceilings were randomly selected or selected by the Site Supervisor based on professional judgment. Bayer directed the use of a surface efficiency value of 0.50 for evaluating low-energy beta surface activity levels from fixed-point measurements and scans. The instrument efficiency for C-14 was used for calculating activity levels from counts per minute.

Removable Contamination Measurements- In Class 3 areas, a removable contamination sample (smear) was collected at each fixed-point measurement. Because one cannot scan for tritium due to technical limitations of tritium detectors, Class 1 survey units received removable tritium contamination measurements at a rate of one per $1m^2$. Each smear was analyzed using the onsite liquid scintillation counter (LSC), set to discriminate using two energy channels: tritium and carbon-14. LSC results are reported directly (without any conversion) in the survey documentation. For purposes of this survey, the fixed levels of tritium contamination are determined using a 10% removable fraction in accordance with (ISO) 7503-3, 1996, *Evaluation of surface contamination, Isomeric transition and electron capture emitters, low-energy beta emitters.* Fixed tritium contamination levels can be determined by multiplying the removable tritium results by a factor of ten.

Gamma Dose Rates- Measurements were taken at one meter above floor surfaces at each fixed-point and removable contamination measurement location.

6.0 INSTRUMENTATION

6.1 SURVEY INSTRUMENTATION

The instruments described below were utilized for the survey and release of materials and equipment, and for personnel monitoring activities. All instruments were calibrated using NIST traceable standards according to Scientech Document No. 82A8034, "Calibration and Maintenance of Survey Instrumentation Procedure" (Scientech 2002). Appendix B contains a list of the instruments used and their efficiencies, probe areas and calibration data. Calibration certificates are also provided for every survey instrument used during the project. The following instruments were used on this project:

Total Surface Activity Measurements - Direct surface activity measurements for total beta contamination were taken using a Ludlum 2221 with either a Ludlum 43-20, which has a 181 cm^2 active surface area, or 43-68 gas flow proportional detector that has a 126 cm^2 active surface area.

Removable Surface Activity Measurements - The removable contamination swipes were counted for 30 seconds or one minute using Beckman LS6500 LSC calibrated and maintained by Bayer. Each swipe was analyzed at two energy channels for tritium and carbon-14. A 10-minute background count rate was collected during the sample run and was used to perform an internal calculation of the activity (in dpm/100cm^2).

Surface Scans- Scans for total beta contamination were performed with either a Ludlum 2220 or 2221 using a Ludlum 43-68, 43-20 or 43-37 gas flow proportional detector. The 43-37 detector probe is a large area floor monitor with a 525 cm^2 active surface area with a Mylar film window. The 43-68 detector probe 126 cm^2, while the 43-20 is 181 cm^2. Scans for total gamma contamination were performed with a Ludlum 44-3 low-energy gamma scintillator connected to either a Ludlum 2221 or Model 3 meter.

Scanning speeds were approximately half a detector-width per second resulting in an observation interval of about 2 seconds for the first phase of the scan. For the second phase of the scan, the verification phase, the observation interval was about 5 seconds. This means that the active portion of the detector would be over a point source for at least 1 second during the initial scan and that, if an elevated area was suspected, the detector was then held in place over the source for about 5 seconds to verify the increase in count rate.

Gamma Dose Rates - Dose rates were taken at one meter above floor surfaces using a Ludlum Model 19 microRem meter.

6.2 MDC CALCULATIONS

MDC for Fixed-Point and Removable Contamination Measurements- Since the background count times and the sample count times differed, the following formula for calculating the MDC was used (derived from Strom and Stansbury 1992):

$$MDC = \frac{3 + 3.29\sqrt{R_B t_S\left(1 + \frac{t_S}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_S)\left(\frac{a}{100cm^2}\right)}$$

Where,

R_B = Background rate

t_S = Sample counting time (minutes)

t_B = Background counting time (minutes)

a = Active probe area or sample area (cm^2)

ε_i = 2π instrument efficiency (unitless). This efficiency is the ratio between the instrument net reading and the surface emission rate of a source. The formula noted above addresses efficiency in terms of 2π emissions while instrument calibration vendors normally report instrument efficiency in terms of 4π. The available effective values for 4π emissions were doubled to estimate effective values for 2π emissions.

ε_s = Surface efficiency (unitless). This efficiency is defined as the ratio of the number of particles emerging from the front face of a source and those emitted from the source per unit time. This factor takes into account decreased particle emission due to self-absorption losses as well as increased emissions due to backscatter effects. It does not apply to LSC measurements. Since the instrument efficiency for carbon-14 was the most limiting of the isotopes of concern, the carbon-14 efficiency for the total surface activity survey instrument was used to determine the MDC and total direct beta activity values. A surface efficiency of 0.50 was used as requested by the Bayer Radiation Safety Office.

MDC for Scans- The MDC values for scanning (ScanMDC) depend on many variables including the sensitivity of the instrument, speed of the scan, size of the detector, distance from the surface, and several other factors. Scanning actually consists of two distinct measurement phases, each carrying its own MDC. The first of these phases is the actual scan measurement. The second phase is a "second look" stationary measurement of an area where an increased scan reading draws the attention of the operator.

The index of sensitivity (d') represents the difference between the mean of the background and mean of the background plus signal. The value of d' depends upon the selection of the acceptable false positive and true positive rates. For this project, an acceptable false positive rate for the first phase of scanning was 60% since it is usually easy to go back over an area after increase counts are noted, whereas a true positive rate of 95% was desirable. This resulted in a d' of 1.38 for the first phase of scanning (from Table 6.5 in MARSSIM). For

the second phase of scanning, it was desirable to use a 20% acceptable false positive rate and a 95% true positive rate. This resulted in a d' of 2.48.

Based on the more conservative first phase scanning limitations, the formula for the scanning MDC used on this project is provided below (MARSSIM 2000):

$$ScanMDC = \frac{1.38\left(\frac{60}{i}\sqrt{R_B \frac{i}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100cm^2}\right)}$$

Where,

d' = detectability value associated with the desired performance (unitless; selected as 1.38)
i = scanning speed observation interval (i = 2 for half a detector width per second)
R_B = background count rate
60 = used to relate counts per second and counts per minute
p = surveyor efficiency (0.5 is standard value provided in NUREG/CR-6364)
ε_i = 2π instrument efficiency (unitless)
ε_s = surface efficiency (unitless)
a = Active probe area (cm^2)

6.3 DATA INTERPRETATION

The net surface activity measurements data were reported in units of dpm/100 cm^2 for direct comparison to the release limits as defined in Section 3.0. The net activity was calculated by first subtracting an instrument-specific background count rate from the gross count rate. The background count rate, used in the activity calculations, was estimated from the daily background check rather than estimated from total gross beta activity measurements made in the reference area. For measurements made using the LSC, the background subtractions were made automatically by the counter and the net activity data was reported directly from the printout. Net activity data for total beta and removable contamination measurements less than the instrument MDC are reported as "<MDC."

7.0 FINAL STATUS SURVEY RESULTS

All statements made in the following sections describe the current, "as-left" status of the facility. The following sections provide a summary of the FSS data, and an evaluation of the data to support license termination. Appendix C contains the survey measurement data generated during the final survey activities.

7.1 SURVEY DATA SUMMARY

The FSS at the Bayer facility included 33 survey units consisting of 32 Class 1 survey units, and 1 Class 3 survey unit. Tables 7-1 and 7-2 summarize the FSS data. The table includes the maximum net activity of each survey unit and compares it to the release criteria.

TABLE 7-1
FINAL STATUS SURVEY DATA SUMMARY FOR CLASS 1 AREAS

	Survey Unit/ Room	Maximum Fixed Activity (dpm/100cm^2)	Maximum Scan (dpm/100cm^2)	Maximum Removable H-3 Activity (dpm/100cm^2)	Maximum Removable C-14 Activity (dpm/100cm^2)	Maximum Gamma Dose Rate (μR/hr)
1	107	354	< MDC	53	27	6
2	109	1,137	< MDC	77	28	6
3	109C	< MDC	< MDC	129	22	6
4	115	1048	< MDC	41	31	6
5	115C	< MDC	< MDC	38	25	5
6	117	< MDC	< MDC	104	31	6
7	121	469	< MDC	46	27	5
8	123	< MDC	< MDC	< MDC	28	5
9	210	< MDC	< MDC	50	24	6
10	212	9004	< MDC	246	51	6
11	212C	1008	< MDC	75	30	6
12	214	994	< MDC	336	91	6
13	214C	652	< MDC	63	249	6
14	220	1004	< MDC	231	92	6
15	220C	1028	< MDC	256	130	6
16	221C	< MDC	< MDC	251	22	6
17	222	1186	< MDC	206	46	6
18	222C	< MDC	< MDC	156	382	5
19	234	474	< MDC	60	31	7
20	RA205	354	< MDC	78	379	7
21	RA257	< MDC	< MDC	183	28	6
22	RA259	919	< MDC	92	26	6
23	RA264	603	< MDC	< MDC	24	5
24	RA306	< MDC	< MDC	< MDC	31	6
25	RA309	1364	< MDC	81	36	5
26	RA311	564	< MDC	52	47	5
27	RA316	411	< MDC	< MDC	26	5
28	RA317	< MDC	< MDC	261	31	5
29	RA319	< MDC	< MDC	81	31	5
30	RA321	662	< MDC	263	28	5
31	RA369	1908	< MDC	484	187	5
32	103A	820	< MDC	117	48	5

TABLE 7-2
FINAL STATUS SURVEY DATA SUMMARY FOR CLASS 3 AREAS

	Survey Unit/ Room	Maximum Fixed Activity (dpm/100cm^2)	Maximum Scan (dpm/100cm^2)	Maximum Removable H-3 Activity (dpm/100cm^2)	Maximum Removable C-14 Activity (dpm/100cm^2)	Maximum Gamma Dose Rate (μR/hr)
1	B-24 2nd Floor Hallway	573	< MDC	< MDC	21	5

7.2 SURVEY DATA EVALUATION

A direct comparison test was used to evaluate whether each survey unit met the release criteria. All fixed measurements were less than the release criteria of 5,000 dpm/100 cm^2. Mean and maximum scan measurements (converted to net dpm/100 cm^2) were all less than the average fixed contamination release criterion of 5,000 dpm/100 cm^2. All removable activity values were less than the removable contamination release criterion of 1,000 dpm/100 cm^2. Surveys for the sink traps and vacuum lines were all less than the release criteria. All dose rate measurements were consistent with the average reference area measurements.

Two remaining locations contain radioactivity levels greater than the removable release criteria of 1,000 dpm/100 cm^2. These include the following areas:

- Drain line from Room 214C (1,281 dpm/100cm^2 removable)
- Drain line from Room 222C (1,219 dpm/100cm^2 removable)
- Drain line from Room 212 (9,004 dpm/100cm^2 fixed)

8.0 DOSE EVALUATION

In order to release the affected areas for uses other than laboratories, levels of residual radioactivity must be compliant Title 10 of the Code of Federal Regulations, Part 20 (10 CFR 20), Subpart E, "Radiological Criteria for License Termination." In this regulation, the criteria for release of a facility in an unrestricted manner requires that the dose to future occupants be less than 25 millirem per year and as low as reasonably achievable. Although, this criterion was not used directly, the stated requirements have nonetheless been achieved as shown by the FSS.

For purposes of a conservative dose evaluation, if the greatest level of remaining radioactivity was distributed over all facility surfaces (from the drain line in Room 212), this would result in a dose of no greater than 0.06 millirem per year to future facility occupants, using conservative assumptions. This hypothetical dose would result if carbon-14 contamination at 9,004 dpm/100 cm^2 were uniformly distributed over all surfaces. Since the three drain lines with radioactivity above the release criteria are inaccessible areas, we expect that they will have no impact on the dose evaluation.

The release criteria selected, is therefore, highly conservative and sufficiently protective of future users of the Bayer facility. In addition, the FSS and evaluation process that was employed has shown that the identified rooms clearly meet the requirements of 10 CFR 20.

9.0 CONCLUSION

Results of the FSS demonstrate that the Bayer facility supports removal of the radiological designation from the surveyed laboratories and waste storage areas. All room surfaces have been demonstrated to be below the release criteria. The disposition of the remaining two areas of radioactive contamination remains the responsibility of Bayer Radiation Safety.

10.0 REFERENCES

International Organization for Standardization (ISO) 7503-3, 1996, *Evaluation of surface contamination, Isomeric transition and electron capture emitters, low-energy beta emitters (E_{Bmax}<0.15 Mev).*

NRC NUREG-1575, 2000, *Multi-Agency Radiation Survey and Site Investigation Manual* (MARSSIM).

NRC NUREG/CR-6364, 1997, *Human Performance in Radiological Survey Scanning.*

NRC Title 10 of the Code of Federal Regulations, Part 20, Subpart E, *Radiological Criteria for License Termination.*

Scientech Document No. 82A8034, 2002, Rev. 3, *Calibration and Maintenance of Survey Instrumentation Procedure.*

Scientech Document No. 82A8008, 2002, Rev. 6, *General Radiological Survey and Air Sampling Procedure.*

Strom D J and Stansbury P S, 1992, *Minimum Detectable Activity When Background is Counted Longer than the Sample*, Health Physics 63:360-1.

APPENDIX A

DAILY BACKGROUND AND RESPONSE MEASUREMENT RESULTS

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/16/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID		FRISKER A	GAMMA SCINT B	DOSE RATE METER C
Meter Model #		L2220	L2221	Model 19 Microrem
Meter Serial #		48409	68537	209746
Probe Model #		L 44-9	PG-2	N/A
Probe Serial #		182614	718194	N/A
Meter Units		cpm	cpm	µrem/hr
Radionuclide Efficiency		C-14	Cs-137	Cs-137
Efficiency (4 pi*)		0.0386	0.0685	1.00
Efficiency (2 pi*)		0.0772	0.137	N/A
Check Source		Tc-99	Cs-137	Cs-137
Range	from:	1,352	15,461	1,096
	to:	1,506	22,362	1,220
AM Range Check #1		1,402	18,495	1,192
		OK to use	OK to use	OK to use
AM Range Check #2 *(Gas Meters Only)*				
PM Range Check #1 *(Gas Meters Only)*				
PM Range Check #2 *(Gas Meters Only)*				

$$MDC = \frac{3 + 3.29\sqrt{R_B t_s\left(1 + \frac{t_s}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_s)\left(\frac{a}{100\ cm^2}\right)}$$

$$ScanMDC = \frac{1.38\left(60\sqrt{\frac{R_B}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100\ cm^2}\right)}$$

1) i = scanning speed in detector widths per second (Default is 1 detector width every 2 seconds, or i = 2).

2) e_s is the surface efficiency. Default is 0.25 for gas proportional meters. For I-125 detection with the PG-2 and 44-3 meters, default is

Note: All range response checks are background subtracted.

BKG Counts		Bkg (cpm)	10 min Bkg	Single Bkg (µrem/hr)
	1	66	528	8
	2	57		
	3	46		
	4	51		
	5	48		
	6	43		
	7	58		
	8	48		
	9	40		
	10	59		
	AVG	51		

BKGD Count Rate	51	52
Equip. Limit (cpm)	102	104
AVE Limit (cpm)	65	103
MAX Limit (cpm)	94	206
MDC	9,548	2,035
MDC_{Scan}	26,369	5,626

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/16/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID	HAND-HELD GAS PROPS D	E	F	G	FLOOR MONITOR H	GAMMA SCINT J
Meter Model #	L2221	L2221	L2241-3	L2360	L Model 12	L2221
Meter Serial #	73700	176940	212353	202415	177883	68795
Probe Model #	43-20	43-68	L43-37	43-68	43-37	L44-3
Probe Serial #	40611	160793	068422	177282	160824	128278
Meter Units	cpm	cpm	cpm	cpm	cpm	cpm
Radionuclide Efficiency	C-14	C-14	C-14	C-14	C-14	I-129
Efficiency (4 pi*)	0.0988	0.0803	0.0818	0.083	0.0821	7.61
Efficiency (2 pi*)	0.198	0.1606	0.1636	0.166	0.1642	15.22
Check Source	Tc-99	Tc-99	Tc-99	Tc-99	Tc-99	Cs-137
Range	1,731	1,992	1,127	1,159	563	47,269
	2,410	2,245	2,215	1,649	947	51,567
AM Range Check #1	2,083	2,079	1,618		908	
	OK to use	OK to use	OK to use	DO NOT USE	OK to use	DO NOT USE
AM Range Check #2						
(Gas Meters Only)	DO NOT USE	DO NOT USE	DO NOT USE	DO NOT USE	DO NOT USE	
PM Range Check #1				1,514		
(Gas Meters Only)	DO NOT USE	DO NOT USE	DO NOT USE	OK to use	DO NOT USE	
PM Range Check #2	1,859	2,171	2,089	1,608		
(Gas Meters Only)	OK to use	OK to use	OK to use	OK to use	DO NOT USE	

s 0.5.

	10 min Bkg	10 min Bkg	Bkg (cpm)	10 min Bkg	Bkg (cpm)	10 min Bkg
BKG Counts	3,652	2,032	1 710	947	1 200	1
			2 732		2 240	2
			3 670		3 180	3
			4 636		4 200	4
			5 655		5 190	5
			6 655		6 160	6
			7 635		7 150	7
			8 696		8 180	8
			9 625		9 220	9
			10 632		10 200	10
			AVG 664		AVG 192	AVG
BKGD Count Rate	365	203	664	94	192	Not Used
Equip. Limit (cpm)	730	406	1328	188	384	Not Used
AVE Limit (cpm)	676	455	1737	355	1269	Not Used
MAX Limit (cpm)	1,298	961	3884	878	3424	Not Used
MDC	1,107	1,031	428	697	236	Not Used
MDC_{Scan}	3,281	3,011	1,283	1,982	687	Not Used

Inst used in PM only

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/17/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID		FRISKER A	GAMMA SCINT. B	DOSE RATE METER C
Meter Model #		L2220	L2221	Model 19 Microrem
Meter Serial #		48409	68537	209746
Probe Model #		L 44-9	PG-2	N/A
Probe Serial #		182614	718194	N/A
Meter Units		cpm	cpm	µrem/hr
Radionuclide Efficiency		C-14	Cs-137	Cs-137
Efficiency (4 pi*)		0.0386	0.0685	1.00
Efficiency (2 pi*)		0.0772	0.137	N/A
Check Source		Tc-99	Cs-137	Cs-137
Range	from:	1,352	15,461	1,096
	to:	1,506	22,362	1,220
AM Range Check #1		1,368	21,270	1,145
		OK to use	OK to use	OK to use
AM Range Check #2 *(Gas Meters Only)*				
PM Range Check #1 *(Gas Meters Only)*				
PM Range Check #2 *(Gas Meters Only)*				

$$MDC = \frac{3 + 3.29\sqrt{R_B t_s\left(1 + \frac{t_s}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_s)\left(\frac{a}{100\ cm^2}\right)}$$

$$ScanMDC = \frac{1.38\left(60\sqrt{\frac{R_B}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100\ cm^2}\right)}$$

1) i = scanning speed in detector widths per second (Default is 1 detector width every 2 seconds, or i = 2).

2) e_s is the surface efficiency. Default is 0.25 for gas proportional meters. For I-125 detection with the PG-2 and 44-3 meters, default is

Note: All range response checks are background subtracted.

BKG Counts		Bkg (cpm)	10 min Bkg	Single Bkg (µrem/hr)
	1	51	411	5
	2	41		
	3	49		
	4	47		
	5	33		
	6	45		
	7	48		
	8	53		
	9	49		
	10	43		
	AVG	45		

BKGD Count Rate	45	41
Equip. Limit (cpm)	90	82
AVE Limit (cpm)	59	92
MAX Limit (cpm)	88	195
MDC	9,032	1,832
MDC_{Scan}	24,769	4,996

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/17/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

	HAND-HELD GAS PROPS				FLOOR MONITOR	GAMMA SCINT.
Instrument ID	D	E	F	G	H	J
Meter Model #	L2221	L2221	L2241-3	L2360	L Model 12	L2221
Meter Serial #	73700	176940	212353	202415	177883	68795
Probe Model #	43-20	43-68	L43-37	43-68	43-37	L44-3
Probe Serial #	40611	160793	068422	177282	160824	128278
Meter Units	cpm	cpm	cpm	cpm	cpm	cpm
Radionuclide Efficiency	C-14	C-14	C-14	C-14	C-14	I-129
Efficiency (4 pi*)	0.0988	0.0803	0.0818	0.083	0.0821	7.61
Efficiency (2 pi*)	0.198	0.1606	0.1636	0.166	0.1642	15.22
Check Source	Tc-99	Tc-99	Tc-99	Tc-99	Tc-99	Cs-137
Range	1,731	1,992	1,127	1,159	563	47,269
	2,410	2,245	2,215	1,649	947	51,567
AM Range Check #1	2,078	2,054	1,935	1,447	832	
	OK to use	OK to use	OK to use	OK to use	OK to use	DO NOT USE
AM Range Check #2	1,907	1,810	1,760	1,462	782	
(Gas Meters Only)	OK to use	DO NOT USE	OK to use	OK to use	OK to use	
PM Range Check #1	2,171	2,128	1,129	1,590	832	
(Gas Meters Only)	OK to use	OK to use	OK to use	OK to use	OK to use	
PM Range Check #2	1,978	2,013			732	
(Gas Meters Only)	OK to use	OK to use	DO NOT USE	DO NOT USE	OK to use	

s 0.5.

	10 min Bkg	10 min Bkg	Bkg (cpm)	10 min Bkg	Bkg (cpm)	10 min Bkg
BKG Counts	3,209	1,837	1 590	893	1 160	1
			2 568		2 180	2
			3 528		3 180	3
			4 563		4 180	4
			5 521		5 160	5
			6 526		6 160	6
			7 538		7 160	7
			8 536		8 160	8
			9 526		9 180	9
			10 521		10 160	10
			AVG 541		AVG 168	AVG

BKGD Count Rate	320	183	541	89	168	Not Used
Equip. Limit (cpm)	640	366	1082	178	336	Not Used
AVE Limit (cpm)	631	435	1614	350	1245	Not Used
MAX Limit (cpm)	1,253	941	3761	873	3400	Not Used
MDC	1,040	982	388	680	221	Not Used
MDC_{Scan}	3,072	2,858	1,158	1,929	643	Not Used

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/18/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID		FRISKER A	GAMMA SCINT B	DOSE RATE METER C
Meter Model #		L2220	L2221	Model 19 Microrem
Meter Serial #		48409	68537	209746
Probe Model #		L 44-9	PG-2	N/A
Probe Serial #		182614	718194	N/A
Meter Units		cpm	cpm	µrem/hr
Radionuclide Efficiency		C-14	Cs-137	Cs-137
Efficiency (4 pi*)		0.0386	0.0685	1.00
Efficiency (2 pi*)		0.0772	0.137	N/A
Check Source		Tc-99	Cs-137	Cs-137
Range	from:	1,352	15,461	1,096
	to:	1,506	22,362	1,220
AM Range Check #1		1,389		1,195
		OK to use	DO NOT USE	OK to use
AM Range Check #2 *(Gas Meters Only)*				
PM Range Check #1 *(Gas Meters Only)*				
PM Range Check #2 *(Gas Meters Only)*				

$$MDC = \frac{3 + 3.29\sqrt{R_B t_s\left(1 + \frac{t_s}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_s)\left(\frac{a}{100\ cm^2}\right)}$$

$$ScanMDC = \frac{1.38\left(60\sqrt{\frac{R_B}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100\ cm^2}\right)}$$

1) i = scanning speed in detector widths per second (Default is 1 detector width every 2 seconds, or i = 2).

2) e_s is the surface efficiency. Default is 0.25 for gas proportional meters. For I-125 detection with the PG-2 and 44-3 meters, default is

Note: All range response checks are background subtracted.

BKG Counts		Bkg (cpm)	10 min Bkg	Single Bkg (µrem/hr)
	1	35		5
	2	45		
	3	47		
	4	41		
	5	34		
	6	36		
	7	43		
	8	40		
	9	48		
	10	39		
	AVG	40		

BKGD Count Rate	40	Not Used
Equip. Limit (cpm)	80	Not Used
AVE Limit (cpm)	54	Not Used
MAX Limit (cpm)	83	Not Used
MDC	8,575	Not Used
MDC_{Scan}	23,353	Not Used

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/18/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

	HAND-HELD GAS PROPS				FLOOR MONITOR	GAMMA SCINT
Instrument ID	D	E	F	G	H	J
Meter Model #	L2221	L2221	L2241-3	L2360	L Model 12	L2221
Meter Serial #	73700	176940	212353	202415	177883	68795
Probe Model #	43-20	43-68	L43-37	43-68	43-37	L44-3
Probe Serial #	40611	160793	068422	177282	160824	128278
Meter Units	cpm	cpm	cpm	cpm	cpm	cpm
Radionuclide Efficiency	C-14	C-14	C-14	C-14	C-14	I-129
Efficiency (4 pi*)	0.0988	0.0803	0.0818	0.083	0.0821	7.61
Efficiency (2 pi*)	0.198	0.1606	0.1636	0.166	0.1642	15.22
Check Source	Tc-99	Tc-99	Tc-99	Tc-99	Tc-99	Cs-137
Range	1,731	1,992	1,127	1,159	563	47,269
	2,410	2,245	2,215	1,649	947	51,567
AM Range Check #1	2,122	2,103		1,546	850	
	OK to use	OK to use	DO NOT USE	OK to use	OK to use	DO NOT USE
AM Range Check #2	Not Used	2,041		1,413	850	
(Gas Meters Only)	DO NOT USE	OK to use	DO NOT USE	OK to use	OK to use	
PM Range Check #1	2,112	2,107		1,613		
(Gas Meters Only)	OK to use	OK to use	DO NOT USE	OK to use	DO NOT USE	
PM Range Check #2	Not Used	2,063		1,286		
(Gas Meters Only)	DO NOT USE	OK to use	DO NOT USE	OK to use	DO NOT USE	

s 0.5.

	10 min Bkg	10 min Bkg		Bkg (cpm)	10 min Bkg		Bkg (cpm)		10 min Bkg
BKG Counts	3,143	2,089	1	Not Used	941	1	150	1	
			2			2	160	2	
			3			3	170	3	
			4			4	180	4	
			5			5	160	5	
			6			6	140	6	
			7			7	150	7	
			8			8	130	8	
			9			9	130	9	
			10			10	130	10	
			AVG	Not Used		AVG	150	AVG	

BKGD Count Rate	314	208	Not Used	94	150	Not Used
Equip. Limit (cpm)	628	416	Not Used	188	300	Not Used
AVE Limit (cpm)	625	460	Not Used	355	1227	Not Used
MAX Limit (cpm)	1,247	966	Not Used	878	3382	Not Used
MDC	1,031	1,043	Not Used	697	210	Not Used
MDC_{Scan}	3,043	3,047	Not Used	1,982	607	Not Used

Inst used in AM only

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/21/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID		FRISKER A	GAMMA SCINT B	DOSE RATE METER C
Meter Model #		L2220	L2221	Model 19 Microrem
Meter Serial #		48409	68537	209746
Probe Model #		L 44-9	PG-2	N/A
Probe Serial #		182614	718194	N/A
Meter Units		cpm	cpm	µrem/hr
Radionuclide Efficiency		C-14	Cs-137	Cs-137
Efficiency (4 pi*)		0.0386	0.0685	1.00
Efficiency (2 pi*)		0.0772	0.137	N/A
Check Source		Tc-99	Cs-137	Cs-137
Range	from:	1,352	15,461	1,096
	to:	1,506	22,362	1,220
AM Range Check #1		1,451		1,194
		OK to use	DO NOT USE	OK to use
AM Range Check #2 *(Gas Meters Only)*				
PM Range Check #1 *(Gas Meters Only)*				
PM Range Check #2 *(Gas Meters Only)*				

$$MDC = \frac{3 + 3.29\sqrt{R_B t_s\left(1 + \frac{t_s}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_s)\left(\frac{a}{100\ cm^2}\right)}$$

$$ScanMDC = \frac{1.38\left(60\sqrt{\frac{R_B}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100\ cm^2}\right)}$$

1) i = scanning speed in detector widths per second (Default is 1 detector width every 2 seconds, or i = 2).

2) e_s is the surface efficiency. Default is 0.25 for gas proportional meters. For I-125 detection with the PG-2 and 44-3 meters, default is

Note: All range response checks are background subtracted.

BKG Counts		Bkg (cpm)	10 min Bkg	Single Bkg (µrem/hr)
	1	37		6
	2	41		
	3	32		
	4	44		
	5	44		
	6	32		
	7	44		
	8	41		
	9	42		
	10	28		
	AVG	38		

BKGD Count Rate	38	Not Used
Equip. Limit (cpm)	76	Not Used
AVE Limit (cpm)	52	Not Used
MAX Limit (cpm)	81	Not Used
MDC	8,384	Not Used
MDC_{Scan}	22,761	Not Used

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/21/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

	HAND-HELD GAS PROPS				FLOOR MONITOR	GAMMA SCINT
Instrument ID	D	E	F	G	H	J
Meter Model #	L2221	L2221	L2241-3	L2360	L Model 12	L2221
Meter Serial #	73700	176940	212353	202415	177883	68795
Probe Model #	43-20	43-68	L43-37	43-68	43-37	L44-3
Probe Serial #	40611	160793	068422	177282	160824	128278
Meter Units	cpm	cpm	cpm	cpm	cpm	cpm
Radionuclide Efficiency	C-14	C-14	C-14	C-14	C-14	I-129
Efficiency (4 pi*)	0.0988	0.0803	0.0818	0.083	0.0821	7.61
Efficiency (2 pi*)	0.198	0.1606	0.1636	0.166	0.1642	15.22
Check Source	Tc-99	Tc-99	Tc-99	Tc-99	Tc-99	Cs-137
Range	1,731	1,992	1,127	1,159	563	47,269
	2,410	2,245	2,215	1,649	947	51,567
AM Range Check #1	2,193	2,064		1,553	751	
	OK to use	**OK to use**	**DO NOT USE**	**OK to use**	**OK to use**	**DO NOT USE**
AM Range Check #2	2,213	2,065		1,171	851	
(Gas Meters Only)	**OK to use**	**OK to use**	**DO NOT USE**	**OK to use**	**OK to use**	
PM Range Check #1	2,182	2,080		1,487	851	
(Gas Meters Only)	**OK to use**	**OK to use**	**DO NOT USE**	**OK to use**	**OK to use**	
PM Range Check #2	2,013	2,160		1,509	851	
(Gas Meters Only)	**OK to use**	**OK to use**	**DO NOT USE**	**OK to use**	**OK to use**	

s 0.5.

	10 min Bkg	10 min Bkg		Bkg (cpm)		10 min Bkg		Bkg (cpm)		10 min Bkg
BKG Counts	3,237	1,997	1			885	1	180	1	
			2				2	140	2	
			3				3	160	3	
			4				4	120	4	
			5				5	150	5	
			6				6	140	6	
			7				7	160	7	
			8				8	150	8	
			9				9	140	9	
			10				10	150	10	
			AVG	Not Used			AVG	149	AVG	

BKGD Count Rate	323	199	Not Used	88	149	Not Used
Equip. Limit (cpm)	646	398	Not Used	176	298	Not Used
AVE Limit (cpm)	634	451	Not Used	349	1226	Not Used
MAX Limit (cpm)	1,256	957	Not Used	872	3381	Not Used
MDC	1,045	1,021	Not Used	676	209	Not Used
MDC_{Scan}	3,086	2,981	Not Used	1,918	605	Not Used

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/22/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID		FRISKER A	GAMMA SCINT B	DOSE RATE METER C
Meter Model #		L2220	L2221	Model 19 Microrem
Meter Serial #		48409	68537	209746
Probe Model #		L 44-9	PG-2	N/A
Probe Serial #		182614	718194	N/A
Meter Units		cpm	cpm	µrem/hr
Radionuclide Efficiency		C-14	Cs-137	Cs-137
Efficiency (4 pi*)		0.0386	0.0685	1.00
Efficiency (2 pi*)		0.0772	0.137	N/A
Check Source		Tc-99	Cs-137	Cs-137
Range	from:	1,352	15,461	1,096
	to:	1,506	22,362	1,220
AM Range Check #1		1,399		1,195
		OK to use	DO NOT USE	OK to use
AM Range Check #2 *(Gas Meters Only)*				
PM Range Check #1 *(Gas Meters Only)*				
PM Range Check #2 *(Gas Meters Only)*				

$$MDC = \frac{3 + 3.29\sqrt{R_B t_s\left(1 + \frac{t_s}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_s)\left(\frac{a}{100\ cm^2}\right)}$$

$$ScanMDC = \frac{1.38\left(60\sqrt{\frac{R_B}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100\ cm^2}\right)}$$

1) i = scanning speed in detector widths per second (Default is 1 detector width every 2 seconds, or i = 2).

2) e_s is the surface efficiency. Default is 0.25 for gas proportional meters. For I-125 detection with the PG-2 and 44-3 meters, default is

Note: All range response checks are background subtracted.

BKG Counts		Bkg (cpm)	10 min Bkg	Single Bkg (µrem/hr)
	1	35		5
	2	42		
	3	46		
	4	38		
	5	42		
	6	41		
	7	44		
	8	36		
	9	45		
	10	38		
	AVG	40		

BKGD Count Rate	40	Not Used
Equip. Limit (cpm)	80	Not Used
AVE Limit (cpm)	54	Not Used
MAX Limit (cpm)	83	Not Used
MDC	8,575	Not Used
MDC_{Scan}	23,353	Not Used

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/22/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

	HAND-HELD GAS PROPS				FLOOR MONITOR	GAMMA SCINT
Instrument ID	D	E	F	G	H	J
Meter Model #	L2221	L2221	L2241-3	L2360	L Model 12	L2221
Meter Serial #	73700	176940	212353	202415	177883	68795
Probe Model #	43-20	43-68	L43-37	43-68	43-37	L44-3
Probe Serial #	40611	160793	068422	177282	160824	128278
Meter Units	cpm	cpm	cpm	cpm	cpm	cpm
Radionuclide Efficiency	C-14	C-14	C-14	C-14	C-14	I-129
Efficiency (4 pi*)	0.0988	0.0803	0.0818	0.083	0.0821	7.61
Efficiency (2 pi*)	0.198	0.1606	0.1636	0.166	0.1642	15.22
Check Source	Tc-99	Tc-99	Tc-99	Tc-99	Tc-99	Cs-137
Range	1,731	1,992	1,127	1,159	563	47,269
	2,410	2,245	2,215	1,649	947	51,567
AM Range Check #1	2,134	2,138		1,435	759	49,832
	OK to use	**OK to use**	**DO NOT USE**	**OK to use**	**OK to use**	**OK to use**
AM Range Check #2	1,997	2,147		1,262	859	
(Gas Meters Only)	**OK to use**	**OK to use**	**DO NOT USE**	**OK to use**	**OK to use**	
PM Range Check #1	2,277	2,220		1,577	759	
(Gas Meters Only)	**OK to use**	**OK to use**	**DO NOT USE**	**OK to use**	**OK to use**	
PM Range Check #2	Not Used	2,024		1,259	859	
(Gas Meters Only)	**DO NOT USE**	**OK to use**	**DO NOT USE**	**OK to use**	**OK to use**	

s 0.5.

	10 min Bkg	10 min Bkg		Bkg (cpm)	10 min Bkg		Bkg (cpm)		10 min Bkg
BKG Counts	2,336	1,844	1		895	1	140	1	103
			2			2	150	2	
			3			3	120	3	
			4			4	130	4	
			5			5	140	5	
			6			6	160	6	
			7			7	140	7	
			8			8	150	8	
			9			9	140	9	
			10			10	140	10	
			AVG	Not Used		AVG	141	AVG	

BKGD Count Rate	233	184	Not Used	89	141	10
Equip. Limit (cpm)	466	368	Not Used	178	282	20
AVE Limit (cpm)	544	436	Not Used	350	1218	1,937
MAX Limit (cpm)	1,166	942	Not Used	873	3373	5,793
MDC	894	985	Not Used	680	204	36
MDC_{Scan}	2,621	2,866	Not Used	1,929	589	88

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/23/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID		FRISKER A	GAMMA SCINT B	DOSE RATE METER C
Meter Model #		L2220	L2221	Model 19 Microrem
Meter Serial #		48409	68537	209746
Probe Model #		L 44-9	PG-2	N/A
Probe Serial #		182614	718194	N/A
Meter Units		cpm	cpm	µrem/hr
Radionuclide Efficiency		C-14	Cs-137	Cs-137
Efficiency (4 pi*)		0.0386	0.0685	1.00
Efficiency (2 pi*)		0.0772	0.137	N/A
Check Source		Tc-99	Cs-137	Cs-137
Range	from:	1,352	15,461	1,096
	to:	1,506	22,362	1,220
AM Range Check #1		1,496		1,144
		OK to use	DO NOT USE	OK to use
AM Range Check #2 *(Gas Meters Only)*				
PM Range Check #1 *(Gas Meters Only)*				
PM Range Check #2 *(Gas Meters Only)*				

$$MDC = \frac{3 + 3.29\sqrt{R_B t_s\left(1 + \frac{t_s}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_s)\left(\frac{a}{100\ cm^2}\right)}$$

$$ScanMDC = \frac{1.38\left(60\sqrt{\frac{R_B}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100\ cm^2}\right)}$$

1) i = scanning speed in detector widths per second (Default is 1 detector width every 2 seconds, or i = 2).

2) e_s is the surface efficiency. Default is 0.25 for gas proportional meters. For I-125 detection with the PG-2 and 44-3 meters, default is

Note: All range response checks are background subtracted.

		Bkg (cpm)	10 min Bkg	Single Bkg (µrem/hr)
BKG Counts	1	37		6
	2	19		
	3	42		
	4	51		
	5	47		
	6	41		
	7	41		
	8	34		
	9	42		
	10	42		
	AVG	39		
BKGD Count Rate		39	Not Used	
Equip. Limit (cpm)		78	Not Used	
AVE Limit (cpm)		53	Not Used	
MAX Limit (cpm)		82	Not Used	
MDC		8,480	Not Used	
MDC_{Scan}		23,059	Not Used	

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/23/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID	HAND-HELD GAS PROPS D	E	F	G	FLOOR MONITOR H	GAMMA SCINT J
Meter Model #	L2221	L2221	L2241-3	L2360	L Model 12	L2221
Meter Serial #	73700	176940	212353	202415	177883	68795
Probe Model #	43-20	43-68	L43-37	43-68	43-37	L44-3
Probe Serial #	40611	160793	068422	177282	160824	128278
Meter Units	cpm	cpm	cpm	cpm	cpm	cpm
Radionuclide Efficiency	C-14	C-14	C-14	C-14	C-14	I-129
Efficiency (4 pi*)	0.0988	0.0803	0.0818	0.083	0.0821	7.61
Efficiency (2 pi*)	0.198	0.1606	0.1636	0.166	0.1642	15.22
Check Source	Tc-99	Tc-99	Tc-99	Tc-99	Tc-99	Cs-137
Range	1,731	1,992	1,127	1,159	563	47,269
	2,410	2,245	2,215	1,649	947	51,567
AM Range Check #1	2,099	2,176		1,461		49,130
	OK to use	OK to use	DO NOT USE	OK to use	DO NOT USE	OK to use
AM Range Check #2	2,050	2,095		1,280		
(Gas Meters Only)	OK to use	OK to use	DO NOT USE	OK to use	DO NOT USE	
PM Range Check #1	2,278	2,116		1,626		
(Gas Meters Only)	OK to use	OK to use	DO NOT USE	OK to use	DO NOT USE	
PM Range Check #2	2,132	2,114		1,362		
(Gas Meters Only)	OK to use	OK to use	DO NOT USE	OK to use	DO NOT USE	

s 0.5.

	10 min Bkg	10 min Bkg	Bkg (cpm)	10 min Bkg	Bkg (cpm)	10 min Bkg
BKG Counts	2,223	1,828		905		70
			1		1	1
			2		2	2
			3		3	3
			4		4	4
			5		5	5
			6		6	6
			7		7	7
			8		8	8
			9		9	9
			10		10	10
			AVG Not Used		AVG Not Used	AVG
BKGD Count Rate	222	182	Not Used	90	Not Used	7
Equip. Limit (cpm)	444	364	Not Used	180	Not Used	14
AVE Limit (cpm)	533	434	Not Used	351	Not Used	1,934
MAX Limit (cpm)	1,155	940	Not Used	874	Not Used	5,790
MDC	874	979	Not Used	683	Not Used	31
MDC_{Scan}	2,559	2,851	Not Used	1,939	Not Used	73

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/24/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID		FRISKER A	GAMMA SCINT B	DOSE RATE METER C
Meter Model #		L2220	L2221	Model 19 Microrem
Meter Serial #		48409	68537	209746
Probe Model #		L 44-9	PG-2	N/A
Probe Serial #		182614	718194	N/A
Meter Units		cpm	cpm	µrem/hr
Radionuclide Efficiency		C-14	Cs-137	Cs-137
Efficiency (4 pi*)		0.0386	0.0685	1.00
Efficiency (2 pi*)		0.0772	0.137	N/A
Check Source		Tc-99	Cs-137	Cs-137
Range	from:	1,352	15,461	1,096
	to:	1,506	22,362	1,220
AM Range Check #1		1,415		1,195
		OK to use	DO NOT USE	OK to use
AM Range Check #2 (Gas Meters Only)				
PM Range Check #1 (Gas Meters Only)				
PM Range Check #2 (Gas Meters Only)				

$$MDC = \frac{3 + 3.29\sqrt{R_B t_s\left(1 + \frac{t_s}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_s)\left(\frac{a}{100\ cm^2}\right)}$$

$$ScanMDC = \frac{1.38\left(60\sqrt{\frac{R_B}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100\ cm^2}\right)}$$

1) i = scanning speed in detector widths per second (Default is 1 detector width every 2 seconds, or i = 2).

2) e_s is the surface efficiency. Default is 0.25 for gas proportional meters. For I-125 detection with the PG-2 and 44-3 meters, default is

Note: All range response checks are background subtracted.

BKG Counts		Bkg (cpm)	10 min Bkg	Single Bkg (µrem/hr)
	1	39		5
	2	37		
	3	38		
	4	43		
	5	54		
	6	51		
	7	50		
	8	40		
	9	35		
	10	40		
	AVG	42		

BKGD Count Rate	42	Not Used
Equip. Limit (cpm)	84	Not Used
AVE Limit (cpm)	56	Not Used
MAX Limit (cpm)	85	Not Used
MDC	8,761	Not Used
MDC_{Scan}	23,929	Not Used

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/24/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

	HAND-HELD GAS PROPS				FLOOR MONITOR	GAMMA SCINT
Instrument ID	D	E	F	G	H	J
Meter Model #	L2221	L2221	L2241-3	L2360	L Model 12	L2221
Meter Serial #	73700	176940	212353	202415	177883	68795
Probe Model #	43-20	43-68	L43-37	43-68	43-37	L44-3
Probe Serial #	40611	160793	068422	177282	160824	128278
Meter Units	cpm	cpm	cpm	cpm	cpm	cpm
Radionuclide Efficiency	C-14	C-14	C-14	C-14	C-14	I-129
Efficiency (4 pi*)	0.0988	0.0803	0.0818	0.083	0.0821	7.61
Efficiency (2 pi*)	0.198	0.1606	0.1636	0.166	0.1642	15.22
Check Source	Tc-99	Tc-99	Tc-99	Tc-99	Tc-99	Cs-137
Range	1,731	1,992	1,127	1,159	563	47,269
	2,410	2,245	2,215	1,649	947	51,567
AM Range Check #1	2,150	2,114		1,550		48,787
	OK to use	OK to use	DO NOT USE	OK to use	DO NOT USE	OK to use
AM Range Check #2		2,052		1,630		
(Gas Meters Only)	DO NOT USE	OK to use	DO NOT USE	OK to use	DO NOT USE	
PM Range Check #1		2,185		1,595		
(Gas Meters Only)	DO NOT USE	OK to use	DO NOT USE	OK to use	DO NOT USE	
PM Range Check #2		2,064		1,606		
(Gas Meters Only)	DO NOT USE	OK to use	DO NOT USE	OK to use	DO NOT USE	

s 0.5.

	10 min Bkg	10 min Bkg	Bkg (cpm)	10 min Bkg	Bkg (cpm)	10 min Bkg
BKG Counts	2,549	2,065	1	919	1	80
			2		2	
			3		3	
			4		4	
			5		5	
			6		6	
			7		7	
			8		8	
			9		9	
			10		10	
			AVG Not Used		AVG Not Used	AVG
BKGD Count Rate	254	206	Not Used	91	Not Used	8
Equip. Limit (cpm)	508	412	Not Used	182	Not Used	16
AVE Limit (cpm)	565	458	Not Used	352	Not Used	1,935
MAX Limit (cpm)	1,187	964	Not Used	875	Not Used	5,791
MDC	932	1,038	Not Used	687	Not Used	33
MDC_{Scan}	2,737	3,033	Not Used	1,950	Not Used	78

Inst used in AM only

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/28/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

Instrument ID		FRISKER A	GAMMA SCINT B	DOSE RATE METER C
Meter Model #		L2220	L2221	Model 19 Microrem
Meter Serial #		48409	68537	209746
Probe Model #		L 44-9	PG-2	N/A
Probe Serial #		182614	718194	N/A
Meter Units		cpm	cpm	µrem/hr
Radionuclide Efficiency		C-14	Cs-137	Cs-137
Efficiency (4 pi*)		0.0386	0.0685	1.00
Efficiency (2 pi*)		0.0772	0.137	N/A
Check Source		Tc-99	Cs-137	Cs-137
Range	from:	1,352	15,461	1,096
	to:	1,506	22,362	1,220
AM Range Check #1		1,483		1,195
		OK to use	DO NOT USE	OK to use
AM Range Check #2 *(Gas Meters Only)*				
PM Range Check #1 *(Gas Meters Only)*				
PM Range Check #2 *(Gas Meters Only)*				

$$MDC = \frac{3 + 3.29\sqrt{R_B t_s\left(1 + \frac{t_s}{t_B}\right)}}{\varepsilon_s(\varepsilon_i)(t_s)\left(\frac{a}{100\ cm^2}\right)}$$

$$ScanMDC = \frac{1.38\left(60\sqrt{\frac{R_B}{60}}\right)}{\sqrt{0.5}(\varepsilon_s)(\varepsilon_i)\left(\frac{a}{100\ cm^2}\right)}$$

1) i = scanning speed in detector widths per second (Default is 1 detector width every 2 seconds, or i = 2).

2) e_s is the surface efficiency. Default is 0.25 for gas proportional meters. For I-125 detection with the PG-2 and 44-3 meters, default is

Note: All range response checks are background subtracted.

BKG Counts		Bkg (cpm)	10 min Bkg	Single Bkg (µrem/hr)
	1	34		5
	2	47		
	3	41		
	4	32		
	5	45		
	6	45		
	7	50		
	8	50		
	9	28		
	10	41		
	AVG	41		

BKGD Count Rate	41	Not Used
Equip. Limit (cpm)	82	Not Used
AVE Limit (cpm)	55	Not Used
MAX Limit (cpm)	84	Not Used
MDC	8,668	Not Used
MDC_{Scan}	23,643	Not Used

SCIENTECH

INSTRUMENT BACKGROUND CHECK

Date: 3/28/2005

Project: 23562

Prepared by: J. Kronick/ S. Hayes

Reviewed by:

	HAND-HELD GAS PROPS				FLOOR MONITOR	GAMMA SCINT
Instrument ID	D	E	F	G	H	J
Meter Model #	L2221	L2221	L2241-3	L2360	L Model 12	L2221
Meter Serial #	73700	176940	212353	202415	177883	68795
Probe Model #	43-20	43-68	L43-37	43-68	43-37	L44-3
Probe Serial #	40611	160793	068422	177282	160824	128278
Meter Units	cpm	cpm	cpm	cpm	cpm	cpm
Radionuclide Efficiency	C-14	C-14	C-14	C-14	C-14	I-129
Efficiency (4 pi*)	0.0988	0.0803	0.0818	0.083	0.0821	7.61
Efficiency (2 pi*)	0.198	0.1606	0.1636	0.166	0.1642	15.22
Check Source	Tc-99	Tc-99	Tc-99	Tc-99	Tc-99	Cs-137
Range	1,731	1,992	1,127	1,159	563	47,269
	2,410	2,245	2,215	1,649	947	51,567
AM Range Check #1		2,106		1,593		48,595
	DO NOT USE	OK to use	DO NOT USE	OK to use	DO NOT USE	OK to use
AM Range Check #2		2,054		1,642		
(Gas Meters Only)	DO NOT USE	OK to use	DO NOT USE	OK to use	DO NOT USE	
PM Range Check #1		2,144				
(Gas Meters Only)	DO NOT USE	OK to use	DO NOT USE	DO NOT USE	DO NOT USE	
PM Range Check #2						
(Gas Meters Only)	DO NOT USE	DO NOT USE	DO NOT USE	DO NOT USE	DO NOT USE	

s 0.5.

	10 min Bkg	10 min Bkg	Bkg (cpm)	10 min Bkg	Bkg (cpm)	10 min Bkg
BKG Counts		2,281	1	1,045	1	88
			2		2	
			3		3	
			4		4	
			5		5	
			6		6	
			7		7	
			8		8	
			9		9	
			10		10	
			AVG Not Used		AVG Not Used	AVG
BKGD Count Rate	Not Used	228	Not Used	104	Not Used	8
Equip. Limit (cpm)	Not Used	456	Not Used	208	Not Used	16
AVE Limit (cpm)	Not Used	480	Not Used	365	Not Used	1,935
MAX Limit (cpm)	Not Used	986	Not Used	888	Not Used	5,791
MDC	Not Used	1,089	Not Used	730	Not Used	33
MDC_{Scan}	Not Used	3,191	Not Used	2,085	Not Used	78

Inst used in AM only

Daily Background Sheet

Beckman LS6500

	cpm	
Date	H-3	C-14
18-Mar	37	9
21-Mar	30	11
22-Mar	16	14
23-Mar	14	9
24-Mar	27	13
28-Mar	27	6
29-Mar	10	10
30-Mar	8	12

APPENDIX B

INSTRUMENT CALIBRATION CERTIFICATES

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: Scientech, Inc., Attn: Patricia Lopez (860) 210-3000
Customer Address: 143 West Street, New Milford, CT 06776

Inst. Mfr. & Model Ludlum Model 2220	Inst. Type Scaler/Ratemeter	Inst. s/n 48409
Det. Mfr. & Model Ludlum 44-9	Det. Type Pancake G-M	Det. s/n 182614
Cal. Date 29 September 2004	Due Date 29 September 2005	Cal. Interval 1 year

Environmental conditions: Temperature: 70°F Relative Humidity 55% Atmospheric Pressure 29.22 inches Hg

Pre-calibration Checks

- ■ Contamination survey
- ■ Mechanical check
- ■ Meter zero
- ■ Geotropism check
- ■ Battery check
- ■ Audio check
- ■ Reset check
- ■ Fast response check
- ■ Slow response check
- ■ Window operation
- □ Plateau check
- □ Alarm set
- ■ Det. volts 900 Vdc
- ■ Input sens. 32 mV

■ Pulse generator s/n 94926 ■ Oscilloscope s/n 171-04928 □ Voltmeter s/n 57410002
□ HV Readout (2 points) Ref./Inst. V/ V Ref./Inst. V/ V

Comments: Th-230 efficiency determined near contact with probe face.

S/N of source used for precision check #6 Isotope Cs-137 Dedicated Source? □Yes ■No
Reading #1 27,000 Reading #2 27,000 Reading #3 27,000 Mean 27,000
Precision: ■± < 10% □± 10-20% □Out of tolerance

Range	Reference Calibration Point	"As Found" Instrument Indication	"As left" Instrument Indication
x 100	400,000 cpm	400,000 cpm	400,000 cpm
x 100	100,000 cpm	100,000 cpm	100,000 cpm
x 10	40,000 cpm	40,000 cpm	40,000 cpm
x 10	10,000 cpm	10,000 cpm	10,000 cpm
x 1	4,000 cpm	4,000 cpm	4,000 cpm
x 1	1,000 cpm	1,000 cpm	1,000 cpm
x 0.1	400 cpm	390 cpm	400 cpm
x 0.1	100 cpm	100 cpm	100 cpm
1 min. count	400,000 cpm	400,042	400,042

All ranges calibrated electronically.

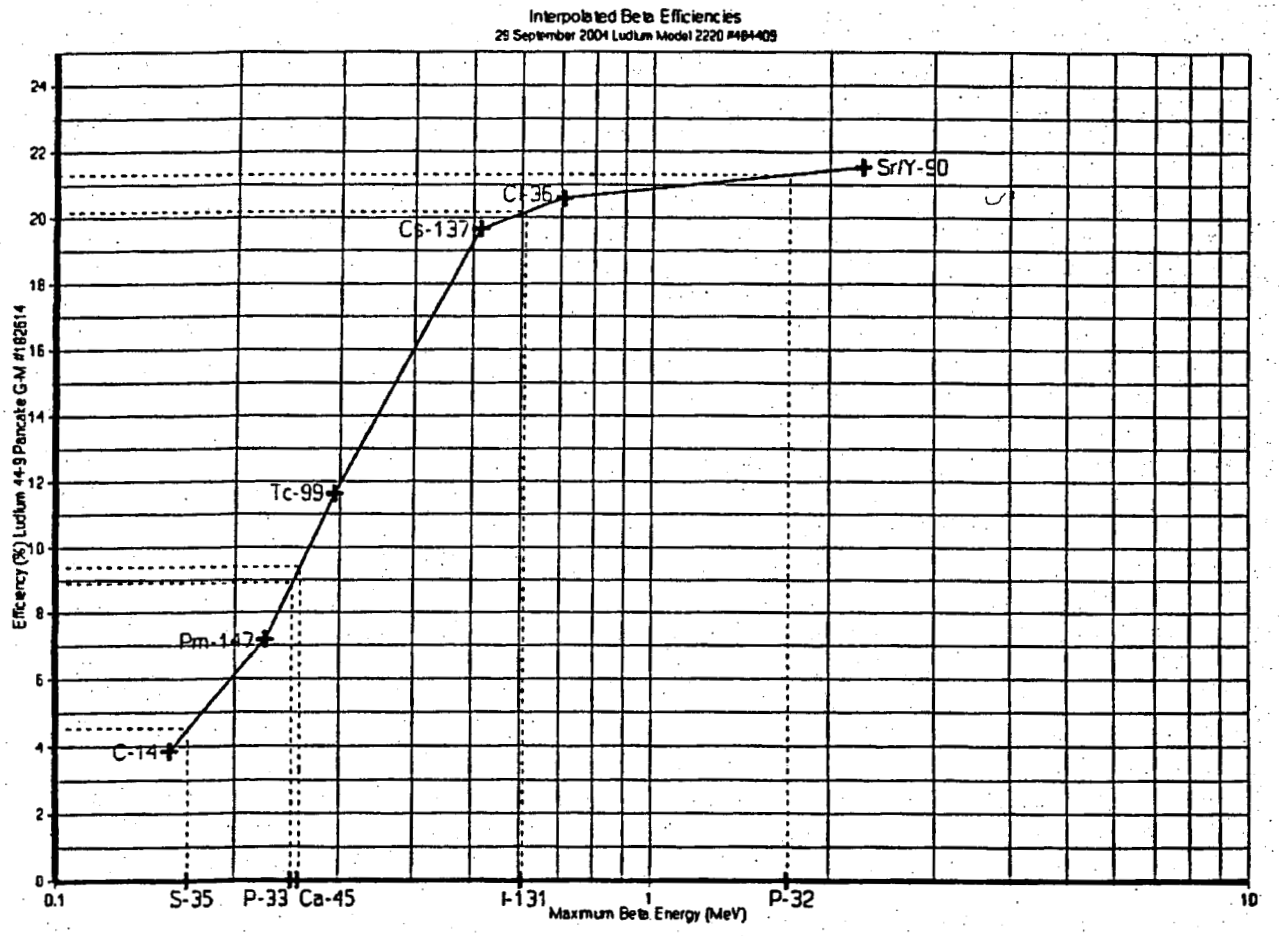
Local background (cpm) = 46

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
1 min. count	C-14 #4456	202,100	7851	3.86
1 min. count	Pm-147 #5381	8,453	653	7.18
1 min. count	Tc-99 #D702	23,064	2727	11.62
1 min. count	Cs-137 #2886	17,777	3540	19.65
1 min. count	Cl-36 #D700	23,598	4903	20.58
1 min. count	Sr/Y-90 #D711	44,497	9624	21.53
1 min. count	Th-230 #91TH2200210	38,900	4757	12.11

RSA Laboratories ID# 9247. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Kurt D. Newton _____ Date: 29 September 2004

Reviewed by: Paul R. Steinmeyer _____ Date: 29 September 2004



RSA Laboratories ID# 9247.

Calibrated by: Kurt D. Newton _____ Date: 29 September 2004

Reviewed by: Paul R. Steinmeyer _____ Date: 29 September 2004

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: Scientech, Inc., Attn: S.R. Smith (860) 210-3085
Customer Address: 143 West Street, New Milford, CT 06776

Inst. Mfr. & Model Ludlum Model 2221 | Inst. Type Scaler/Ratemeter | Inst. s/n 68537
Det. Mfr. & Model Eberline PG-2 | Det. Type Low Energy Gamma Scintillator | Det. s/n 718194
Cal. Date 11 March 2005 | Due Date 11 March 2006 | Cal. Interval 1 year

Environmental conditions: Temperature: 70°F Relative Humidity 25% Atmospheric Pressure 29.50 inches Hg

Pre-calibration Checks:

- ■ Contamination survey
- ■ Battery check
- ■ Slow response check
- ■ Mechanical check
- ■ Audio check
- □ Window operation
- ■ Det. volts 975 Vdc
- ■ Meter zero
- ■ Reset check
- □ Plateau check
- ■ Geotropism check
- ■ Fast response check
- □ Alarm set
- ■ Input sens. 16 mV

■ Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
■ HV Readout (2 points) Ref./Inst. 500V/ 500V Ref./Inst. 1500V/ 1500V

Comments: Pulse calibration performed with window OUT. Cs-137 & Am-241 efficiencies measured on contact with probe face. Window IN = 16 to 21 mV. Background with window IN ≈ 295 cpm, window OUT ≈ 1598 cpm.

S/N of source used for precision check #2886 Isotope Cs-137 Dedicated Source? □Yes ■No
Reading #1 2,794 Reading #2 2,736 Reading #3 2,845 Mean 2,792
Precision: ■±<10% □±10-20% □Out of tolerance

Range	Reference Calibration Point	"As Found" Instrument Indication	"As left" Instrument Indication
x 1000	400,000 cpm	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm	400 cpm
x 1	100 cpm	100 cpm	100 cpm
1 min. count	400,000 cpm	399,993 counts	399,993 counts

All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
1 min. count	Cs-137 #2886 (Win IN)	17,602	353	0.33
1 min. count	Cs-137 #2886 (Win OUT)	17,602	2,792	6.78
1 min. count	Am-241 #47 (Win IN)	573,197	40,075	6.94
1 min. count	Am-241 #47 (Win OUT)	573,197	46,139	7.77

RSA Laboratories ID# 9606. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Kurt D. Newton _____ Date: 11 March 2005

Reviewed by: Jay R. Dockendorff _____ Date: 11 March 2005

(B)

Windowed Efficiency Calculations

Cs-137 source #2886 @ 17,602dpm

Isotope information:
36.4keV @ 0.0139 photons/dis
32.2194keV @ 0.038197 photons/dis
31.817keV @ 0.020703 photons/dis
Sum yield for this window = 0.0728
Sum yield for all photons in isotope = 0.982981
Effective yield for this region = 0.0728/0.982981 = 0.07406
Effective activity for this region = 17602dpm * 0.07406 = 1304 dpm @ 32keV

Ludlum Model 2221 #68537 w. Eberline PG-2 #718194:
353 ncpm/1304 dpm @32keV = 0.2707 cpm/dpm @ 32keV in a 4-pi steradian
0.2707 cpm/dpm @ 32keV in a 4-pi steradian * 0.5 = **0.135 cpm/dpm @ 32keV in a 2-pi steradian**

Ludlum Model 2221 #68537 w. Eberline PG-2 #406572:
207 ncpm/1304 dpm @32keV = 0.1568 cpm/dpm @ 32keV in a 4-pi steradian
0.1568 cpm/dpm @ 32keV in a 4-pi steradian * 0.5 = **0.0794 cpm/dpm @ 32keV in a 2-pi steradian**

The nuclide data are taken from "Radioactive Decay Data Tables" by David C. Kocher, Report DOE/TIC-11026.

Paul R. [illegible], 16 March 2005

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

C

CUSTOMER SCIENTECH INC PA ORDER NO. 226033

fg. Ludlum Measurements, Inc. Model 19 Serial No. 209746

Mfg. Model Serial No.

Cal. Date 15-Nov-04 Cal Due Date 15-Nov-05 Cal. Interval 1 Year Meterface 202-1070

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 72 °F RH 34 % Alt 710.8 mm Hg

☑ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☑ F/S Resp. ck ☑ Reset ck. ☐ Window Operation ☑ Geotropism
☑ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 700 V Input Sens. 31 mV Det. Oper. V at mV Threshold Dial Ratio = mV

☑ HV Readout (2 points) Ref./Inst. 500 / 492 V Ref./Inst. 1000 / 992 V

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
5000	4000μR/hr		4000
5000	1000μR/hr		1000
500	400μR/hr = 70,500 cpm		400
500	100μR/hr		110
250	200μR/hr = 36,000 cpm		200
250	100μR/hr		105
50	7050 cpm		40
50	1760 cpm		10
25	3600 cpm		20
25	900 cpm		5

*Uncertainty within ± 10% C.F. within ± 20% 50, 25 **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout				Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☑ 720 ☐ 734 ☐ 1616 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N ☐ Beta S/N ☐ Other

☑ m 500 S/N 196745 ☐ Oscilloscope S/N ☑ Multimeter S/N 80050663

Calibrated By: Elior Chavez Date 15 Nov 04

Reviewed By: Gloria Orozco Date 15 Nov 04

FORM C22A 11/26/2003

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed:

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

D

Customer and Contact: Scientech, Inc., Attn: Randy Smith (860) 210-3085
Customer Address: 143 West Street, New Milford, CT 06776

Inst. Mfr. & Model Ludlum Model 2221	Inst. Type Scaler/Ratemeter	Inst. s/n 73700
Det. Mfr. & Model Ludlum 43-20	Det. Type Gas-Proportional	Det. s/n 040611
Cal. Date 05 May 2004	Due Date 05 May 2005	Cal. Interval 1 Year

Environmental conditions: Temperature: 72°F Relative Humidity 40% Atmospheric Pressure 29.20 inches Hg

Pre-calibration Checks:

- ■ Contamination survey
- ■ Battery check
- ■ Slow response check
- ■ Mechanical check
- ■ Audio check
- ■ Window operation
- ■ Det. volts 1750 Vdc
- ■ Meter zero
- ■ Reset check
- ■ Plateau check
- ■ Geotropism check
- ■ Fast response check
- □ Alarm set
- ■ Input sens. 4 mV

■ Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
■ HV Readout (2 points) Ref./Inst. 900 V/ 900 V Ref./Inst. 1700 V/ 1700 V

Comments: Efficiencies taken with source in near-contact with probe grill.

S/N of source used for precision check 0001 Isotope Th-230 Dedicated Source? □Yes ■No
Reading #1 9,865 Reading #2 9,756 Reading #3 9,926 Mean 9,849
Precision: ■±<10% □±10-20% □Out of tolerance

Range	Reference Calibration Point	"As Found" Instrument Indication	"As left" Instrument Indication
x 1000	400,000 cpm	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm	400 cpm
x 1	100 cpm	100 cpm	100 cpm
1 min. count	400,000 cpm	400,048 cpm	400,048 cpm

All ranges calibrated electronically.

Local background (cpm) = 362

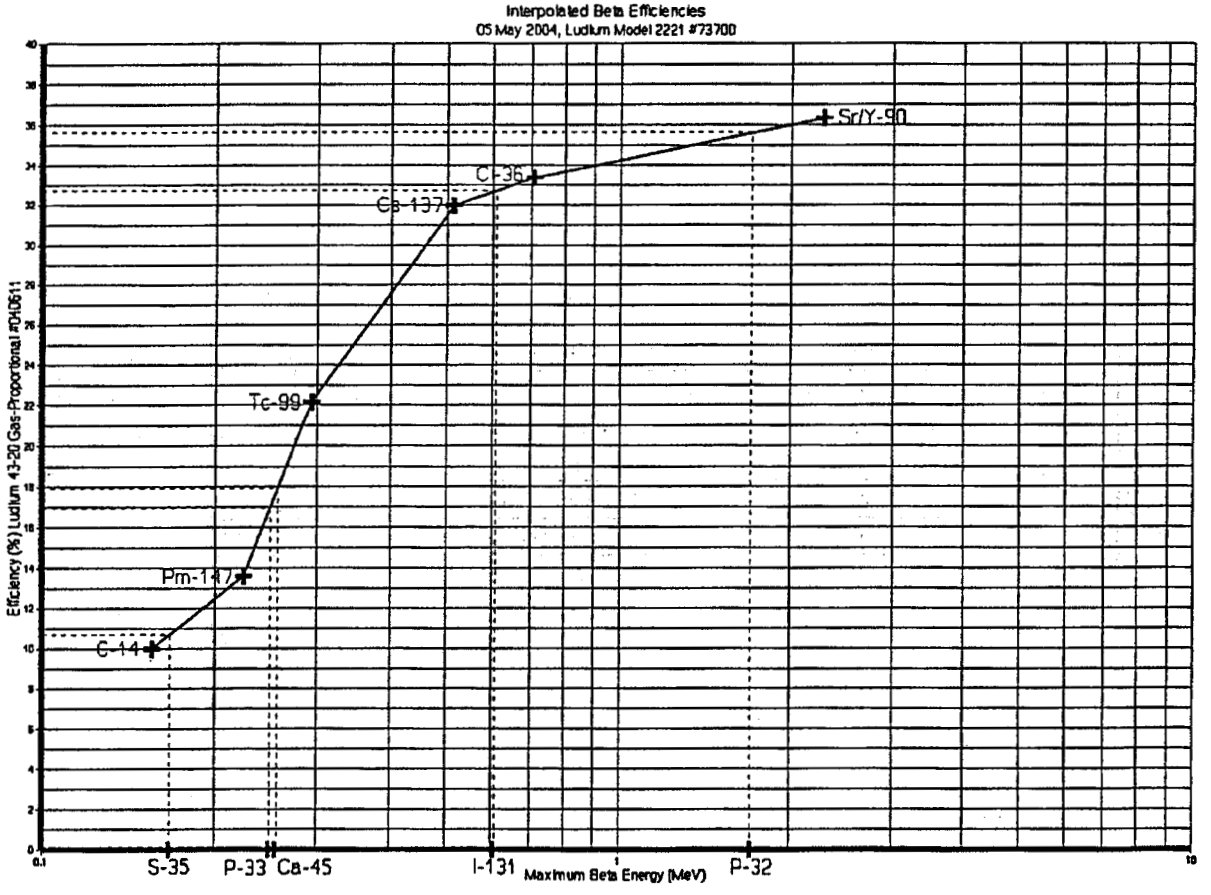
Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
1 min. count	C-14 #4456 0.7" disk	202,100	20,532	9.98
1 min. count	Pm-147 #5381 0.7" disk	9,401	1640	13.59
1 min. count	Tc-99 #D702 0.7" disk	23,064	5470	22.15
1 min. count	Cs-137 #2886 0.7" disk	17,942	6099	31.98
1 min. count	Cl-36 #D700 0.7" disk	23,598	8237	33.37
1 min. count	Sr/Y-90 #D711 0.7" disk	44,933	16,697	36.35
1 min. count	Th-230 #91TH4700001 2" disk	33,000	9849	28.75

RSA Laboratories ID# 8606. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Kurt D. Newton _____ Date: 05 May 2004

Reviewed by: Jay R. Dockendorff _____ Date: 05 May 2004

D



RSA Laboratories ID# 8606.

Calibrated by: Kurt D. Newton_____ **Date: 05 May 2004**

Reviewed by: Jay R. Dockendorff_____ **Date: 05 May 2004**

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

E

Customer and Contact: **Scientech, Inc., Attn: Randy Smith (860) 210-3085**
Customer Address: **143 West Street, New Milford, CT 06776**

Inst. Mfr. & Model **Ludlum Model 2221**	Inst. Type **Scaler/Ratemeter**	Inst. s/n **176940**
Det. Mfr. & Model **Ludlum 43-68**	Det. Type **Gas-Proportional**	Det. s/n **160793**
Cal. Date **05 May 2004**	Due Date **05 May 2005**	Cal. Interval **1 Year**

Environmental conditions: Temperature: 72°F Relative Humidity 40% Atmospheric Pressure 29.25 inches Hg

Pre-calibration Checks:

- ■ Contamination survey
- ■ Mechanical check
- ■ Meter zero
- ■ Geotropism check
- ■ Battery check
- ■ Audio check
- ■ Reset check
- ■ Fast response check
- ■ Slow response check
- ■ Window operation
- ■ Plateau check
- □ Alarm set
- ■ Det. volts 1690 Vdc
- ■ Input sens. 4 mV

■ Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
■ HV Readout (2 points) Ref./Inst. 900 V/ 900 V Ref./Inst. 1700 V/ 1700 V

Comments: Efficiencies taken with source in near-contact with probe grill.

S/N of source used for precision check 0001 Isotope Th-230 Dedicated Source? □Yes ■No
Reading #1 9,368 Reading #2 9,605 Reading #3 9,527 Mean 9,500
Precision: ■±<10% □±10-20% □Out of tolerance

Range	Reference Calibration Point	"As Found" Instrument Indication	"As left" Instrument Indication
x 1000	400,000 cpm	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm	400 cpm
x 1	100 cpm	100 cpm	100 cpm
1 min. count	400,000 cpm	400,023 cpm	400,023 cpm

All ranges calibrated electronically.

Local background (cpm) = 346

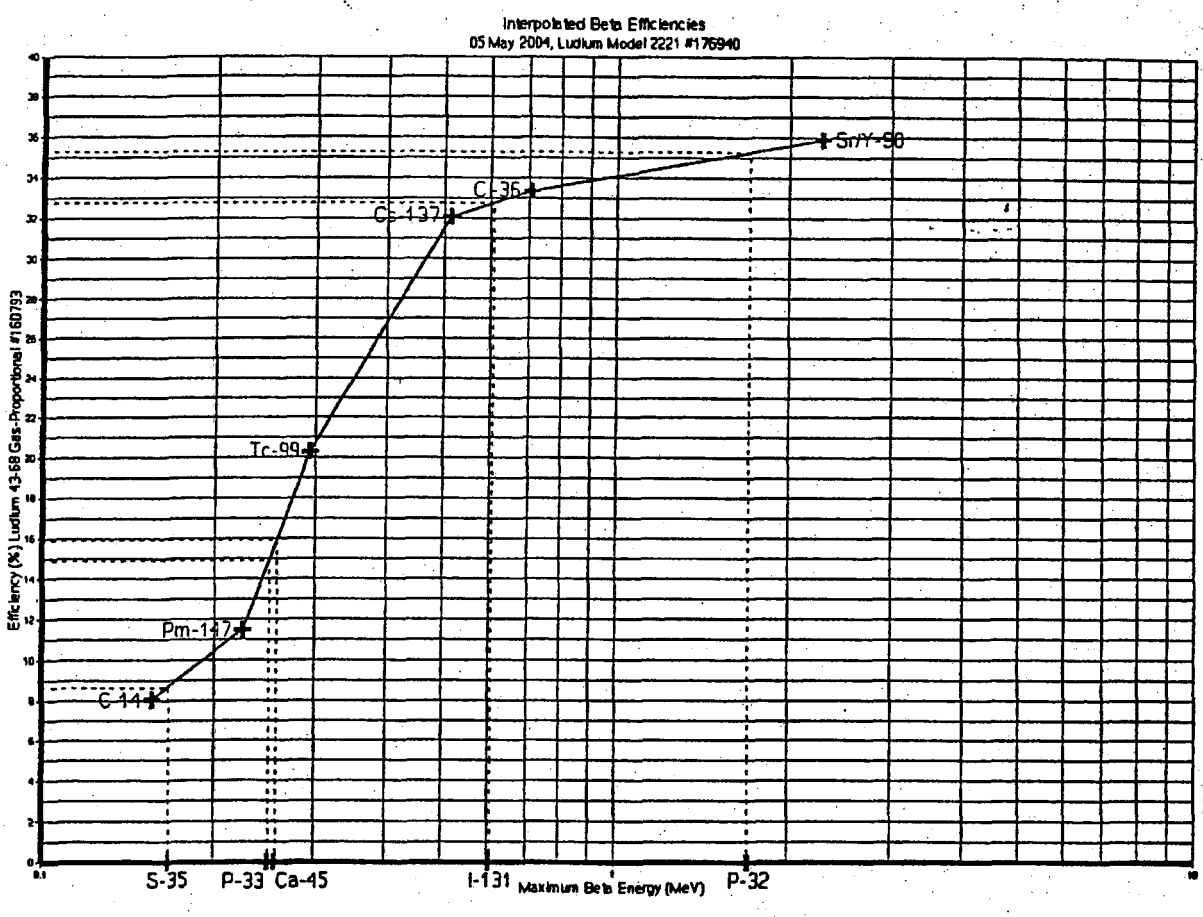
Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
1 min. count	C-14 #4456 0.7" disk	202,100	16,592	8.04
1 min. count	Pm-147 #5381 0.7" disk	9,401	1425	11.48
1 min. count	Tc-99 #D702 0.7" disk	23,064	5029	20.30
1 min. count	Cs-137 #2886 0.7" disk	17,942	6101	32.08
1 min. count	Cl-36 #D700 0.7" disk	23,598	8217	33.35
1 min. count	Sr/Y-90 #D711 0.7" disk	44,933	16,472	35.89
1 min. count	Th-230 #91TH4700001 2" disk	33,000	9,500	27.74

RSA Laboratories ID# 8603. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Kurt D. Newton _____ Date: 05 May 2004

Reviewed by: Jay R. Dockendorff _____ Date: 05 May 2004

(E)



RSA Laboratories ID# 8603.

Calibrated by: Kurt D. Newton _____ Date: 05 May 2004

Reviewed by: Jay R. Dockendorff _____ Date: 05 May 2004

CERTIFICATE OF CALIBRATION
(COUNT RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

F

Customer and Contact: **Scientech, Inc., Attn: Rob Ellison (814) 263-4694**
Customer Address: **115 Reactor Road, Karthaus, PA 16845**

Inst. Mfr. & Model **Ludlum Model 2241-3**	Inst. Type **Scaler/Ratemeter**	Inst. s/n **212353**
Det. Mfr. & Model **Ludlum 43-37**	Type **Gas Proportional**	Det. s/n **068422**
Cal. Date **14 December 2004**	Due Date **14 December 2005**	Cal. Interval **1 year**

Environmental conditions: Temperature: 68°F Relative Humidity 29% Atmospheric Pressure 29.30 inches Hg

Pre-calibration Checks:

- ■ Contamination survey
- ■ Mechanical check
- ■ Meter zero
- ■ Geotropism check
- ■ Battery check
- ■ Audio check
- ■ Reset check
- ■ Fast response check
- ■ Slow response check
- □ Window operation
- □ Plateau check
- □ Alarm set
- ■ Det. volts 1620 Vdc
- ■ Input sens. 2 mV

■ Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
□HV Readout

Comments: **Switch set to Det. 2. Th-230 efficiency measured with source at near contact. Calibrated using 5-foot long probe cord.**

S/N of source used for precision check #0210 Isotope Th-230 Dedicated Source? □Yes ■No
Reading #1 9,190 cpm Reading #2 9,085 cpm Reading #3 9,366 kcpm Mean 9,214 cpm
Precision: ■±<10% □±10-20% □Out of tolerance

Range	Reference Calibration Point	"As Found" Instrument Indication	"As left" Instrument Indication
n/a	800,000 cpm	799 kcpm	799 kcpm
n/a	200,000 cpm	200 kcpm	200 kcpm
n/a	80,000 cpm	79.9 kcpm	79.0 kcpm
n/a	20,000 cpm	20.0 kcpm	20.0 kcpm
n/a	8,000 cpm	8.00 kcpm	8.00 kcpm
n/a	2,000 cpm	2.00 kcpm	2.00 kcpm
n/a	800 cpm	800 cpm	800 cpm
n/a	200 cpm	200 cpm	200 cpm
n/a	80 cpm	80 cpm	80 cpm
n/a	20 cpm	20 cpm	20 cpm
1 min. count	8,000 cpm	7,999 counts	7,999 counts
1 min. count	2,000 cpm	2,001 counts	2,001 counts

All ranges calibrated electronically.

Local background (cpm) ≈ 836

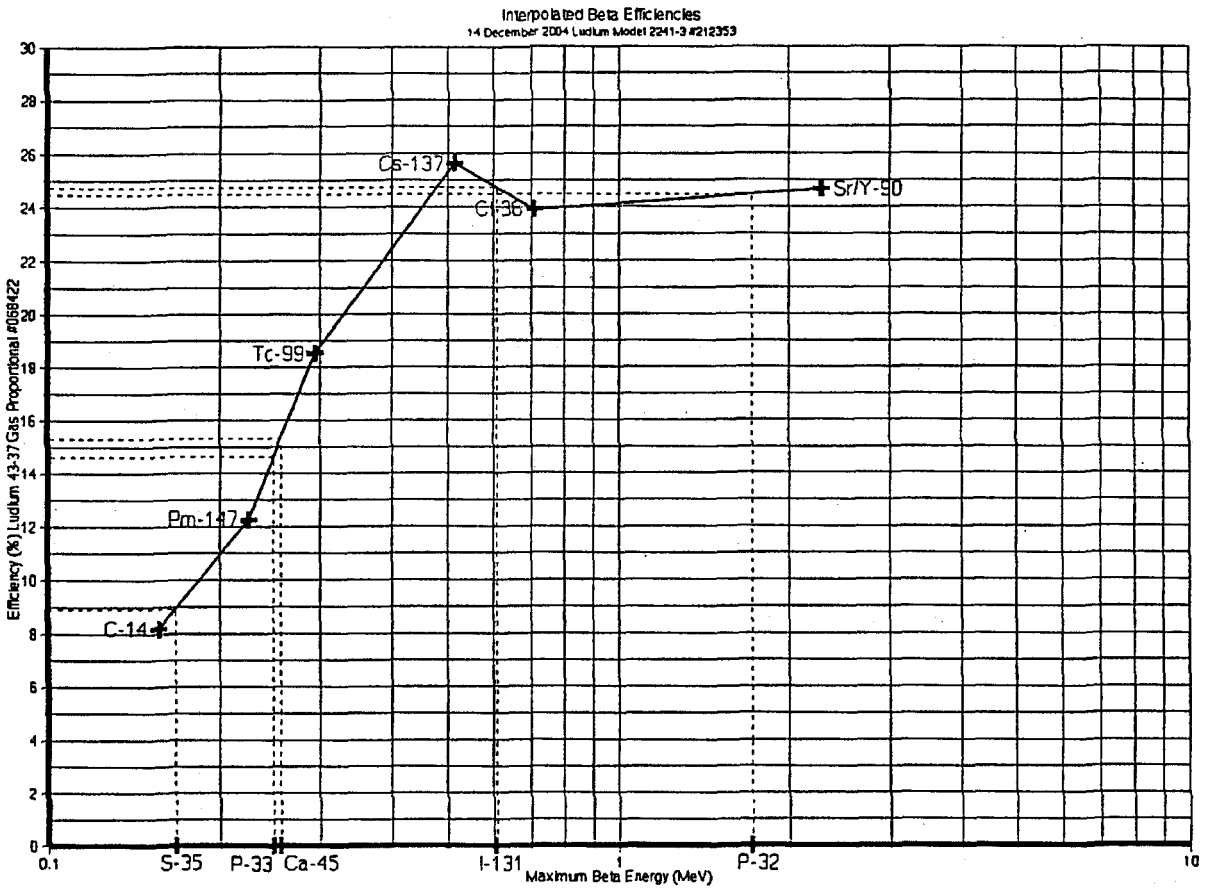
Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
1 min. count	C-14 #4456	202,100	17,377	8.18
1 min. count	Pm-147 #5381	7,989	1815	12.25
1 min. count	Tc-99 #D702	23,064	5109	18.53
1 min. count	Cs-137 #2886	17,690	5368	25.62
1 min. count	Cl-36 #D700	23,598	6476	23.90
1 min. count	Sr/Y-90 #D711	44,267	11,753	24.66
1 min. count	Th-230 #91TH2200210	38,900	9214	21.54

RSA Laboratories ID# 9492. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Kurt D. Newton _____ Date: 14 December 2004

Reviewed by: Jay R. Dockendorff _____ Date: 14 December 2004

(F)



RSA Laboratories ID# 9492.

Calibrated by: Kurt D. Newton_____ Date: 14 December 2004

Reviewed by: Jay R. Dockendorff_____ Date: 14 December 2004

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

(G)

Effectiv 12/7/04

Customer and Contact: Scientech, Inc., Attn: Randy Smith (860) 210-3085
Customer Address: 143 West Street, New Milford, CT 06776

Inst. Mfr. & Model Ludlum Model 2360	Inst. Type Scaler/Ratemeter	Inst. s/n 202415
Det. Mfr. & Model Ludlum Model 43-68	Det. Type Gas Proportional	Det. s/n 177282
Cal. Date 01 December 2004	Due Date 01 December 2005	Cal. Interval 1 year

Environmental conditions: Temperature: 68°F Relative Humidity 44% Atmospheric Pressure 28.85 inches Hg

Pre-calibration Checks:

- ■ Contamination survey
- ■ Mechanical check
- ■ Meter zero
- ■ Geotropism check
- ■ Battery check
- ■ Audio check
- ■ Reset check
- □ Fast response check
- □ Slow response check
- □ Window operation
- ■ Plateau check
- □ Alarm set
- ■ Det. volts 1550 Vdc
- ■ Input sens. *See comments

■ Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
■ HV Readout (2 points) Ref./Inst. 500 V/ 500 V Ref./Inst. 2000 V/ 2000 V

Comments: * Alpha threshold = 130 mV; Beta threshold = 3.5 mV; Beta window = 3.5 mV to 60 mV.
Local background ≈ 1 cpm alpha, 230 cpm beta. Th-230 efficiency measured at near contact.

S/N of source used for precision check 0210 Isotope Th-230 Dedicated Source? □Yes ■No
Reading #1 7,138 cpm Reading #2 7,270 cpm Reading #3 7,137 cpm Mean 7,182 cpm
Precision: ■± <10% □± 10-20% □Out of tolerance

Range	Reference Calibration Point	"As Found" Instrument Indication	"As left" Instrument Indication
x 1000	400,000 cpm	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm	400 cpm
x 1	100 cpm	100 cpm	100 cpm
1 min. count	400,000 cpm	399,830 counts	399,830 counts

All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (Isotope and S/N)	Source Activity (dpm)	Instrument Bending (cpm)	4π Instrument Efficiency (%)
1 min. count	C-14 [illegible]	[illegible]	4 (α) 16,959 (β)	0.0% 8.3%
1 min. count	Pm-147 #5301	8,070	0 (α) 1,111 (β)	0.0% 10.3%
1 min. count	Tc-99 #D702	23,064	2 (α) 4,047 (β)	0.0% 16.5%
1 min. count	Cs-137 #2886	17,705	3 (α) 4,200 (β)	0.0% 22.4%
1 min. count	Cl-36 #D700	23,578	2 (α) 4,799 (β)	0.0% 19.4%
1 min. count	Sr/Y-90 #D751	44,300	2 (α) 8,730 (β)	0.0% 19.2%
1 min. count	Th-230 #9178H200210	30,900	5,340 (α) 1,842 (β)	13.7% 4.1%

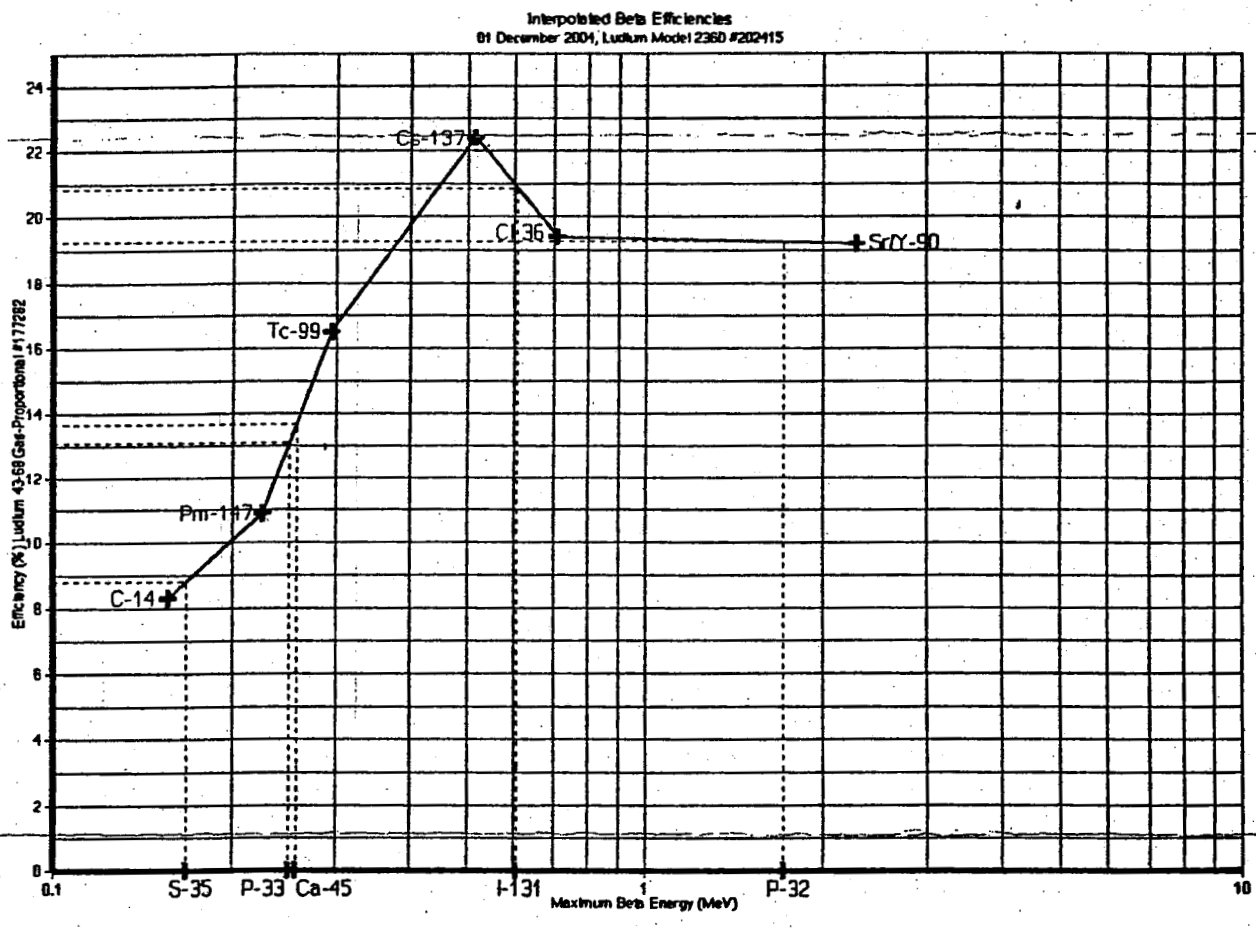
RSA Laboratories ID# 9470. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Kurt D. Newton _____ Date: 01 December 2004

Reviewed by: Paul R. Steinmeyer _____ Date: 01 December 2004

G

Effective 12/7/04



RSA Laboratories ID# 9470.

Calibrated by: Kurt D. Newton _____ **Date: 01 December 2004**

Reviewed by: Paul R. Steinmeyer _____ **Date: 01 December 2004**

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

H

Customer and Contact: **Scientech, Inc., Attn: Randy Smith (860) 210-3085**
Customer Address: **143 West Street, New Milford, CT 06776**

Inst. Mfr. & Model **Ludlum Model 12**	Inst. Type **Survey Meter**	Inst. s/n **177883**
Det. Mfr. & Model **Ludlum 43-37**	Det. Type **Gas-Proportional**	Det. s/n **160824**
Cal. Date **05 August 2004**	Due Date **05 August 2005**	Cal. Interval **1 Year**

Environmental conditions: Temperature: 70°F Relative Humidity 50% Atmospheric Pressure 29.15 inches Hg

Pre-calibration Checks:

- ■ Contamination survey
- ■ Mechanical check
- ■ Meter zero
- ■ Geotropism check
- ■ Battery check
- ■ Audio check
- ■ Reset check
- ■ Fast response check
- ■ Slow response check
- ■ Window operation
- ■ Plateau check
- □ Alarm set
- ■ Det. volts 1700 Vdc
- ■ Input sens. 4 mV

■ Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
■ HV Readout (2 points) Ref./Inst. 500 V/ 500 V Ref./Inst. 2000 V/ 2000 V

Comments: **Efficiencies taken with source in near-contact with probe grill. Calibration performed using 10-foot probe cord.**

S/N of source used for precision check **0001** Isotope **Th-230** Dedicated Source? □Yes ■No
Reading #1 **10,000** Reading #2 **10,000** Reading #3 **10,000** Mean **10,000**
Precision: ■± <10% □±10-20% □Out of tolerance

Range	Reference Calibration Point	"As Found" Instrument Indication	"As left" Instrument Indication
x 1000	400,000 cpm	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm	400 cpm
x 1	100 cpm	100 cpm	100 cpm

All ranges calibrated electronically.

Local background (cpm) ≈ 400

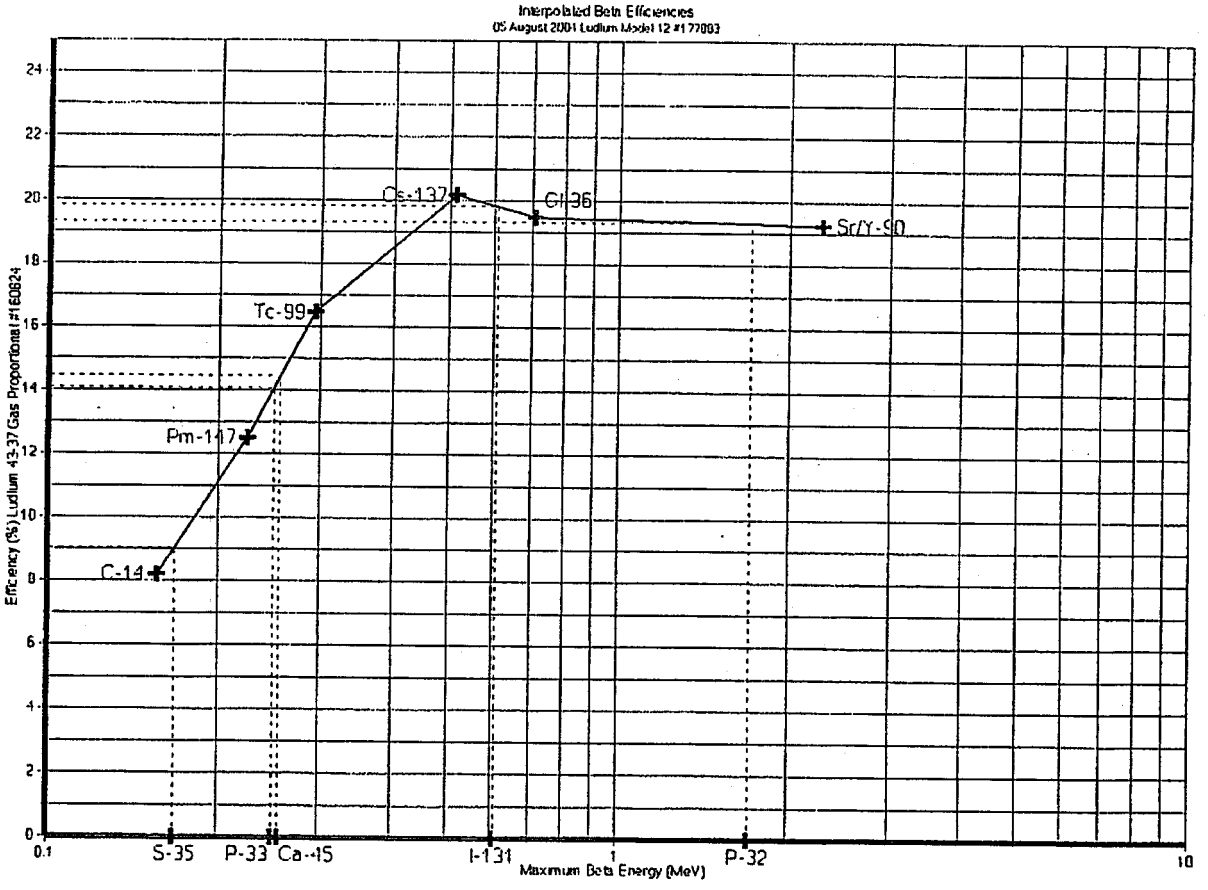
Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
x 100	C-14 #4456 0.7" disk	202,100	17,000	8.21
x 10	Pm-147 #5381 0.7" disk	8,802	1500	12.50
x 10	Tc-99 #D702 0.7" disk	23,064	4200	16.48
x 10	Cs-137 #2886 0.7" disk	17,839	4000	20.18
x 100	Cl-36 #D700 0.7" disk	23,598	5000	19.49
x 100	Sr/Y-90 #D711 0.7" disk	44,662	9000	19.26
x 100	Th-230 #91TH4700001 2" disk	33,000	10,000	29.09

RSA Laboratories ID# 9087. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Kurt D. Newton _____ Date: 05 August 2004

Reviewed by: Paul R. Steinmeyer _____ Date: 05 August 2004

(H)



RSA Laboratories ID# 9087.

Calibrated by: Kurt D. Newton _____ Date: 05 August 2004

Reviewed by: Paul R. Steinmeyer _____ Date: 05 August 2004

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: Scientech, Inc., Attn: S.R. Smith (860) 210-3085
Customer Address: 143 West Street, New Milford, CT 06776
Inst. Mfr. & Model Ludlum Model 2221 | Inst. Type Scaler/Ratemeter | Inst. s/n 68795
Det. Mfr. & Model Ludlum 44-3 | Det. Type Low Energy Gamma Scintillator | Det. s/n 128278
Cal. Date 21 March 2005 | Due Date 21 March 2006 | Cal. Interval 1 year

Environmental conditions: Temperature: 65°F Relative Humidity 36% Atmospheric Pressure 29.80 inches Hg
Pre-calibration Checks:

- ■ Contamination survey
- ■ Mechanical check
- ■ Meter zero
- ■ Geotropism check
- ■ Battery check
- ■ Audio check
- ■ Reset check
- ■ Fast response check
- ■ Slow response check
- □ Window operation
- □ Plateau check
- □ Alarm set
- ■ Det. volts 750 Vdc
- ■ Input sens. 10 mV

■ Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
■ HV Readout (2 points) Ref./Inst. 500V/ 500V Ref./Inst. 1500V/ 1500V

Comments: Pulse calibration performed with window OUT. Window IN = 10 to 16.5 mV. Background with window IN = 19 cpm, window OUT = 317 cpm.

S/N of source used for precision check #081693 Isotope I-129 Dedicated Source? □Yes ■No
Reading #1 14,134 Reading #2 14,397 Reading #3 14,383 Mean 14,305
Precision: ■± <10% □± 10-20% □Out of tolerance

Range	Reference Calibration Point	"As Found" Instrument Indication	"As left" Instrument Indication
x 1000	400,000 cpm	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm	400 cpm
x 1	100 cpm	100 cpm	100 cpm
1 min. count	400,000 cpm	400,009 counts	400,009 counts

All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (Isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
1 min. count	Cs-137 #2886 (Win IN)	1,304	276	19.71
1 min. count	Cs-137 #2886 (Win OUT)	17,602	2,022	9.69
1 min. count	Am-241 #47 (Win IN)	573,197	10,554	1.84
1 min. count	Am-241 #47 (Win OUT)	573,197	46,192	8.00
1 min. count	I-129 #NES-186S-081693 (Win IN)	166,500	12,688	7.61
1 min. count	I-129 #NES-186S-081693 (Win OUT)	166,500	14,305	8.40
1 min. count	I-125 (mock) #NES-186S-081693 (Win IN)	129,870	12,688	9.76
1 min. count	I-125 (mock) #NES-186S-081693 (Win OUT)	129,870	14,305	10.77

RSA Laboratories ID# 9626. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Kurt D. Newton _____ Date: 21 March 2005

Reviewed by: Jay R. Dockendorff _____ Date: 21 March 2005

J

Windowed Efficiency Calculations

Cs-137 source #2886 @ 17,602dpm

Isotope information:
36.4keV @ 0.0139 photons/dis
32.2194keV @ 0.038197 photons/dis
31.817keV @ 0.020703 photons/dis
Sum yield for this window = 0.0728
Sum yield for all photons in isotope = 0.982981
Effective yield for this region = 0.0728/0.982981 = 0.07406
Effective activity for this region = 17602dpm * 0.07406 = 1304 dpm @ 32keV

Ludlum Model 2221 #172022 w. Eberline PG-2 #406572:
158 ncpm/1304 dpm @32keV = 0.1212 cpm/dpm @ 32keV in a 4-pi steradian
0.1212 cpm/dpm @ 32keV in a 4-pi steradian * 0.5 = **0.061 cpm/dpm @ 32keV in a 2-pi steradian**

Ludlum Model 2221 #68795 w. Ludlum 44-3 #128278:
257 ncpm/1304 dpm @32keV = 0.1971 cpm/dpm @ 32keV in a 4-pi steradian
0.1971 cpm/dpm @ 32keV in a 4-pi steradian * 0.5 = **0.0985 cpm/dpm @ 32keV in a 2-pi steradian**

The nuclide data are taken from "Radioactive Decay Data Tables" by David C. Kocher, Report DOE/TIC-11026.

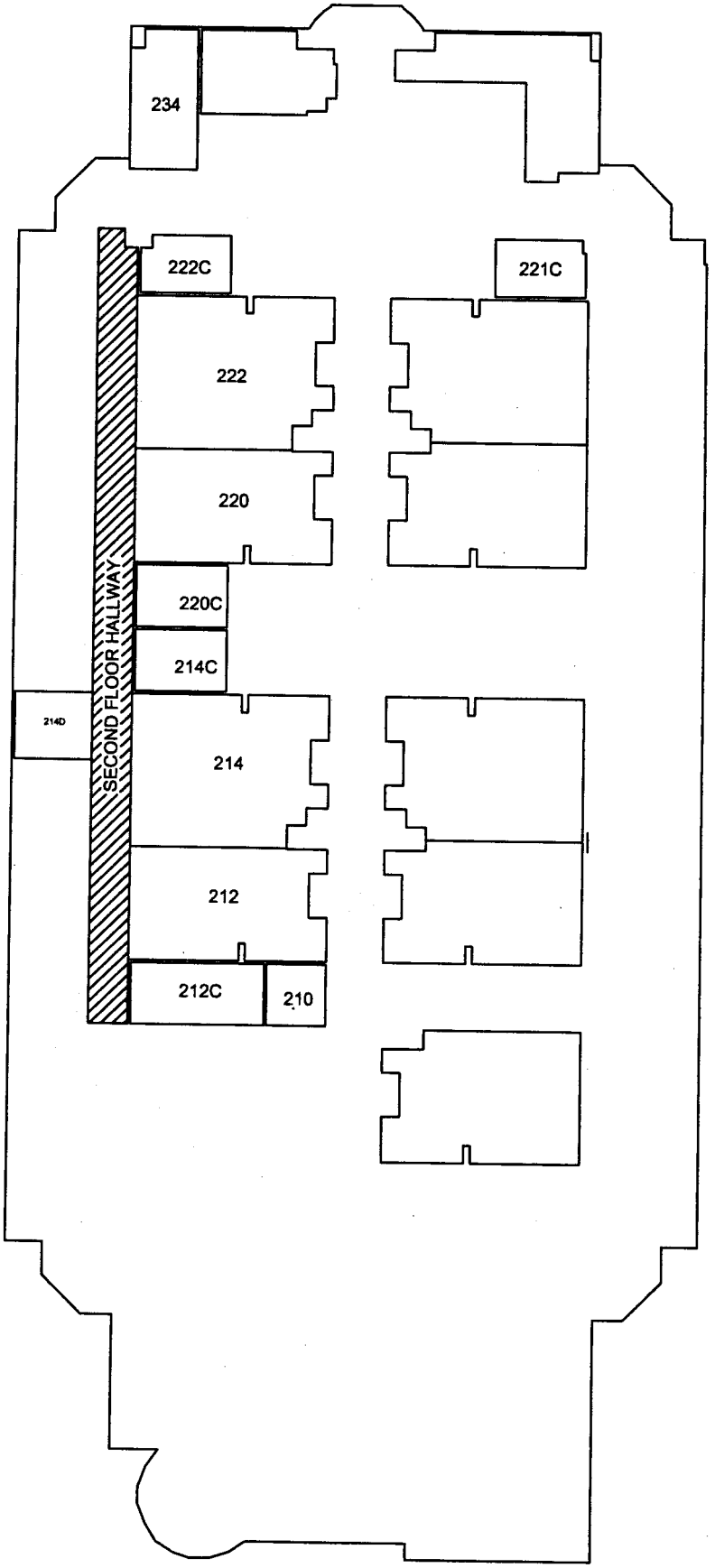
Calculated by: **Kurt D. Newton** _____ Date: **21 March 2005**

Reviewed by: **Jay R. Dockendorff** _____ Date: **21 March 2005**

APPENDIX C

FINAL STATUS SURVEY MAPS AND MEASUREMENT RESULTS

Building 24, 2nd Floor Hallway



BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 SECOND FLOOR HALLWAY

SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	2nd Fl. Hallway		
Instrument ID:	E		Survey Date:	03/28/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	1A	200	512	209	89	<MDC
2	Wall	1B	200	512	203	30	<MDC
3	Floor	2A	200	512	258	573	573
4	Wall	2B	200	512	237	366	<MDC
5	Floor	3A	200	512	250	494	<MDC
6	Wall	3B	200	512	215	148	<MDC
7	Floor	4A	200	512	224	237	<MDC
8	Wall	4B	200	512	216	158	<MDC
9	Floor	5A	200	512	196	-40	<MDC
10	Wall	5B	200	512	236	356	<MDC
11	Floor	6A	200	512	222	217	<MDC
12	Wall	6B	200	512	211	109	<MDC
13	Floor	7A	200	512	245	445	<MDC
14	Wall	7B	200	512	247	465	<MDC
15	Floor	8A	200	512	246	455	<MDC
16	Wall	8B	200	512	200	0	<MDC
17	Floor	9A	200	512	243	425	<MDC
18	Wall	9B	200	512	200	0	<MDC
19	Floor	10A	200	512	202	20	<MDC
20	Wall	10B	200	512	187	-128	<MDC

Survey Type:	Fixed-Gamma		Survey Unit:	2nd Fl. Hallway		
Instrument ID:	J		Survey Date:	03/28/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	1A	8	3,353	8	0	<MDC
2	Wall	1B	8	3,353	9	263	<MDC
3	Floor	2A	8	3,353	11	788	<MDC
4	Wall	2B	8	3,353	8	0	<MDC
5	Floor	3A	8	3,353	9	263	<MDC
6	Wall	3B	8	3,353	7	-263	<MDC
7	Floor	4A	8	3,353	10	526	<MDC
8	Wall	4B	8	3,353	2	-1,577	<MDC
9	Floor	5A	8	3,353	13	1,314	<MDC
10	Wall	5B	8	3,353	3	-1,314	<MDC
11	Floor	6A	8	3,353	10	526	<MDC
12	Wall	6B	8	3,353	9	263	<MDC
13	Floor	7A	8	3,353	11	788	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Scans** Survey Unit: **2nd Fl. Hallway**

Instrument Information:

Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	250	943	250	290	<MDC	<MDC

Survey Type: **Removable H-3** Survey Unit: **2nd Fl. Hallway**

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	1A	30	50	14	<MDC
2	Wall	1B	30	50	15	<MDC
3	Floor	2A	30	50	21	<MDC
4	Wall	2B	30	50	25	<MDC
5	Floor	3A	30	50	22	<MDC
6	Wall	3B	30	50	0	<MDC
7	Floor	4A	30	50	19	<MDC
8	Wall	4B	30	50	20	<MDC
9	Floor	5A	30	50	8	<MDC
10	Wall	5B	30	50	7	<MDC
11	Floor	6A	30	50	17	<MDC
12	Wall	6B	30	50	17	<MDC
13	Floor	7A	30	50	2	<MDC
14	Wall	7B	30	50	17	<MDC
15	Floor	8A	30	50	10	<MDC
16	Wall	8B	30	50	15	<MDC
17	Floor	9A	30	50	8	<MDC
18	Wall	9B	30	50	24	<MDC
19	Floor	10A	30	50	21	<MDC
20	Wall	10B	30	50	5	<MDC

Survey Type: **Removable C-14** Survey Unit: **2nd Fl. Hallway**

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	1A	11	16	10	<MDC
2	Wall	1B	11	16	13	<MDC
3	Floor	2A	11	16	12	<MDC
4	Wall	2B	11	16	10	<MDC
5	Floor	3A	11	16	14	<MDC
6	Wall	3B	11	16	16	16
7	Floor	4A	11	16	16	16
8	Wall	4B	11	16	14	<MDC
9	Floor	5A	11	16	21	21

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Removable C-14** Survey Unit: **2nd Fl. Hallway**

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
10	Wall	5B	11	16	13	<MDC
11	Floor	6A	11	16	14	<MDC
12	Wall	6B	11	16	10	<MDC
13	Floor	7A	11	16	17	17
14	Wall	7B	11	16	13	<MDC
15	Floor	8A	11	16	14	<MDC
16	Wall	8B	11	16	17	17
17	Floor	9A	11	16	12	<MDC
18	Wall	9B	11	16	18	18
19	Floor	10A	11	16	12	<MDC
20	Wall	10B	11	16	14	<MDC

Survey Type: **Gamma Dose Rates** Survey Unit: **2nd Fl. Hallway**

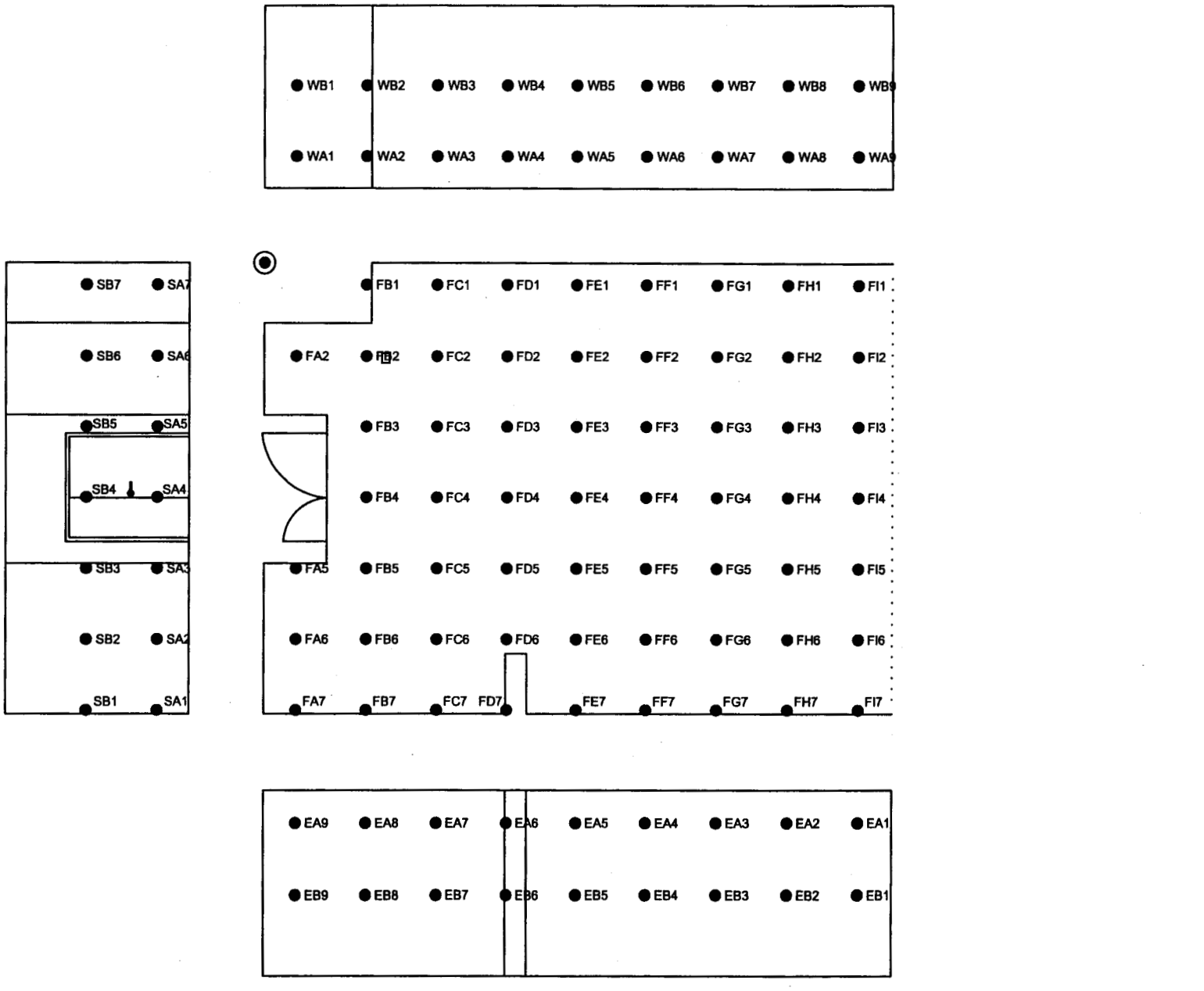
Instrument ID: C Survey Date: 03/28/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Floor	1A	5
2	Wall	1B	5
3	Floor	2A	5
4	Wall	2B	5
5	Floor	3A	5
6	Wall	3B	5
7	Floor	4A	5
8	Wall	4B	5
9	Floor	5A	5
10	Wall	5B	5
11	Floor	6A	5
12	Wall	6B	5
13	Floor	7A	5
14	Wall	7B	5
15	Floor	8A	5
16	Wall	8B	5
17	Floor	9A	5
18	Wall	9B	5
19	Floor	10A	5
20	Wall	10B	5

Building 24, Room 107

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 107



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	107		
Instrument ID:	G		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	WA8	70	305	81	105	<MDC
2	Wall	WB2	70	305	100	287	<MDC
3	Metal	SA6	70	305	78	76	<MDC
4	Wall	SB2	70	305	107	354	354
5	Wall	EB8	70	305	90	191	<MDC
6	Metal	EA4	70	305	91	201	<MDC
7	Floor	FH6	70	305	66	-38	<MDC
8	Benchtop	FA6	70	305	78	76	<MDC
9	Floor	FC3	70	305	103	316	316
10	Floor	FI12	70	305	78	76	<MDC
11	Ceiling	EG1	70	305	92	210	<MDC
12	Ceiling	CE1	70	305	69	-10	<MDC
13	Upper Wall	SC4	70	305	73	29	<MDC
14	Upper Wall	EC4	70	305	77	67	<MDC
15	H1 Rear	FB7	70	305	99	277	<MDC
16	H1 Vent	FB7	70	305	83	124	<MDC
17	H1 left	FB7	70	305	72	19	<MDC
18	H1 right	FB7	70	305	73	29	<MDC
19	H1 base	FB7	70	305	61	-86	<MDC
20	F2 rear	FC1	70	305	79	86	<MDC
21	F2 vent	FC1	70	305	66	-38	<MDC
22	F2 left	FC1	70	305	74	38	<MDC
23	F2 right	FC1	70	305	71	10	<MDC
24	F2 base	FC1	70	305	69	-10	<MDC
25	Workbench	FE7	70	305	65	-48	<MDC
26	Drawer	FE7	70	305	81	105	<MDC
27	Workbench	FD2	70	305	73	29	<MDC
28	Drawer	FD2	70	305	72	19	<MDC
29	Fridge out	FH3	70	305	61	-86	<MDC
30	S1 sink	FC7	70	305	52	-172	<MDC
31	S1 trap	FC7	70	305	72	19	<MDC
32	S2 sink	FC4	70	305	74	38	<MDC
33	S2 trap	FC4	70	305	76	57	<MDC
34	S4 sink	FD1	70	305	68	-19	<MDC
35	S4 trap	FD1	70	305	71	10	<MDC
36	F2 out	FH5	70	305	59	-105	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Scans **Survey Unit: 107**

Instrument Information:

Instrument ID:	G		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Wall and Floor	All	80	914	100	130	<MDC	<MDC

Survey Type: Removable H-3 **Survey Unit: 107**

Instrument ID:	Beckman LS6500		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA2	27	48	8	<MDC
2	Floor	FA3	27	48	17	<MDC
3	Floor	FA4	27	48	11	<MDC
4	Floor	FA5	27	48	19	<MDC
5	Floor	FA6	27	48	9	<MDC
6	Floor	FA7	27	48	-2	<MDC
7	Floor	FB1	27	48	-1	<MDC
8	Floor	FB2	27	48	14	<MDC
9	Floor	FB3	27	48	3	<MDC
10	Floor	FB4	27	48	20	<MDC
11	Floor	FB5	27	48	6	<MDC
12	Floor	FB6	27	48	6	<MDC
13	Floor	FB7	27	48	8	<MDC
14	Floor	FC1	27	48	24	<MDC
15	Floor	FC2	27	48	13	<MDC
16	Floor	FC3	27	48	19	<MDC
17	Floor	FC4	27	48	19	<MDC
18	Floor	FC5	27	48	53	53
19	Floor	FC6	27	48	12	<MDC
20	Floor	FC7	27	48	20	<MDC
21	Floor	FD1	27	48	9	<MDC
22	Floor	FD2	27	48	18	<MDC
23	Floor	FD3	27	48	4	<MDC
24	Floor	FD4	27	48	12	<MDC
25	Floor	FD5	27	48	9	<MDC
26	Floor	FD6	27	48	7	<MDC
27	Floor	FD7	27	48	8	<MDC
28	Floor	FE1	27	48	6	<MDC
29	Floor	FE2	27	48	18	<MDC
30	Floor	FE3	27	48	16	<MDC
31	Floor	FE4	27	48	15	<MDC
32	Floor	FE5	27	48	19	<MDC
33	Floor	FE6	27	48	11	<MDC
34	Floor	FE7	27	48	-1	<MDC
35	Workbench	FE7	27	48	5	<MDC
36	Drawer	FE7	27	48	25	<MDC
37	Floor	FF1	27	48	3	<MDC
38	Floor	FF2	27	48	16	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 107

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
39	Floor	FF3	27	48	5	<MDC
40	Floor	FF4	27	48	6	<MDC
41	Floor	FF5	27	48	9	<MDC
42	Floor	FF6	27	48	19	<MDC
43	Floor	FF7	27	48	6	<MDC
44	Floor	FG1	27	48	19	<MDC
45	Floor	FG2	27	48	11	<MDC
46	Floor	FG3	27	48	11	<MDC
47	Floor	FG4	27	48	0	<MDC
48	Floor	FG5	27	48	4	<MDC
49	Floor	FG6	27	48	10	<MDC
50	Floor	FG7	27	48	19	<MDC
51	Floor	FH1	27	48	2	<MDC
52	Floor	FH2	27	48	4	<MDC
53	Floor	FH3	27	48	7	<MDC
54	Floor	FH4	27	48	12	<MDC
55	Floor	FH5	27	48	8	<MDC
56	Floor	FH6	27	48	11	<MDC
57	Floor	FH7	27	48	10	<MDC
58	Floor	FI1	27	48	7	<MDC
59	Floor	FI2	27	48	10	<MDC
60	Floor	FI3	27	48	12	<MDC
61	Floor	FI4	27	48	-1	<MDC
62	Floor	FI5	27	48	4	<MDC
63	Floor	FI6	27	48	15	<MDC
64	Floor	FI7	27	48	9	<MDC
65	Wall	EA1	27	48	2	<MDC
66	Wall	EA2	27	48	7	<MDC
67	Wall	EA3	27	48	-1	<MDC
68	Wall	EA4	27	48	12	<MDC
69	Wall	EA5	27	48	3	<MDC
70	Wall	EA6	27	48	4	<MDC
71	Wall	EA7	27	48	4	<MDC
72	Wall	EA8	27	48	5	<MDC
73	Wall	EA9	27	48	11	<MDC
74	Wall	EB1	27	48	5	<MDC
75	Wall	EB2	27	48	3	<MDC
76	Wall	EB3	27	48	13	<MDC
77	Wall	EB4	27	48	1	<MDC
78	Wall	EB5	27	48	-2	<MDC
79	Wall	EB6	27	48	18	<MDC
80	Wall	EB7	27	48	15	<MDC
81	Wall	EB8	27	48	3	<MDC
82	Wall	EB9	27	48	19	<MDC
83	Wall	SA1	27	48	20	<MDC
84	Wall	SA2	27	48	14	<MDC
85	Wall	SA3	27	48	12	<MDC
86	Wall	SA4	27	48	24	<MDC
87	Wall	SA5	27	48	16	<MDC
88	Wall	SA6	27	48	12	<MDC
89	Wall	SA7	27	48	7	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 107

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
90	Wall	SB1	27	48	10	<MDC
91	Wall	SB2	27	48	15	<MDC
92	Wall	SB3	27	48	8	<MDC
93	Wall	SB4	27	48	12	<MDC
94	Wall	SB5	27	48	15	<MDC
95	Wall	SB6	27	48	12	<MDC
96	Wall	SB7	27	48	-2	<MDC
97	Wall	WA1	27	48	10	<MDC
98	Wall	WA2	27	48	8	<MDC
99	Wall	WA3	27	48	14	<MDC
100	Wall	WA4	27	48	5	<MDC
101	Wall	WA5	27	48	9	<MDC
102	Wall	WA6	27	48	23	<MDC
103	Wall	WA7	27	48	9	<MDC
104	Wall	WA8	27	48	2	<MDC
105	Wall	WA9	27	48	-2	<MDC
106	Wall	WB1	27	48	7	<MDC
107	Wall	WB2	27	48	8	<MDC
108	Wall	WB3	27	48	12	<MDC
109	Wall	WB4	27	48	5	<MDC
110	Wall	WB5	27	48	2	<MDC
111	Wall	WB6	27	48	9	<MDC
112	Wall	WB7	27	48	2	<MDC
113	Wall	WB8	27	48	4	<MDC
114	Wall	WB9	27	48	11	<MDC
115	Ceiling	CG1	27	48	9	<MDC
116	Ceiling	CE1	27	48	11	<MDC
117	Upper Wall	SC4	27	48	-1	<MDC
118	Upper Wall	EC4	27	48	11	<MDC
119	Upper Wall	WC2	27	48	6	<MDC
120	Hood 1	FB7	27	48	1	<MDC
121	Hood 1	FB7	27	48	9	<MDC
122	Hood 1	FB7	27	48	5	<MDC
123	Hood 1	FB7	27	48	13	<MDC
124	Hood 1	FB7	27	48	-1	<MDC
125	Hood 2	FB7	27	48	15	<MDC
126	Hood 2	FC1	27	48	4	<MDC
127	Hood 2	FC1	27	48	15	<MDC
128	Hood 2	FC1	27	48	8	<MDC
129	Hood 2	FC1	27	48	28	<MDC
130	Workbench	#REF!	27	48	8	<MDC
131	Drawer	FD2	27	48	9	<MDC
132	Fridge 1 In	FD2	27	48	19	<MDC
133	Fridge 1 Out	n/a	27	48	24	<MDC
134	Sink 1	n/a	27	48	-1	<MDC
135	Trap 1	FC7	27	48	13	<MDC
136	Sink 2	FC7	27	48	15	<MDC
137	Trap 2	FC4	27	48	20	<MDC
138	Sink 3	FC4	27	48	4	<MDC
139	Trap 3	FB1	27	48	12	<MDC
140	Sink 4	FB1	27	48	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 107

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
141	Trap 4	FD1	27	48	8	<MDC
142	Fridge 2 in	FD1	27	48	3	<MDC
143	Fridge 2 out	n/a	27	48	2	<MDC

Survey Type: Removable C-14 Survey Unit: 107

Instrument ID:	Beckman LS6500		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA2	13	17	16	<MDC
2	Floor	FA3	13	17	12	<MDC
3	Floor	FA4	13	17	20	20
4	Floor	FA5	13	17	8	<MDC
5	Floor	FA6	13	17	13	<MDC
6	Floor	FA7	13	17	20	20
7	Floor	FB1	13	17	13	<MDC
8	Floor	FB2	13	17	12	<MDC
9	Floor	FB3	13	17	15	<MDC
10	Floor	FB4	13	17	16	<MDC
11	Floor	FB5	13	17	8	<MDC
12	Floor	FB6	13	17	26	26
13	Floor	FB7	13	17	16	<MDC
14	Floor	FC1	13	17	13	<MDC
15	Floor	FC2	13	17	21	21
16	Floor	FC3	13	17	13	<MDC
17	Floor	FC4	13	17	20	20
18	Floor	FC5	13	17	5	<MDC
19	Floor	FC6	13	17	12	<MDC
20	Floor	FC7	13	17	17	17
21	Floor	FD1	13	17	13	<MDC
22	Floor	FD2	13	17	16	<MDC
23	Floor	FD3	13	17	8	<MDC
24	Floor	FD4	13	17	12	<MDC
25	Floor	FD5	13	17	24	24
26	Floor	FD6	13	17	21	21
27	Floor	FD7	13	17	21	21
28	Floor	FE1	13	17	13	<MDC
29	Floor	FE2	13	17	25	25
30	Floor	FE3	13	17	19	19
31	Floor	FE4	13	17	12	<MDC
32	Floor	FE5	13	17	13	<MDC
33	Floor	FE6	13	17	13	<MDC
34	Floor	FE7	13	17	17	17
35	Workbench	FE7	13	17	16	<MDC
36	Drawer	FE7	13	17	8	<MDC
37	Floor	FF1	13	17	27	27
38	Floor	FF2	13	17	20	20
39	Floor	FF3	13	17	11	<MDC
40	Floor	FF4	13	17	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 107

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
41	Floor	FF5	13	17	13	<MDC
42	Floor	FF6	13	17	12	<MDC
43	Floor	FF7	13	17	15	<MDC
44	Floor	FG1	13	17	12	<MDC
45	Floor	FG2	13	17	19	19
46	Floor	FG3	13	17	20	20
47	Floor	FG4	13	17	16	<MDC
48	Floor	FG5	13	17	13	<MDC
49	Floor	FG6	13	17	12	<MDC
50	Floor	FG7	13	17	9	<MDC
51	Floor	FH1	13	17	17	17
52	Floor	FH2	13	17	19	19
53	Floor	FH3	13	17	19	19
54	Floor	FH4	13	17	19	19
55	Floor	FH5	13	17	22	22
56	Floor	FH6	13	17	15	<MDC
57	Floor	FH7	13	17	12	<MDC
58	Floor	FI1	13	17	19	19
59	Floor	FI2	13	17	12	<MDC
60	Floor	FI3	13	17	13	<MDC
61	Floor	FI4	13	17	17	17
62	Floor	FI5	13	17	12	<MDC
63	Floor	FI6	13	17	16	<MDC
64	Floor	FI7	13	17	17	17
65	Wall	EA1	13	17	7	<MDC
66	Wall	EA2	13	17	17	17
67	Wall	EA3	13	17	13	<MDC
68	Wall	EA4	13	17	23	23
69	Wall	EA5	13	17	16	<MDC
70	Wall	EA6	13	17	19	19
71	Wall	EA7	13	17	19	19
72	Wall	EA8	13	17	9	<MDC
73	Wall	EA9	13	17	24	24
74	Wall	EB1	13	17	11	<MDC
75	Wall	EB2	13	17	15	<MDC
76	Wall	EB3	13	17	13	<MDC
77	Wall	EB4	13	17	24	24
78	Wall	EB5	13	17	15	<MDC
79	Wall	EB6	13	17	8	<MDC
80	Wall	EB7	13	17	15	<MDC
81	Wall	EB8	13	17	16	<MDC
82	Wall	EB9	13	17	13	<MDC
83	Wall	SA1	13	17	9	<MDC
84	Wall	SA2	13	17	17	17
85	Wall	SA3	13	17	12	<MDC
86	Wall	SA4	13	17	11	<MDC
87	Wall	SA5	13	17	13	<MDC
88	Wall	SA6	13	17	17	17
89	Wall	SA7	13	17	16	<MDC
90	Wall	SB1	13	17	16	<MDC
91	Wall	SB2	13	17	15	<MDC
92	Wall	SB3	13	17	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 107

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
93	Wall	SB4	13	17	11	<MDC
94	Wall	SB5	13	17	16	<MDC
95	Wall	SB6	13	17	12	<MDC
96	Wall	SB7	13	17	20	20
97	Wall	WA1	13	17	15	<MDC
98	Wall	WA2	13	17	25	25
99	Wall	WA3	13	17	19	19
100	Wall	WA4	13	17	11	<MDC
101	Wall	WA5	13	17	13	<MDC
102	Wall	WA6	13	17	13	<MDC
103	Wall	WA7	13	17	12	<MDC
104	Wall	WA8	13	17	17	17
105	Wall	WA9	13	17	15	<MDC
106	Wall	WB1	13	17	11	<MDC
107	Wall	WB2	13	17	9	<MDC
108	Wall	WB3	13	17	12	<MDC
109	Wall	WB4	13	17	15	<MDC
110	Wall	WB5	13	17	12	<MDC
111	Wall	WB6	13	17	17	17
112	Wall	WB7	13	17	16	<MDC
113	Wall	WB8	13	17	19	19
114	Wall	WB9	13	17	13	<MDC
115	Ceiling	CG1	13	17	12	<MDC
116	Ceiling	CE1	13	17	13	<MDC
117	Upper Wall	SC4	13	17	28	28
118	Upper Wall	EC4	13	17	20	20
119	Upper Wall	WC2	13	17	15	<MDC
120	Hood 1	FB7	13	17	19	19
121	Hood 1	FB7	13	17	21	21
122	Hood 1	FB7	13	17	16	<MDC
123	Hood 1	FB7	13	17	15	<MDC
124	Hood 1	FB7	13	17	19	19
125	Hood 2	FC1	13	17	11	<MDC
126	Hood 2	FC1	13	17	13	<MDC
127	Hood 2	FC1	13	17	21	21
128	Hood 2	FC1	13	17	11	<MDC
129	Hood 2	FC1	13	17	19	19
130	Workbench	FD2	13	17	15	<MDC
131	Drawer	FD2	13	17	13	<MDC
132	Fridge 1 In	n/a	13	17	7	<MDC
133	Fridge 1 Out	n/a	13	17	16	<MDC
134	Sink 1	FC7	13	17	28	28
135	Trap 1	FC7	13	17	19	19
136	Sink 2	FC4	13	17	16	<MDC
137	Trap 2	FC4	13	17	21	21
138	Sink 3	FB1	13	17	17	17
139	Trap 3	FB1	13	17	23	23
140	Sink 4	FD1	13	17	24	24
141	Trap 4	FD1	13	17	11	<MDC
142	Fridge 2 in	n/a	13	17	16	<MDC
143	Fridge 2 out	n/a	13	17	11	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Gamma Dose Rates** Survey Unit: **107**

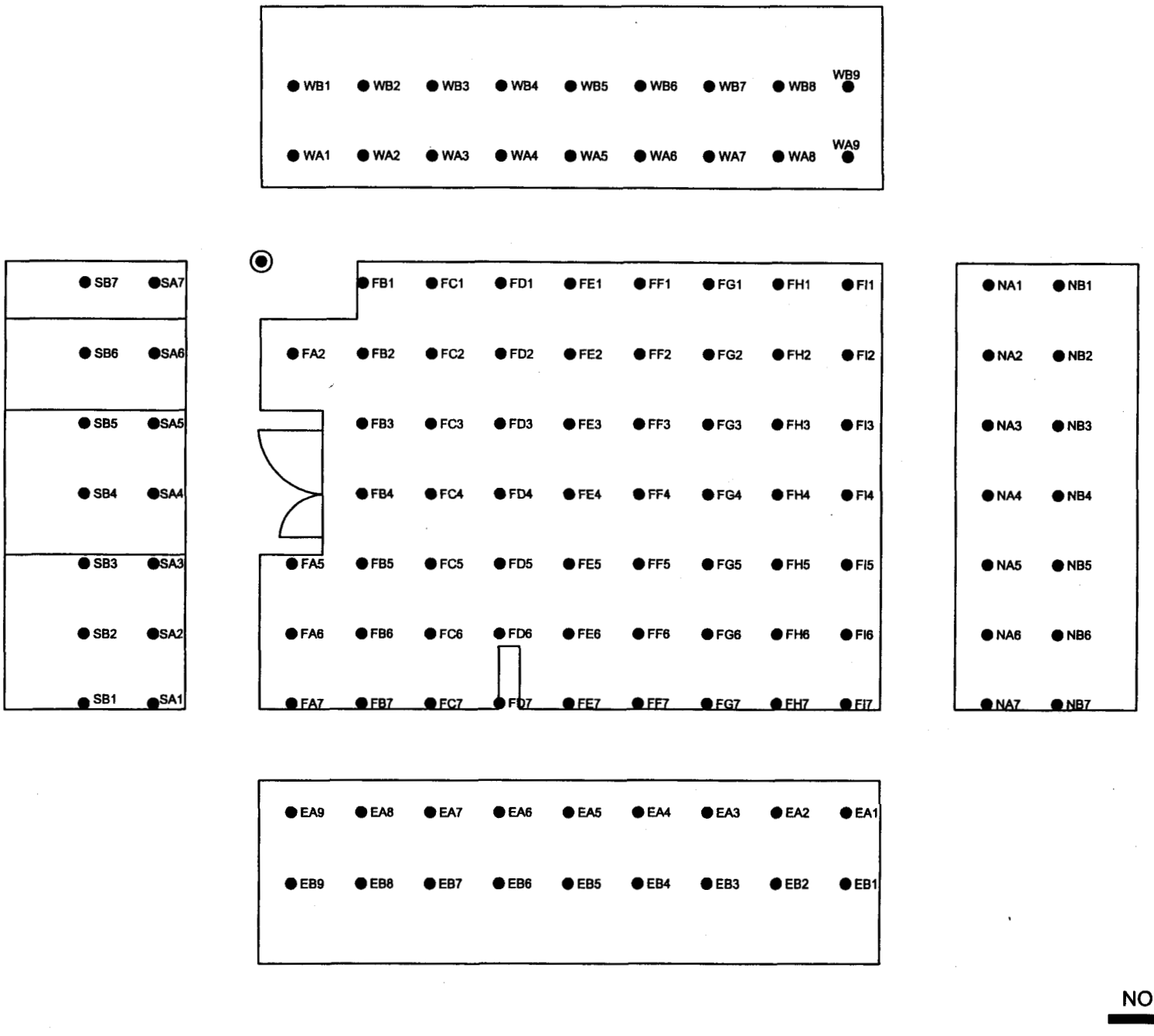
Instrument ID: C Survey Date: 03/21/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Metal	WA8	6
2	Wall	WB2	6
3	Metal	SA6	6
4	Wall	SB2	6
5	Wall	EB8	5
6	Metal	EA4	5
7	Floor	FH6	5
8	Benchtop	FA6	5
9	Floor	FC3	5
10	Floor	FI12	6
11	Ceiling	EG1	5
12	Ceiling	CE1	5
13	Upper Wall	SC4	5
14	Upper Wall	EC4	5
15	H1 Rear	FB7	6
16	H1 Vent	FB7	6
17	H1 left	FB7	6
18	H1 right	FB7	6
19	H1 base	FB7	6
20	F2 rear	FC1	6
21	F2 vent	FC1	6
22	F2 left	FC1	6
23	F2 right	FC1	6
24	F2 base	FC1	6
25	Workbench	FE7	5
26	Drawer	FE7	5
27	Workbench	FD2	6
28	Drawer	FD2	6
29	Fridge in	FH3	6
30	Fridge out	FH3	5
31	S1 sink	FC7	5
32	S1 trap	FC7	5
33	S2 sink	FC4	5
34	S2 trap	FC4	5
35	S3 sink	FB1	6
36	S3 trap	FB1	6
37	S4 sink	FD1	5
38	S4 trap	FD1	5
39	F2 in	FH5	6
40	F2 out	FH5	6

Building 24, Room 109

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 109



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	109		
Instrument ID:	E		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	EB4	160	461	185	247	<MDC
2	Wall	EA7	160	461	178	178	<MDC
3	Wall	SB3	160	461	195	346	<MDC
4	Wall	SA6	160	461	146	-138	<MDC
5	Wall	WA2	160	461	170	99	<MDC
6	Wall	WA4	160	461	169	89	<MDC
7	Wall	WB7	160	461	186	257	<MDC
8	Floor	FF2	160	461	163	30	<MDC
9	Benchtop	FD4	160	461	169	89	<MDC
10	Floor	FE6	160	461	198	376	<MDC
11	Sink 1	FE7	160	461	147	-128	<MDC
12	Trap 1	FE7	160	461	159	-10	<MDC
13	Sink 2	FC7	160	461	151	-89	<MDC
14	Trap 2	FC7	160	461	154	-59	<MDC
15	Sink 3	FC1	160	461	162	20	<MDC
16	Trap 3	FC1	160	461	159	-10	<MDC
17	Sink 4	FE1	160	461	138	-217	<MDC
18	Trap 4	FE1	160	461	147	-128	<MDC
19	Sink 5	FE4	160	461	146	-138	<MDC
20	Trap 5	FE4	160	461	144	-158	<MDC
21	Sink 6	FI1	160	461	199	385	<MDC
22	Trap 6	FI1	160	461	168	79	<MDC
23	Benchtop	FH3	160	461	194	336	<MDC
24	Drawer	FF3	160	461	206	455	<MDC
25	Ceiling	CF1	160	461	241	801	801
26	Ceiling	CG3	160	461	275	1,137	1,137
27	Upper Wall	SC5	160	461	198	376	<MDC
28	Upper Wall	EC5	160	461	164	40	<MDC
29	Hood 1	FC7	160	461	154	-59	<MDC
30	Hood 1	FC7	160	461	175	148	<MDC
31	Hood 1	FC7	160	461	135	-247	<MDC
32	Hood 1	FC7	160	461	176	158	<MDC
33	Hood 1	FC7	160	461	130	-297	<MDC
34	Hood 2	FC1	160	461	131	-287	<MDC
35	Hood 2	FC1	160	461	135	-247	<MDC
36	Hood 2	FC1	160	461	139	-208	<MDC
37	Hood 2	FC1	160	461	136	-237	<MDC
38	Hood 2	FC1	160	461	156	-40	<MDC
39	Benchtop	FI7	160	461	166	59	<MDC
40	Benchtop	FG1	160	461	195	346	<MDC
41	Drawer	FA7	160	461	212	514	514
42	Fluoroscope	FF5	160	461	183	227	<MDC
43	Fridge in	FE3	160	461	151	-89	<MDC
44	Fridge out	FE3	160	461	171	109	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Scans **Survey Unit: 109**

Instrument Information:

Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	160	1,336	180	250	<MDC	<MDC

Survey Type: Removable H-3 **Survey Unit: 109**

Instrument ID:	Beckman LS6500		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA2	14	36	23	<MDC
2	Floor	FA3	14	36	24	<MDC
3	Floor	FA4	14	36	18	<MDC
4	Floor	FA5	14	36	12	<MDC
5	Floor	FA6	14	36	4	<MDC
6	Floor	FA7	14	36	19	<MDC
7	Floor	FB1	14	36	17	<MDC
8	Floor	FB2	14	36	35	<MDC
9	Floor	FB3	14	36	13	<MDC
10	Floor	FB4	14	36	15	<MDC
11	Floor	FB5	14	36	28	<MDC
12	Floor	FB6	14	36	25	<MDC
13	Floor	FB7	14	36	5	<MDC
14	Floor	FC1	14	36	5	<MDC
15	Floor	FC2	14	36	31	<MDC
16	Floor	FC3	14	36	18	<MDC
17	Floor	FC4	14	36	24	<MDC
18	Floor	FC5	14	36	23	<MDC
19	Floor	FC6	14	36	3	<MDC
20	Floor	FC7	14	36	17	<MDC
21	Floor	FD1	14	36	9	<MDC
22	Floor	FD2	14	36	14	<MDC
23	Floor	FD3	14	36	16	<MDC
24	Floor	FD4	14	36	8	<MDC
25	Floor	FD5	14	36	14	<MDC
26	Floor	FD6	14	36	6	<MDC
27	Floor	FD7	14	36	13	<MDC
28	Floor	FE1	14	36	9	<MDC
29	Floor	FE2	14	36	13	<MDC
30	Floor	FE3	14	36	9	<MDC
31	Floor	FE4	14	36	13	<MDC
32	Floor	FE5	14	36	6	<MDC
33	Floor	FE6	14	36	-1	<MDC
34	Floor	FE7	14	36	7	<MDC
35	Workbench	FF1	14	36	27	<MDC
36	Drawer	FF2	14	36	8	<MDC
37	Floor	FF3	14	36	21	<MDC
38	Floor	FF4	14	36	1	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 109

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
39	Floor	FF5	14	36	14	<MDC
40	Floor	FF6	14	36	18	<MDC
41	Floor	FF7	14	36	15	<MDC
42	Floor	FG1	14	36	20	<MDC
43	Floor	FG2	14	36	5	<MDC
44	Floor	FG3	14	36	14	<MDC
45	Floor	FG4	14	36	10	<MDC
46	Floor	FG5	14	36	26	<MDC
47	Floor	FG6	14	36	14	<MDC
48	Floor	FG7	14	36	1	<MDC
49	Floor	FH1	14	36	22	<MDC
50	Floor	FH2	14	36	-1	<MDC
51	Floor	FH3	14	36	4	<MDC
52	Floor	FH4	14	36	19	<MDC
53	Floor	FH5	14	36	19	<MDC
54	Floor	FH6	14	36	19	<MDC
55	Floor	FH7	14	36	-1	<MDC
56	Floor	FI1	14	36	4	<MDC
57	Floor	FI2	14	36	17	<MDC
58	Floor	FI3	14	36	23	<MDC
59	Floor	FI4	14	36	12	<MDC
60	Floor	FI5	14	36	10	<MDC
61	Floor	FI6	14	36	7	<MDC
62	Floor	FI7	14	36	3	<MDC
63	Sink1	n/a	14	36	77	77
64	Trap 1	n/a	14	36	1	<MDC
65	Sink 2	n/a	14	36	4	<MDC
66	Trap 2	n/a	14	36	8	<MDC
67	Sink 3	n/a	14	36	9	<MDC
68	Trap 3	n/a	14	36	21	<MDC
69	Sink 4	n/a	14	36	10	<MDC
70	Trap 4	n/a	14	36	4	<MDC
71	Sink 5	n/a	14	36	18	<MDC
72	Trap 5	n/a	14	36	14	<MDC
73	Sink 6	n/a	14	36	11	<MDC
74	Trap 6	n/a	14	36	4	<MDC
75	Workbench	n/a	14	36	8	<MDC
76	Drawer	n/a	14	36	12	<MDC
77	Wall	EA1	14	36	21	<MDC
78	Wall	EA2	14	36	6	<MDC
79	Wall	EA3	14	36	5	<MDC
80	Wall	EA4	14	36	13	<MDC
81	Wall	EA5	14	36	4	<MDC
82	Wall	EA6	14	36	13	<MDC
83	Wall	EA7	14	36	9	<MDC
84	Wall	EA8	14	36	21	<MDC
85	Wall	EA9	14	36	30	<MDC
86	Wall	EB1	14	36	11	<MDC
87	Wall	EB2	14	36	7	<MDC
88	Wall	EB3	14	36	14	<MDC
89	Wall	EB4	14	36	14	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 109

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
90	Wall	EB5	14	36	14	<MDC
91	Wall	EB6	14	36	12	<MDC
92	Wall	EB7	14	36	18	<MDC
93	Wall	EB8	14	36	8	<MDC
94	Wall	EB9	14	36	24	<MDC
95	Wall	SA1	14	36	3	<MDC
96	Wall	SA2	14	36	15	<MDC
97	Wall	SA3	14	36	13	<MDC
98	Wall	SA4	14	36	12	<MDC
99	Wall	SA5	14	36	4	<MDC
100	Wall	SA6	14	36	15	<MDC
101	Wall	SA7	14	36	10	<MDC
102	Wall	SB1	14	36	-3	<MDC
103	Wall	SB2	14	36	1	<MDC
104	Wall	SB3	14	36	3	<MDC
105	Wall	SB4	14	36	16	<MDC
106	Wall	SB5	14	36	12	<MDC
107	Wall	SB6	14	36	7	<MDC
108	Wall	SB7	14	36	19	<MDC
109	Wall	WA1	14	36	21	<MDC
110	Wall	WA2	14	36	-2	<MDC
111	Wall	WA3	14	36	7	<MDC
112	Wall	WA4	14	36	13	<MDC
113	Wall	WA5	14	36	22	<MDC
114	Wall	WA6	14	36	0	<MDC
115	Wall	WA7	14	36	11	<MDC
116	Wall	WA8	14	36	20	<MDC
117	Wall	WA9	14	36	20	<MDC
118	Wall	WB1	14	36	11	<MDC
119	Wall	WB2	14	36	10	<MDC
120	Wall	WB3	14	36	8	<MDC
121	Wall	WB4	14	36	18	<MDC
122	Wall	WB5	14	36	28	<MDC
123	Wall	WB6	14	36	1	<MDC
124	Wall	WB7	14	36	8	<MDC
125	Wall	WB8	14	36	13	<MDC
126	Wall	WB9	14	36	2	<MDC
127	Ceiling	CF1	14	36	12	<MDC
128	Ceiling	CG3	14	36	18	<MDC
129	Upper Wall	n/a	14	36	10	<MDC
130	Upper Wall	n/a	14	36	7	<MDC
131	Hood 1	n/a	14	36	4	<MDC
132	Hood 1	n/a	14	36	-1	<MDC
133	Hood 1	n/a	14	36	5	<MDC
134	Hood 1	n/a	14	36	7	<MDC
135	Hood 1	n/a	14	36	11	<MDC
136	Hood 2	n/a	14	36	15	<MDC
137	Hood 2	n/a	14	36	-2	<MDC
138	Hood 2	n/a	14	36	15	<MDC
139	Hood 2	n/a	14	36	23	<MDC
140	Hood 2	n/a	14	36	9	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 109

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
141	Workbench	n/a	14	36	11	<MDC
142	Workbench	n/a	14	36	5	<MDC
143	Drawer	n/a	14	36	1	<MDC
144	Drawer	n/a	14	36	9	<MDC
145	Fluoroscope	n/a	14	36	5	<MDC
146	Fridge 1 in	n/a	14	36	4	<MDC
147	Fridge 1 out	n/a	14	36	32	<MDC

Survey Type: Removable C-14 Survey Unit: 109

Instrument ID:	Beckman LS6500		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA2	9	15	13	<MDC
2	Floor	FA3	9	15	11	<MDC
3	Floor	FA4	9	15	11	<MDC
4	Floor	FA5	9	15	17	17
5	Floor	FA6	9	15	17	17
6	Floor	FA7	9	15	8	<MDC
7	Floor	FB1	9	15	13	<MDC
8	Floor	FB2	9	15	9	<MDC
9	Floor	FB3	9	15	16	16
10	Floor	FB4	9	15	12	<MDC
11	Floor	FB5	9	15	15	15
12	Floor	FB6	9	15	9	<MDC
13	Floor	FB7	9	15	18	18
14	Floor	FC1	9	15	11	<MDC
15	Floor	FC2	9	15	13	<MDC
16	Floor	FC3	9	15	11	<MDC
17	Floor	FC4	9	15	16	16
18	Floor	FC5	9	15	19	19
19	Floor	FC6	9	15	15	15
20	Floor	FC7	9	15	9	<MDC
21	Floor	FD1	9	15	13	<MDC
22	Floor	FD2	9	15	15	15
23	Floor	FD3	9	15	11	<MDC
24	Floor	FD4	9	15	16	16
25	Floor	FD5	9	15	19	19
26	Floor	FD6	9	15	13	<MDC
27	Floor	FD7	9	15	5	<MDC
28	Floor	FE1	9	15	13	<MDC
29	Floor	FE2	9	15	20	20
30	Floor	FE3	9	15	8	<MDC
31	Floor	FE4	9	15	9	<MDC
32	Floor	FE5	9	15	19	19
33	Floor	FE6	9	15	19	19
34	Floor	FE7	9	15	19	19
35	Workbench	FF1	9	15	19	19
36	Drawer	FF2	9	15	15	15

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 109

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
37	Floor	FF3	9	15	9	<MDC
38	Floor	FF4	9	15	19	19
39	Floor	FF5	9	15	23	23
40	Floor	FF6	9	15	20	20
41	Floor	FF7	9	15	16	16
42	Floor	FG1	9	15	16	16
43	Floor	FG2	9	15	16	16
44	Floor	FG3	9	15	19	19
45	Floor	FG4	9	15	17	17
46	Floor	FG5	9	15	15	15
47	Floor	FG6	9	15	13	<MDC
48	Floor	FG7	9	15	19	19
49	Floor	FH1	9	15	11	<MDC
50	Floor	FH2	9	15	19	19
51	Floor	FH3	9	15	13	<MDC
52	Floor	FH4	9	15	13	<MDC
53	Floor	FH5	9	15	13	<MDC
54	Floor	FH6	9	15	8	<MDC
55	Floor	FH7	9	15	19	19
56	Floor	FI1	9	15	23	23
57	Floor	FI2	9	15	17	17
58	Floor	FI3	9	15	15	15
59	Floor	FI4	9	15	20	20
60	Floor	FI5	9	15	11	<MDC
61	Floor	FI6	9	15	23	23
62	Floor	FI7	9	15	20	20
63	Sink1	n/a	9	15	16	16
64	Trap 1	n/a	9	15	25	25
65	Sink 2	n/a	9	15	12	<MDC
66	Trap 2	n/a	9	15	16	16
67	Sink 3	n/a	9	15	19	19
68	Trap 3	n/a	9	15	15	15
69	Sink 4	n/a	9	15	17	17
70	Trap 4	n/a	9	15	17	17
71	Sink 5	n/a	9	15	17	17
72	Trap 5	n/a	9	15	12	<MDC
73	Sink 6	n/a	9	15	13	<MDC
74	Trap 6	n/a	9	15	23	23
75	Workbench	n/a	9	15	21	21
76	Drawer	n/a	9	15	21	21
77	Wall	EA1	9	15	15	15
78	Wall	EA2	9	15	15	15
79	Wall	EA3	9	15	16	16
80	Wall	EA4	9	15	21	21
81	Wall	EA5	9	15	13	<MDC
82	Wall	EA6	9	15	16	16
83	Wall	EA7	9	15	19	19
84	Wall	EA8	9	15	12	<MDC
85	Wall	EA9	9	15	12	<MDC
86	Wall	EB1	9	15	20	20
87	Wall	EB2	9	15	11	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 109

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
88	Wall	EB3	9	15	20	20
89	Wall	EB4	9	15	17	17
90	Wall	EB5	9	15	8	<MDC
91	Wall	EB6	9	15	11	<MDC
92	Wall	EB7	9	15	20	20
93	Wall	EB8	9	15	16	16
94	Wall	EB9	9	15	15	15
95	Wall	SA1	9	15	11	<MDC
96	Wall	SA2	9	15	12	<MDC
97	Wall	SA3	9	15	16	16
98	Wall	SA4	9	15	17	17
99	Wall	SA5	9	15	17	17
100	Wall	SA6	9	15	21	21
101	Wall	SA7	9	15	7	<MDC
102	Wall	SB1	9	15	27	27
103	Wall	SB2	9	15	8	<MDC
104	Wall	SB3	9	15	21	21
105	Wall	SB4	9	15	9	<MDC
106	Wall	SB5	9	15	19	19
107	Wall	SB6	9	15	12	<MDC
108	Wall	SB7	9	15	15	15
109	Wall	WA1	9	15	11	<MDC
110	Wall	WA2	9	15	15	15
111	Wall	WA3	9	15	17	17
112	Wall	WA4	9	15	21	21
113	Wall	WA5	9	15	13	<MDC
114	Wall	WA6	9	15	27	27
115	Wall	WA7	9	15	20	20
116	Wall	WA8	9	15	16	16
117	Wall	WA9	9	15	13	<MDC
118	Wall	WB1	9	15	15	15
119	Wall	WB2	9	15	16	16
120	Wall	WB3	9	15	11	<MDC
121	Wall	WB4	9	15	9	<MDC
122	Wall	WB5	9	15	13	<MDC
123	Wall	WB6	9	15	8	<MDC
124	Wall	WB7	9	15	15	15
125	Wall	WB9	9	15	11	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 109

Instrument ID: C Survey Date: 03/21/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	EB4	5
2	Wall	EA7	5
3	Wall	SB3	5
4	Wall	SA6	5
5	Wall	WA2	6
6	Wall	WA4	6

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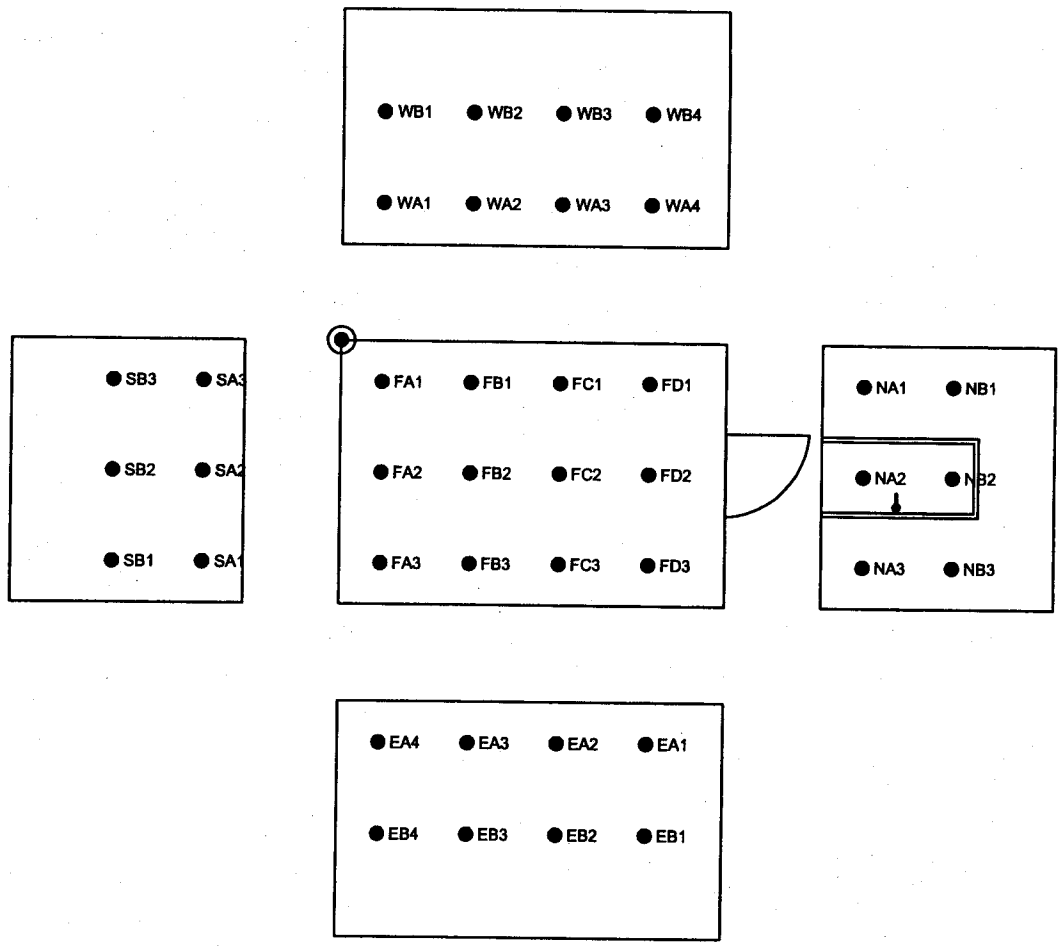
Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Gamma Dose Rates** Survey Unit: **109**

#	Location	Survey Point	Dose Rate (urem/hr)
7	Wall	WB7	6
8	Floor	FF2	6
9	Benchtop	FD4	6
10	Floor	FE6	6
11	Sink 1	FE7	5
12	Trap 1	FE7	5
13	Sink 2	FC7	5
14	Trap 2	FC7	5
15	Sink 3	FC1	5
16	Trap 3	FC1	5
17	Sink 4	FE1	5
18	Trap 4	FE1	5
19	Sink 5	FE4	5
20	Trap 5	FE4	5
21	Sink 6	FI1	5
22	Trap 6	FI1	5
23	Benchtop	FH3	5
24	Drawer	FF3	5
25	Ceiling	CF1	5
26	Ceiling	CG3	5
27	Upper Wall	SC5	5
28	Upper Wall	EC5	5
29	Hood 1	FC7	5
30	Hood 1	FC7	5
31	Hood 1	FC7	5
32	Hood 1	FC7	5
33	Hood 1	FC7	5
34	Hood 2	FC1	5
35	Hood 2	FC1	5
36	Hood 2	FC1	5
37	Hood 2	FC1	5
38	Hood 2	FC1	5
39	Benchtop	FI7	5
40	Benchtop	FG1	5
41	Drawer	FA7	5
42	Fluoroscope	FF5	5
43	Fridge in	FE3	5
44	Fridge out	FE3	5

Building 24, Room 109C

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 109C



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	109 C		
Instrument ID:	G		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WB1	65	295	79	134	<MDC
2	Metal	WA1	65	295	74	86	<MDC
3	Wall	WB3	65	295	67	19	<MDC
4	Metal	NA2	65	295	71	57	<MDC
5	Glass	EB3	65	295	70	48	<MDC
6	Metal	EA4	65	295	56	-86	<MDC
7	Wall	SB1	65	295	77	115	<MDC
8	Benchtop	FD1	65	295	71	57	<MDC
9	Floor	FB2	65	295	66	10	<MDC
10	Floor	FD3	65	295	65	0	<MDC
11	Ceiling	CC1	65	295	68	29	<MDC
12	Upper wall	SC2	65	295	69	38	<MDC
13	Hood	FC3	65	295	67	19	<MDC
14	Hood	FC3	65	295	67	19	<MDC
15	Hood	FC3	65	295	68	29	<MDC
16	Hood	FC3	65	295	61	-38	<MDC
17	Hood	FC3	65	295	63	-19	<MDC
18	Sink	FC1	65	295	85	191	<MDC
19	Trap	FC1	65	295	60	-48	<MDC
20	Workbench	FB1	65	295	75	96	<MDC
21	Drawers	FB1	65	295	65	0	<MDC

Survey Type:	Scans		Survey Unit:	109 C		

Instrument Information:

Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	175	1,398	180	210	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable H-3		Survey Unit:	109 C	
Instrument ID:	Beckman LS6500		Survey Date:	03/23/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	14	36	10	<MDC
2	Floor	FA2	14	36	3	<MDC
3	Floor	FA3	14	36	19	<MDC
4	Floor	FB1	14	36	30	<MDC
5	Floor	FB2	14	36	1	<MDC
6	Floor	FB3	14	36	11	<MDC
7	Floor	FC1	14	36	7	<MDC
8	Floor	FC2	14	36	7	<MDC
9	Floor	FC3	14	36	11	<MDC
10	Floor	FD1	14	36	6	<MDC
11	Floor	FD2	14	36	7	<MDC
12	Floor	FD3	14	36	3	<MDC
13	Wall	NA1	14	36	7	<MDC
14	Wall	NA2	14	36	28	<MDC
15	Wall	NA3	14	36	5	<MDC
16	Wall	NB1	14	36	8	<MDC
17	Wall	NB2	14	36	7	<MDC
18	Wall	NB3	14	36	19	<MDC
19	Wall	EA1	14	36	24	<MDC
20	Wall	EA2	14	36	25	<MDC
21	Wall	EA3	14	36	15	<MDC
22	Wall	EA4	14	36	9	<MDC
23	Wall	EB1	14	36	12	<MDC
24	Wall	EB2	14	36	19	<MDC
25	Wall	EB3	14	36	41	41
26	Wall	EB4	14	36	19	<MDC
27	Wall	SA1	14	36	5	<MDC
28	Wall	SA2	14	36	8	<MDC
29	Wall	SA3	14	36	13	<MDC
30	Wall	SB1	14	36	16	<MDC
31	Wall	SB2	14	36	11	<MDC
32	Wall	SB3	14	36	12	<MDC
33	Wall	WA1	14	36	19	<MDC
34	Wall	WA2	14	36	28	<MDC
35	Wall	WA3	14	36	7	<MDC
36	Wall	WA4	14	36	31	<MDC
37	Wall	WB1	14	36	5	<MDC
38	Wall	WB2	14	36	2	<MDC
39	Wall	WB3	14	36	18	<MDC
40	Wall	WB4	14	36	14	<MDC
41	Ceiling	CC1	14	36	24	<MDC
42	Upper Wall	SC2	14	36	0	<MDC
43	Hood	FC3	14	36	129	129
44	Hood	FC3	14	36	28	<MDC
45	Hood	FC3	14	36	27	<MDC
46	Hood	FC3	14	36	6	<MDC
47	Hood	FC3	14	36	21	<MDC
48	Sink	FC1	14	36	6	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Removable H-3** Survey Unit: **109 C**

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
49	Trap	FC1	14	36	5	<MDC
50	Workbench	FB1	14	36	5	<MDC
51	Drawer	FB1	14	36	11	<MDC

Survey Type: **Removable C-14** Survey Unit: **109 C**

Instrument ID:	Beckman LS6500		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	9	15	12	<MDC
2	Floor	FA2	9	15	16	16
3	Floor	FA3	9	15	11	<MDC
4	Floor	FB1	9	15	15	15
5	Floor	FB2	9	15	19	19
6	Floor	FB3	9	15	22	22
7	Floor	FC1	9	15	19	19
8	Floor	FC2	9	15	19	19
9	Floor	FC3	9	15	22	22
10	Floor	FD1	9	15	15	15
11	Floor	FD2	9	15	13	<MDC
12	Floor	FD3	9	15	20	20
13	Wall	NA1	9	15	18	18
14	Wall	NA2	9	15	8	<MDC
15	Wall	NA3	9	15	22	22
16	Wall	NB1	9	15	16	16
17	Wall	NB2	9	15	12	<MDC
18	Wall	NB3	9	15	15	15
19	Wall	EA1	9	15	21	21
20	Wall	EA2	9	15	17	17
21	Wall	EA3	9	15	17	17
22	Wall	EA4	9	15	13	<MDC
23	Wall	EB1	9	15	19	19
24	Wall	EB2	9	15	15	15
25	Wall	EB3	9	15	12	<MDC
26	Wall	EB4	9	15	13	<MDC
27	Wall	SA1	9	15	16	16
28	Wall	SA2	9	15	20	20
29	Wall	SA3	9	15	17	17
30	Wall	SB1	9	15	11	<MDC
31	Wall	SB2	9	15	9	<MDC
32	Wall	SB3	9	15	17	17
33	Wall	WA1	9	15	8	<MDC
34	Wall	WA2	9	15	9	<MDC
35	Wall	WA3	9	15	12	<MDC
36	Wall	WA4	9	15	15	15
37	Wall	WB1	9	15	22	22
38	Wall	WB2	9	15	18	18
39	Wall	WB3	9	15	17	17

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Removable C-14** Survey Unit: **109 C**

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
40	Wall	WB4	9	15	15	15
41	Ceiling	CC1	9	15	15	15
42	Upper Wall	SC2	9	15	16	16
43	Hood	FC3	9	15	4	<MDC
44	Hood	FC3	9	15	16	16
45	Hood	FC3	9	15	15	15
46	Hood	FC3	9	15	19	19
47	Hood	FC3	9	15	17	17
48	Sink	FC1	9	15	20	20
49	Trap	FC1	9	15	16	16
50	Workbench	FB1	9	15	16	16
51	Drawer	FB1	9	15	20	20

Survey Type: **Gamma Dose Rates** Survey Unit: **109 C**

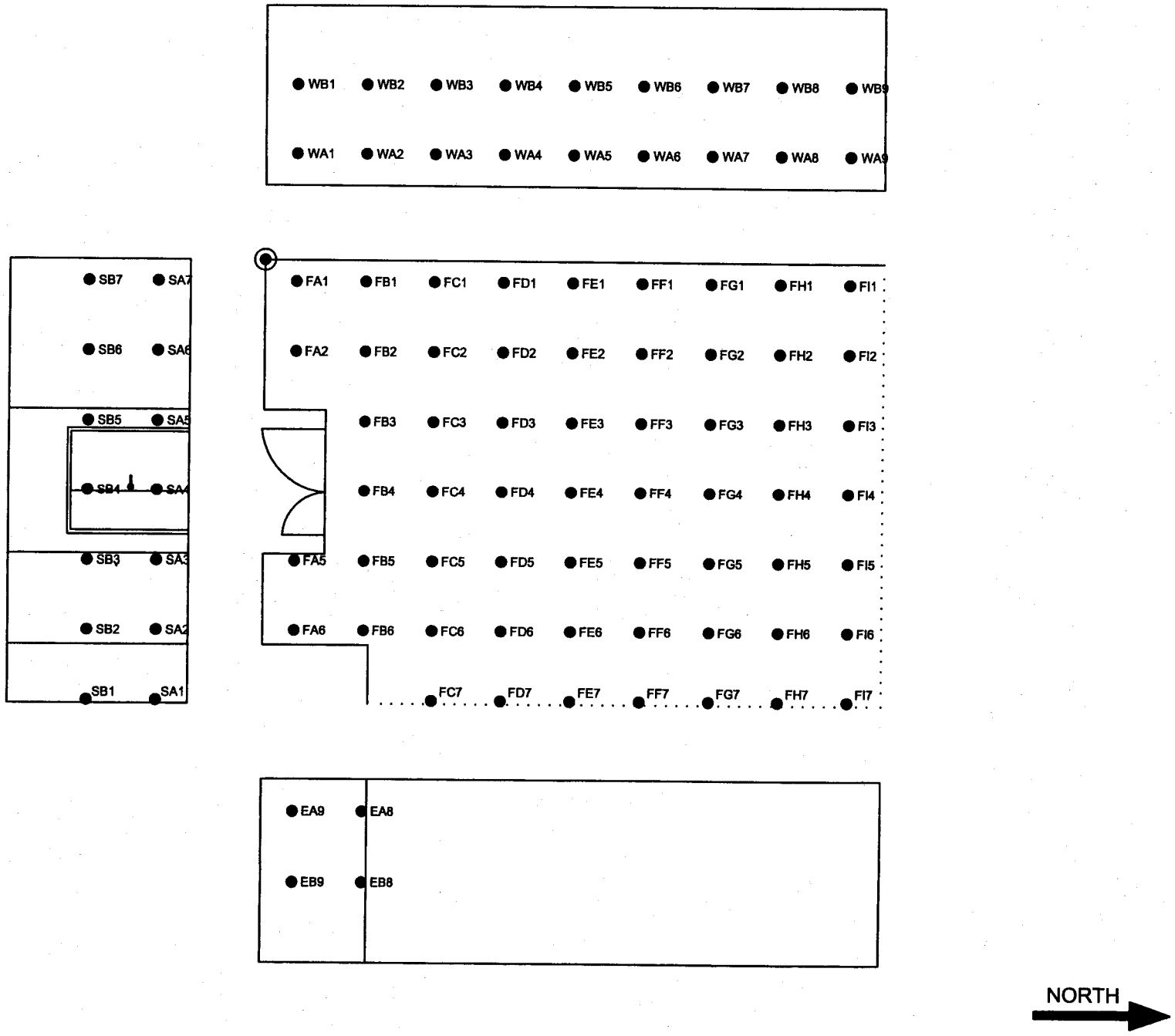
Instrument ID: M Survey Date: 03/21/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WB1	6
2	Metal	WA1	6
3	Wall	WB3	5
4	Metal	NA2	5
5	Glass	EB3	5
6	Metal	EA4	n/a
7	Wall	SB1	n/a
8	Benchtop	FD1	n/a
9	Floor	FB2	n/a
10	Floor	FD3	n/a
11	Ceiling	CC1	n/a
12	Upper wall	SC2	n/a
13	Hood	FC3	5
14	Hood	FC3	5
15	Hood	FC3	5
16	Hood	FC3	5
17	Hood	FC3	5
18	Sink	FC1	5
19	Trap	FC1	5
20	Workbench	FB1	5
21	Drawers	FB1	5

Building 24, Room 115

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 115



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: Y Rios Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	115		
Instrument ID:	E		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WA8	160	461	163	30	<MDC
2	Wall	WB2	160	461	175	148	<MDC
3	Wall	SB6	160	461	189	287	<MDC
4	Wall	SA2	160	461	187	267	<MDC
5	Wall	EB6	160	461	161	10	<MDC
6	Wall	EA4	160	461	154	-59	<MDC
7	Floor	FA6	160	461	181	208	<MDC
8	Floor	FD5	160	461	169	89	<MDC
9	Benchtop	FH4	160	461	180	198	<MDC
10	Floor	FE2	160	461	184	237	<MDC
11	Ceiling	CH7	160	461	266	1,048	1,048
12	Ceiling	CH1	160	461	233	722	722
13	Upper wall	WC6	160	461	179	188	<MDC
14	Upper wall	SC2	160	461	185	247	<MDC
15	Benchtop	FF1	160	461	162	20	<MDC
16	Benchtop	FE5	160	461	151	-89	<MDC
17	Drawer	FF1	160	461	171	109	<MDC
18	Drawer	FE5	160	461	203	425	<MDC
19	Hood 1	FC7	160	461	146	-138	<MDC
20	Hood 1	FC7	160	461	165	49	<MDC
21	Hood 1	FC7	160	461	190	297	<MDC
22	Hood 1	FC7	160	461	151	-89	<MDC
23	Hood 1	FC7	160	461	133	-267	<MDC
24	Hood 2	FC1	160	461	152	-79	<MDC
25	Hood 2	FC1	160	461	159	-10	<MDC
26	Hood 2	FC1	160	461	183	227	<MDC
27	Hood 2	FC1	160	461	137	-227	<MDC
28	Hood 2	FC1	160	461	142	-178	<MDC
29	Sink 1	FC7	160	461	197	366	<MDC
30	Trap 1	FC7	160	461	178	178	<MDC
31	Sink 2	FD7	160	461	185	247	<MDC
32	Trap 2	FD7	160	461	169	89	<MDC
33	Sink 3	FD3	160	461	154	-59	<MDC
34	Trap 3	FD3	160	461	169	89	<MDC
35	Sink 4	FC1	160	461	169	89	<MDC
36	Trap 4	FC1	160	461	160	0	<MDC
37	Sink 5	FG1	160	461	169	89	<MDC
38	Trap 5	FG1	160	461	162	20	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Scans **Survey Unit: 115**

Instrument Information:

Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	175	1,398	180	220	<MDC	<MDC

Survey Type: Removable H-3 **Survey Unit: 115**

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	16	38	19	<MDC
2	Floor	FA2	16	38	12	<MDC
3	Floor	FA3	16	38	12	<MDC
4	Floor	FA4	16	38	25	<MDC
5	Floor	FA5	16	38	33	<MDC
6	Floor	FA6	16	38	18	<MDC
7	Floor	FB1	16	38	28	<MDC
8	Floor	FB2	16	38	19	<MDC
9	Floor	FB3	16	38	9	<MDC
10	Floor	FB4	16	38	20	<MDC
11	Floor	FB5	16	38	5	<MDC
12	Floor	FB6	16	38	20	<MDC
13	Floor	FB7	16	38	21	<MDC
14	Floor	FC1	16	38	21	<MDC
15	Floor	FC2	16	38	2	<MDC
16	Floor	FC3	16	38	21	<MDC
17	Floor	FC4	16	38	33	<MDC
18	Floor	FC5	16	38	10	<MDC
19	Floor	FC6	16	38	21	<MDC
20	Floor	FC7	16	38	11	<MDC
21	Floor	FD1	16	38	23	<MDC
22	Floor	FD2	16	38	10	<MDC
23	Floor	FD3	16	38	29	<MDC
24	Floor	FD4	16	38	14	<MDC
25	Floor	FD5	16	38	28	<MDC
26	Floor	FD6	16	38	4	<MDC
27	Floor	FD7	16	38	19	<MDC
28	Floor	FE1	16	38	16	<MDC
29	Floor	FE2	16	38	16	<MDC
30	Floor	FE3	16	38	8	<MDC
31	Floor	FE4	16	38	11	<MDC
32	Floor	FE5	16	38	26	<MDC
33	Floor	FE6	16	38	19	<MDC
34	Floor	FE7	16	38	6	<MDC
35	Floor	FF1	16	38	9	<MDC
36	Floor	FF2	16	38	8	<MDC
37	Floor	FF3	16	38	9	<MDC
38	Floor	FF4	16	38	27	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 115

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
39	Floor	FF5	16	38	17	<MDC
40	Floor	FF6	16	38	24	<MDC
41	Floor	FF7	16	38	13	<MDC
42	Floor	FG1	16	38	16	<MDC
43	Floor	FG2	16	38	17	<MDC
44	Floor	FG3	16	38	9	<MDC
45	Floor	FG4	16	38	23	<MDC
46	Floor	FG5	16	38	15	<MDC
47	Floor	FG6	16	38	24	<MDC
48	Floor	FG7	16	38	21	<MDC
49	Floor	FH1	16	38	7	<MDC
50	Floor	FH2	16	38	16	<MDC
51	Floor	FH3	16	38	6	<MDC
52	Floor	FH4	16	38	12	<MDC
53	Floor	FH5	16	38	0	<MDC
54	Floor	FH6	16	38	5	<MDC
55	Floor	FH7	16	38	6	<MDC
56	Floor	FI1	16	38	4	<MDC
57	Floor	FI2	16	38	21	<MDC
58	Floor	FI3	16	38	19	<MDC
59	Floor	FI4	16	38	23	<MDC
60	Floor	FI5	16	38	18	<MDC
61	Floor	FI6	16	38	18	<MDC
62	Floor	FI7	16	38	3	<MDC
63	Wall	EA1	16	38	32	<MDC
64	Wall	EA2	16	38	15	<MDC
65	Wall	EA3	16	38	14	<MDC
66	Wall	EA4	16	38	8	<MDC
67	Wall	EA5	16	38	16	<MDC
68	Wall	EA6	16	38	7	<MDC
69	Wall	EA7	16	38	7	<MDC
70	Wall	EA8	16	38	-1	<MDC
71	Wall	EA9	16	38	7	<MDC
72	Wall	EB1	16	38	9	<MDC
73	Wall	EB2	16	38	5	<MDC
74	Wall	EB3	16	38	11	<MDC
75	Wall	EB4	16	38	11	<MDC
76	Wall	EB5	16	38	7	<MDC
77	Wall	EB6	16	38	7	<MDC
78	Wall	EB7	16	38	9	<MDC
79	Wall	EB8	16	38	7	<MDC
80	Wall	EB9	16	38	5	<MDC
81	Wall	SA1	16	38	1	<MDC
82	Wall	SA2	16	38	4	<MDC
83	Wall	SA3	16	38	12	<MDC
84	Wall	SA4	16	38	8	<MDC
85	Wall	SA5	16	38	13	<MDC
86	Wall	SA6	16	38	10	<MDC
87	Wall	SA7	16	38	6	<MDC
88	Wall	SB1	16	38	9	<MDC
89	Wall	SB2	16	38	11	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 115

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
90	Wall	SB3	16	38	29	<MDC
91	Wall	SB4	16	38	13	<MDC
92	Wall	SB5	16	38	23	<MDC
93	Wall	SB6	16	38	-2	<MDC
94	Wall	SB7	16	38	7	<MDC
95	Wall	WA1	16	38	1	<MDC
96	Wall	WA2	16	38	13	<MDC
97	Wall	WA3	16	38	6	<MDC
98	Wall	WA4	16	38	1	<MDC
99	Wall	WA5	16	38	26	<MDC
100	Wall	WA6	16	38	5	<MDC
101	Wall	WA7	16	38	19	<MDC
102	Wall	WA8	16	38	18	<MDC
103	Wall	WA9	16	38	4	<MDC
104	Wall	WB1	16	38	19	<MDC
105	Wall	WB2	16	38	17	<MDC
106	Wall	WB3	16	38	25	<MDC
107	Wall	WB4	16	38	17	<MDC
108	Wall	WB5	16	38	18	<MDC
109	Wall	WB6	16	38	6	<MDC
110	Wall	WB7	16	38	6	<MDC
111	Wall	WB8	16	38	15	<MDC
112	Wall	WB9	16	38	11	<MDC
113	Ceiling	CH7	16	38	10	<MDC
114	Ceiling	CH1	16	38	12	<MDC
115	Upper wall	WC6	16	38	7	<MDC
116	Upper wall	SC2	16	38	18	<MDC
117	Workbench	FF1	16	38	2	<MDC
118	Workbench	FE5	16	38	14	<MDC
119	Drawer	FF1	16	38	1	<MDC
120	Drawer	FE5	16	38	15	<MDC
121	Hood 1	FC7	16	38	11	<MDC
122	Hood 1	FC7	16	38	5	<MDC
123	Hood 1	FC7	16	38	6	<MDC
124	Hood 1	FC7	16	38	7	<MDC
125	Hood 1	FC7	16	38	20	<MDC
126	Hood 2	FC1	16	38	-3	<MDC
127	Hood 2	FC1	16	38	1	<MDC
128	Hood 2	FC1	16	38	18	<MDC
129	Hood 2	FC1	16	38	20	<MDC
130	Hood 2	FC1	16	38	19	<MDC
131	Sink 1	FC7	16	38	1	<MDC
132	Trap 1	FC7	16	38	41	41
133	Sink 2	FD7	16	38	27	<MDC
134	Trap 2	FD7	16	38	5	<MDC
135	Sink 3	FD3	16	38	24	<MDC
136	Trap 3	FD3	16	38	4	<MDC
137	Sink 4	FC1	16	38	5	<MDC
138	Trap 4	FC1	16	38	4	<MDC
139	Sink 5	FG1	16	38	23	<MDC
140	Trap 5	FG1	16	38	21	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable C-14		Survey Unit:	115		
Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	14	17	31	31
2	Floor	FA2	14	17	17	<MDC
3	Floor	FA3	14	17	23	23
4	Floor	FA4	14	17	17	<MDC
5	Floor	FA5	14	17	12	<MDC
6	Floor	FA6	14	17	20	20
7	Floor	FB1	14	17	11	<MDC
8	Floor	FB2	14	17	13	<MDC
9	Floor	FB3	14	17	19	19
10	Floor	FB4	14	17	12	<MDC
11	Floor	FB5	14	17	16	<MDC
12	Floor	FB6	14	17	19	19
13	Floor	FB7	14	17	15	<MDC
14	Floor	FC1	14	17	15	<MDC
15	Floor	FC2	14	17	18	18
16	Floor	FC3	14	17	9	<MDC
17	Floor	FC4	14	17	12	<MDC
18	Floor	FC5	14	17	16	<MDC
19	Floor	FC6	14	17	15	<MDC
20	Floor	FC7	14	17	9	<MDC
21	Floor	FD1	14	17	17	<MDC
22	Floor	FD2	14	17	23	23
23	Floor	FD3	14	17	16	<MDC
24	Floor	FD4	14	17	13	<MDC
25	Floor	FD5	14	17	5	<MDC
26	Floor	FD6	14	17	24	24
27	Floor	FD7	14	17	8	<MDC
28	Floor	FE1	14	17	9	<MDC
29	Floor	FE2	14	17	20	20
30	Floor	FE3	14	17	16	<MDC
31	Floor	FE4	14	17	15	<MDC
32	Floor	FE5	14	17	9	<MDC
33	Floor	FE6	14	17	13	<MDC
34	Floor	FE7	14	17	13	<MDC
35	Floor	FF1	14	17	17	<MDC
36	Floor	FF2	14	17	11	<MDC
37	Floor	FF3	14	17	19	19
38	Floor	FF4	14	17	16	<MDC
39	Floor	FF5	14	17	12	<MDC
40	Floor	FF6	14	17	9	<MDC
41	Floor	FF7	14	17	23	23
42	Floor	FG1	14	17	9	<MDC
43	Floor	FG2	14	17	5	<MDC
44	Floor	FG3	14	17	15	<MDC
45	Floor	FG4	14	17	11	<MDC
46	Floor	FG5	14	17	17	<MDC
47	Floor	FG6	14	17	15	<MDC
48	Floor	FG7	14	17	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 115

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Floor	FH1	14	17	17	<MDC
50	Floor	FH2	14	17	15	<MDC
51	Floor	FH3	14	17	20	20
52	Floor	FH4	14	17	12	<MDC
53	Floor	FH5	14	17	11	<MDC
54	Floor	FH6	14	17	16	<MDC
55	Floor	FH7	14	17	15	<MDC
56	Floor	FI1	14	17	19	19
57	Floor	FI2	14	17	12	<MDC
58	Floor	FI3	14	17	9	<MDC
59	Floor	FI4	14	17	11	<MDC
60	Floor	FI5	14	17	17	<MDC
61	Floor	FI6	14	17	23	23
62	Floor	FI7	14	17	27	27
63	Wall	EA1	14	17	15	<MDC
64	Wall	EA2	14	17	12	<MDC
65	Wall	EA3	14	17	25	25
66	Wall	EA4	14	17	11	<MDC
67	Wall	EA5	14	17	15	<MDC
68	Wall	EA6	14	17	13	<MDC
69	Wall	EA7	14	17	19	19
70	Wall	EA8	14	17	14	<MDC
71	Wall	EA9	14	17	17	<MDC
72	Wall	EB1	14	17	13	<MDC
73	Wall	EB2	14	17	12	<MDC
74	Wall	EB3	14	17	20	20
75	Wall	EB4	14	17	16	<MDC
76	Wall	EB5	14	17	13	<MDC
77	Wall	EB6	14	17	18	18
78	Wall	EB7	14	17	20	20
79	Wall	EB8	14	17	23	23
80	Wall	EB9	14	17	23	23
81	Wall	SA1	14	17	19	19
82	Wall	SA2	14	17	20	20
83	Wall	SA3	14	17	15	<MDC
84	Wall	SA4	14	17	12	<MDC
85	Wall	SA5	14	17	15	<MDC
86	Wall	SA6	14	17	12	<MDC
87	Wall	SA7	14	17	20	20
88	Wall	SB1	14	17	13	<MDC
89	Wall	SB2	14	17	11	<MDC
90	Wall	SB3	14	17	16	<MDC
91	Wall	SB4	14	17	15	<MDC
92	Wall	SB5	14	17	17	<MDC
93	Wall	SB6	14	17	15	<MDC
94	Wall	SB7	14	17	19	19
95	Wall	WA1	14	17	13	<MDC
96	Wall	WA2	14	17	20	20
97	Wall	WA3	14	17	20	20
98	Wall	WA4	14	17	31	31
99	Wall	WA5	14	17	5	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 115

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
100	Wall	WA6	14	17	17	<MDC
101	Wall	WA7	14	17	15	<MDC
102	Wall	WA8	14	17	12	<MDC
103	Wall	WA9	14	17	13	<MDC
104	Wall	WB1	14	17	11	<MDC
105	Wall	WB2	14	17	19	19
106	Wall	WB3	14	17	20	20
107	Wall	WB4	14	17	15	<MDC
108	Wall	WB5	14	17	12	<MDC
109	Wall	WB6	14	17	9	<MDC
110	Wall	WB7	14	17	15	<MDC
111	Wall	WB8	14	17	12	<MDC
112	Wall	WB9	14	17	9	<MDC
113	Ceiling	CH7	14	17	12	<MDC
114	Ceiling	CH1	14	17	13	<MDC
115	Upper wall	WC6	14	17	17	<MDC
116	Upper wall	SC2	14	17	15	<MDC
117	Workbench	FF1	14	17	28	28
118	Workbench	FE5	14	17	16	<MDC
119	Drawer	FF1	14	17	14	<MDC
120	Drawer	FE5	14	17	13	<MDC
121	Hood 1	FC7	14	17	15	<MDC
122	Hood 1	FC7	14	17	16	<MDC
123	Hood 1	FC7	14	17	13	<MDC
124	Hood 1	FC7	14	17	13	<MDC
125	Hood 1	FC7	14	17	19	19
126	Hood 2	FC1	14	17	22	22
127	Hood 2	FC1	14	17	9	<MDC
128	Hood 2	FC1	14	17	28	28
129	Hood 2	FC1	14	17	13	<MDC
130	Hood 2	FC1	14	17	11	<MDC
131	Sink 1	FC7	14	17	8	<MDC
132	Trap 1	FC7	14	17	27	27
133	Sink 2	FD7	14	17	19	19
134	Trap 2	FD7	14	17	16	<MDC
135	Sink 3	FD3	14	17	13	<MDC
136	Trap 3	FD3	14	17	12	<MDC
137	Sink 4	FC1	14	17	16	<MDC
138	Trap 4	FC1	14	17	23	23
139	Sink 5	FG1	14	17	17	<MDC
140	Trap 5	FG1	14	17	25	25

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 115

Instrument ID: C Survey Date: 03/21/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WA8	6
2	Wall	WB2	5
3	Wall	SB6	5
4	Wall	SA2	6
5	Wall	EB6	6
6	Wall	EA4	6
7	Floor	FA6	6
8	Floor	FD5	6
9	Benchtop	FH4	6
10	Floor	FE2	6
11	Ceiling	CH7	6
12	Ceiling	CH1	6
13	Upper wall	WC6	6
14	Upper wall	SC2	6
15	Benchtop	FF1	6
16	Benchtop	FE5	6
17	Drawer	FF1	6
18	Drawer	FE5	6
19	Hood 1	FC7	5
20	Hood 1	FC7	5
21	Hood 1	FC7	5
22	Hood 1	FC7	5
23	Hood 1	FC7	5
24	Hood 2	FC1	5
25	Hood 2	FC1	5
26	Hood 2	FC1	5
27	Hood 2	FC1	5
28	Hood 2	FC1	5
29	Sink 1	FC7	5
30	Trap 1	FC7	5
31	Sink 2	FD7	6
32	Trap 2	FD7	6
33	Sink 3	FD3	6
34	Trap 3	FD3	6
35	Sink 4	FC1	5
36	Trap 4	FC1	5
37	Sink 5	FG1	6
38	Trap 5	FG1	6

Building 24, Room 115C

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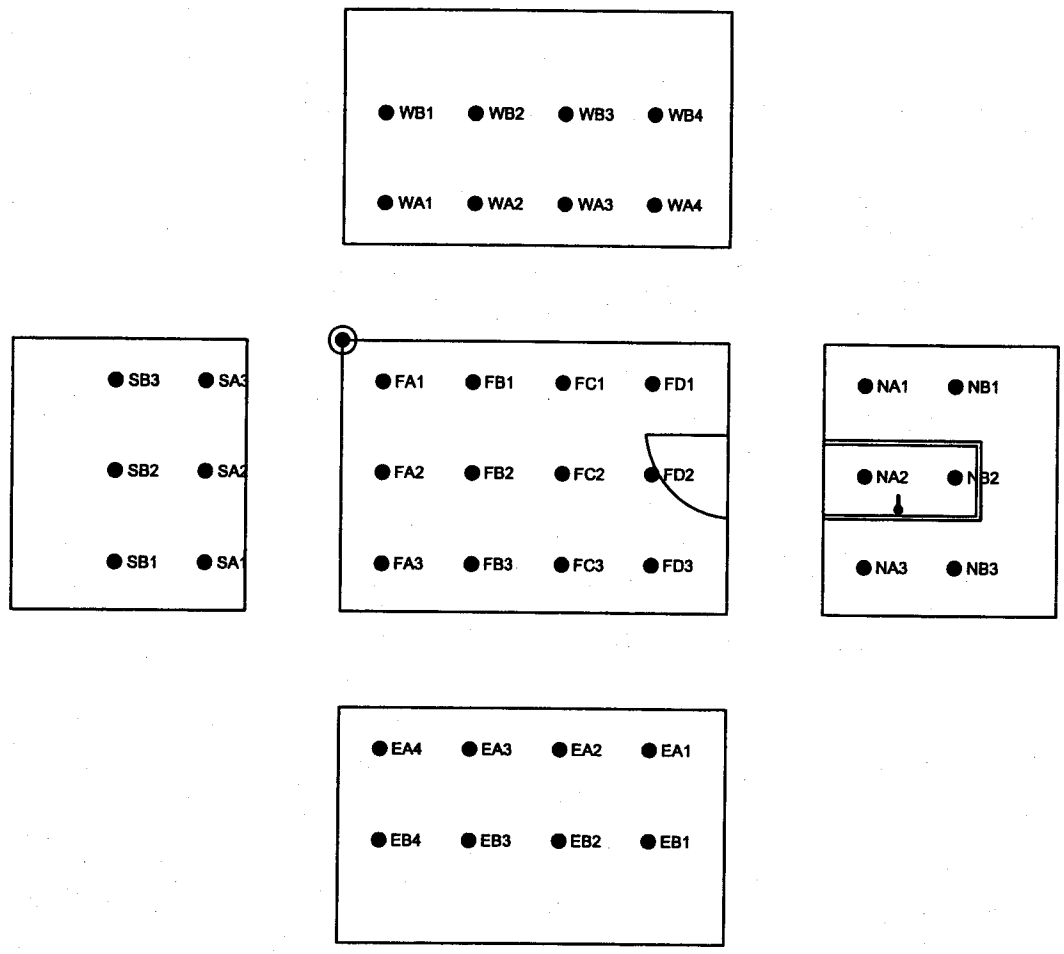
BUILDING B-24 ROOM 115C



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	115 C		
Instrument ID:	G		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WB2	85	333	97	115	<MDC
2	Wall	WB3	85	333	94	86	<MDC
3	Wall	NB1	85	333	86	10	<MDC
4	Wall	NB3	85	333	86	10	<MDC
5	Glass	EB1	85	333	96	105	<MDC
6	Metal	EA3	85	333	77	-76	<MDC
7	Wall	SB2	85	333	104	182	<MDC
8	Benchtop	FA1	85	333	82	-29	<MDC
9	Floor	FC2	85	333	80	-48	<MDC
10	Floor	FD2	85	333	88	29	<MDC
11	Ceiling	CC1	85	333	97	115	<MDC
12	Upper wall	WC3	85	333	92	67	<MDC
13	Benchtop	FC1	85	333	69	-153	<MDC
14	Drawer	FC1	85	333	73	-115	<MDC
15	Sink	FC1	85	333	85	0	<MDC
16	Trap	FC1	85	333	71	-134	<MDC
17	Centrigure 1	FD3	85	333	81	-38	<MDC
18	Centrifuge 2	FC3	85	333	82	-29	<MDC
19	Bodman	FD1	85	333	72	-124	<MDC
20	Paytest	FD1	85	333	92	67	<MDC
21	Eberbach	FD3	85	333	87	19	<MDC

Survey Type:	Scans		Survey Unit:	115 C		
Instrument Information:						
Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	160	1,336	160	200	<MDC	<MDC

Survey Type:	Removable H-3		Survey Unit:	115 C		
Instrument ID:	Beckman LS6500		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	14	36	29	<MDC
2	Floor	FA2	14	36	26	<MDC
3	Floor	FA3	14	36	32	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable H-3		Survey Unit:	115 C	
Instrument ID:	Beckman LS6500		Survey Date:	03/23/05	
Sample Count Time (t_s):	1	min.	Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
4	Floor	FB1	14	36	23	<MDC
5	Floor	FB2	14	36	22	<MDC
6	Floor	FB3	14	36	11	<MDC
7	Floor	FC1	14	36	25	<MDC
8	Floor	FC2	14	36	16	<MDC
9	Floor	FC3	14	36	18	<MDC
10	Floor	FD1	14	36	29	<MDC
11	Floor	FD2	14	36	34	<MDC
12	Floor	FD3	14	36	24	<MDC
13	Wall	NA1	14	36	16	<MDC
14	Wall	NA2	14	36	21	<MDC
15	Wall	NA3	14	36	13	<MDC
16	Wall	NB1	14	36	14	<MDC
17	Wall	NB2	14	36	25	<MDC
18	Wall	NB3	14	36	33	<MDC
19	Wall	EA1	14	36	25	<MDC
20	Wall	EA2	14	36	6	<MDC
21	Wall	EA3	14	36	22	<MDC
22	Wall	EA4	14	36	18	<MDC
23	Wall	EB1	14	36	31	<MDC
24	Wall	EB2	14	36	32	<MDC
25	Wall	EB3	14	36	21	<MDC
26	Wall	EB4	14	36	19	<MDC
27	Wall	SA1	14	36	21	<MDC
28	Wall	SA2	14	36	10	<MDC
29	Wall	SA3	14	36	7	<MDC
30	Wall	SB1	14	36	13	<MDC
31	Wall	SB2	14	36	21	<MDC
32	Wall	SB3	14	36	23	<MDC
33	Wall	WA1	14	36	34	<MDC
34	Wall	WA2	14	36	23	<MDC
35	Wall	WA3	14	36	38	38
36	Wall	WA4	14	36	33	<MDC
37	Wall	WB1	14	36	23	<MDC
38	Wall	WB2	14	36	33	<MDC
39	Wall	WB3	14	36	10	<MDC
40	Wall	WB4	14	36	27	<MDC
41	Ceiling	CC1	14	36	17	<MDC
42	Upper wall	WC3	14	36	26	<MDC
43	Workbench	FC1	14	36	33	<MDC
44	Drawer	FC1	14	36	19	<MDC
45	Sink	FC1	14	36	32	<MDC
46	Trap	FC1	14	36	18	<MDC
47	Centrifuge 1	FD3	14	36	31	<MDC
48	Centrifuge 2	FC3	14	36	19	<MDC
49	Bodman	FD1	14	36	17	<MDC
50	Raytest	FD1	14	36	15	<MDC
51	Eberbach	FD3	14	36	14	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable C-14		Survey Unit:	115 C	
Instrument ID:	3eckman LS6500		Survey Date:	03/23/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	9	15	12	<MDC
2	Floor	FA2	9	15	10	<MDC
3	Floor	FA3	9	15	7	<MDC
4	Floor	FB1	9	15	16	16
5	Floor	FB2	9	15	10	<MDC
6	Floor	FB3	9	15	13	<MDC
7	Floor	FC1	9	15	13	<MDC
8	Floor	FC2	9	15	14	<MDC
9	Floor	FC3	9	15	16	16
10	Floor	FD1	9	15	6	<MDC
11	Floor	FD2	9	15	9	<MDC
12	Floor	FD3	9	15	22	22
13	Wall	NA1	9	15	20	20
14	Wall	NA2	9	15	18	18
15	Wall	NA3	9	15	8	<MDC
16	Wall	NB1	9	15	10	<MDC
17	Wall	NB2	9	15	18	18
18	Wall	NB3	9	15	18	18
19	Wall	EA1	9	15	12	<MDC
20	Wall	EA2	9	15	22	22
21	Wall	EA3	9	15	16	16
22	Wall	EA4	9	15	16	16
23	Wall	EB1	9	15	15	15
24	Wall	EB2	9	15	19	19
25	Wall	EB3	9	15	16	16
26	Wall	EB4	9	15	12	<MDC
27	Wall	SA1	9	15	8	<MDC
28	Wall	SA2	9	15	9	<MDC
29	Wall	SA3	9	15	25	25
30	Wall	SB1	9	15	13	<MDC
31	Wall	SB2	9	15	17	17
32	Wall	SB3	9	15	17	17
33	Wall	WA1	9	15	10	<MDC
34	Wall	WA2	9	15	18	18
35	Wall	WA3	9	15	13	<MDC
36	Wall	WA4	9	15	15	15
37	Wall	WB1	9	15	18	18
38	Wall	WB2	9	15	10	<MDC
39	Wall	WB3	9	15	19	19
40	Wall	WB4	9	15	10	<MDC
41	Ceiling	CC1	9	15	12	<MDC
42	Upper wall	WC3	9	15	19	19
43	Workbench	FC1	9	15	14	<MDC
44	Drawer	FC1	9	15	18	18
45	Sink	FC1	9	15	13	<MDC
46	Trap	FC1	9	15	17	17
47	Centrifuge 1	FD3	9	15	14	<MDC
48	Centrifuge 2	FC3	9	15	12	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Removable C-14** Survey Unit: **115 C**

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Bodman	FD1	9	15	8	<MDC
50	Raytest	FD1	9	15	21	21
51	Eberbach	FD3	9	15	19	19

Survey Type: **Gamma Dose Rates** Survey Unit: **115 C**

Instrument ID: C Survey Date: 03/21/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WB2	5
2	Wall	WB3	5
3	Wall	NB1	5
4	Wall	NB3	5
5	Glass	EB1	5
6	Metal	EA3	5
7	Wall	SB2	5
8	Benchtop	FA1	5
9	Floor	FC2	5
10	Floor	FD2	5
11	Ceiling	CC1	5
12	Upper wall	WC3	5
13	Benchtop	FC1	5
14	Drawer	FC1	5
15	Sink	FC1	5
16	Trap	FC1	5
17	Centrigure 1	FD3	5
18	Centrifuge 2	FC3	5
19	Bodman	FD1	5
20	Paytest	FD1	5
21	Eberbach	FD3	5

Building 24, Room 117

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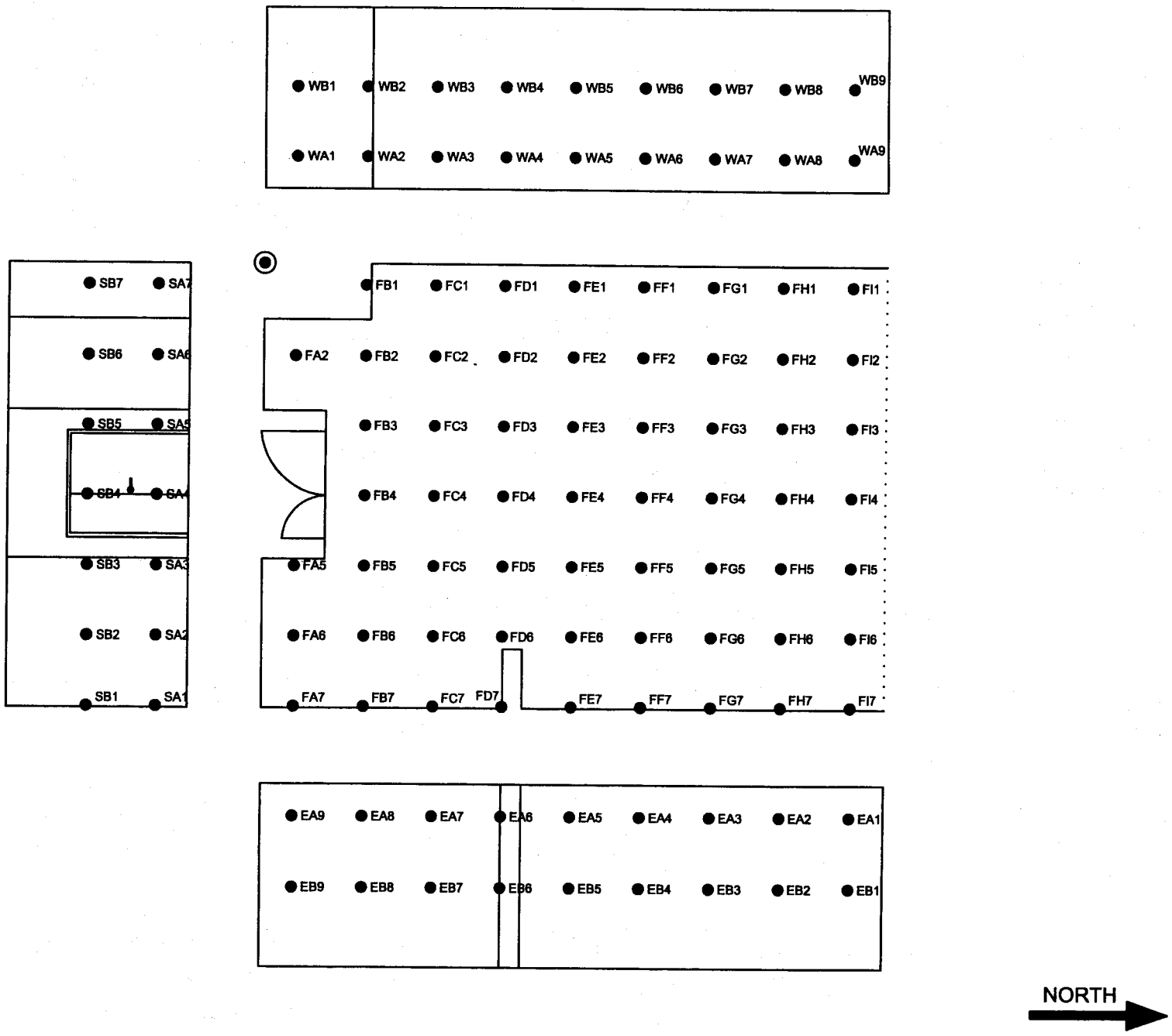
BUILDING B-24 ROOM 117



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:			
Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WB2	175	481	181	59	<MDC
2	Benchtop	FF3	175	481	175	0	<MDC
3	Wall	WA8	175	481	162	-128	<MDC
4	Floor	FH7	175	481	185	99	<MDC
5	Floor	FC4	175	481	177	20	<MDC
6	Wall	SB2	175	481	220	445	<MDC
7	Wall	EA2	175	481	146	-287	<MDC
8	Wall	EB6	175	481	182	69	<MDC
9	Floor	FH2	175	481	173	-20	<MDC
10	Wall	Sa6	175	481	169	-59	<MDC
11	Ceiling	CE1	175	481	213	376	<MDC
12	Ceiling	CE7	175	481	203	277	<MDC
13	Upper wall	SC3	175	481	192	168	<MDC
14	Upper wall	WC5	175	481	178	30	<MDC
15	Fridge in	FG5	175	481	177	20	<MDC
16	Fridge out	FG5	175	481	123	-514	<MDC
17	Fridge in	FF5	175	481	151	-237	<MDC
18	Fridge out	FF5	175	481	161	-138	<MDC
19	Hood 1	FB1	175	481	168	-69	<MDC
20	Hood 1	FB1	175	481	162	-128	<MDC
21	Hood 1	FB1	175	481	168	-69	<MDC
22	Hood 1	FB1	175	481	128	-465	<MDC
23	Hood 1	FB1	175	481	148	-267	<MDC
24	Hood 2	FB7	175	481	155	-198	<MDC
25	Hood 2	FB7	175	481	179	40	<MDC
26	Hood 2	FB7	175	481	168	-69	<MDC
27	Hood 2	FB7	175	481	162	-128	<MDC
28	Hood 2	FB7	175	481	149	-257	<MDC
29	Benchtop	FE1	175	481	181	59	<MDC
30	Benchtop	FE5	175	481	160	-148	<MDC
31	Benchtop	FF7	175	481	178	30	<MDC
32	Drawer	FF1	175	481	171	-40	<MDC
33	Drawer	FE3	175	481	157	-178	<MDC
34	Sink 1	FH1	175	481	170	-49	<MDC
35	Trap 1	FH1	175	481	173	-20	<MDC
36	Sink 2	FF1	175	481	178	30	<MDC
37	Trap 2	FF1	175	481	185	99	<MDC
38	Sink 6	FC7	175	481	162	-128	<MDC
39	Trap 6	FE7	175	481	151	-237	<MDC
40	Sink 8	FI7	175	481	179	40	<MDC
41	Trap 8	FI7	175	481	162	-128	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Scans Survey Unit: 117

Instrument Information:

Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	180	1,417	200	290	<MDC	<MDC

Survey Type: Removable H-3 Survey Unit: 117

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA2	16	38	23	<MDC
2	Floor	FA3	16	38	32	<MDC
3	Floor	FA4	16	38	16	<MDC
4	Floor	FA5	16	38	18	<MDC
5	Floor	FA6	16	38	27	<MDC
6	Floor	FA7	16	38	16	<MDC
7	Floor	FB1	16	38	20	<MDC
8	Floor	FB2	16	38	43	43
9	Floor	FB3	16	38	7	<MDC
10	Floor	FB4	16	38	32	<MDC
11	Floor	FB5	16	38	11	<MDC
12	Floor	FB6	16	38	23	<MDC
13	Floor	FB7	16	38	9	<MDC
14	Floor	FC1	16	38	33	<MDC
15	Floor	FC2	16	38	24	<MDC
16	Floor	FC3	16	38	33	<MDC
17	Floor	FC4	16	38	13	<MDC
18	Floor	FC5	16	38	28	<MDC
19	Floor	FC6	16	38	8	<MDC
20	Floor	FC7	16	38	16	<MDC
21	Floor	FD1	16	38	7	<MDC
22	Floor	FD2	16	38	11	<MDC
23	Floor	FD3	16	38	36	<MDC
24	Floor	FD4	16	38	21	<MDC
25	Floor	FD5	16	38	16	<MDC
26	Floor	FD6	16	38	23	<MDC
27	Floor	FD7	16	38	20	<MDC
28	Floor	FE1	16	38	33	<MDC
29	Floor	FE2	16	38	28	<MDC
30	Floor	FE3	16	38	20	<MDC
31	Floor	FE4	16	38	17	<MDC
32	Floor	FE5	16	38	27	<MDC
33	Floor	FE6	16	38	21	<MDC
34	Floor	FE7	16	38	18	<MDC
35	Floor	FF1	16	38	19	<MDC
36	Floor	FF2	16	38	9	<MDC
37	Floor	FF3	16	38	6	<MDC
38	Floor	FF4	16	38	36	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 117

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
39	Floor	FF5	16	38	15	<MDC
40	Floor	FF6	16	38	22	<MDC
41	Floor	FF7	16	38	21	<MDC
42	Floor	FG1	16	38	13	<MDC
43	Floor	FG2	16	38	6	<MDC
44	Floor	FG3	16	38	22	<MDC
45	Floor	FG4	16	38	33	<MDC
46	Floor	FG5	16	38	14	<MDC
47	Floor	FG6	16	38	11	<MDC
48	Floor	FG7	16	38	28	<MDC
49	Floor	FH1	16	38	18	<MDC
50	Floor	FH2	16	38	22	<MDC
51	Floor	FH3	16	38	23	<MDC
52	Floor	FH4	16	38	17	<MDC
53	Floor	FH5	16	38	16	<MDC
54	Floor	FH6	16	38	8	<MDC
55	Floor	FH7	16	38	17	<MDC
56	Floor	FI1	16	38	24	<MDC
57	Floor	FI2	16	38	18	<MDC
58	Floor	FI3	16	38	28	<MDC
59	Floor	FI4	16	38	12	<MDC
60	Floor	FI5	16	38	14	<MDC
61	Floor	FI6	16	38	13	<MDC
62	Floor	FI7	16	38	14	<MDC
63	Wall	EA9	16	38	21	<MDC
64	Wall	EA8	16	38	20	<MDC
65	Wall	EA7	16	38	16	<MDC
66	Wall	EA6	16	38	19	<MDC
67	Wall	EA5	16	38	11	<MDC
68	Wall	EA4	16	38	17	<MDC
69	Wall	EA3	16	38	36	<MDC
70	Wall	EA2	16	38	20	<MDC
71	Wall	EA1	16	38	33	<MDC
72	Wall	EB9	16	38	10	<MDC
73	Wall	EB8	16	38	19	<MDC
74	Wall	EB7	16	38	28	<MDC
75	Wall	EB6	16	38	11	<MDC
76	Wall	EB5	16	38	17	<MDC
77	Wall	EB4	16	38	34	<MDC
78	Wall	EB3	16	38	15	<MDC
79	Wall	EB2	16	38	27	<MDC
80	Wall	EB1	16	38	14	<MDC
81	Wall	WA1	16	38	35	<MDC
82	Wall	WA2	16	38	16	<MDC
83	Wall	WA3	16	38	12	<MDC
84	Wall	WA4	16	38	27	<MDC
85	Wall	WA5	16	38	15	<MDC
86	Wall	WA6	16	38	22	<MDC
87	Wall	WA7	16	38	11	<MDC
88	Wall	WA8	16	38	18	<MDC
89	Wall	WA9	16	38	22	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 117

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
90	Wall	WB1	16	38	21	<MDC
91	Wall	WB2	16	38	30	<MDC
92	Wall	WB3	16	38	15	<MDC
93	Wall	WB4	16	38	12	<MDC
94	Wall	WB5	16	38	18	<MDC
95	Wall	WB6	16	38	22	<MDC
96	Wall	WB7	16	38	21	<MDC
97	Wall	WB8	16	38	17	<MDC
98	Wall	WB9	16	38	20	<MDC
99	Wall	WC9	16	38	18	<MDC
100	Wall	SA7	16	38	4	<MDC
101	Wall	SA6	16	38	21	<MDC
102	Wall	SA5	16	38	20	<MDC
103	Wall	SA4	16	38	21	<MDC
104	Wall	SA3	16	38	30	<MDC
105	Wall	SA2	16	38	12	<MDC
106	Wall	SA1	16	38	21	<MDC
107	Wall	SB7	16	38	27	<MDC
108	Wall	SB6	16	38	18	<MDC
109	Wall	SB5	16	38	10	<MDC
110	Wall	SB4	16	38	13	<MDC
111	Wall	SB3	16	38	24	<MDC
112	Wall	SB2	16	38	15	<MDC
113	Wall	SB1	16	38	16	<MDC
114	Ceiling	CE1	16	38	10	<MDC
115	Ceiling	CE7	16	38	104	104
116	Upper wall	SC3	16	38	15	<MDC
117	Upper wall	WC5	16	38	22	<MDC
118	Fridge in	FG5	16	38	15	<MDC
119	Fridge out	FG5	16	38	4	<MDC
120	Fridge in	FF5	16	38	13	<MDC
121	Fridge out	FF5	16	38	19	<MDC
122	Hood 1	FH1	16	38	8	<MDC
123	Hood 1	FH1	16	38	5	<MDC
124	Hood 1	FH1	16	38	14	<MDC
125	Hood 1	FH1	16	38	10	<MDC
126	Hood 1	FH1	16	38	27	<MDC
127	Hood 2	FH7	16	38	19	<MDC
128	Hood 2	FH7	16	38	22	<MDC
129	Hood 2	FH7	16	38	5	<MDC
130	Hood 2	FH7	16	38	17	<MDC
131	Hood 2	FH7	16	38	22	<MDC
132	Workstation 1	FE1	16	38	11	<MDC
133	Workstation 2	FE5	16	38	15	<MDC
134	Workstation 3	FF7	16	38	5	<MDC
135	Drawer	FF1	16	38	9	<MDC
136	Drawer	FE3	16	38	49	49
137	Sink 1	FH1	16	38	23	<MDC
138	Trap 1	FH1	16	38	17	<MDC
139	Sink 2	FF1	16	38	11	<MDC
140	Trap 2	FF!	16	38	11	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 117

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
141	Sink 3	FF3	16	38	16	<MDC
142	Trap 3	FF3	16	38	17	<MDC
143	Sink 4	FE4	16	38	13	<MDC
144	Trap 4	FE4	16	38	21	<MDC
145	Sink 5	FH7	16	38	14	<MDC
146	Trap 5	FH7	16	38	21	<MDC
147	Sink 6	FE7	16	38	26	<MDC
148	Trap 6	FE7	16	38	18	<MDC
149	Sink 7	FD7	16	38	23	<MDC
150	Trap 7	FD7	16	38	14	<MDC
151	Sink 8	FI7	16	38	21	<MDC
152	Trap 8	FI7	16	38	25	<MDC

Survey Type: Removable C-14 Survey Unit: 117

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA2	14	17	22	22
2	Floor	FA3	14	17	5	<MDC
3	Floor	FA4	14	17	16	<MDC
4	Floor	FA5	14	17	9	<MDC
5	Floor	FA6	14	17	14	<MDC
6	Floor	FA7	14	17	19	19
7	Floor	FB1	14	17	14	<MDC
8	Floor	FB2	14	17	14	<MDC
9	Floor	FB3	14	17	20	20
10	Floor	FB4	14	17	18	18
11	Floor	FB5	14	17	23	23
12	Floor	FB6	14	17	15	<MDC
13	Floor	FB7	14	17	18	18
14	Floor	FC1	14	17	14	<MDC
15	Floor	FC2	14	17	13	<MDC
16	Floor	FC3	14	17	8	<MDC
17	Floor	FC4	14	17	18	18
18	Floor	FC5	14	17	10	<MDC
19	Floor	FC6	14	17	22	22
20	Floor	FC7	14	17	16	<MDC
21	Floor	FD1	14	17	25	25
22	Floor	FD2	14	17	18	18
23	Floor	FD3	14	17	9	<MDC
24	Floor	FD4	14	17	23	23
25	Floor	FD5	14	17	19	19
26	Floor	FD6	14	17	14	<MDC
27	Floor	FD7	14	17	19	19
28	Floor	FE1	14	17	9	<MDC
29	Floor	FE2	14	17	8	<MDC
30	Floor	FE3	14	17	6	<MDC
31	Floor	FE4	14	17	12	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit 117

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
32	Floor	FE5	14	17	12	<MDC
33	Floor	FE6	14	17	10	<MDC
34	Floor	FE7	14	17	19	19
35	Floor	FF1	14	17	12	<MDC
36	Floor	FF2	14	17	12	<MDC
37	Floor	FF3	14	17	14	<MDC
38	Floor	FF4	14	17	11	<MDC
39	Floor	FF5	14	17	17	<MDC
40	Floor	FF6	14	17	18	18
41	Floor	FF7	14	17	21	21
42	Floor	FG1	14	17	23	23
43	Floor	FG2	14	17	22	22
44	Floor	FG3	14	17	16	<MDC
45	Floor	FG4	14	17	9	<MDC
46	Floor	FG5	14	17	14	<MDC
47	Floor	FG6	14	17	14	<MDC
48	Floor	FG7	14	17	16	<MDC
49	Floor	FH1	14	17	9	<MDC
50	Floor	FH2	14	17	14	<MDC
51	Floor	FH3	14	17	17	<MDC
52	Floor	FH4	14	17	16	<MDC
53	Floor	FH5	14	17	14	<MDC
54	Floor	FH6	14	17	14	<MDC
55	Floor	FH7	14	17	15	<MDC
56	Floor	FI1	14	17	13	<MDC
57	Floor	FI2	14	17	14	<MDC
58	Floor	FI3	14	17	15	<MDC
59	Floor	FI4	14	17	5	<MDC
60	Floor	FI5	14	17	12	<MDC
61	Floor	FI6	14	17	6	<MDC
62	Floor	FI7	14	17	19	19
63	Wall	EA9	14	17	22	22
64	Wall	EA8	14	17	16	<MDC
65	Wall	EA7	14	17	13	<MDC
66	Wall	EA6	14	17	16	<MDC
67	Wall	EA5	14	17	13	<MDC
68	Wall	EA4	14	17	8	<MDC
69	Wall	EA3	14	17	10	<MDC
70	Wall	EA2	14	17	16	<MDC
71	Wall	EA1	14	17	18	18
72	Wall	EB9	14	17	14	<MDC
73	Wall	EB8	14	17	12	<MDC
74	Wall	EB7	14	17	2	<MDC
75	Wall	EB6	14	17	8	<MDC
76	Wall	EB5	14	17	18	18
77	Wall	EB4	14	17	18	18
78	Wall	EB3	14	17	17	<MDC
79	Wall	EB2	14	17	15	<MDC
80	Wall	EB1	14	17	10	<MDC
81	Wall	WA1	14	17	20	20
82	Wall	WA2	14	17	14	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 117

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
83	Wall	WA3	14	17	14	<MDC
84	Wall	WA4	14	17	12	<MDC
85	Wall	WA5	14	17	23	23
86	Wall	WA6	14	17	16	<MDC
87	Wall	WA7	14	17	17	<MDC
88	Wall	WA8	14	17	16	<MDC
89	Wall	WA9	14	17	10	<MDC
90	Wall	WB1	14	17	12	<MDC
91	Wall	WB2	14	17	9	<MDC
92	Wall	WB3	14	17	12	<MDC
93	Wall	WB4	14	17	10	<MDC
94	Wall	WB5	14	17	19	19
95	Wall	WB6	14	17	21	21
96	Wall	WB7	14	17	13	<MDC
97	Wall	WB8	14	17	18	18
98	Wall	WB9	14	17	10	<MDC
99	Wall	WC9	14	17	21	21
100	Wall	SA7	14	17	10	<MDC
101	Wall	SA6	14	17	13	<MDC
102	Wall	SA5	14	17	14	<MDC
103	Wall	SA4	14	17	16	<MDC
104	Wall	SA3	14	17	9	<MDC
105	Wall	SA2	14	17	10	<MDC
106	Wall	SA1	14	17	10	<MDC
107	Wall	SB7	14	17	18	18
108	Wall	SB6	14	17	19	19
109	Wall	SB5	14	17	16	<MDC
110	Wall	SB4	14	17	12	<MDC
111	Wall	SB3	14	17	12	<MDC
112	Wall	SB2	14	17	13	<MDC
113	Wall	SB1	14	17	14	<MDC
114	Ceiling	CE1	14	17	14	<MDC
115	Ceiling	CE7	14	17	31	31
116	Upper wall	SC3	14	17	17	<MDC
117	Upper wall	WC5	14	17	14	<MDC
118	Fridge in	FG5	14	17	12	<MDC
119	Fridge out	FG5	14	17	21	21
120	Fridge in	FF5	14	17	22	22
121	Fridge out	FF5	14	17	13	<MDC
122	Hood 1	FH1	14	17	9	<MDC
123	Hood 1	FH1	14	17	23	23
124	Hood 1	FH1	14	17	16	<MDC
125	Hood 1	FH1	14	17	21	21
126	Hood 1	FH1	14	17	14	<MDC
127	Hood 2	FH7	14	17	29	29
128	Hood 2	FH7	14	17	14	<MDC
129	Hood 2	FH7	14	17	13	<MDC
130	Hood 2	FH7	14	17	13	<MDC
131	Hood 2	FH7	14	17	9	<MDC
132	Workstation 1	FE1	14	17	13	<MDC
133	Workstation 2	FE5	14	17	18	18

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 117

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
134	Workstation 3	FF7	14	17	23	23
135	Drawer	FF1	14	17	20	20
136	Drawer	FE3	14	17	15	<MDC
137	Sink 1	FH1	14	17	10	<MDC
138	Trap 1	FH1	14	17	13	<MDC
139	Sink 2	FF1	14	17	20	20
140	Trap 2	FFI	14	17	20	20
141	Sink 3	FF3	14	17	14	<MDC
142	Trap 3	FF3	14	17	12	<MDC
143	Sink 4	FE4	14	17	17	<MDC
144	Trap 4	FE4	14	17	10	<MDC
145	Sink 5	FH7	14	17	9	<MDC
146	Trap 5	FH7	14	17	18	18
147	Sink 6	FE7	14	17	14	<MDC
148	Trap 6	FE7	14	17	10	<MDC
149	Sink 7	FD7	14	17	12	<MDC
150	Trap 7	FD7	14	17	16	<MDC
151	Sink 8	FI7	14	17	12	<MDC
152	Trap 8	FI7	14	17	13	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 117

Instrument ID: C Survey Date: 03/18/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WB2	5
2	Benchtop	FF3	5
3	Wall	WA8	5
4	Floor	FH7	6
5	Floor	FC4	6
6	Wall	SB2	6
7	Wall	EA2	5
8	Wall	EB6	5
9	Floor	FH2	5
10	Wall	Sa6	5
11	Ceiling	CE1	6
12	Ceiling	CE7	6
13	Upper wall	SC3	6
14	Upper wall	WC5	6
15	Fridge in	FG5	6
16	Fridge out	FG5	6
17	Fridge in	FF5	6
18	Fridge out	FF5	6
19	Hood 1	FB1	5
20	Hood 1	FB1	5
21	Hood 1	FB1	5
22	Hood 1	FB1	5
23	Hood 1	FB1	5
24	Hood 2	FB7	5
25	Hood 2	FB7	5
26	Hood 2	FB7	5

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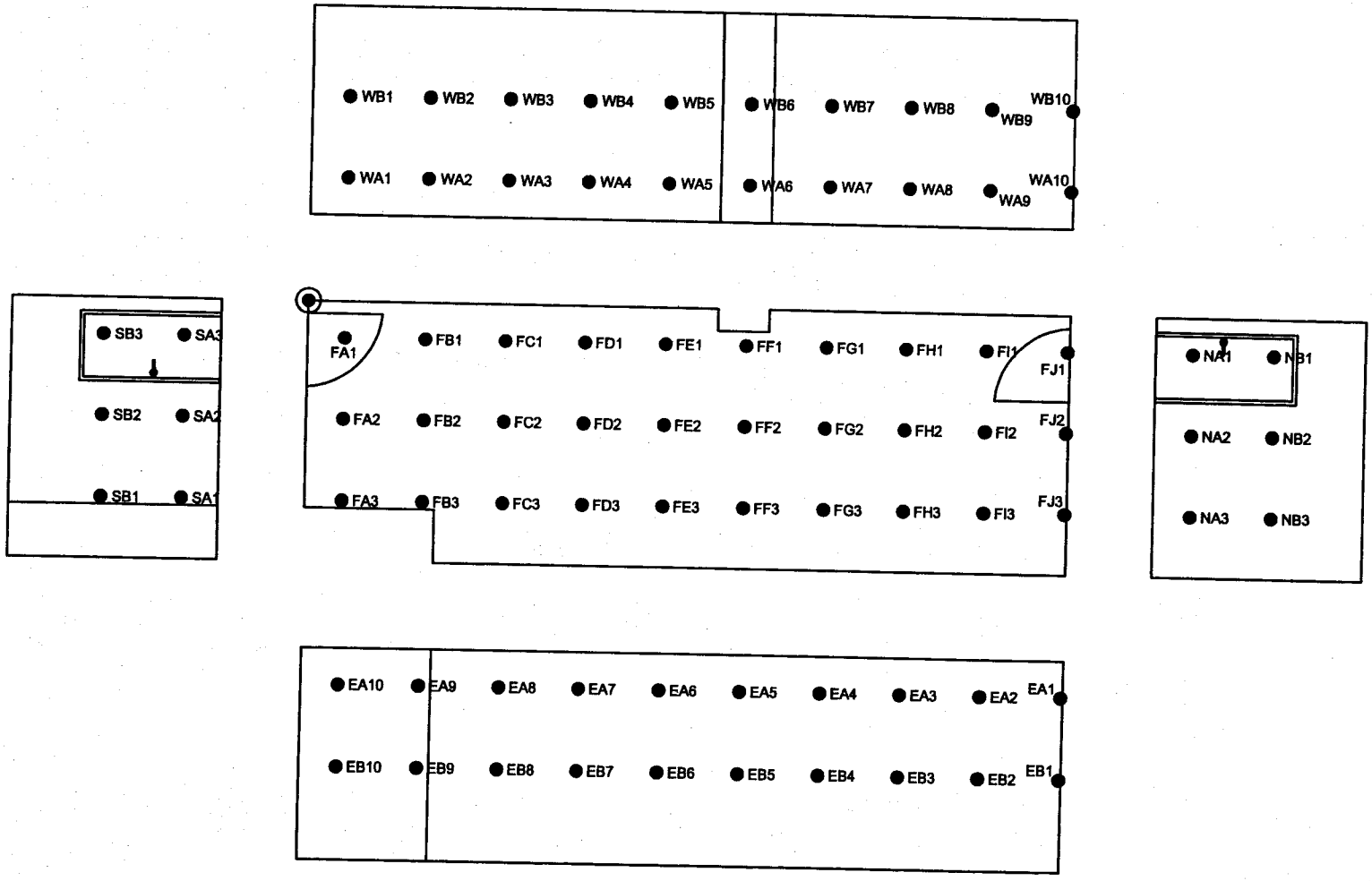
Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 117

#	Location	Survey Point	Dose Rate (urem/hr)
27	Hood 2	FB7	5
28	Hood 2	FB7	5
29	Benchtop	FE1	6
30	Benchtop	FE5	6
31	Benchtop	FF7	5
32	Drawer	FF1	5
33	Drawer	FE3	6
34	Sink 1	FH1	5
35	Trap 1	FH1	5
36	Sink 2	FF1*	5
37	Trap 2	FF1	5
38	Sink 3	FF3	5
39	Trap 3	FF3	5
40	Sink 4	FE4	5
41	Trap 4	FE4	5
42	Sink 5	FH7	5
43	Trap 5	FH7	5
44	Sink 6	FC7	5
45	Trap 6	FE7	5
46	Sink7	FD7	5
47	Trap 7	FD7	5
48	Sink 8	FI7	5
49	Trap 8	FI7	5

Building 24, Room 121

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 121



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	121		
Instrument ID:	G		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	NB2	70	305	56	-134	<MDC
2	Wall	NA3	70	305	72	19	<MDC
3	Metal	EA4	70	305	72	19	<MDC
4	Glass	EB10	70	305	88	172	<MDC
5	Metal	SA2	70	305	95	239	<MDC
6	Wall	WB1	70	305	95	239	<MDC
7	Metal	WB7	70	305	69	-10	<MDC
8	Floor	FJ1	70	305	78	76	<MDC
9	Floor	FC2	70	305	83	124	<MDC
10	Floor	FA1	70	305	94	229	<MDC
11	Hood 1	FC3	70	305	59	-105	<MDC
12	Hood 1	FC3	70	305	71	10	<MDC
13	Hood 1	FC3	70	305	77	67	<MDC
14	Hood 1	FC3	70	305	84	134	<MDC
15	Hood 1	FC3	70	305	62	-76	<MDC
16	Hood 2	FE3	70	305	77	67	<MDC
17	Hood 2	FE3	70	305	75	48	<MDC
18	Hood 2	FE3	70	305	73	29	<MDC
19	Hood 2	FE3	70	305	78	76	<MDC
20	Hood 2	FE3	70	305	62	-76	<MDC
21	Fridge 1 in	FI1	70	305	72	19	<MDC
22	Fridge 1 out	FI1	70	305	77	67	<MDC
23	Fridge 2 in	FI1	70	305	72	19	<MDC
24	Fridge 2 out	FI1	70	305	59	-105	<MDC
25	Bath in	FC1	70	305	60	-96	<MDC
26	Bath out	FC1	70	305	84	134	<MDC
27	Sink	FG1	70	305	119	469	469
28	Trap	FG1	70	305	104	325	325
29	Ceiling	CD4	70	305	74	38	<MDC
30	Ceiling	CF3	70	305	84	134	<MDC
31	Upper wall	NC4	70	305	78	76	<MDC
32	Upper wall	WF7	70	305	57	-124	<MDC
33	Drawers	FD1	70	305	56	-134	<MDC
34	Workbench	FH3	70	305	66	-38	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Scans **Survey Unit: 121**

Instrument Information:

Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	180	1,417	180	210	<MDC	<MDC

Survey Type: Removable H-3 **Survey Unit: 121**

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	16	38	35	<MDC
2	Floor	FA2	16	38	20	<MDC
3	Floor	FA3	16	38	28	<MDC
4	Floor	FB1	16	38	27	<MDC
5	Floor	FB2	16	38	20	<MDC
6	Floor	FB3	16	38	20	<MDC
7	Floor	FC1	16	38	27	<MDC
8	Floor	FC2	16	38	20	<MDC
9	Floor	FC3	16	38	28	<MDC
10	Floor	FD1	16	38	18	<MDC
11	Floor	FD2	16	38	18	<MDC
12	Floor	FD3	16	38	21	<MDC
13	Floor	FE1	16	38	23	<MDC
14	Floor	FE2	16	38	32	<MDC
15	Floor	FE3	16	38	17	<MDC
16	Floor	FF1	16	38	12	<MDC
17	Floor	FF2	16	38	24	<MDC
18	Floor	FF3	16	38	25	<MDC
19	Floor	FG1	16	38	23	<MDC
20	Floor	FG2	16	38	20	<MDC
21	Floor	FG3	16	38	18	<MDC
22	Floor	FH1	16	38	24	<MDC
23	Floor	FH2	16	38	25	<MDC
24	Floor	FH3	16	38	28	<MDC
25	Floor	FI1	16	38	20	<MDC
26	Floor	FI2	16	38	20	<MDC
27	Floor	FI3	16	38	29	<MDC
28	Floor	FJ1	16	38	24	<MDC
29	Floor	FJ2	16	38	19	<MDC
30	Floor	FJ3	16	38	14	<MDC
31	Wall	NA1	16	38	34	<MDC
32	Wall	NA2	16	38	15	<MDC
33	Wall	NA3	16	38	18	<MDC
34	Wall	NB1	16	38	29	<MDC
35	Wall	NB2	16	38	22	<MDC
36	Wall	NB3	16	38	8	<MDC
37	Wall	EA1	16	38	18	<MDC
38	Wall	EA2	16	38	14	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 121

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
39	Wall	EA3	16	38	34	<MDC
40	Wall	EA4	16	38	16	<MDC
41	Wall	EA5	16	38	9	<MDC
42	Wall	EA6	16	38	20	<MDC
43	Wall	EA7	16	38	17	<MDC
44	Wall	EA8	16	38	7	<MDC
45	Wall	EA9	16	38	11	<MDC
46	Wall	EA10	16	38	14	<MDC
47	Wall	EB1	16	38	30	<MDC
48	Wall	EB2	16	38	15	<MDC
49	Wall	EB3	16	38	26	<MDC
50	Wall	EB4	16	38	13	<MDC
51	Wall	EB5	16	38	28	<MDC
52	Wall	EB6	16	38	26	<MDC
53	Wall	EB7	16	38	10	<MDC
54	Wall	EB8	16	38	19	<MDC
55	Wall	EB9	16	38	16	<MDC
56	Wall	EB10	16	38	14	<MDC
57	Wall	SA3	16	38	29	<MDC
58	Wall	SA2	16	38	23	<MDC
59	Wall	SA1	16	38	41	41
60	Wall	SB1	16	38	23	<MDC
61	Wall	SB2	16	38	30	<MDC
62	Wall	SB3	16	38	25	<MDC
63	Wall	WA1	16	38	20	<MDC
64	Wall	WA2	16	38	8	<MDC
65	Wall	WA3	16	38	15	<MDC
66	Wall	WA4	16	38	25	<MDC
67	Wall	WA5	16	38	12	<MDC
68	Wall	WA6	16	38	16	<MDC
69	Wall	WA7	16	38	9	<MDC
70	Wall	WA8	16	38	22	<MDC
71	Wall	WA9	16	38	31	<MDC
72	Wall	WA10	16	38	19	<MDC
73	Wall	WB1	16	38	35	<MDC
74	Wall	WB2	16	38	38	<MDC
75	Wall	WB3	16	38	23	<MDC
76	Wall	WB4	16	38	18	<MDC
77	Wall	WB5	16	38	14	<MDC
78	Wall	WB6	16	38	45	45
79	Wall	WB7	16	38	30	<MDC
80	Wall	WB8	16	38	20	<MDC
81	Wall	WB9	16	38	23	<MDC
82	Wall	WB10	16	38	26	<MDC
83	Hood 1	FC3	16	38	26	<MDC
84	Hood 1	FC3	16	38	19	<MDC
85	Hood 1	FC3	16	38	24	<MDC
86	Hood 1	FC3	16	38	24	<MDC
87	Hood 1	FC3	16	38	26	<MDC
88	Hood 2	FG3	16	38	14	<MDC
89	Hood 2	FG3	16	38	19	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 121

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
90	Hood 2	FG3	16	38	28	<MDC
91	Hood 2	FG3	16	38	28	<MDC
92	Hood 2	FG3	16	38	38	<MDC
93	Fridge 1 in	FI1	16	38	23	<MDC
94	Fridge 1 out	FI1	16	38	20	<MDC
95	Fridge 2 in	FI1	16	38	30	<MDC
96	Fridge 2 out	FI1	16	38	37	<MDC
97	Bath 1	FC1	16	38	28	<MDC
98	Bath 2	FC1	16	38	35	<MDC
99	Sink	FG1	16	38	30	<MDC
100	Trap	FG1	16	38	46	46
101	Ceiling	CD1	16	38	27	<MDC
102	Ceiling	CF3	16	38	7	<MDC
103	Upper wall	NC2	16	38	25	<MDC
104	Upper wall	WC6	16	38	23	<MDC
105	Drawers	FD1	16	38	21	<MDC
106	Workbench	FH3	16	38	26	<MDC

Survey Type: Removable C-14 Survey Unit: 121

Instrument ID: Beckman LS6500 Survey Date: 03/22/05

Sample Count Time (t_s): 1 min. Average Release Criteria: 1,000 dpm/100 cm²

Bkgrnd Count Time (t_b): 10 min. Maximum Release Criteria: 1,000 dpm/100 cm² (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	14	17	14	<MDC
2	Floor	FA2	14	17	14	<MDC
3	Floor	FA3	14	17	12	<MDC
4	Floor	FB1	14	17	14	<MDC
5	Floor	FB2	14	17	12	<MDC
6	Floor	FB3	14	17	14	<MDC
7	Floor	FC1	14	17	13	<MDC
8	Floor	FC2	14	17	8	<MDC
9	Floor	FC3	14	17	8	<MDC
10	Floor	FD1	14	17	19	19
11	Floor	FD2	14	17	14	<MDC
12	Floor	FD3	14	17	12	<MDC
13	Floor	FE1	14	17	10	<MDC
14	Floor	FE2	14	17	10	<MDC
15	Floor	FE3	14	17	5	<MDC
16	Floor	FF1	14	17	8	<MDC
17	Floor	FF2	14	17	8	<MDC
18	Floor	FF3	14	17	14	<MDC
19	Floor	FG1	14	17	20	20
20	Floor	FG2	14	17	16	<MDC
21	Floor	FG3	14	17	18	18
22	Floor	FH1	14	17	14	<MDC
23	Floor	FH2	14	17	18	18
24	Floor	FH3	14	17	10	<MDC
25	Floor	FI1	14	17	26	26
26	Floor	FI2	14	17	25	25

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 121

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
27	Floor	FI3	14	17	6	<MDC
28	Floor	FJ1	14	17	12	<MDC
29	Floor	FJ2	14	17	12	<MDC
30	Floor	FJ3	14	17	14	<MDC
31	Wall	NA1	14	17	18	18
32	Wall	NA2	14	17	12	<MDC
33	Wall	NA3	14	17	21	21
34	Wall	NB1	14	17	12	<MDC
35	Wall	NB2	14	17	19	19
36	Wall	NB3	14	17	17	<MDC
37	Wall	EA1	14	17	14	<MDC
38	Wall	EA2	14	17	16	<MDC
39	Wall	EA3	14	17	15	<MDC
40	Wall	EA4	14	17	16	<MDC
41	Wall	EA5	14	17	20	20
42	Wall	EA6	14	17	14	<MDC
43	Wall	EA7	14	17	12	<MDC
44	Wall	EA8	14	17	12	<MDC
45	Wall	EA9	14	17	20	20
46	Wall	EA10	14	17	21	21
47	Wall	EB1	14	17	13	<MDC
48	Wall	EB2	14	17	13	<MDC
49	Wall	EB3	14	17	13	<MDC
50	Wall	EB4	14	17	16	<MDC
51	Wall	EB5	14	17	13	<MDC
52	Wall	EB6	14	17	13	<MDC
53	Wall	EB7	14	17	9	<MDC
54	Wall	EB8	14	17	13	<MDC
55	Wall	EB9	14	17	14	<MDC
56	Wall	EB10	14	17	10	<MDC
57	Wall	SA3	14	17	12	<MDC
58	Wall	SA2	14	17	12	<MDC
59	Wall	SA1	14	17	14	<MDC
60	Wall	SB1	14	17	22	22
61	Wall	SB2	14	17	27	27
62	Wall	SB3	14	17	18	18
63	Wall	WA1	14	17	13	<MDC
64	Wall	WA2	14	17	14	<MDC
65	Wall	WA3	14	17	8	<MDC
66	Wall	WA4	14	17	8	<MDC
67	Wall	WA5	14	17	9	<MDC
68	Wall	WA6	14	17	17	<MDC
69	Wall	WA7	14	17	14	<MDC
70	Wall	WA8	14	17	22	22
71	Wall	WA9	14	17	19	19
72	Wall	WA10	14	17	10	<MDC
73	Wall	WB1	14	17	19	19
74	Wall	WB2	14	17	14	<MDC
75	Wall	WB3	14	17	8	<MDC
76	Wall	WB4	14	17	13	<MDC
77	Wall	WB5	14	17	16	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 121

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
78	Wall	WB6	14	17	9	<MDC
79	Wall	WB7	14	17	13	<MDC
80	Wall	WB8	14	17	5	<MDC
81	Wall	WB9	14	17	12	<MDC
82	Wall	WB10	14	17	13	<MDC
83	Hood 1	FC3	14	17	18	18
84	Hood 1	FC3	14	17	10	<MDC
85	Hood 1	FC3	14	17	18	18
86	Hood 1	FC3	14	17	13	<MDC
87	Hood 1	FC3	14	17	12	<MDC
88	Hood 2	FG3	14	17	13	<MDC
89	Hood 2	FG3	14	17	7	<MDC
90	Hood 2	FG3	14	17	14	<MDC
91	Hood 2	FG3	14	17	22	22
92	Hood 2	FG3	14	17	13	<MDC
93	Fridge 1 in	FI1	14	17	12	<MDC
94	Fridge 1 out	FI1	14	17	13	<MDC
95	Fridge 2 in	FI1	14	17	12	<MDC
96	Fridge 2 out	FI1	14	17	14	<MDC
97	Bath 1	FC1	14	17	9	<MDC
98	Bath 2	FC1	14	17	14	<MDC
99	Sink	FG1	14	17	10	<MDC
100	Trap	FG1	14	17	26	26
101	Ceiling	CD1	14	17	13	<MDC
102	Ceiling	CF3	14	17	17	<MDC
103	Upper wall	NC2	14	17	9	<MDC
104	Upper wall	WC6	14	17	15	<MDC
105	Drawers	FD1	14	17	18	18
106	Workbench	FH3	14	17	17	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 121

Instrument ID: C Survey Date: 03/18/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	NB2	5
2	Wall	NA3	5
3	Metal	EA4	5
4	Glass	EB10	5
5	Metal	SA2	5
6	Wall	WB1	5
7	Metal	WB7	5
8	Floor	FJ1	5
9	Floor	FC2	5
10	Floor	FA1	5
11	Hood 1	FC3	5
12	Hood 1	FC3	5
13	Hood 1	FC3	5
14	Hood 1	FC3	5
15	Hood 1	FC3	5

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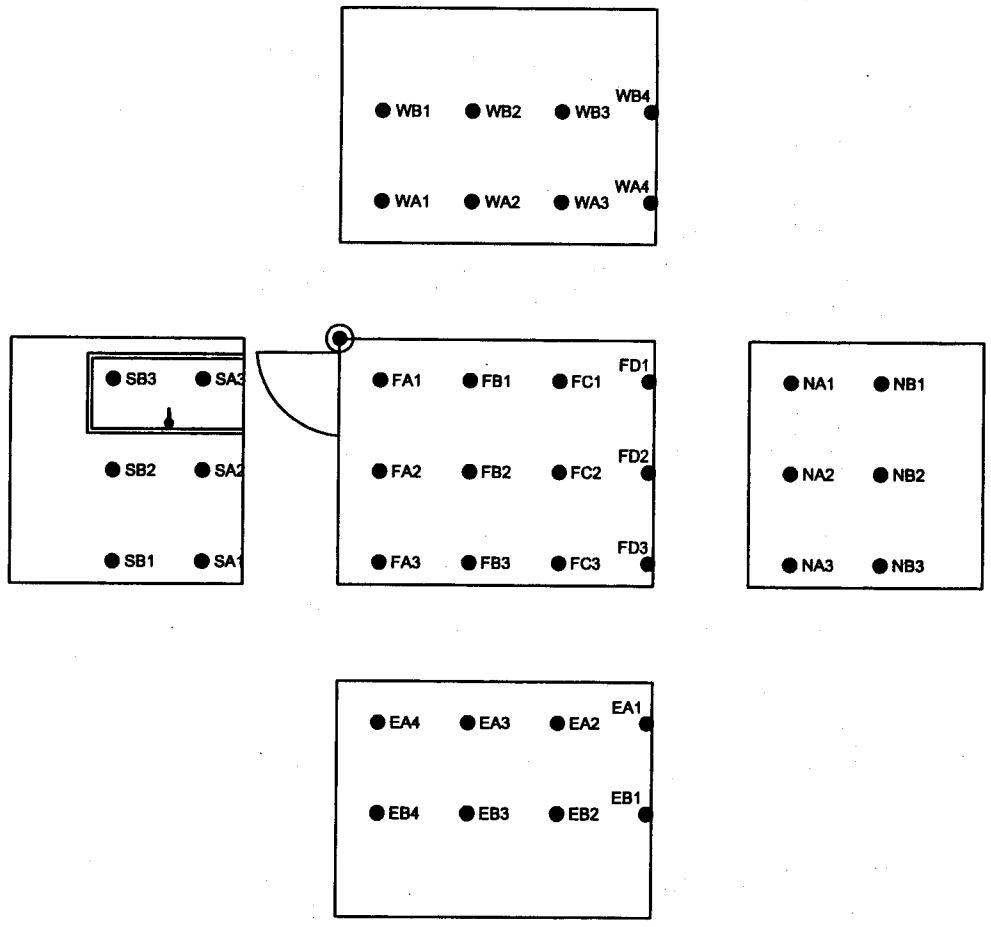
Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 121

#	Location	Survey Point	Dose Rate (urem/hr)
16	Hood 2	FE3	5
17	Hood 2	FE3	5
18	Hood 2	FE3	5
19	Hood 2	FE3	5
20	Hood 2	FE3	5
21	Fridge 1 in	FI1	5
22	Fridge 1 out	FI1	5
23	Fridge 2 in	FI1	5
24	Fridge 2 out	FI1	5
25	Bath in	FC1	5
26	Bath out	FC1	5
27	Sink	FG1	5
28	Trap	FG1	5
29	Ceiling	CD4	5
30	Ceiling	CF3	5
31	Upper wall	NC4	5
32	Upper wall	WF7	5
33	Drawers	FD1	5
34	Workbench	FH3	5

Building 24, Room 123

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 123



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	123		
Instrument ID:	G		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WA1	70	305	95	239	<MDC
2	Wall	WB3	70	305	79	86	<MDC
3	Wall	NA2	70	305	82	115	<MDC
4	Wall	EB1	70	305	84	134	<MDC
5	Glass	EB3	70	305	86	153	<MDC
6	Wall	SB2	70	305	69	-10	<MDC
7	Glass	SA3	70	305	73	29	<MDC
8	Floor	FA1	70	305	87	163	<MDC
9	Floor	FC1	70	305	72	19	<MDC
10	Floor	FA3	70	305	87	163	<MDC
11	Ceiling	CC3	70	305	91	201	<MDC
12	Upper wall	SC3	70	305	84	134	<MDC
13	Workbench	FC3	70	305	67	-29	<MDC
14	Drawers	FC3	70	305	60	-96	<MDC
15	Hood	FB3	70	305	68	-19	<MDC
16	Hood	FB3	70	305	61	-86	<MDC
17	Hood	FB3	70	305	72	19	<MDC
18	Hood	FB3	70	305	76	57	<MDC
19	Hood	FB3	70	305	73	29	<MDC
20	Sink	FA3	70	305	78	76	<MDC
21	Trap	FA3	70	305	78	76	<MDC

Survey Type:	Scans		Survey Unit:	123		
Instrument Information:						
Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	180	1,417	180	220	<MDC	<MDC

Survey Type:	Removable H-3		Survey Unit:	123		
Instrument ID:	Beckman LS6500		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	27	48	5	<MDC
2	Floor	FA2	27	48	-4	<MDC
3	Floor	FA3	27	48	-3	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 123

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
4	Floor	FB1	27	48	15	<MDC
5	Floor	FB2	27	48	10	<MDC
6	Floor	FB3	27	48	8	<MDC
7	Floor	FC1	27	48	18	<MDC
8	Floor	FC2	27	48	16	<MDC
9	Floor	FC3	27	48	2	<MDC
10	Floor	FD1	27	48	9	<MDC
11	Floor	FD2	27	48	4	<MDC
12	Floor	FD3	27	48	15	<MDC
13	Wall	NA1	27	48	12	<MDC
14	Wall	NA2	27	48	5	<MDC
15	Wall	NA3	27	48	6	<MDC
16	Wall	NB1	27	48	3	<MDC
17	Wall	NB2	27	48	3	<MDC
18	Wall	NB3	27	48	2	<MDC
19	Wall	EA1	27	48	11	<MDC
20	Wall	EA2	27	48	-3	<MDC
21	Wall	EA3	27	48	12	<MDC
22	Wall	EA4	27	48	14	<MDC
23	Wall	EB1	27	48	6	<MDC
24	Wall	EB2	27	48	-6	<MDC
25	Wall	EB3	27	48	10	<MDC
26	Wall	EB4	27	48	7	<MDC
27	Wall	SA1	27	48	26	<MDC
28	Wall	SA2	27	48	6	<MDC
29	Wall	SA3	27	48	11	<MDC
30	Wall	SB1	27	48	7	<MDC
31	Wall	SB2	27	48	12	<MDC
32	Wall	SB3	27	48	19	<MDC
33	Wall	WA1	27	48	16	<MDC
34	Wall	WA2	27	48	8	<MDC
35	Wall	WA3	27	48	8	<MDC
36	Wall	WA4	27	48	18	<MDC
37	Wall	WB1	27	48	20	<MDC
38	Wall	WB2	27	48	13	<MDC
39	Wall	WB3	27	48	18	<MDC
40	Wall	WB4	27	48	10	<MDC
41	Ceiling	CC3	27	48	19	<MDC
42	Upper wall	SC3	27	48	-5	<MDC
43	Workbench	FC3	27	48	19	<MDC
44	Drawers	FC3	27	48	16	<MDC
45	Hood	FB3	27	48	-8	<MDC
46	Hood	FB3	27	48	10	<MDC
47	Hood	FB3	27	48	7	<MDC
48	Hood	FB3	27	48	11	<MDC
49	Hood	FB3	27	48	6	<MDC
50	Sink	FA3	27	48	22	<MDC
51	Trap	FA3	27	48	10	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable C-14		Survey Units:	123		
Instrument ID:	Beckman LS6500		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	13	17	12	<MDC
2	Floor	FA2	13	17	24	24
3	Floor	FA3	13	17	27	27
4	Floor	FB1	13	17	16	<MDC
5	Floor	FB2	13	17	17	17
6	Floor	FB3	13	17	22	22
7	Floor	FC1	13	17	16	<MDC
8	Floor	FC2	13	17	25	25
9	Floor	FC3	13	17	12	<MDC
10	Floor	FD1	13	17	15	<MDC
11	Floor	FD2	13	17	19	19
12	Floor	FD3	13	17	15	<MDC
13	Wall	NA1	13	17	13	<MDC
14	Wall	NA2	13	17	11	<MDC
15	Wall	NA3	13	17	13	<MDC
16	Wall	NB1	13	17	22	22
17	Wall	NB2	13	17	20	20
18	Wall	NB3	13	17	23	23
19	Wall	EA1	13	17	11	<MDC
20	Wall	EA2	13	17	16	<MDC
21	Wall	EA3	13	17	20	20
22	Wall	EA4	13	17	15	<MDC
23	Wall	EB1	13	17	15	<MDC
24	Wall	EB2	13	17	18	18
25	Wall	EB3	13	17	11	<MDC
26	Wall	EB4	13	17	13	<MDC
27	Wall	SA1	13	17	17	17
28	Wall	SA2	13	17	15	<MDC
29	Wall	SA3	13	17	9	<MDC
30	Wall	SB1	13	17	17	17
31	Wall	SB2	13	17	17	17
32	Wall	SB3	13	17	11	<MDC
33	Wall	WA1	13	17	13	<MDC
34	Wall	WA2	13	17	15	<MDC
35	Wall	WA3	13	17	16	<MDC
36	Wall	WA4	13	17	11	<MDC
37	Wall	WB1	13	17	13	<MDC
38	Wall	WB2	13	17	16	<MDC
39	Wall	WB3	13	17	16	<MDC
40	Wall	WB4	13	17	16	<MDC
41	Ceiling	CC3	13	17	20	20
42	Upper wall	SC3	13	17	20	20
43	Workbench	FC3	13	17	15	<MDC
44	Drawers	FC3	13	17	15	<MDC
45	Hood	FB3	13	17	28	28
46	Hood	FB3	13	17	17	17
47	Hood	FB3	13	17	12	<MDC
48	Hood	FB3	13	17	20	20

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Removable C-14** Survey Unit: **123**

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Hood	FB3	13	17	15	<MDC
50	Sink	FA3	13	17	13	<MDC
51	Trap	FA3	13	17	19	19

Survey Type: **Gamma Dose Rates** Survey Unit: **123**

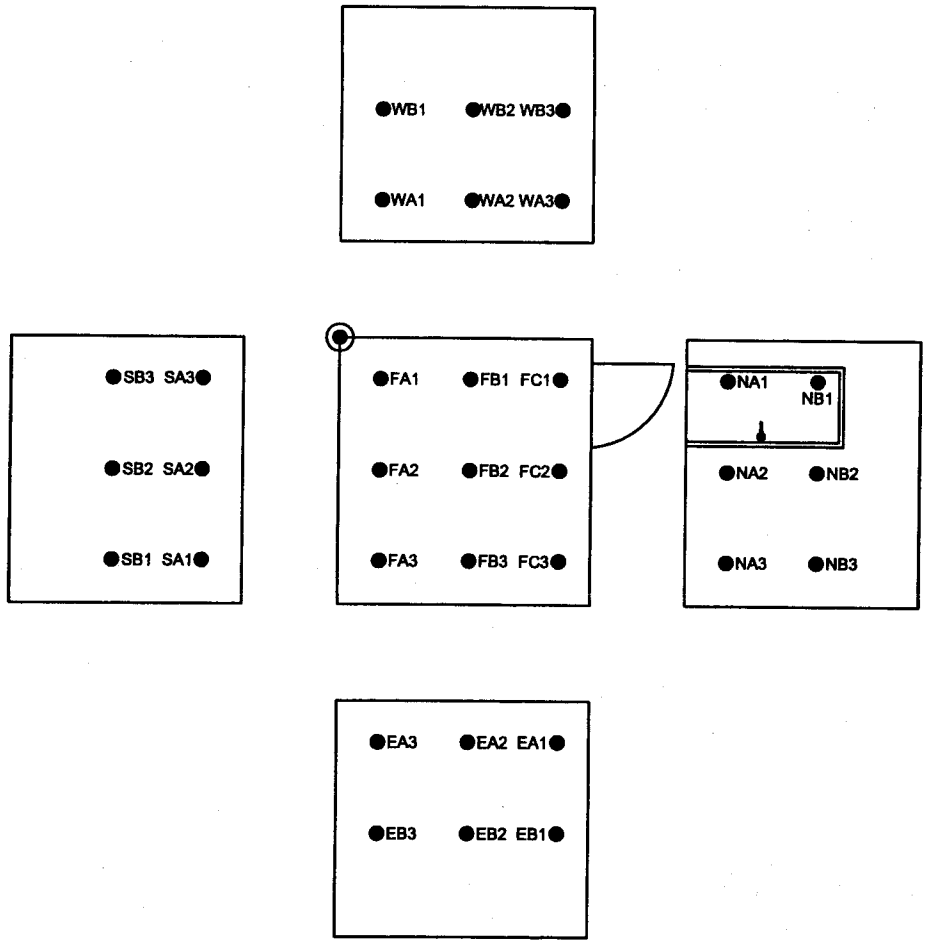
Instrument ID: C Survey Date: 03/21/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WA1	5
2	Wall	WB3	5
3	Wall	NA2	5
4	Wall	EB1	5
5	Glass	EB3	5
6	Wall	SB2	5
7	Glass	SA3	5
8	Floor	FA1	5
9	Floor	FC1	5
10	Floor	FA3	5
11	Ceiling	CC3	5
12	Upper wall	SC3	5
13	Workbench	FC3	5
14	Drawers	FC3	5
15	Hood	FB3	5
16	Hood	FB3	5
17	Hood	FB3	5
18	Hood	FB3	5
19	Hood	FB3	5
20	Sink	FA3	5
21	Trap	FA3	5

Building 24, Room 210

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 210



NORTH

SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/20/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	210	
Instrument ID:	D		Survey Date:	03/18/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WB3	314	358	203	-619	<MDC
2	Wall	SA2	314	358	219	-530	<MDC
3	Floor	FA1	314	358	184	-725	<MDC
4	Wall	NA1	314	358	215	-552	<MDC
5	Wall	NB3	314	358	212	-569	<MDC
6	Floor	FA3	314	358	194	-670	<MDC
7	Wall	EA1	314	358	171	-798	<MDC
8	Floor	FC1	314	358	226	-491	<MDC
9	Wall	FB3	314	358	185	-720	<MDC
10	Wall	WB1	314	358	196	-659	<MDC
11	Ceiling	CA2	314	358	266	-268	<MDC
12	Upper wall	NC1	314	358	198	-647	<MDC
13	Sink	FC3	314	358	218	-536	<MDC
14	Trap	FC3	314	358	242	-402	<MDC
15	Motor	FC3	314	358	191	-686	<MDC
16	Drawer	FC3	314	358	205	-608	<MDC
17	Benchtop	FA3	314	358	195	-664	<MDC

Survey Type:	Scans		Survey Unit:	210	
Instrument Information:					
Instrument ID:	D		Survey Date:	03/16/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	250	943	250	290	<MDC	<MDC

Survey Type:	Removable H-3		Survey Unit:	210	
Instrument ID:	Beckman LS6500		Survey Date:	03/22/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	16	38	19	<MDC
2	Floor	FA2	16	38	9	<MDC
3	Floor	FA3	16	38	16	<MDC
4	Floor	FB1	16	38	26	<MDC
5	Floor	FB2	16	38	12	<MDC
6	Floor	FB3	16	38	20	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable H-3		Survey Unit:	210		
Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
7	Floor	FC1	16	38	7	<MDC
8	Floor	FC2	16	38	24	<MDC
9	Floor	FC3	16	38	16	<MDC
10	Wall	NA1	16	38	10	<MDC
11	Wall	NA2	16	38	9	<MDC
12	Wall	NA3	16	38	30	<MDC
13	Wall	NB1	16	38	15	<MDC
14	Wall	NB2	16	38	20	<MDC
15	Wall	NB3	16	38	23	<MDC
16	Wall	EA1	16	38	19	<MDC
17	Wall	EA2	16	38	9	<MDC
18	Wall	EA3	16	38	20	<MDC
19	Wall	EB1	16	38	11	<MDC
20	Wall	EB2	16	38	12	<MDC
21	Wall	EB3	16	38	12	<MDC
22	Wall	SA1	16	38	18	<MDC
23	Wall	SA2	16	38	0	<MDC
24	Wall	SA3	16	38	7	<MDC
25	Wall	SB1	16	38	8	<MDC
26	Wall	SB2	16	38	23	<MDC
27	Wall	SB3	16	38	31	<MDC
28	Wall	WA1	16	38	17	<MDC
29	Wall	WA2	16	38	10	<MDC
30	Wall	WA3	16	38	11	<MDC
31	Wall	WB1	16	38	17	<MDC
32	Wall	WB2	16	38	3	<MDC
33	Wall	WB3	16	38	16	<MDC
34	Ceiling	CA2	16	38	30	<MDC
35	Upper wall	NC1	16	38	19	<MDC
36	Sink	FC3	16	38	50	50
37	Trap	FC3	16	38	44	44
38	Motor	FC3	16	38	40	40
39	Drawer	FC3	16	38	18	<MDC
40	Benchtop	FA3	16	38	15	<MDC

Survey Type:	Removable C-14		Survey Unit:	210		
Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	14	17	14	<MDC
2	Floor	FA2	14	17	23	23
3	Floor	FA3	14	17	24	24
4	Floor	FB1	14	17	10	<MDC
5	Floor	FB2	14	17	10	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 210

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
6	Floor	FB3	14	17	21	21
7	Floor	FC1	14	17	9	<MDC
8	Floor	FC2	14	17	17	<MDC
9	Floor	FC3	14	17	8	<MDC
10	Wall	NA1	14	17	21	21
11	Wall	NA2	14	17	14	<MDC
12	Wall	NA3	14	17	10	<MDC
13	Wall	NB1	14	17	20	20
14	Wall	NB2	14	17	22	22
15	Wall	NB3	14	17	13	<MDC
16	Wall	EA1	14	17	14	<MDC
17	Wall	EA2	14	17	18	18
18	Wall	EA3	14	17	16	<MDC
19	Wall	EB1	14	17	13	<MDC
20	Wall	EB2	14	17	10	<MDC
21	Wall	EB3	14	17	24	24
22	Wall	SA1	14	17	14	<MDC
23	Wall	SA2	14	17	22	22
24	Wall	SA3	14	17	18	18
25	Wall	SB1	14	17	18	18
26	Wall	SB2	14	17	14	<MDC
27	Wall	SB3	14	17	8	<MDC
28	Wall	WA1	14	17	14	<MDC
29	Wall	WA2	14	17	16	<MDC
30	Wall	WA3	14	17	12	<MDC
31	Wall	WB1	14	17	16	<MDC
32	Wall	WB2	14	17	18	18
33	Wall	WB3	14	17	14	<MDC
34	Ceiling	CA2	14	17	20	20
35	Upper wall	NC1	14	17	16	<MDC
36	Sink	FC3	14	17	21	21
37	Trap	FC3	14	17	10	<MDC
38	Motor	FC3	14	17	14	<MDC
39	Drawer	FC3	14	17	13	<MDC
40	Benchtop	FA3	14	17	16	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 210

Instrument ID: C Survey Date: 03/18/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WB3	6
2	Wall	SA2	6
3	Floor	FA1	6
4	Wall	NA1	6
5	Wall	NB3	5
6	Floor	FA3	6
7	Wall	EA1	6
8	Floor	FC1	6
9	Wall	FB3	5

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Gamma Dose Rates** Survey Unit: **210**

#	Location	Survey Point	Dose Rate (urem/hr)
10	Wall	WB1	6
11	Ceiling	CA2	6
12	Upper wall	NC1	6
13	Sink	FC3	5
14	Trap	FC3	5
15	Motor	FC3	6
16	Drawer	FC3	6
17	Benchtop	FA3	5

Building 24, Room 212

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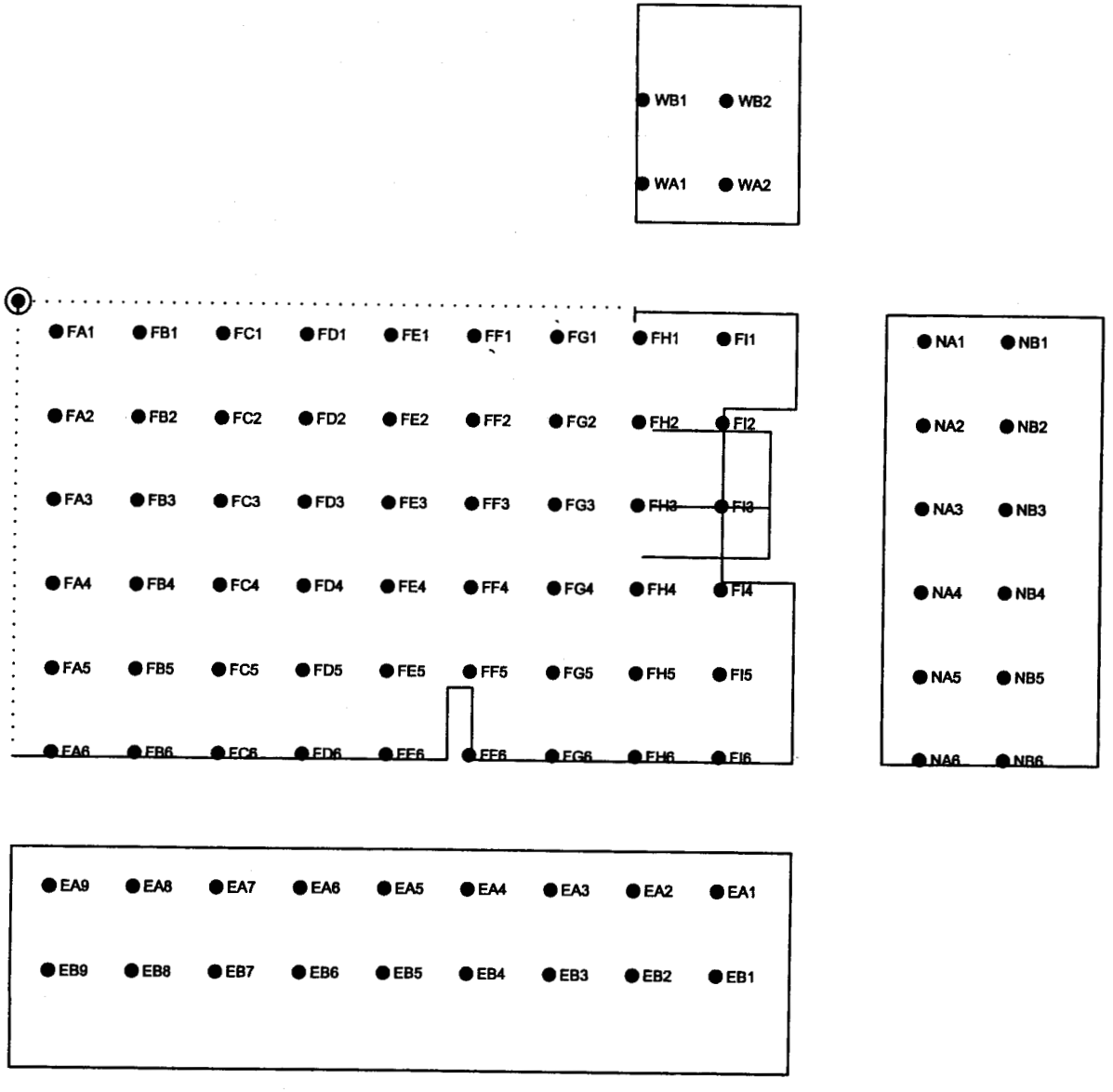
BUILDING B-24 ROOM 212



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	212		
Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	EB6	208	522	147	-603	<MDC
2	Wall	EA2	208	522	165	-425	<MDC
3	Floor	FD5	208	522	187	-208	<MDC
4	Floor	FH2	208	522	211	30	<MDC
5	Wall	NB5	208	522	182	-257	<MDC
6	Wall	WA8	208	522	178	-297	<MDC
7	Wall	WA4	208	522	137	-702	<MDC
8	Floor	FD1	208	522	180	-277	<MDC
9	Benchtop	FA3	208	522	186	-217	<MDC
10	Wall	NA1	208	522	184	-237	<MDC
11	Ceiling	CE1	208	522	227	188	<MDC
12	Ceiling	CD4	208	522	241	326	<MDC
13	Upper wall	NC2	208	522	163	-445	<MDC
14	Upper wall	EC5	208	522	197	-109	<MDC
15	Hood 1	FG1	208	522	140	-672	<MDC
16	Hood 1	FG1	208	522	167	-405	<MDC
17	Hood 1	FG1	208	522	178	-297	<MDC
18	Hood 1	FG1	208	522	176	-316	<MDC
19	Hood 1	FG1	208	522	189	-188	<MDC
20	Hood 2	FH6	208	522	157	-504	<MDC
21	Hood 2	FH6	208	522	197	-109	<MDC
22	Hood 2	FH6	208	522	147	-603	<MDC
23	Hood 2	FH6	208	522	149	-583	<MDC
24	Hood 2	FH6	208	522	215	69	<MDC
25	Benchtop	FE1	208	522	160	-474	<MDC
26	Benchtop	FC2	208	522	173	-346	<MDC
27	Benchtop	FF4	208	522	138	-692	<MDC
28	Benchtop	FC6	208	522	161	-465	<MDC
29	Drawer	FE1	208	522	171	-366	<MDC
30	Drawer	FC1	208	522	161	-465	<MDC
31	Drawer	FF4	208	522	183	-247	<MDC
32	Drawer	FC6	208	522	195	-128	<MDC
33	Sink 1	FE1	208	522	136	-712	<MDC
34	Trap 1	FE1	208	522	174	-336	<MDC
35	Sink 2	FD3	208	522	200	-79	<MDC
36	Trap 2	FD3	208	522	179	-287	<MDC
37	Sink 3	FE6	208	522	216	79	<MDC
38	Trap 3	FE6	208	522	1,119	9,004	9,004
39	Sink 4	FG1	208	522	169	-385	<MDC
40	Trap 4	FG1	208	522	144	-633	<MDC
41	Fridge in right	FH3	208	522	146	-613	<MDC
42	Fridge in left	FH3	208	522	143	-642	<MDC
43	Fridge out	FH3	208	522	133	-741	<MDC
44	Pb shield	FG3	208	522	146	-613	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Scans** Survey Unit: **212**

Instrument Information:

Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	250	943	280	350	<MDC	<MDC

Survey Type: **Removable H-3** Survey Unit: **212**

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	30	50	26	<MDC
2	Floor	FA2	30	50	27	<MDC
3	Floor	FA3	30	50	24	<MDC
4	Floor	FA4	30	50	26	<MDC
5	Floor	FA5	30	50	22	<MDC
6	Floor	FA6	30	50	31	<MDC
7	Floor	FB1	30	50	33	<MDC
8	Floor	FB2	30	50	50	50
9	Floor	FB3	30	50	29	<MDC
10	Floor	FB4	30	50	42	<MDC
11	Floor	FB5	30	50	13	<MDC
12	Floor	FB6	30	50	29	<MDC
13	Floor	FC1	30	50	64	64
14	Floor	FC2	30	50	237	237
15	Floor	FC3	30	50	32	<MDC
16	Floor	FC4	30	50	27	<MDC
17	Floor	FC5	30	50	38	<MDC
18	Floor	FC6	30	50	28	<MDC
19	Floor	FD1	30	50	16	<MDC
20	Floor	FD2	30	50	45	<MDC
21	Floor	FD3	30	50	32	<MDC
22	Floor	FD4	30	50	40	<MDC
23	Floor	FD5	30	50	21	<MDC
24	Floor	FD6	30	50	10	<MDC
25	Floor	FE1	30	50	29	<MDC
26	Floor	FE2	30	50	34	<MDC
27	Floor	FE3	30	50	21	<MDC
28	Floor	FE4	30	50	30	<MDC
29	Floor	FE5	30	50	25	<MDC
30	Floor	FE6	30	50	49	<MDC
31	Floor	FF1	30	50	33	<MDC
32	Floor	FF2	30	50	31	<MDC
33	Floor	FF3	30	50	32	<MDC
34	Floor	FF4	30	50	28	<MDC
35	Floor	FF5	30	50	30	<MDC
36	Floor	FF6	30	50	16	<MDC
37	Floor	FG1	30	50	17	<MDC
38	Floor	FG2	30	50	19	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 212

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
39	Floor	FG3	30	50	21	<MDC
40	Floor	FG4	30	50	36	<MDC
41	Floor	FG5	30	50	29	<MDC
42	Floor	FG6	30	50	17	<MDC
43	Floor	FH1	30	50	13	<MDC
44	Floor	FH2	30	50	18	<MDC
45	Floor	FH3	30	50	23	<MDC
46	Floor	FH4	30	50	123	123
47	Floor	FH5	30	50	28	<MDC
48	Floor	FH6	30	50	45	<MDC
49	Floor	FI1	30	50	32	<MDC
50	Floor	FI2	30	50	26	<MDC
51	Floor	FI3	30	50	25	<MDC
52	Floor	FI4	30	50	13	<MDC
53	Floor	FI5	30	50	27	<MDC
54	Floor	FI6	30	50	25	<MDC
55	Wall	NA1	30	50	29	<MDC
56	Wall	NA2	30	50	13	<MDC
57	Wall	NA3	30	50	34	<MDC
58	Wall	NA4	30	50	35	<MDC
59	Wall	NA5	30	50	15	<MDC
60	Wall	NA6	30	50	38	<MDC
61	Wall	NB1	30	50	58	58
62	Wall	NB2	30	50	32	<MDC
63	Wall	NB3	30	50	39	<MDC
64	Wall	NB4	30	50	20	<MDC
65	Wall	NB5	30	50	26	<MDC
66	Wall	NB6	30	50	28	<MDC
67	Wall	EA1	30	50	15	<MDC
68	Wall	EA2	30	50	35	<MDC
69	Wall	EA3	30	50	28	<MDC
70	Wall	EA4	30	50	35	<MDC
71	Wall	EA5	30	50	13	<MDC
72	Wall	EA6	30	50	25	<MDC
73	Wall	EA7	30	50	43	<MDC
74	Wall	EA8	30	50	38	<MDC
75	Wall	EA9	30	50	28	<MDC
76	Wall	EB1	30	50	40	<MDC
77	Wall	EB2	30	50	33	<MDC
78	Wall	EB3	30	50	20	<MDC
79	Wall	EB4	30	50	25	<MDC
80	Wall	EB5	30	50	33	<MDC
81	Wall	EB6	30	50	25	<MDC
82	Wall	EB7	30	50	30	<MDC
83	Wall	EB8	30	50	37	<MDC
84	Wall	EB9	30	50	40	<MDC
85	Wall	WA1	30	50	35	<MDC
86	Wall	WA2	30	50	30	<MDC
87	Wall	WA3	30	50	19	<MDC
88	Wall	WA4	30	50	30	<MDC
89	Wall	WA5	30	50	16	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 212

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
90	Wall	WA6	30	50	23	<MDC
91	Wall	WA7	30	50	30	<MDC
92	Wall	WA8	30	50	20	<MDC
93	Wall	WA9	30	50	15	<MDC
94	Wall	WB1	30	50	26	<MDC
95	Wall	WB2	30	50	31	<MDC
96	Wall	WB3	30	50	30	<MDC
97	Wall	WB4	30	50	29	<MDC
98	Wall	WB5	30	50	25	<MDC
99	Wall	WB6	30	50	24	<MDC
100	Wall	WB7	30	50	29	<MDC
101	Wall	WB8	30	50	40	<MDC
102	Wall	WB9	30	50	40	<MDC
103	Ceiling	CE1	30	50	18	<MDC
104	Ceiling	CD4	30	50	21	<MDC
105	Upper wall	NC2	30	50	28	<MDC
106	Upper wall	EC5	30	50	28	<MDC
107	Hood 1	FG1	30	50	45	<MDC
108	Hood 1	FG1	30	50	42	<MDC
109	Hood 1	FG1	30	50	28	<MDC
110	Hood 1	FG1	30	50	33	<MDC
111	Hood 1	FG1	30	50	42	<MDC
112	Hood 2	FH6	30	50	33	<MDC
113	Hood 2	FH6	30	50	66	66
114	Hood 2	FH6	30	50	39	<MDC
115	Hood 2	FH6	30	50	29	<MDC
116	Hood 2	FH6	30	50	17	<MDC
117	Workbench	FE1	30	50	28	<MDC
118	Workbench	FC3	30	50	50	50
119	Workbench	FF4	30	50	31	<MDC
120	Workbench	FC6	30	50	28	<MDC
121	Drawer	FE1	30	50	18	<MDC
122	Drawer	FC3	30	50	27	<MDC
123	Drawer	FF4	30	50	34	<MDC
124	Drawer	FC6	30	50	26	<MDC
125	Sink 1	FE1	30	50	25	<MDC
126	Trap 1	FE1	30	50	37	<MDC
127	Sink 2	FD3	30	50	55	55
128	Trap 2	FD3	30	50	45	<MDC
129	Sink 3	FE6	30	50	42	<MDC
130	Trap 3	FE6	30	50	246	246
131	Sink 4	FG1	30	50	38	<MDC
132	Trap 4	FG1	30	50	37	<MDC
133	Fridge in right	FH3	30	50	18	<MDC
134	Fridge in left	FH3	30	50	22	<MDC
135	Fridge out	FH3	30	50	24	<MDC
136	Pb shield	FG3	30	50	32	<MDC
137	Forceps	FG3	30	50	14	<MDC
138	Equipment	Biomet 2000	30	50	16	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable C-14		Survey Unit:	212	
Instrument ID:	Beckman LS6500		Survey Date:	03/21/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	11	16	23	23
2	Floor	FA2	11	16	21	21
3	Floor	FA3	11	16	14	<MDC
4	Floor	FA4	11	16	18	18
5	Floor	FA5	11	16	27	27
6	Floor	FA6	11	16	14	<MDC
7	Floor	FB1	11	16	14	<MDC
8	Floor	FB2	11	16	19	19
9	Floor	FB3	11	16	22	22
10	Floor	FB4	11	16	18	18
11	Floor	FB5	11	16	29	29
12	Floor	FB6	11	16	17	17
13	Floor	FC1	11	16	15	<MDC
14	Floor	FC2	11	16	15	<MDC
15	Floor	FC3	11	16	22	22
16	Floor	FC4	11	16	23	23
17	Floor	FC5	11	16	14	<MDC
18	Floor	FC6	11	16	16	16
19	Floor	FD1	11	16	22	22
20	Floor	FD2	11	16	14	<MDC
21	Floor	FD3	11	16	14	<MDC
22	Floor	FD4	11	16	18	18
23	Floor	FD5	11	16	14	<MDC
24	Floor	FD6	11	16	33	33
25	Floor	FE1	11	16	19	19
26	Floor	FE2	11	16	19	19
27	Floor	FE3	11	16	12	<MDC
28	Floor	FE4	11	16	18	18
29	Floor	FE5	11	16	18	18
30	Floor	FE6	11	16	51	51
31	Floor	FF1	11	16	18	18
32	Floor	FF2	11	16	27	27
33	Floor	FF3	11	16	17	17
34	Floor	FF4	11	16	15	<MDC
35	Floor	FF5	11	16	17	17
36	Floor	FF6	11	16	14	<MDC
37	Floor	FG1	11	16	13	<MDC
38	Floor	FG2	11	16	18	18
39	Floor	FG3	11	16	25	25
40	Floor	FG4	11	16	10	<MDC
41	Floor	FG5	11	16	17	17
42	Floor	FG6	11	16	22	22
43	Floor	FH1	11	16	13	<MDC
44	Floor	FH2	11	16	19	19
45	Floor	FH3	11	16	10	<MDC
46	Floor	FH4	11	16	25	25
47	Floor	FH5	11	16	14	<MDC
48	Floor	FH6	11	16	26	26

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 212

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Floor	FI1	11	16	13	<MDC
50	Floor	FI2	11	16	14	<MDC
51	Floor	FI3	11	16	18	18
52	Floor	FI4	11	16	29	29
53	Floor	FI5	11	16	23	23
54	Floor	FI6	11	16	18	18
55	Wall	NA1	11	16	15	<MDC
56	Wall	NA2	11	16	12	<MDC
57	Wall	NA3	11	16	18	18
58	Wall	NA4	11	16	17	17
59	Wall	NA5	11	16	13	<MDC
60	Wall	NA6	11	16	25	25
61	Wall	NB1	11	16	22	22
62	Wall	NB2	11	16	21	21
63	Wall	NB3	11	16	19	19
64	Wall	NB4	11	16	14	<MDC
65	Wall	NB5	11	16	16	16
66	Wall	NB6	11	16	19	19
67	Wall	EA1	11	16	30	30
68	Wall	EA2	11	16	10	<MDC
69	Wall	EA3	11	16	14	<MDC
70	Wall	EA4	11	16	21	21
71	Wall	EA5	11	16	13	<MDC
72	Wall	EA6	11	16	15	<MDC
73	Wall	EA7	11	16	17	17
74	Wall	EA8	11	16	13	<MDC
75	Wall	EA9	11	16	16	16
76	Wall	EB1	11	16	17	17
77	Wall	EB2	11	16	17	17
78	Wall	EB3	11	16	10	<MDC
79	Wall	EB4	11	16	17	17
80	Wall	EB5	11	16	14	<MDC
81	Wall	EB6	11	16	17	17
82	Wall	EB7	11	16	23	23
83	Wall	EB8	11	16	19	19
84	Wall	EB9	11	16	23	23
85	Wall	WA1	11	16	9	<MDC
86	Wall	WA2	11	16	19	19
87	Wall	WA3	11	16	10	<MDC
88	Wall	WA4	11	16	15	<MDC
89	Wall	WA5	11	16	9	<MDC
90	Wall	WA6	11	16	18	18
91	Wall	WA7	11	16	13	<MDC
92	Wall	WA8	11	16	14	<MDC
93	Wall	WA9	11	16	19	19
94	Wall	WB1	11	16	19	19
95	Wall	WB2	11	16	15	<MDC
96	Wall	WB3	11	16	14	<MDC
97	Wall	WB4	11	16	17	17
98	Wall	WB5	11	16	22	22
99	Wall	WB6	11	16	16	16

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 212

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
100	Wall	WB7	11	16	10	<MDC
101	Wall	WB8	11	16	19	19
102	Wall	WB9	11	16	17	17
103	Ceiling	CE1	11	16	19	19
104	Ceiling	CD4	11	16	14	<MDC
105	Upper wall	NC2	11	16	14	<MDC
106	Upper wall	EC5	11	16	16	16
107	Hood 1	FG1	11	16	6	<MDC
108	Hood 1	FG1	11	16	9	<MDC
109	Hood 1	FG1	11	16	19	19
110	Hood 1	FG1	11	16	22	22
111	Hood 1	FG1	11	16	15	<MDC
112	Hood 2	FH6	11	16	32	32
113	Hood 2	FH6	11	16	15	<MDC
114	Hood 2	FH6	11	16	22	22
115	Hood 2	FH6	11	16	23	23
116	Hood 2	FH6	11	16	23	23
117	Workbench	FE1	11	16	13	<MDC
118	Workbench	FC3	11	16	10	<MDC
119	Workbench	FF4	11	16	13	<MDC
120	Workbench	FC6	11	16	15	<MDC
121	Drawer	FE1	11	16	21	21
122	Drawer	FC3	11	16	12	<MDC
123	Drawer	FF4	11	16	18	18
124	Drawer	FC6	11	16	14	<MDC
125	Sink 1	FE1	11	16	12	<MDC
126	Trap 1	FE1	11	16	14	<MDC
127	Sink 2	FD3	11	16	27	27
128	Trap 2	FD3	11	16	25	25
129	Sink 3	FE6	11	16	26	26
130	Trap 3	FE6	11	16	29	29
131	Sink 4	FG1	11	16	21	21
132	Trap 4	FG1	11	16	18	18
133	Fridge in right	FH3	11	16	13	<MDC
134	Fridge in left	FH3	11	16	22	22
135	Fridge out	FH3	11	16	12	<MDC
136	Pb shield	FG3	11	16	17	17
137	Forceps	FG3	11	16	9	<MDC
138	Equipment	Biomet 2000	11	16	14	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 212

Instrument ID: C Survey Date: 03/18/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	EB6	6
2	Wall	EA2	6
3	Floor	FD5	6
4	Floor	FH2	6
5	Wall	NB5	6

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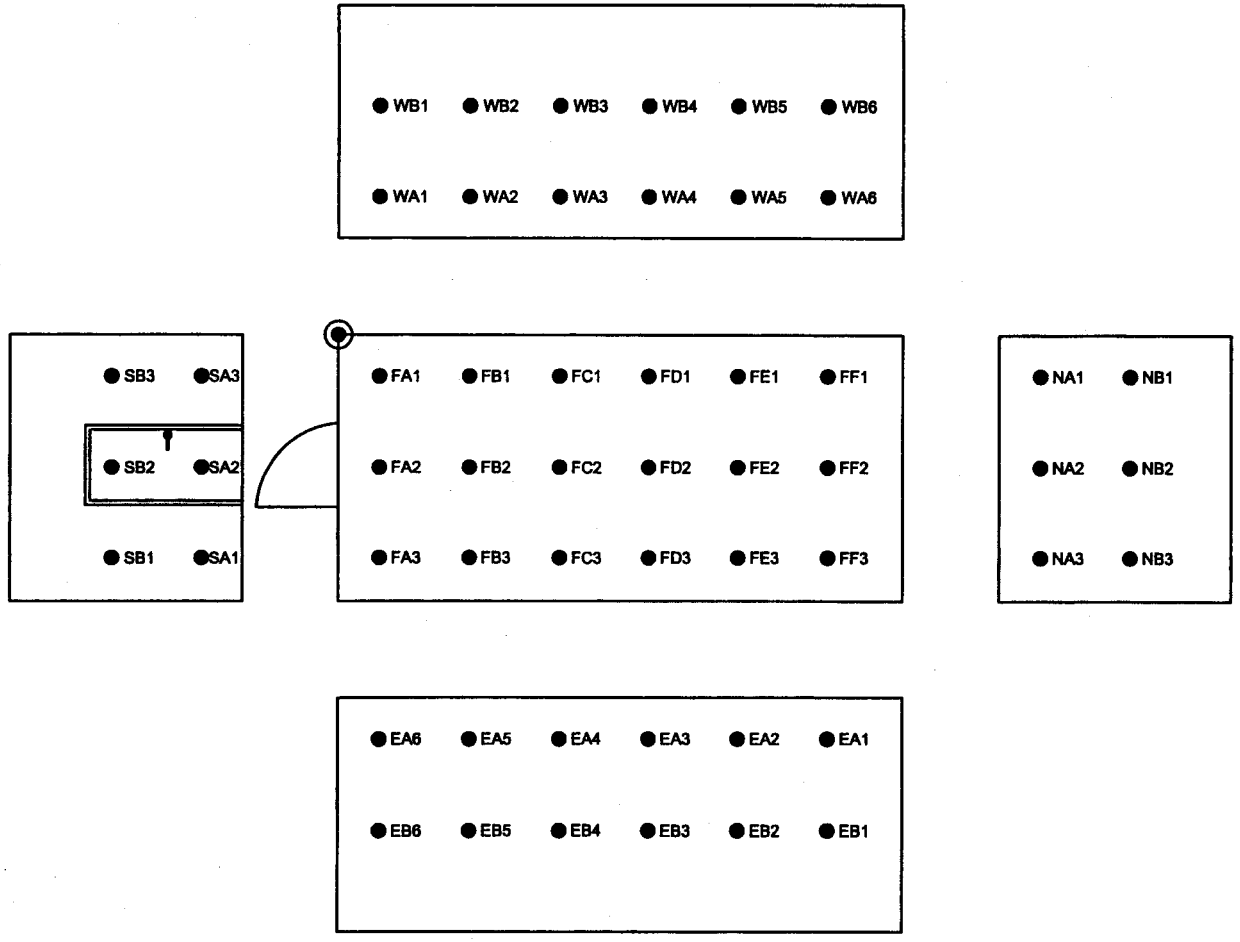
Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 212

#	Location	Survey Point	Dose Rate (urem/hr)
6	Wall	WA8	5
7	Wall	WA4	5
8	Floor	FD1	5
9	Benchtop	FA3	6
10	Wall	NA1	6
11	Ceiling	CE1	6
12	Ceiling	CD4	6
13	Upper wall	NC2	6
14	Upper wall	EC5	6
15	Hood 1	FG1	5
16	Hood 1	FG1	5
17	Hood 1	FG1	5
18	Hood 1	FG1	5
19	Hood 1	FG1	5
20	Hood 2	FH6	6
21	Hood 2	FH6	6
22	Hood 2	FH6	6
23	Hood 2	FH6	6
24	Hood 2	FH6	6
25	Benchtop	FE1	5
26	Benchtop	FC2	5
27	Benchtop	FF4	6
28	Benchtop	FC6	6
29	Drawer	FE1	5
30	Drawer	FC1	5
31	Drawer	FF4	6
32	Drawer	FC6	6
33	Sink 1	FE1	5
34	Trap 1	FE1	5
35	Sink 2	FD3	6
36	Trap 2	FD3	6
37	Sink 3	FE6	6
38	Trap 3	FE6	6
39	Sink 4	FG1	6
40	Trap 4	FG1	6
41	Fridge in right	FH3	5
42	Fridge in left	FH3	5
43	Fridge out	FH3	5
44	Pb shield	FG3	6

Building 24, Room 212C

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 212C



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	212 C	
Instrument ID:	E		Survey Date:	03/16/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WA1	140	433	149	89	<MDC
2	Wall	WB3	140	433	153	128	<MDC
3	Wall	WA6	140	433	149	89	<MDC
4	Wall	NA1	140	433	140	0	<MDC
5	Wall	NB2	140	433	173	326	<MDC
6	Wall	EB4	140	433	181	405	<MDC
7	Wall	SA3	140	433	175	346	<MDC
8	Floor	FB2	140	433	161	208	<MDC
9	Floor	FD2	140	433	191	504	504
10	Floor	FD3	140	433	183	425	<MDC
11	Sink	FC7	140	433	166	257	<MDC
12	Cabinet	WA3	140	433	142	20	<MDC
13	Trap	FC7	140	433	138	-20	<MDC
14	Fridge	FB1	140	433	181	405	<MDC
15	Microbeta	EA4	140	433	141	10	<MDC
16	Large fridge	FB3	140	433	157	168	<MDC
17	Upper wall	NC2	140	433	173	326	<MDC
18	Ceiling	CF3	140	433	242	1,008	1,008

Survey Type:	Fixed-Gamma		Survey Unit:	212 C	
Instrument ID:	B		Survey Date:	03/22/05	
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WA1	10	1,015	6	-292	<MDC
2	Wall	WB3	10	1,015	8	-146	<MDC
3	Wall	WA6	10	1,015	6	-292	<MDC
4	Wall	NA1	10	1,015	1	-657	<MDC
5	Wall	NB2	10	1,015	6	-292	<MDC
6	Wall	EB4	10	1,015	14	292	<MDC
7	Wall	SA3	10	1,015	7	-219	<MDC
8	Floor	FB2	10	1,015	21	803	<MDC
9	Floor	FD2	10	1,015	9	-73	<MDC
10	Floor	FD3	10	1,015	4	-438	<MDC
11	Sink	FC7	10	1,015	12	146	<MDC
12	Cabinet	WA3	10	1,015	8	-146	<MDC
13	Trap	FC7	10	1,015	8	-146	<MDC
14	Fridge	FB1	10	1,015	7	-219	<MDC
15	Microbeta	EA4	10	1,015	10	0	<MDC
16	Large fridge	FB3	10	1,015	9	-73	<MDC
17	Upper wall	NC2	10	1,015	17	511	<MDC
18	Ceiling	CF3	10	1,015	11	73	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Scans **Survey Unit: 212 C**

Instrument Information:

Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	300	1,033	300	340	<MDC	<MDC

Survey Type: Removable H-3 **Survey Unit: 212 C**

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	30	50	75	75
2	Floor	FA2	30	50	20	<MDC
3	Floor	FA3	30	50	23	<MDC
4	Floor	FB1	30	50	23	<MDC
5	Floor	FB2	30	50	15	<MDC
6	Floor	FB3	30	50	8	<MDC
7	Floor	FC1	30	50	30	<MDC
8	Floor	FC2	30	50	9	<MDC
9	Floor	FC3	30	50	13	<MDC
10	Floor	FD1	30	50	19	<MDC
11	Floor	FD2	30	50	29	<MDC
12	Floor	FD3	30	50	37	<MDC
13	Floor	FE1	30	50	29	<MDC
14	Floor	FE2	30	50	17	<MDC
15	Floor	FE3	30	50	18	<MDC
16	Floor	FF1	30	50	14	<MDC
17	Floor	FF2	30	50	23	<MDC
18	Floor	FF3	30	50	34	<MDC
19	Wall	NA1	30	50	21	<MDC
20	Wall	NA2	30	50	18	<MDC
21	Wall	NA3	30	50	15	<MDC
22	Wall	NB1	30	50	16	<MDC
23	Wall	NB2	30	50	21	<MDC
24	Wall	NB3	30	50	26	<MDC
25	Wall	EA1	30	50	33	<MDC
26	Wall	EA2	30	50	25	<MDC
27	Wall	EA3	30	50	25	<MDC
28	Wall	EA4	30	50	28	<MDC
29	Wall	EA5	30	50	24	<MDC
30	Wall	EA6	30	50	39	<MDC
31	Wall	EB1	30	50	14	<MDC
32	Wall	EB2	30	50	17	<MDC
33	Wall	EB3	30	50	16	<MDC
34	Wall	EB4	30	50	14	<MDC
35	Wall	EB5	30	50	26	<MDC
36	Wall	EB6	30	50	21	<MDC
37	Wall	SA1	30	50	28	<MDC
38	Wall	SA2	30	50	17	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 212 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
39	Wall	SA3	30	50	25	<MDC
40	Wall	SB1	30	50	31	<MDC
41	Wall	SB2	30	50	18	<MDC
42	Wall	SB3	30	50	13	<MDC
43	Wall	WA1	30	50	25	<MDC
44	Wall	WA2	30	50	22	<MDC
45	Wall	WA3	30	50	16	<MDC
46	Wall	WA4	30	50	25	<MDC
47	Wall	WA5	30	50	26	<MDC
48	Wall	WA6	30	50	15	<MDC
49	Wall	WB1	30	50	13	<MDC
50	Wall	WB2	30	50	30	<MDC
51	Wall	WB3	30	50	21	<MDC
52	Wall	WB4	30	50	21	<MDC
53	Wall	WB5	30	50	4	<MDC
54	Wall	WB6	30	50	28	<MDC
55	Sink	FC7	30	50	69	69
56	Trap	FC7	30	50	28	<MDC
57	Drawers	WA3	30	50	11	<MDC
58	Small fridge	WB1	30	50	36	<MDC
59	Microbeta	EA4	30	50	39	<MDC
60	Large fridge	FB3	30	50	37	<MDC
61	Upper wll	NC2	30	50	21	<MDC
62	Ceiling	CF3	30	50	31	<MDC

Survey Type: Removable C-14 Survey Unit: 212 C

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	11	16	30	30
2	Floor	FA2	11	16	18	18
3	Floor	FA3	11	16	18	18
4	Floor	FB1	11	16	18	18
5	Floor	FB2	11	16	23	23
6	Floor	FB3	11	16	21	21
7	Floor	FC1	11	16	10	<MDC
8	Floor	FC2	11	16	22	22
9	Floor	FC3	11	16	25	25
10	Floor	FD1	11	16	12	<MDC
11	Floor	FD2	11	16	17	17
12	Floor	FD3	11	16	22	22
13	Floor	FE1	11	16	12	<MDC
14	Floor	FE2	11	16	27	27
15	Floor	FE3	11	16	26	26
16	Floor	FF1	11	16	25	25
17	Floor	FF2	11	16	17	17
18	Floor	FF3	11	16	23	23
19	Wall	NA1	11	16	29	29

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 212 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
20	Wall	NA2	11	16	19	19
21	Wall	NA3	11	16	17	17
22	Wall	NB1	11	16	16	16
23	Wall	NB2	11	16	17	17
24	Wall	NB3	11	16	13	<MDC
25	Wall	EA1	11	16	14	<MDC
26	Wall	EA2	11	16	12	<MDC
27	Wall	EA3	11	16	17	17
28	Wall	EA4	11	16	12	<MDC
29	Wall	EA5	11	16	13	<MDC
30	Wall	EA6	11	16	11	<MDC
31	Wall	EB1	11	16	25	25
32	Wall	EB2	11	16	16	16
33	Wall	EB3	11	16	16	16
34	Wall	EB4	11	16	16	16
35	Wall	EB5	11	16	25	25
36	Wall	EB6	11	16	15	<MDC
37	Wall	SA1	11	16	9	<MDC
38	Wall	SA2	11	16	22	22
39	Wall	SA3	11	16	10	<MDC
40	Wall	SB1	11	16	15	<MDC
41	Wall	SB2	11	16	16	16
42	Wall	SB3	11	16	13	<MDC
43	Wall	WA1	11	16	19	19
44	Wall	WA2	11	16	19	19
45	Wall	WA3	11	16	16	16
46	Wall	WA4	11	16	17	17
47	Wall	WA5	11	16	14	<MDC
48	Wall	WA6	11	16	23	23
49	Wall	WB1	11	16	18	18
50	Wall	WB2	11	16	9	<MDC
51	Wall	WB3	11	16	16	16
52	Wall	WB4	11	16	16	16
53	Wall	WB5	11	16	17	17
54	Wall	WB6	11	16	8	<MDC
55	Sink	FC7	11	16	26	26
56	Trap	FC7	11	16	14	<MDC
57	Drawers	WA3	11	16	14	<MDC
58	Small fridge	WB1	11	16	28	28
59	Microbeta	EA4	11	16	14	<MDC
60	Large fridge	FB3	11	16	17	17
61	Upper wll	NC2	11	16	15	<MDC
62	Ceiling	CF3	11	16	21	21

SCIENTECH

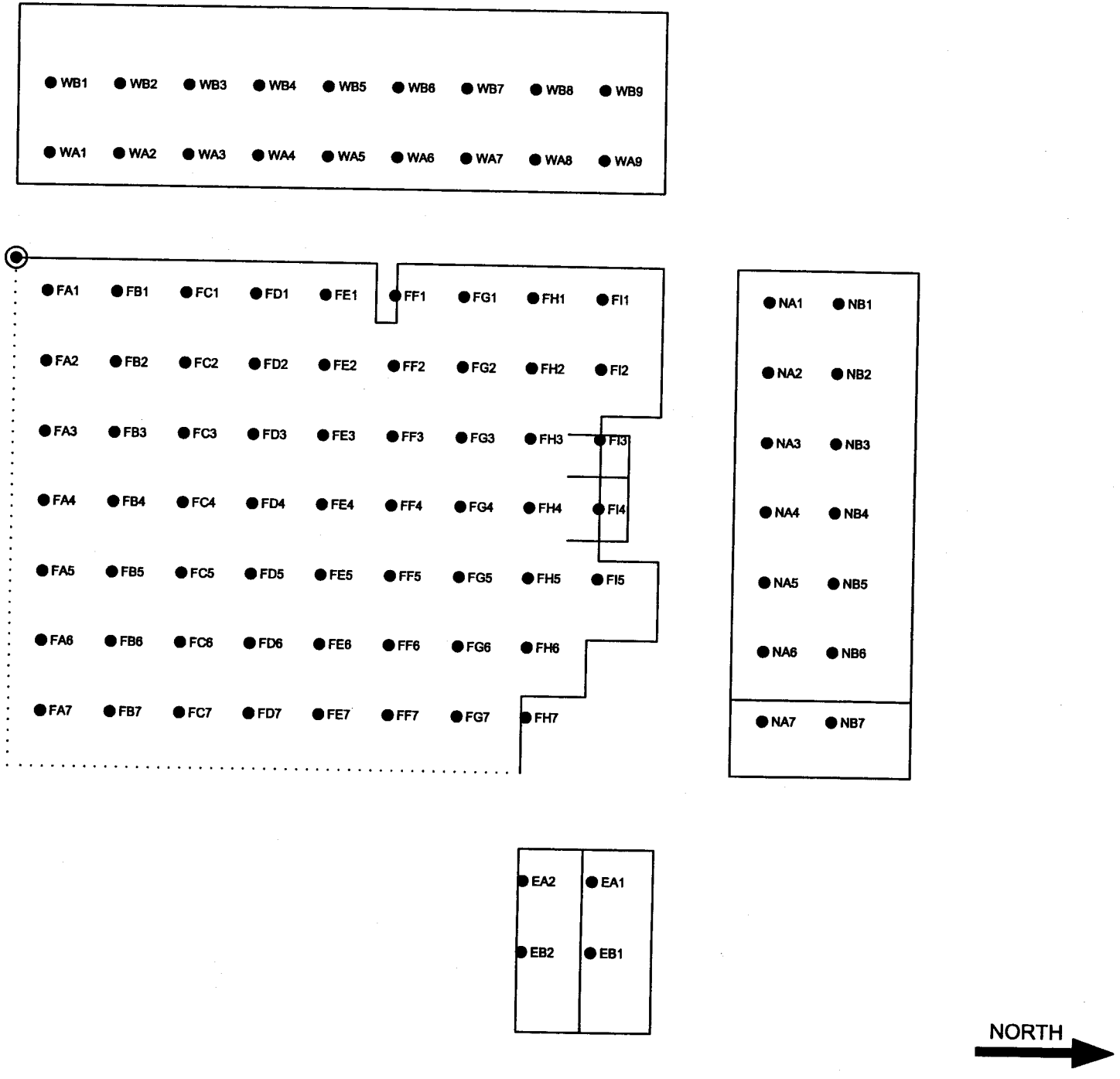
Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Gamma Dose Rates		Survey Unit:	212 C
Instrument ID:	C		Survey Date:	03/16/05
Background (R_b):	5	urem/hr		

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WA1	6
2	Wall	WB3	6
3	Wall	WA6	6
4	Wall	NA1	6
5	Wall	NB2	6
6	Wall	EB4	5
7	Wall	SA3	5
8	Floor	FB2	5
9	Floor	FD2	6
10	Floor	FD3	6
11	Sink	FC7	6
12	Cabinet	WA3	6
13	Trap	FC7	6
14	Fridge	FB1	6
15	Microbeta	EA4	5
16	Large fridge	FB3	5
17	Upper wall	NC2	5
18	Ceiling	CF3	5

Building 24, Room 214

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 214



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	214		
Instrument ID:	G		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WB2	70	305	174	994	994
2	Metal wall	WA5	70	305	105	335	335
3	Metal wall	WA7	70	305	82	115	<MDC
4	Metal wall	NA1	70	305	98	268	<MDC
5	Metal wall	NA3	70	305	80	96	<MDC
6	Wood bookshelf	EA2	70	305	82	115	<MDC
7	Metal wall	EB6	70	305	91	201	<MDC
8	Floor	FI1	70	305	86	153	<MDC
9	Floor	FE3	70	305	75	48	<MDC
10	Floor	FB6	70	305	93	220	<MDC
11	Ceiling	CF1	70	305	100	287	<MDC
12	Ceiling	CD4	70	305	148	746	746
13	Upper wall	NC2	70	305	109	373	373
14	Upper wall	WC3	70	305	108	363	363
15	Sink 1	FD1	70	305	76	57	<MDC
16	Trap 1	FD1	70	305	74	38	<MDC
17	Sink/trap 2	FC4	70	305	78	76	<MDC
18	Sink/trap 3	FG6	70	305	94	229	<MDC
19	Sink 4	FC6	70	305	73	29	<MDC
20	Trap 4	FC6	70	305	69	-10	<MDC
21	Hood 1	FH1	70	305	82	115	<MDC
22	Hood 1	FH1	70	305	99	277	<MDC
23	Hood 1	FH1	70	305	94	229	<MDC
24	Hood 1	FH1	70	305	65	-48	<MDC
25	Hood 1	FH1	70	305	90	191	<MDC
26	Hood 2	FH6	70	305	67	-29	<MDC
27	Hood 2	FH6	70	305	98	268	<MDC
28	Hood 2	FH6	70	305	86	153	<MDC
29	Hood 2	FH6	70	305	68	-19	<MDC
30	Hood 2	FH6	70	305	92	210	<MDC
31	Pb shield	FC1	70	305	73	29	<MDC
32	Pb shield	FD1	70	305	92	210	<MDC
33	Centrifuge lid	FG3	70	305	92	210	<MDC
34	Plexiglass	FF4	70	305	70	0	<MDC
35	Plexiglass	FI4	70	305	75	48	<MDC
36	Equipment	FE6	70	305	66	-38	<MDC
37	Fridge in	FG4	70	305	72	19	<MDC
38	Fridge out	FG4	70	305	81	105	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Fixed-Gamma		Survey Unit:	214		
Instrument ID:	J		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WB2	10	3,656	6	-1,051	<MDC
2	Metal wall	WA5	10	3,656	9	-263	<MDC
3	Metal wall	WA7	10	3,656	10	0	<MDC
4	Metal wall	NA1	10	3,656	11	263	<MDC
5	Metal wall	NA3	10	3,656	6	-1,051	<MDC
6	Wood bookshelf	EA2	10	3,656	7	-788	<MDC
7	Metal wall	EB6	10	3,656	9	-263	<MDC
8	Floor	FI1	10	3,656	13	788	<MDC
9	Floor	FE3	10	3,656	10	0	<MDC
10	Floor	FB6	10	3,656	4	-1,577	<MDC
11	Ceiling	CF1	10	3,656	12	526	<MDC
12	Ceiling	CD4	10	3,656	13	788	<MDC
13	Upper wall	NC2	10	3,656	10	0	<MDC
14	Upper wall	WC3	10	3,656	10	0	<MDC
15	Sink 1	FD1	10	3,656	8	-526	<MDC
16	Trap 1	FD1	10	3,656	10	0	<MDC
17	Sink/trap 2	FC4	10	3,656	4	-1,577	<MDC
18	Sink/trap 3	FG6	10	3,656	3	-1,840	<MDC
19	Sink 4	FC6	10	3,656	7	-788	<MDC
20	Trap 4	FC6	10	3,656	9	-263	<MDC
21	Hood 1	FH1	10	3,656	7	-788	<MDC
22	Hood 1	FH1	10	3,656	8	-526	<MDC
23	Hood 1	FH1	10	3,656	1	-2,365	<MDC
24	Hood 1	FH1	10	3,656	5	-1,314	<MDC
25	Hood 1	FH1	10	3,656	2	-2,102	<MDC
26	Hood 2	FH6	10	3,656	13	788	<MDC
27	Hood 2	FH6	10	3,656	5	-1,314	<MDC
28	Hood 2	FH6	10	3,656	13	788	<MDC
29	Hood 2	FH6	10	3,656	7	-788	<MDC
30	Hood 2	FH6	10	3,656	8	-526	<MDC
31	Pb shield	FC1	10	3,656	6	-1,051	<MDC
32	Pb shield	FD1	10	3,656	7	-788	<MDC
33	Centrifuge lid	FG3	10	3,656	3	-1,840	<MDC
34	Plexiglass	FF4	10	3,656	4	-1,577	<MDC
35	Plexiglass	FI4	10	3,656	1	-2,365	<MDC
36	Equipment	FE6	10	3,656	4	-1,577	<MDC
37	Fridge in	FG4	10	3,656	7	-788	<MDC
38	Fridge out	FG4	10	3,656	11	263	<MDC

Survey Type:	Scans		Survey Unit:	214		
Instrument Information:						
Instrument ID:	J		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	10	8,884	8	17	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable H-3		Survey Unit:	214		
Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	30	50	22	<MDC
2	Floor	FA2	30	50	15	<MDC
3	Floor	FA3	30	50	26	<MDC
4	Floor	FA4	30	50	33	<MDC
5	Floor	FA5	30	50	26	<MDC
6	Floor	FA6	30	50	16	<MDC
7	Floor	FB1	30	50	7	<MDC
8	Floor	FB2	30	50	8	<MDC
9	Floor	FB3	30	50	20	<MDC
10	Floor	FB4	30	50	20	<MDC
11	Floor	FB5	30	50	8	<MDC
12	Floor	FB6	30	50	47	<MDC
13	Floor	FC1	30	50	14	<MDC
14	Floor	FC2	30	50	32	<MDC
15	Floor	FC3	30	50	12	<MDC
16	Floor	FC4	30	50	16	<MDC
17	Floor	FC5	30	50	38	<MDC
18	Floor	FC6	30	50	9	<MDC
19	Floor	FD1	30	50	7	<MDC
20	Floor	FD2	30	50	17	<MDC
21	Floor	FD3	30	50	14	<MDC
22	Floor	FD4	30	50	19	<MDC
23	Floor	FD5	30	50	18	<MDC
24	Floor	FD6	30	50	13	<MDC
25	Floor	FE1	30	50	15	<MDC
26	Floor	FE2	30	50	15	<MDC
27	Floor	FE3	30	50	336	336
28	Floor	FE4	30	50	22	<MDC
29	Floor	FE5	30	50	12	<MDC
30	Floor	FE6	30	50	777	777
31	Floor	FF1	30	50	117	117
32	Floor	FF2	30	50	11	<MDC
33	Floor	FF3	30	50	14	<MDC
34	Floor	FF4	30	50	17	<MDC
35	Floor	FF5	30	50	15	<MDC
36	Floor	FF6	30	50	12	<MDC
37	Floor	FG1	30	50	16	<MDC
38	Floor	FG2	30	50	11	<MDC
39	Floor	FG3	30	50	15	<MDC
40	Floor	FG4	30	50	25	<MDC
41	Floor	FG5	30	50	30	<MDC
42	Floor	FG6	30	50	3	<MDC
43	Floor	FH1	30	50	15	<MDC
44	Floor	FH2	30	50	21	<MDC
45	Floor	FH3	30	50	54	54
46	Floor	FH4	30	50	14	<MDC
47	Floor	FH5	30	50	14	<MDC
48	Floor	FH6	30	50	8	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 214

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
49	Floor	FI1	30	50	28	<MDC
50	Floor	FI2	30	50	34	<MDC
51	Floor	FI3	30	50	27	<MDC
52	Floor	FI4	30	50	10	<MDC
53	Floor	FI5	30	50	1	<MDC
54	Floor	FI6	30	50	20	<MDC
55	Wall	NA1	30	50	20	<MDC
56	Wall	NA2	30	50	19	<MDC
57	Wall	NA3	30	50	17	<MDC
58	Wall	NA4	30	50	14	<MDC
59	Wall	NA5	30	50	13	<MDC
60	Wall	NA6	30	50	17	<MDC
61	Wall	NB1	30	50	11	<MDC
62	Wall	NB2	30	50	21	<MDC
63	Wall	NB3	30	50	10	<MDC
64	Wall	NB4	30	50	40	<MDC
65	Wall	NB5	30	50	14	<MDC
66	Wall	NB6	30	50	12	<MDC
67	Wall	EA1	30	50	11	<MDC
68	Wall	EA2	30	50	13	<MDC
69	Wall	EA3	30	50	7	<MDC
70	Wall	EA4	30	50	16	<MDC
71	Wall	EA5	30	50	15	<MDC
72	Wall	EA6	30	50	23	<MDC
73	Wall	EA7	30	50	7	<MDC
74	Wall	EA8	30	50	18	<MDC
75	Wall	EA9	30	50	5	<MDC
76	Wall	EB1	30	50	18	<MDC
77	Wall	EB2	30	50	33	<MDC
78	Wall	EB3	30	50	22	<MDC
79	Wall	EB4	30	50	21	<MDC
80	Wall	EB5	30	50	12	<MDC
81	Wall	EB6	30	50	14	<MDC
82	Wall	EB7	30	50	2	<MDC
83	Wall	EB8	30	50	11	<MDC
84	Wall	EB9	30	50	8	<MDC
85	Wall	WA1	30	50	28	<MDC
86	Wall	WA2	30	50	13	<MDC
87	Wall	WA3	30	50	13	<MDC
88	Wall	WA4	30	50	16	<MDC
89	Wall	WA5	30	50	12	<MDC
90	Wall	WA6	30	50	10	<MDC
91	Wall	WA7	30	50	22	<MDC
92	Wall	WA8	30	50	19	<MDC
93	Wall	WA9	30	50	16	<MDC
94	Wall	WB1	30	50	24	<MDC
95	Wall	WB2	30	50	13	<MDC
96	Wall	WB3	30	50	20	<MDC
97	Wall	WB4	30	50	28	<MDC
98	Wall	WB5	30	50	21	<MDC
99	Wall	WB6	30	50	21	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 214

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
100	Wall	WB7	30	50	11	<MDC
101	Wall	WB8	30	50	15	<MDC
102	Wall	WB9	30	50	15	<MDC
103	Ceiling	CF1	30	50	19	<MDC
104	Ceiling	CD4	30	50	19	<MDC
105	Upper wall	NC2	30	50	27	<MDC
106	Upper wall	WC3	30	50	12	<MDC
107	Sink 1	FD1	30	50	21	<MDC
108	Trap 1	FD1	30	50	15	<MDC
109	Sink 2	FC4	30	50	14	<MDC
110	Trap 2	FC4	30	50	14	<MDC
111	Sink 3	FG6	30	50	11	<MDC
112	Trap 3	FG6	30	50	4	<MDC
113	Sink 4	FC6	30	50	12	<MDC
114	Trap 4	FC6	30	50	9	<MDC
115	Hood 1	FH1	30	50	11	<MDC
116	Hood 1	FH1	30	50	21	<MDC
117	Hood 1	FH1	30	50	25	<MDC
118	Hood 1	FH1	30	50	17	<MDC
119	Hood 1	FH1	30	50	16	<MDC
120	Hood 2	FH6	30	50	17	<MDC
121	Hood 2	FH6	30	50	31	<MDC
122	Hood 2	FH6	30	50	29	<MDC
123	Hood 2	FH6	30	50	35	<MDC
124	Hood 2	FH6	30	50	11	<MDC
125	Gross equipment	FC1	30	50	20	<MDC
126	Gross equipment	FC1	30	50	30	<MDC
127	Gross equipment	FC1	30	50	5	<MDC
128	Gross equipment	FD1	30	50	14	<MDC
129	Gross equipment	FD1	30	50	14	<MDC
130	Gross equipment	FD1	30	50	14	<MDC
131	Gross equipment	FC3	30	50	148	148
132	Gross equipment	FC3	30	50	-168	<MDC
133	Gross equipment	FC3	30	50	21	<MDC
134	Gross equipment	FC3	30	50	21	<MDC
135	Gross equipment	FF4	30	50	21	<MDC
136	Gross equipment	FF4	30	50	24	<MDC
137	Gross equipment	FF4	30	50	21	<MDC
138	Gross equipment	FI4	30	50	18	<MDC
139	Gross equipment	FI4	30	50	15	<MDC
140	Tray	FE6	30	50	14	<MDC
141	Fridge in	FG4	30	50	15	<MDC
142	Fridge out	FG4	30	50	-231	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable C-14		Survey Unit:	214	
Instrument ID:	Beckman LS6500		Survey Date:	03/21/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	11	16	22	22
2	Floor	FA2	11	16	18	18
3	Floor	FA3	11	16	12	<MDC
4	Floor	FA4	11	16	21	21
5	Floor	FA5	11	16	17	17
6	Floor	FA6	11	16	16	16
7	Floor	FB1	11	16	20	20
8	Floor	FB2	11	16	21	21
9	Floor	FB3	11	16	14	<MDC
10	Floor	FB4	11	16	14	<MDC
11	Floor	FB5	11	16	16	16
12	Floor	FB6	11	16	21	21
13	Floor	FC1	11	16	16	16
14	Floor	FC2	11	16	725	725
15	Floor	FC3	11	16	16	16
16	Floor	FC4	11	16	8	<MDC
17	Floor	FC5	11	16	15	<MDC
18	Floor	FC6	11	16	18	18
19	Floor	FD1	11	16	14	<MDC
20	Floor	FD2	11	16	20	20
21	Floor	FD3	11	16	16	16
22	Floor	FD4	11	16	20	20
23	Floor	FD5	11	16	22	22
24	Floor	FD6	11	16	10	<MDC
25	Floor	FE1	11	16	20	20
26	Floor	FE2	11	16	14	<MDC
27	Floor	FE3	11	16	91	91
28	Floor	FE4	11	16	17	17
29	Floor	FE5	11	16	4	<MDC
30	Floor	FE6	11	16	23	23
31	Floor	FF1	11	16	25	25
32	Floor	FF2	11	16	23	23
33	Floor	FF3	11	16	13	<MDC
34	Floor	FF4	11	16	13	<MDC
35	Floor	FF5	11	16	6	<MDC
36	Floor	FF6	11	16	21	21
37	Floor	FG1	11	16	10	<MDC
38	Floor	FG2	11	16	8	<MDC
39	Floor	FG3	11	16	9	<MDC
40	Floor	FG4	11	16	14	<MDC
41	Floor	FG5	11	16	-3	<MDC
42	Floor	FG6	11	16	18	18
43	Floor	FH1	11	16	20	20
44	Floor	FH2	11	16	26	26
45	Floor	FH3	11	16	14	<MDC
46	Floor	FH4	11	16	19	19
47	Floor	FH5	11	16	10	<MDC
48	Floor	FH6	11	16	12	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 214

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Floor	FI1	11	16	17	17
50	Floor	FI2	11	16	15	<MDC
51	Floor	FI3	11	16	14	<MDC
52	Floor	FI4	11	16	12	<MDC
53	Floor	FI5	11	16	20	20
54	Floor	FI6	11	16	9	<MDC
55	Wall	NA1	11	16	22	22
56	Wall	NA2	11	16	18	18
57	Wall	NA3	11	16	9	<MDC
58	Wall	NA4	11	16	16	16
59	Wall	NA5	11	16	18	18
60	Wall	NA6	11	16	14	<MDC
61	Wall	NB1	11	16	18	18
62	Wall	NB2	11	16	6	<MDC
63	Wall	NB3	11	16	16	16
64	Wall	NB4	11	16	17	17
65	Wall	NB5	11	16	14	<MDC
66	Wall	NB6	11	16	5	<MDC
67	Wall	EA1	11	16	12	<MDC
68	Wall	EA2	11	16	13	<MDC
69	Wall	EA3	11	16	17	17
70	Wall	EA4	11	16	16	16
71	Wall	EA5	11	16	13	<MDC
72	Wall	EA6	11	16	18	18
73	Wall	EA7	11	16	12	<MDC
74	Wall	EA8	11	16	9	<MDC
75	Wall	EA9	11	16	14	<MDC
76	Wall	EB1	11	16	16	16
77	Wall	EB2	11	16	13	<MDC
78	Wall	EB3	11	16	16	16
79	Wall	EB4	11	16	8	<MDC
80	Wall	EB5	11	16	20	20
81	Wall	EB6	11	16	9	<MDC
82	Wall	EB7	11	16	17	17
83	Wall	EB8	11	16	13	<MDC
84	Wall	EB9	11	16	12	<MDC
85	Wall	WA1	11	16	9	<MDC
86	Wall	WA2	11	16	9	<MDC
87	Wall	WA3	11	16	18	18
88	Wall	WA4	11	16	14	<MDC
89	Wall	WA5	11	16	20	20
90	Wall	WA6	11	16	17	17
91	Wall	WA7	11	16	8	<MDC
92	Wall	WA8	11	16	8	<MDC
93	Wall	WA9	11	16	17	17
94	Wall	WB1	11	16	14	<MDC
95	Wall	WB2	11	16	17	17
96	Wall	WB3	11	16	5	<MDC
97	Wall	WB4	11	16	12	<MDC
98	Wall	WB5	11	16	6	<MDC
99	Wall	WB6	11	16	10	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 214

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
100	Wall	WB7	11	16	17	17
101	Wall	WB8	11	16	17	17
102	Wall	WB9	11	16	15	<MDC
103	Ceiling	CF1	11	16	14	<MDC
104	Ceiling	CD4	11	16	13	<MDC
105	Upper wall	NC2	11	16	17	17
106	Upper wall	WC3	11	16	9	<MDC
107	Sink 1	FD1	11	16	16	16
108	Trap 1	FD1	11	16	16	16
109	Sink 2	FC4	11	16	10	<MDC
110	Trap 2	FC4	11	16	14	<MDC
111	Sink 3	FG6	11	16	13	<MDC
112	Trap 3	FG6	11	16	9	<MDC
113	Sink 4	FC6	11	16	17	17
114	Trap 4	FC6	11	16	13	<MDC
115	Hood 1	FH1	11	16	8	<MDC
116	Hood 1	FH1	11	16	9	<MDC
117	Hood 1	FH1	11	16	18	18
118	Hood 1	FH1	11	16	14	<MDC
119	Hood 1	FH1	11	16	10	<MDC
120	Hood 2	FH6	11	16	12	<MDC
121	Hood 2	FH6	11	16	21	21
122	Hood 2	FH6	11	16	17	17
123	Hood 2	FH6	11	16	14	<MDC
124	Hood 2	FH6	11	16	13	<MDC
125	Gross equipment	FC1	11	16	5	<MDC
126	Gross equipment	FC1	11	16	17	17
127	Gross equipment	FC1	11	16	18	18
128	Gross equipment	FD1	11	16	10	<MDC
129	Gross equipment	FD1	11	16	33	33
130	Gross equipment	FD1	11	16	17	17
131	Gross equipment	FC3	11	16	17	17
132	Gross equipment	FC3	11	16	21	21
133	Gross equipment	FC3	11	16	12	<MDC
134	Gross equipment	FC3	11	16	15	<MDC
135	Gross equipment	FF4	11	16	18	18
136	Gross equipment	FF4	11	16	6	<MDC
137	Gross equipment	FF4	11	16	8	<MDC
138	Gross equipment	FI4	11	16	9	<MDC
139	Gross equipment	FI4	11	16	24	24
140	Tray	FE6	11	16	14	<MDC
141	Fridge in	FG4	11	16	12	<MDC
142	Fridge out	FG4	11	16	29	29

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 214

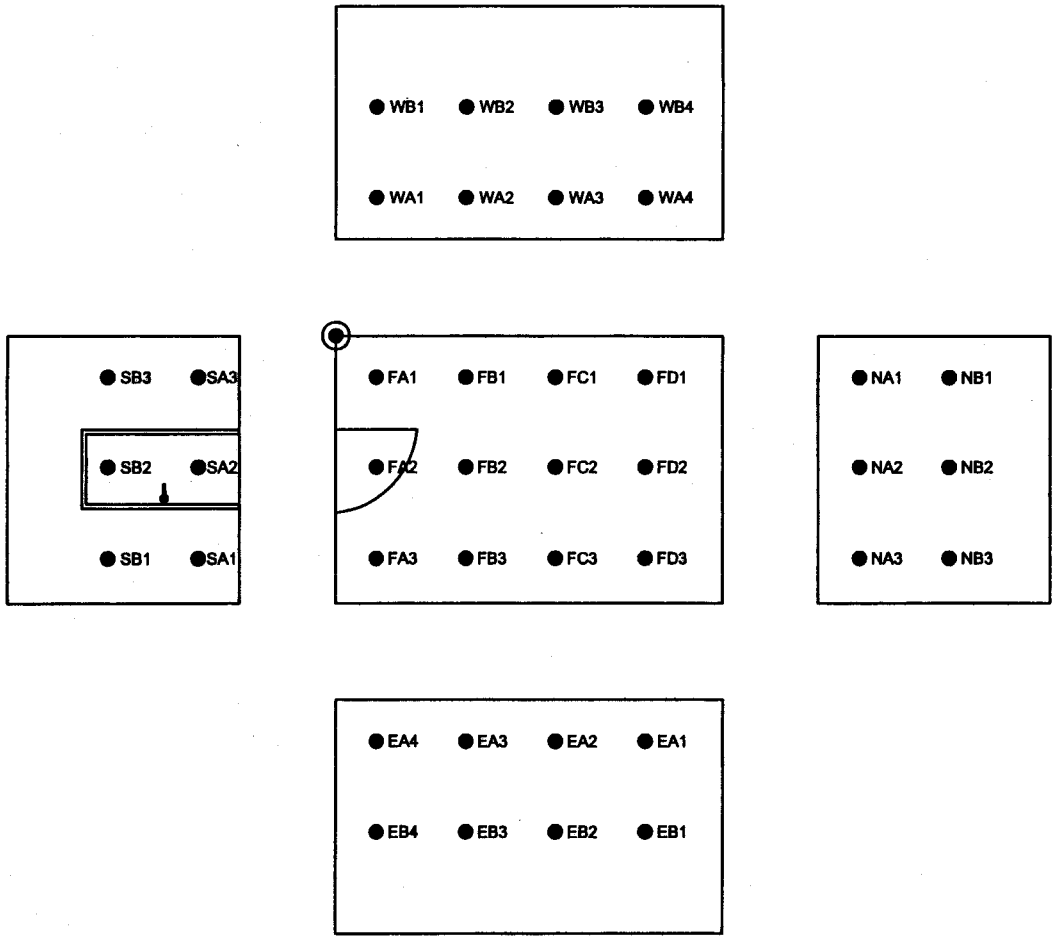
Instrument ID: C Survey Date: 03/18/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WB2	5
2	Metal wall	WA5	5
3	Metal wall	WA7	5
4	Metal wall	NA1	5
5	Metal wall	NA3	5
6	Wood bookshelf	EA2	6
7	Metal wall	EB6	6
8	Floor	FI1	5
9	Floor	FE3	6
10	Floor	FB6	6
11	Ceiling	CF1	6
12	Ceiling	CD4	5
13	Upper wall	NC2	5
14	Upper wall	WC3	5
15	Sink 1	FD1	5
16	Trap 1	FD1	5
17	Sink/trap 2	FC4	5
18	Sink/trap 3	FG6	6
19	Sink 4	FC6	6
20	Trap 4	FC6	6
21	Hood 1	FH1	6
22	Hood 1	FH1	5
23	Hood 1	FH1	5
24	Hood 1	FH1	5
25	Hood 1	FH1	5
26	Hood 2	FH6	5
27	Hood 2	FH6	5
28	Hood 2	FH6	5
29	Hood 2	FH6	5
30	Hood 2	FH6	5
31	Pb shield	FC1	5
32	Pb shield	FD1	5
33	Centrifuge lid	FG3	5
34	Plexiglass	FF4	5
35	Plexiglass	FI4	5
36	Equipment	FE6	6
37	Fridge in	FG4	6
38	Fridge out	FG4	6

Building 24, Room 214C

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 214C



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: Y 1290 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	214 C	
Instrument ID:	E		Survey Date:	03/17/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	WB1	160	461	152	-79	<MDC
2	Wall	WB2	160	461	137	-227	<MDC
3	Wall	WA3	160	461	142	-178	<MDC
4	Wall	NB1	160	461	162	20	<MDC
5	Wall	NA3	160	461	156	-40	<MDC
6	Wall	EB1	160	461	147	-128	<MDC
7	Metal wall	EA3	160	461	86	-731	<MDC
8	Wall	SB1	160	461	181	208	<MDC
9	Wall	SA2	160	461	155	-49	<MDC
10	Floor	FC2	160	461	136	-237	<MDC
11	Drawer	EA1	160	461	162	20	<MDC
12	Drawer	EA2	160	461	148	-119	<MDC
13	Fridge in	FB1	160	461	145	-148	<MDC
14	Fridge out	FB1	160	461	143	-168	<MDC
15	Oven	FA3	160	461	138	-217	<MDC
16	Thermolyne	FD3	160	461	161	10	<MDC
17	Ceiling	CD3	160	461	201	405	<MDC
18	Upper wall	NC3	160	461	146	-138	<MDC
19	Sink	FC9	160	461	187	267	<MDC
20	Trap	FC9	160	461	226	652	652

Survey Type:	Fixed-Gamma		Survey Unit:	214 C	
Instrument ID:	J		Survey Date:	03/23/05	
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	WB1	7	3,188	2	-1,314	<MDC
2	Wall	WB2	7	3,188	3	-1,051	<MDC
3	Wall	WA3	7	3,188	2	-1,314	<MDC
4	Wall	NB1	7	3,188	1	-1,577	<MDC
5	Wall	NA3	7	3,188	3	-1,051	<MDC
6	Wall	EB1	7	3,188	1	-1,577	<MDC
7	Metal wall	EA3	7	3,188	3	-1,051	<MDC
8	Wall	SB1	7	3,188	1	-1,577	<MDC
9	Wall	SA2	7	3,188	2	-1,314	<MDC
10	Floor	FC2	7	3,188	2	-1,314	<MDC
11	Drawer	EA1	7	3,188	1	-1,577	<MDC
12	Drawer	EA2	7	3,188	3	-1,051	<MDC
13	Fridge in	FB1	7	3,188	3	-1,051	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Scans Survey Unit: 214 Q

Instrument Information:

Instrument ID:	J		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	7	7,433	5	19	<MDC	<MDC

Survey Type: Removable H-3 Survey Unit: 214 Q

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	30	50	20	<MDC
2	Floor	FA2	30	50	41	<MDC
3	Floor	FA3	30	50	25	<MDC
4	Floor	FB1	30	50	32	<MDC
5	Floor	FB2	30	50	31	<MDC
6	Floor	FB3	30	50	28	<MDC
7	Floor	FC1	30	50	40	<MDC
8	Floor	FC2	30	50	35	<MDC
9	Floor	FC3	30	50	27	<MDC
10	Floor	FD1	30	50	20	<MDC
11	Floor	FD2	30	50	39	<MDC
12	Floor	FD3	30	50	32	<MDC
13	Wall	NA1	30	50	17	<MDC
14	Wall	NA2	30	50	23	<MDC
15	Wall	NA3	30	50	39	<MDC
16	Wall	NB1	30	50	32	<MDC
17	Wall	NB2	30	50	18	<MDC
18	Wall	NB3	30	50	60	60
19	Wall	EA1	30	50	22	<MDC
20	Wall	EA2	30	50	33	<MDC
21	Wall	EA3	30	50	32	<MDC
22	Wall	EA4	30	50	23	<MDC
23	Wall	EB1	30	50	31	<MDC
24	Wall	EB2	30	50	18	<MDC
25	Wall	EB3	30	50	29	<MDC
26	Wall	EB4	30	50	25	<MDC
27	Wall	SA1	30	50	32	<MDC
28	Wall	SA2	30	50	23	<MDC
29	Wall	SA3	30	50	41	<MDC
30	Wall	SB1	30	50	38	<MDC
31	Wall	SB2	30	50	34	<MDC
32	Wall	SB3	30	50	24	<MDC
33	Wall	WA1	30	50	29	<MDC
34	Wall	WA2	30	50	25	<MDC
35	Wall	WA3	30	50	33	<MDC
36	Wall	WA4	30	50	33	<MDC
37	Wall	WB1	30	50	27	<MDC
38	Wall	WB2	30	50	26	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 214 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
39	Wall	WB3	30	50	19	<MDC
40	Wall	WB4	30	50	28	<MDC
41	Sink	FC9	30	50	63	63
42	Trap	FC9	30	50	19	<MDC
43	Drawers	EA1	30	50	22	<MDC
44	Drawers	EA2	30	50	23	<MDC
45	Fridge in	FB1	30	50	48	<MDC
46	Fridge out	FB1	30	50	32	<MDC
47	Oven	FA3	30	50	17	<MDC
48	Thermolyne	FD3	30	50	25	<MDC
49	Ceiling	CD3	30	50	12	<MDC
50	Upper wall	NC3	30	50	16	<MDC

Survey Type: Removable C-14 Survey Unit: 214 C

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	11	16	16	16
2	Floor	FA2	11	16	14	<MDC
3	Floor	FA3	11	16	23	23
4	Floor	FB1	11	16	17	17
5	Floor	FB2	11	16	21	21
6	Floor	FB3	11	16	13	<MDC
7	Floor	FC1	11	16	10	<MDC
8	Floor	FC2	11	16	9	<MDC
9	Floor	FC3	11	16	15	<MDC
10	Floor	FD1	11	16	14	<MDC
11	Floor	FD2	11	16	14	<MDC
12	Floor	FD3	11	16	18	18
13	Wall	NA1	11	16	23	23
14	Wall	NA2	11	16	15	<MDC
15	Wall	NA3	11	16	21	21
16	Wall	NB1	11	16	14	<MDC
17	Wall	NB2	11	16	13	<MDC
18	Wall	NB3	11	16	10	<MDC
19	Wall	EA1	11	16	14	<MDC
20	Wall	EA2	11	16	13	<MDC
21	Wall	EA3	11	16	15	<MDC
22	Wall	EA4	11	16	34	34
23	Wall	EB1	11	16	21	21
24	Wall	EB2	11	16	18	18
25	Wall	EB3	11	16	18	18
26	Wall	EB4	11	16	15	<MDC
27	Wall	SA1	11	16	23	23
28	Wall	SA2	11	16	10	<MDC
29	Wall	SA3	11	16	19	19
30	Wall	SB1	11	16	17	17
31	Wall	SB2	11	16	18	18

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 214 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
32	Wall	SB3	11	16	27	27
33	Wall	WA1	11	16	13	<MDC
34	Wall	WA2	11	16	21	21
35	Wall	WA3	11	16	15	<MDC
36	Wall	WA4	11	16	13	<MDC
37	Wall	WB1	11	16	17	17
38	Wall	WB2	11	16	22	22
39	Wall	WB3	11	16	17	17
40	Wall	WB4	11	16	12	<MDC
41	Sink	FC9	11	16	23	23
42	Trap	FC9	11	16	249	249
43	Drawers	EA1	11	16	16	16
44	Drawers	EA2	11	16	17	17
45	Fridge in	FB1	11	16	15	<MDC
46	Fridge out	FB1	11	16	17	17
47	Oven	FA3	11	16	17	17
48	Thermolyne	FD3	11	16	28	28
49	Ceiling	CD3	11	16	12	<MDC
50	Upper wall	NC3	11	16	17	17

Survey Type: Gamma Dose Rates Survey Unit: 214 C

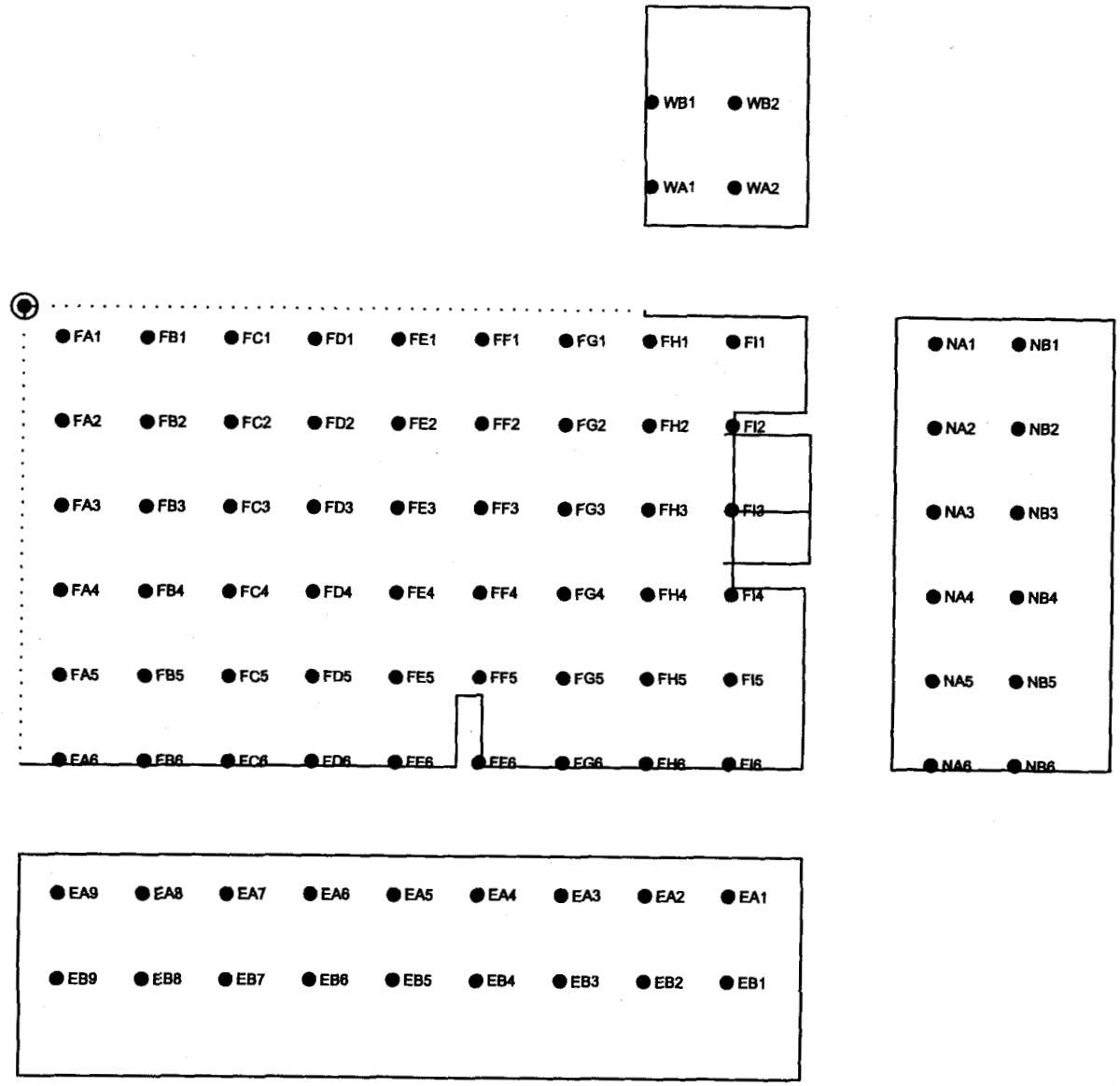
Instrument ID: C Survey Date: 03/17/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Metal	WB1	5
2	Wall	WB2	5
3	Wall	WA3	5
4	Wall	NB1	5
5	Wall	NA3	5
6	Wall	EB1	5
7	Metal wall	EA3	5
8	Wall	SB1	5
9	Wall	SA2	5
10	Floor	FC2	5
11	Drawer	EA1	5
12	Drawer	EA2	6
13	Fridge in	FB1	5
14	Fridge out	FB1	5
15	Oven	FA3	5
16	Thermolyne	FD3	5
17	Ceiling	CD3	5
18	Upper wall	NC3	5
19	Sink	FC9	5
20	Trap	FC9	5

Building 24, Room 220

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 220



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 220

Instrument Information:

Instrument ID:	G		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	WA7	70	305	62	-76	<MDC
2	Wall	WB9	70	305	98	268	<MDC
3	Wall	NA2	70	305	97	258	<MDC
4	Wall	NB5	70	305	68	-19	<MDC
5	Wall	EA1	70	305	65	-48	<MDC
6	Wall	EB5	70	305	56	-134	<MDC
7	Floor	FG1	70	305	73	29	<MDC
8	Floor	FD3	70	305	74	38	<MDC
9	Floor	FA5	70	305	61	-86	<MDC
10	Floor	FF5	70	305	68	-19	<MDC
11	Ceiling	CE1	70	305	72	19	<MDC
12	Ceiling	CB6	70	305	71	10	<MDC
13	Upper wall	NC3	70	305	57	-124	<MDC
14	Upper wall	WC1	70	305	72	19	<MDC
15	Hood 1 - base	FH1	70	305	175	1,004	1,004
16	Hood 1 - vent	FH1	70	305	99	277	<MDC
17	Hood 1 - rear	FH1	70	305	83	124	<MDC
18	Hood 1 - left	FH1	70	305	112	402	402
19	Hood 1 - right	FH1	70	305	98	268	<MDC
20	Hood 2 - base	FH6	70	305	117	449	449
21	Hood 2 - vent	FH6	70	305	112	402	402
22	Hood 2 - rear	FH6	70	305	172	975	975
23	Hood 2 - left	FH6	70	305	134	612	612
24	Hood 2 - right	FH6	70	305	125	526	526
25	Trap	FH1	70	305	138	650	650
26	Sink	FF1	70	305	58	-115	<MDC
27	Trap	FF1	70	305	60	-96	<MDC
28	Trap	FE3	70	305	53	-163	<MDC
29	Sink	FF6	70	305	100	287	<MDC
30	Trap	FF6	70	305	108	363	363
31	Fridge - in	FG3	70	305	106	344	344
32	Fridge - out	FG3	70	305	102	306	306
33	Fridge - in	FD1	70	305	98	268	<MDC
34	Fridge - out	FD1	70	305	87	163	<MDC
35	Fridge - in	FE4	70	305	109	373	373
36	Fridge - out	FE4	70	305	111	392	392
37	Equipment	FB1	70	305	96	249	<MDC
38	Equipment	FH2	70	305	101	296	<MDC
39	Equipment	FH3	70	305	99	277	<MDC
40	Equipment	FH6	70	305	102	306	306
41	Equipment	FF6	70	305	89	182	<MDC
42	Equipment	FD5	70	305	117	449	449

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Fixed-Gamma		Survey Unit:	220		
Instrument ID:	J		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	WA7	6	110	3	-29	<MDC
2	Wall	WB9	6	110	4	-19	<MDC
3	Wall	NA2	6	110	7	10	<MDC
4	Wall	NB5	6	110	3	-29	<MDC
5	Wall	EA1	6	110	7	10	<MDC
6	Wall	EB5	6	110	3	-29	<MDC
7	Floor	FG1	6	110	4	-19	<MDC
8	Floor	FD3	6	110	6	0	<MDC
9	Floor	FA5	6	110	3	-29	<MDC
10	Floor	FF5	6	110	3	-29	<MDC
11	Ceiling	CE1	6	110	3	-29	<MDC
12	Ceiling	CB6	6	110	3	-29	<MDC
13	Upper wall	NC3	6	110	5	-10	<MDC
14	Upper wall	WC1	6	110	4	-19	<MDC
15	Hood 1 - base	FH1	6	110	3	-29	<MDC
16	Hood 1 - vent	FH1	6	110	5	-10	<MDC
17	Hood 1 - rear	FH1	6	110	2	-38	<MDC
18	Hood 1 - left	FH1	6	110	1	-48	<MDC
19	Hood 1 - right	FH1	6	110	2	-38	<MDC
20	Hood 2 - base	FH6	6	110	2	-38	<MDC
21	Hood 2 - vent	FH6	6	110	4	-19	<MDC
22	Hood 2 - rear	FH6	6	110	8	19	<MDC
23	Hood 2 - left	FH6	6	110	2	-38	<MDC
24	Hood 2 - right	FH6	6	110	4	-19	<MDC
25	Trap	FH1	6	110	2	-38	<MDC
26	Sink	FF1	6	110	2	-38	<MDC
27	Trap	FF1	6	110	1	-48	<MDC
28	Trap	FE3	6	110	2	-38	<MDC
29	Sink	FF6	6	110	4	-19	<MDC
30	Trap	FF6	6	110	4	-19	<MDC
31	Fridge - in	FG3	6	110	1	-48	<MDC
32	Fridge - out	FG3	6	110	0	-57	<MDC
33	Fridge - in	FD1	6	110	1	-48	<MDC
34	Fridge - out	FD1	6	110	1	-48	<MDC
35	Fridge - in	FE4	6	110	6	0	<MDC
36	Fridge - out	FE4	6	110	3	-29	<MDC
37	Equipment	FB1	6	110	2	-38	<MDC
38	Equipment	FH2	6	110	3	-29	<MDC
39	Equipment	FH3	6	110	1	-48	<MDC
40	Equipment	FH6	6	110	5	-10	<MDC
41	Equipment	FF6	6	110	3	-29	<MDC
42	Equipment	FD5	6	110	1	-48	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Scans** Survey Unit: **220**

Instrument Information:

Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	320	1,828	275	368	<MDC	<MDC

Survey Type: **Removable H-3** Survey Unit: **220**

Instrument ID:	Beckman L6500		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	37	55	55	55
2	Floor	FA2	37	55	30	<MDC
3	Floor	FA3	37	55	29	<MDC
4	Floor	FA4	37	55	27	<MDC
5	Floor	FA5	37	55	27	<MDC
6	Floor	FA6	37	55	26	<MDC
7	Floor	FB1	37	55	34	<MDC
8	Floor	FB2	37	55	25	<MDC
9	Floor	FB3	37	55	63	63
10	Floor	FB4	37	55	16	<MDC
11	Floor	FB5	37	55	20	<MDC
12	Floor	FB6	37	55	35	<MDC
13	Floor	FC1	37	55	22	<MDC
14	Floor	FC2	37	55	28	<MDC
15	Floor	FC3	37	55	19	<MDC
16	Floor	FC4	37	55	17	<MDC
17	Floor	FC5	37	55	28	<MDC
18	Floor	FC6	37	55	6	<MDC
19	Floor	FD1	37	55	14	<MDC
20	Floor	FD2	37	55	11	<MDC
21	Floor	FD3	37	55	18	<MDC
22	Floor	FD4	37	55	18	<MDC
23	Floor	FD5	37	55	12	<MDC
24	Floor	FD6	37	55	130	130
25	Floor	FE1	37	55	16	<MDC
26	Floor	FE2	37	55	27	<MDC
27	Floor	FE3	37	55	27	<MDC
28	Floor	FE4	37	55	51	<MDC
29	Floor	FE5	37	55	16	<MDC
30	Floor	FE6	37	55	31	<MDC
31	Floor	FF1	37	55	23	<MDC
32	Floor	FF2	37	55	11	<MDC
33	Floor	FF3	37	55	13	<MDC
34	Floor	FF4	37	55	16	<MDC
35	Floor	FF5	37	55	24	<MDC
36	Floor	FF6	37	55	18	<MDC
37	Floor	FG1	37	55	21	<MDC
38	Floor	FG2	37	55	7	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 220

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
39	Floor	FG3	37	55	26	<MDC
40	Floor	FG4	37	55	15	<MDC
41	Floor	FG5	37	55	16	<MDC
42	Floor	FG6	37	55	24	<MDC
43	Floor	FH1	37	55	14	<MDC
44	Floor	FH2	37	55	12	<MDC
45	Floor	FH3	37	55	28	<MDC
46	Floor	FH4	37	55	21	<MDC
47	Floor	FH5	37	55	18	<MDC
48	Floor	FH6	37	55	28	<MDC
49	Floor	FI1	37	55	27	<MDC
50	Floor	FI2	37	55	3	<MDC
51	Floor	FI3	37	55	14	<MDC
52	Floor	FI4	37	55	88	88
53	Floor	FI5	37	55	191	191
54	Floor	FI6	37	55	13	<MDC
55	Wall	NA1	37	55	10	<MDC
56	Wall	NA2	37	55	34	<MDC
57	Wall	NA3	37	55	16	<MDC
58	Wall	NA4	37	55	10	<MDC
59	Wall	NA5	37	55	15	<MDC
60	Wall	NA6	37	55	14	<MDC
61	Wall	NB1	37	55	22	<MDC
62	Wall	NB2	37	55	25	<MDC
63	Wall	NB3	37	55	5	<MDC
64	Wall	NB4	37	55	29	<MDC
65	Wall	NB5	37	55	16	<MDC
66	Wall	NB6	37	55	11	<MDC
67	Wall	EA1	37	55	18	<MDC
68	Wall	EA2	37	55	20	<MDC
69	Wall	EA3	37	55	8	<MDC
70	Wall	EA4	37	55	7	<MDC
71	Wall	EA5	37	55	15	<MDC
72	Wall	EA6	37	55	16	<MDC
73	Wall	EA7	37	55	14	<MDC
74	Wall	EA8	37	55	11	<MDC
75	Wall	EA9	37	55	11	<MDC
76	Wall	EB1	37	55	11	<MDC
77	Wall	EB2	37	55	28	<MDC
78	Wall	EB3	37	55	8	<MDC
79	Wall	EB4	37	55	11	<MDC
80	Wall	EB5	37	55	15	<MDC
81	Wall	EB6	37	55	10	<MDC
82	Wall	EB7	37	55	39	<MDC
83	Wall	EB8	37	55	28	<MDC
84	Wall	EB9	37	55	15	<MDC
85	Wall	WA1	37	55	8	<MDC
86	Wall	WA2	37	55	37	<MDC
87	Wall	WA3	37	55	13	<MDC
88	Wall	WA4	37	55	120	120
89	Wall	WA5	37	55	18	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 220

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
90	Wall	WA6	37	55	11	<MDC
91	Wall	WA7	37	55	9	<MDC
92	Wall	WA8	37	55	36	<MDC
93	Wall	WA9	37	55	24	<MDC
94	Wall	WB1	37	55	17	<MDC
95	Wall	WB2	37	55	3	<MDC
96	Wall	WB3	37	55	17	<MDC
97	Wall	WB4	37	55	12	<MDC
98	Wall	WB5	37	55	13	<MDC
99	Wall	WB6	37	55	13	<MDC
100	Wall	WB7	37	55	22	<MDC
101	Wall	WB8	37	55	35	<MDC
102	Wall	WB9	37	55	38	<MDC
103	Ceiling	CE1	37	55	7	<MDC
104	Ceiling	CB6	37	55	34	<MDC
105	Upper wall	NC3	37	55	23	<MDC
106	Upper wall	WC1	37	55	25	<MDC
107	Hood 1 - base	FH1	37	55	31	<MDC
108	Hood 1 - vent	FH1	37	55	37	<MDC
109	Hood 1 - rear	FH1	37	55	27	<MDC
110	Hood 1 - left	FH1	37	55	42	<MDC
111	Hood 1 - right	FH1	37	55	27	<MDC
112	Hood 2 - base	FH6	37	55	60	60
113	Hood 2 - vent	FH6	37	55	231	231
114	Hood 2 - rear	FH6	37	55	24	<MDC
115	Hood 2 - left	FH6	37	55	49	<MDC
116	Hood 2 - right	FH6	37	55	23	<MDC
117	Sink	FH1	37	55	40	<MDC
118	Trap	FH1	37	55	25	<MDC
119	Sink	FF1	37	55	26	<MDC
120	Trap	FF1	37	55	34	<MDC
121	Sink	FE3	37	55	39	<MDC
122	Trap	FE3	37	55	28	<MDC
123	Sink	FF6	37	55	41	<MDC
124	Trap	FF6	37	55	57	57
125	Fridge - in	FG3	37	55	184	184
126	Fridge - out	FG3	37	55	64	64
127	Fridge - in	FD1	37	55	22	<MDC
128	Fridge - out	FD1	37	55	25	<MDC
129	Fridge - in	FE4	37	55	35	<MDC
130	Fridge - out	FE4	37	55	25	<MDC
131	Gross equipment	FB1	37	55	37	<MDC
132	Gross equipment	FB1	37	55	43	<MDC
133	Gross equipment	FB1	37	55	33	<MDC
134	Gross equipment	FH2	37	55	21	<MDC
135	Gross equipment	FH2	37	55	44	<MDC
136	Gross equipment	FH2	37	55	35	<MDC
137	Gross equipment	FH3	37	55	21	<MDC
138	Gross equipment	FH3	37	55	11	<MDC
139	Gross equipment	FH3	37	55	15	<MDC
140	Gross equipment	FH6	37	55	69	69

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 220

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
141	Gross equipment	FH6	37	55	23	<MDC
142	Gross equipment	FH6	37	55	28	<MDC
143	Gross equipment	FF6	37	55	38	<MDC
144	Gross equipment	FF6	37	55	35	<MDC
145	Gross equipment	FF6	37	55	30	<MDC
146	Gross equipment	FD5	37	55	20	<MDC
147	Gross equipment	FD5	37	55	714	714
148	Gross equipment	FD5	37	55	21	<MDC
149	Gross equipment	FD5	37	55	33	<MDC
150	Gross equipment	FD5	37	55	65	65
151	Gross equipment	FD5	37	55	29	<MDC
152	Gross equipment	FD5	37	55	27	<MDC
153	Gross equipment	FD5	37	55	129	129

Survey Type: Removable C-14 Survey Unit: 220

Instrument ID:	Beckman L6500		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	9	15	13	<MDC
2	Floor	FA2	9	15	15	15
3	Floor	FA3	9	15	8	<MDC
4	Floor	FA4	9	15	10	<MDC
5	Floor	FA5	9	15	22	22
6	Floor	FA6	9	15	14	<MDC
7	Floor	FB1	9	15	14	<MDC
8	Floor	FB2	9	15	10	<MDC
9	Floor	FB3	9	15	26	26
10	Floor	FB4	9	15	20	20
11	Floor	FB5	9	15	9	<MDC
12	Floor	FB6	9	15	14	<MDC
13	Floor	FC1	9	15	9	<MDC
14	Floor	FC2	9	15	14	<MDC
15	Floor	FC3	9	15	10	<MDC
16	Floor	FC4	9	15	12	<MDC
17	Floor	FC5	9	15	19	19
18	Floor	FC6	9	15	10	<MDC
19	Floor	FD1	9	15	8	<MDC
20	Floor	FD2	9	15	18	18
21	Floor	FD3	9	15	14	<MDC
22	Floor	FD4	9	15	25	25
23	Floor	FD5	9	15	14	<MDC
24	Floor	FD6	9	15	33	33
25	Floor	FE1	9	15	10	<MDC
26	Floor	FE2	9	15	12	<MDC
27	Floor	FE3	9	15	17	17
28	Floor	FE4	9	15	15	15
29	Floor	FE5	9	15	16	16
30	Floor	FE6	9	15	10	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 220

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
31	Floor	FF1	9	15	13	<MDC
32	Floor	FF2	9	15	17	17
33	Floor	FF3	9	15	8	<MDC
34	Floor	FF4	9	15	14	<MDC
35	Floor	FF5	9	15	9	<MDC
36	Floor	FF6	9	15	14	<MDC
37	Floor	FG1	9	15	20	20
38	Floor	FG2	9	15	23	23
39	Floor	FG3	9	15	17	17
40	Floor	FG4	9	15	13	<MDC
41	Floor	FG5	9	15	16	16
42	Floor	FG6	9	15	19	19
43	Floor	FH1	9	15	5	<MDC
44	Floor	FH2	9	15	12	<MDC
45	Floor	FH3	9	15	12	<MDC
46	Floor	FH4	9	15	10	<MDC
47	Floor	FH5	9	15	16	16
48	Floor	FH6	9	15	16	16
49	Floor	FI1	9	15	8	<MDC
50	Floor	FI2	9	15	13	<MDC
51	Floor	FI3	9	15	10	<MDC
52	Floor	FI4	9	15	18	18
53	Floor	FI5	9	15	10	<MDC
54	Floor	FI6	9	15	9	<MDC
55	Wall	NA1	9	15	10	<MDC
56	Wall	NA2	9	15	14	<MDC
57	Wall	NA3	9	15	16	16
58	Wall	NA4	9	15	17	17
59	Wall	NA5	9	15	12	<MDC
60	Wall	NA6	9	15	10	<MDC
61	Wall	NB1	9	15	19	19
62	Wall	NB2	9	15	12	<MDC
63	Wall	NB3	9	15	18	18
64	Wall	NB4	9	15	5	<MDC
65	Wall	NB5	9	15	10	<MDC
66	Wall	NB6	9	15	24	24
67	Wall	EA1	9	15	6	<MDC
68	Wall	EA2	9	15	14	<MDC
69	Wall	EA3	9	15	16	16
70	Wall	EA4	9	15	12	<MDC
71	Wall	EA5	9	15	12	<MDC
72	Wall	EA6	9	15	10	<MDC
73	Wall	EA7	9	15	14	<MDC
74	Wall	EA8	9	15	8	<MDC
75	Wall	EA9	9	15	20	20
76	Wall	EB1	9	15	23	23
77	Wall	EB2	9	15	22	22
78	Wall	EB3	9	15	17	17
79	Wall	EB4	9	15	25	25
80	Wall	EB5	9	15	20	20
81	Wall	EB6	9	15	10	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 220

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
82	Wall	EB7	9	15	14	<MDC
83	Wall	EB8	9	15	16	16
84	Wall	EB9	9	15	13	<MDC
85	Wall	WA1	9	15	21	21
86	Wall	WA2	9	15	18	18
87	Wall	WA3	9	15	18	18
88	Wall	WA4	9	15	27	27
89	Wall	WA5	9	15	14	<MDC
90	Wall	WA6	9	15	13	<MDC
91	Wall	WA7	9	15	13	<MDC
92	Wall	WA8	9	15	17	17
93	Wall	WA9	9	15	10	<MDC
94	Wall	WB1	9	15	12	<MDC
95	Wall	WB2	9	15	13	<MDC
96	Wall	WB3	9	15	13	<MDC
97	Wall	WB4	9	15	12	<MDC
98	Wall	WB5	9	15	22	22
99	Wall	WB6	9	15	14	<MDC
100	Wall	WB7	9	15	10	<MDC
101	Wall	WB8	9	15	9	<MDC
102	Wall	WB9	9	15	16	16
103	Ceiling	CE1	9	15	10	<MDC
104	Ceiling	CB6	9	15	10	<MDC
105	Upper wall	NC3	9	15	5	<MDC
106	Upper wall	WC1	9	15	6	<MDC
107	Hood 1 - base	FH1	9	15	27	27
108	Hood 1 - vent	FH1	9	15	15	15
109	Hood 1 - rear	FH1	9	15	17	17
110	Hood 1 - left	FH1	9	15	10	<MDC
111	Hood 1 - right	FH1	9	15	13	<MDC
112	Hood 2 - base	FH6	9	15	14	<MDC
113	Hood 2 - vent	FH6	9	15	89	89
114	Hood 2 - rear	FH6	9	15	19	19
115	Hood 2 - left	FH6	9	15	7	<MDC
116	Hood 2 - right	FH6	9	15	6	<MDC
117	Sink	FH1	9	15	17	17
118	Trap	FH1	9	15	24	24
119	Sink	FF1	9	15	10	<MDC
120	Trap	FF1	9	15	10	<MDC
121	Sink	FE3	9	15	5	<MDC
122	Trap	FE3	9	15	10	<MDC
123	Sink	FF6	9	15	11	<MDC
124	Trap	FF6	9	15	12	<MDC
125	Fridge - in	FG3	9	15	56	56
126	Fridge - out	FG3	9	15	24	24
127	Fridge - in	FD1	9	15	12	<MDC
128	Fridge - out	FD1	9	15	10	<MDC
129	Fridge - in	FE4	9	15	17	17
130	Fridge - out	FE4	9	15	28	28
131	Gross equipment	FB1	9	15	19	19
132	Gross equipment	FB1	9	15	6	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Removable C-14** Survey Unit: **220**

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
133	Gross equipment	FB1	9	15	10	<MDC
134	Gross equipment	FH2	9	15	44	44
135	Gross equipment	FH2	9	15	11	<MDC
136	Gross equipment	FH2	9	15	14	<MDC
137	Gross equipment	FH3	9	15	17	17
138	Gross equipment	FH3	9	15	9	<MDC
139	Gross equipment	FH3	9	15	9	<MDC
140	Gross equipment	FH6	9	15	46	46
141	Gross equipment	FH6	9	15	19	19
142	Gross equipment	FH6	9	15	28	28
143	Gross equipment	FF6	9	15	9	<MDC
144	Gross equipment	FF6	9	15	14	<MDC
145	Gross equipment	FF6	9	15	15	15
146	Gross equipment	FD5	9	15	13	<MDC
147	Gross equipment	FD5	9	15	92	92
148	Gross equipment	FD5	9	15	14	<MDC
149	Gross equipment	FD5	9	15	17	17
150	Gross equipment	FD5	9	15	23	23
151	Gross equipment	FD5	9	15	14	<MDC
152	Gross equipment	FD5	9	15	14	<MDC
153	Gross equipment	FD5	9	15	12	<MDC

Survey Type: **Gamma Dose Rates** Survey Unit: **220**

Instrument ID: C Survey Date: 03/18/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Metal	WA7	5
2	Wall	WB9	5
3	Wall	NA2	6
4	Wall	NB5	6
5	Wall	EA1	6
6	Wall	EB5	6
7	Floor	FG1	6
8	Floor	FD3	6
9	Floor	FA5	6
10	Floor	FF5	6
11	Ceiling	CE1	5
12	Ceiling	CB6	5
13	Upper wall	NC3	5
14	Upper wall	WC1	5
15	Hood 1 - base	FH1	5
16	Hood 1 - vent	FH1	6
17	Hood 1 - rear	FH1	5
18	Hood 1 - left	FH1	5
19	Hood 1 - right	FH1	6
20	Hood 2 - base	FH6	6
21	Hood 2 - vent	FH6	6
22	Hood 2 - rear	FH6	6
23	Hood 2 - left	FH6	6
24	Hood 2 - right	FH6	6

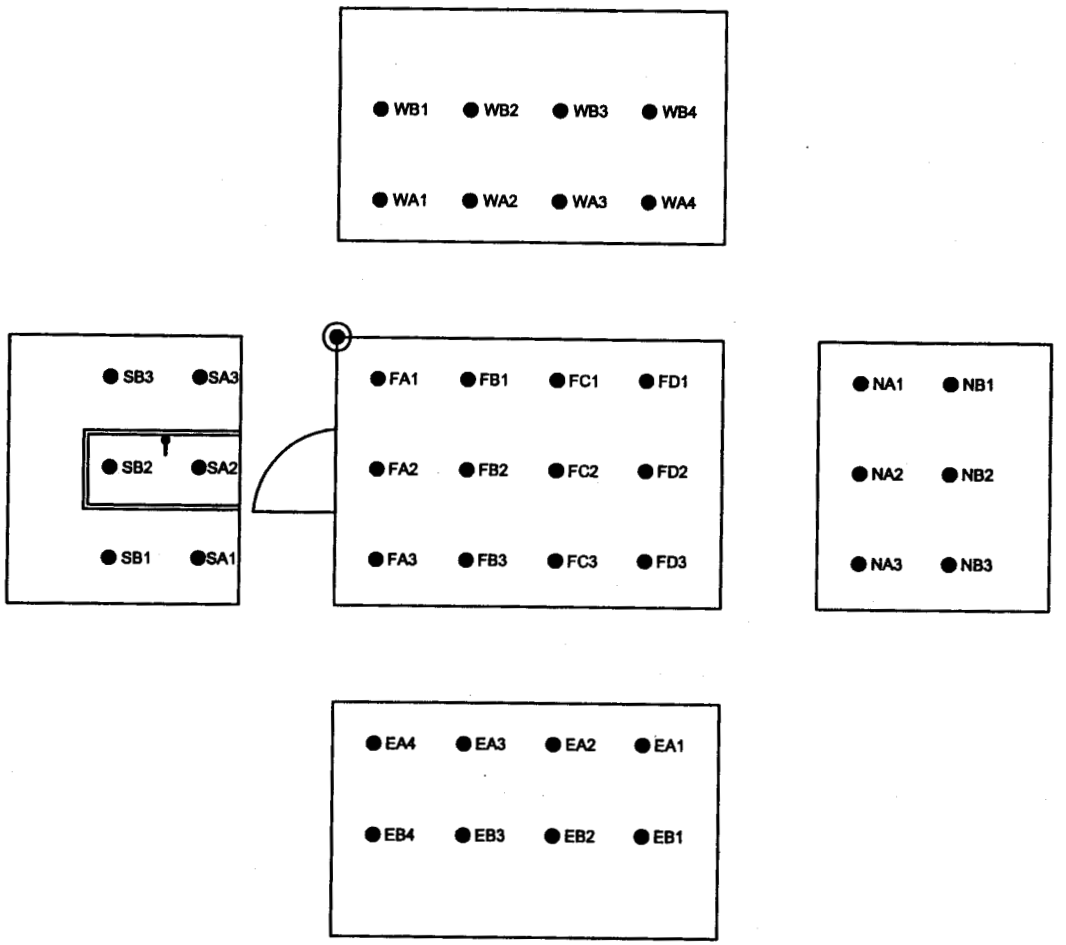
Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Gamma Dose Rates** Survey Unit: **220**

#	Location	Survey Point	Dose Rate (urem/hr)
25	Trap	FH1	6
26	Sink	FF1	6
27	Trap	FF1	6
28	Trap	FE3	6
29	Sink	FF6	5
30	Trap	FF6	5
31	Fridge - in	FG3	5
32	Fridge - out	FG3	5
33	Fridge - in	FD1	5
34	Fridge - out	FD1	5
35	Fridge - in	FE4	5
36	Fridge - out	FE4	5
37	Equipment	FB1	5
38	Equipment	FH2	5
39	Equipment	FH3	5
40	Equipment	FH6	5
41	Equipment	FF6	5
42	Equipment	FD5	5

Building 24, Room 220C

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 220C



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 220 C

Instrument Information:

Instrument ID:	E		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WA1	130	418	149	188	<MDC
2	Wall	WA3	130	418	132	20	<MDC
3	Wall	NB2	130	418	147	168	<MDC
4	Wall	NA3	130	418	143	128	<MDC
5	Wall	EB3	130	418	142	119	<MDC
6	Wall	SB2	130	418	127	-30	<MDC
7	Wall	SB3	130	418	118	-119	<MDC
8	Floor	FB1	130	418	153	227	<MDC
9	Floor	FC2	130	418	157	267	<MDC
10	Floor	FC3	130	418	138	79	<MDC
11	Ceiling	CA1	130	418	165	346	<MDC
12	Upper wall	NC2	130	418	126	-40	<MDC
13	Freezer - in	EB2	130	418	137	69	<MDC
14	Freezer - out	EB2	130	418	125	-49	<MDC
15	Equipment	EB3	130	418	136	59	<MDC
16	Equipment	EB4	130	418	143	128	<MDC
17	Hood - base	WA3	130	418	234	1,028	1,028
18	Hood - rear	WA3	130	418	152	217	<MDC
19	Hood - left	WA3	130	418	150	198	<MDC
20	Hood - right	WA3	130	418	32	-969	<MDC
21	Hood - vent	WA3	130	418	155	247	<MDC

Survey Type: Fixed-Gamma Survey Unit: 220 C

Instrument ID:	J		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WA1	4	2,602	4	0	<MDC
2	Wall	WA3	4	2,602	4	0	<MDC
3	Wall	NB2	4	2,602	0	-1,051	<MDC
4	Wall	NA3	4	2,602	2	-526	<MDC
5	Wall	EB3	4	2,602	2	-526	<MDC
6	Wall	SB2	4	2,602	5	263	<MDC
7	Wall	SB3	4	2,602	3	-263	<MDC
8	Floor	FB1	4	2,602	2	-526	<MDC
9	Floor	FC2	4	2,602	3	-263	<MDC
10	Floor	FC3	4	2,602	2	-526	<MDC
11	Ceiling	CA1	4	2,602	6	526	<MDC
12	Upper wall	NC2	4	2,602	4	0	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Fixed Gamma Survey Unit: 220 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Gross Total Counts Per Minute	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
13	Freezer - in	EB2	4	2,602	3	-263	<MDC
14	Freezer - out	EB2	4	2,602	1	-788	<MDC
15	Equipment	EB3	4	2,602	4	0	<MDC
16	Equipment	EB4	4	2,602	3	-263	<MDC
17	Hood - base	WA3	4	2,602	3	-263	<MDC
18	Hood - rear	WA3	4	2,602	4	0	<MDC
19	Hood - left	WA3	4	2,602	3	-263	<MDC
20	Hood - right	WA3	4	2,602	2	-526	<MDC
21	Hood - vent	WA3	4	2,602	2	-526	<MDC

Survey Type: Scans Survey Unit: 220 C

Instrument Information:

Instrument ID:	D		Survey Date:	03/16/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm²)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm²)	Max Activity (dpm/100cm²)
1	Floors and walls	All	250	943	280	320	<MDC	<MDC

Survey Type: Removable H-3 Survey Unit: 220 C

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	16	38	30	<MDC
2	Floor	FA2	16	38	24	<MDC
3	Floor	FA3	16	38	29	<MDC
4	Floor	FB1	16	38	79	79
5	Floor	FB2	16	38	28	<MDC
6	Floor	FB3	16	38	34	<MDC
7	Floor	FC1	16	38	34	<MDC
8	Floor	FC2	16	38	48	48
9	Floor	FC3	16	38	29	<MDC
10	Floor	FD1	16	38	34	<MDC
11	Floor	FD2	16	38	26	<MDC
12	Floor	FD3	16	38	36	<MDC
13	Wall	NA1	16	38	30	<MDC
14	Wall	NA2	16	38	36	<MDC
15	Wall	NA3	16	38	24	<MDC
16	Wall	NB1	16	38	26	<MDC
17	Wall	NB2	16	38	41	41
18	Wall	NB3	16	38	15	<MDC
19	Wall	EA1	16	38	13	<MDC
20	Wall	EA2	16	38	21	<MDC
21	Wall	EA3	16	38	60	60
22	Wall	EA4	16	38	27	<MDC
23	Wall	EB1	16	38	41	41

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 220 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
24	Wall	EB2	16	38	18	<MDC
25	Wall	EB3	16	38	36	<MDC
26	Wall	EB4	16	38	136	136
27	Wall	SA1	16	38	26	<MDC
28	Wall	SA2	16	38	31	<MDC
29	Wall	SA3	16	38	63	63
30	Wall	SB1	16	38	34	<MDC
31	Wall	SB2	16	38	33	<MDC
32	Wall	SB3	16	38	28	<MDC
33	Wall	WA1	16	38	29	<MDC
34	Wall	WA2	16	38	38	<MDC
35	Wall	WA3	16	38	17	<MDC
36	Wall	WA4	16	38	28	<MDC
37	Wall	WB1	16	38	29	<MDC
38	Wall	WB2	16	38	52	52
39	Wall	WB3	16	38	27	<MDC
40	Wall	WB4	16	38	28	<MDC
41	Ceiling	CA1	16	38	13	<MDC
42	Upper wall	NC2	16	38	54	54
43	Freezer - in	EB2	16	38	256	256
44	Freezer - out	EB2	16	38	26	<MDC
45	Equipment	EB3	16	38	24	<MDC
46	Equipment	EB4	16	38	34	<MDC
47	Hood - base	WA3	16	38	220	220
48	Hood - rear	WA3	16	38	35	<MDC
49	Hood - left	WA3	16	38	255	255
50	Hood - right	WA3	16	38	33	<MDC
51	Hood - vent	WA3	16	38	186	186
52	Equipment	WA3	16	38	74	74

Survey Type: Removable C-14 Survey Unit: 220 C

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	14	17	23	23
2	Floor	FA2	14	17	19	19
3	Floor	FA3	14	17	23	23
4	Floor	FB1	14	17	10	<MDC
5	Floor	FB2	14	17	18	18
6	Floor	FB3	14	17	19	19
7	Floor	FC1	14	17	12	<MDC
8	Floor	FC2	14	17	13	<MDC
9	Floor	FC3	14	17	22	22
10	Floor	FD1	14	17	23	23
11	Floor	FD2	14	17	17	<MDC
12	Floor	FD3	14	17	29	29
13	Wall	NA1	14	17	27	27
14	Wall	NA2	14	17	9	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 220 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
15	Wall	NA3	14	17	14	<MDC
16	Wall	NB1	14	17	19	19
17	Wall	NB2	14	17	21	21
18	Wall	NB3	14	17	35	35
19	Wall	EA1	14	17	22	22
20	Wall	EA2	14	17	18	18
21	Wall	EA3	14	17	22	22
22	Wall	EA4	14	17	13	<MDC
23	Wall	EB1	14	17	14	<MDC
24	Wall	EB2	14	17	12	<MDC
25	Wall	EB3	14	17	19	19
26	Wall	EB4	14	17	16	<MDC
27	Wall	SA1	14	17	14	<MDC
28	Wall	SA2	14	17	22	22
29	Wall	SA3	14	17	130	130
30	Wall	SB1	14	17	13	<MDC
31	Wall	SB2	14	17	22	22
32	Wall	SB3	14	17	23	23
33	Wall	WA1	14	17	17	<MDC
34	Wall	WA2	14	17	26	26
35	Wall	WA3	14	17	24	24
36	Wall	WA4	14	17	21	21
37	Wall	WB1	14	17	22	22
38	Wall	WB2	14	17	17	<MDC
39	Wall	WB3	14	17	17	<MDC
40	Wall	WB4	14	17	8	<MDC
41	Ceiling	CA1	14	17	23	23
42	Upper wall	NC2	14	17	26	26
43	Freezer - in	EB2	14	17	37	37
44	Freezer - out	EB2	14	17	19	19
45	Equipment	EB3	14	17	25	25
46	Equipment	EB4	14	17	59	59
47	Hood - base	WA3	14	17	75	75
48	Hood - rear	WA3	14	17	25	25
49	Hood - left	WA3	14	17	58	58
50	Hood - right	WA3	14	17	34	34
51	Hood - vent	WA3	14	17	44	44
52	Equipment	WA3	14	17	45	45

Survey Type: Gamma Dose Rates Survey Unit: 220 C

Instrument ID: C Survey Date: 03/17/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WA1	5
2	Wall	WA3	5
3	Wall	NB2	5
4	Wall	NA3	5
5	Wall	EB3	5
6	Wall	SB2	5
7	Wall	SB3	5
8	Floor	FB1	5

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 220 C

#	Location	Survey Point	Dose Rate (urem/hr)
9	Floor	FC2	5
10	Floor	FC3	5
11	Ceiling	CA1	5
12	Upper wall	NC2	6
13	Freezer - in	EB2	5
14	Freezer - out	EB2	5
15	Equipment	EB3	5
16	Equipment	EB4	5
17	Hood - base	WA3	5
18	Hood - rear	WA3	5
19	Hood - left	WA3	5
20	Hood - right	WA3	5
21	Hood - vent	WA3	5

Building 24, Room 221C

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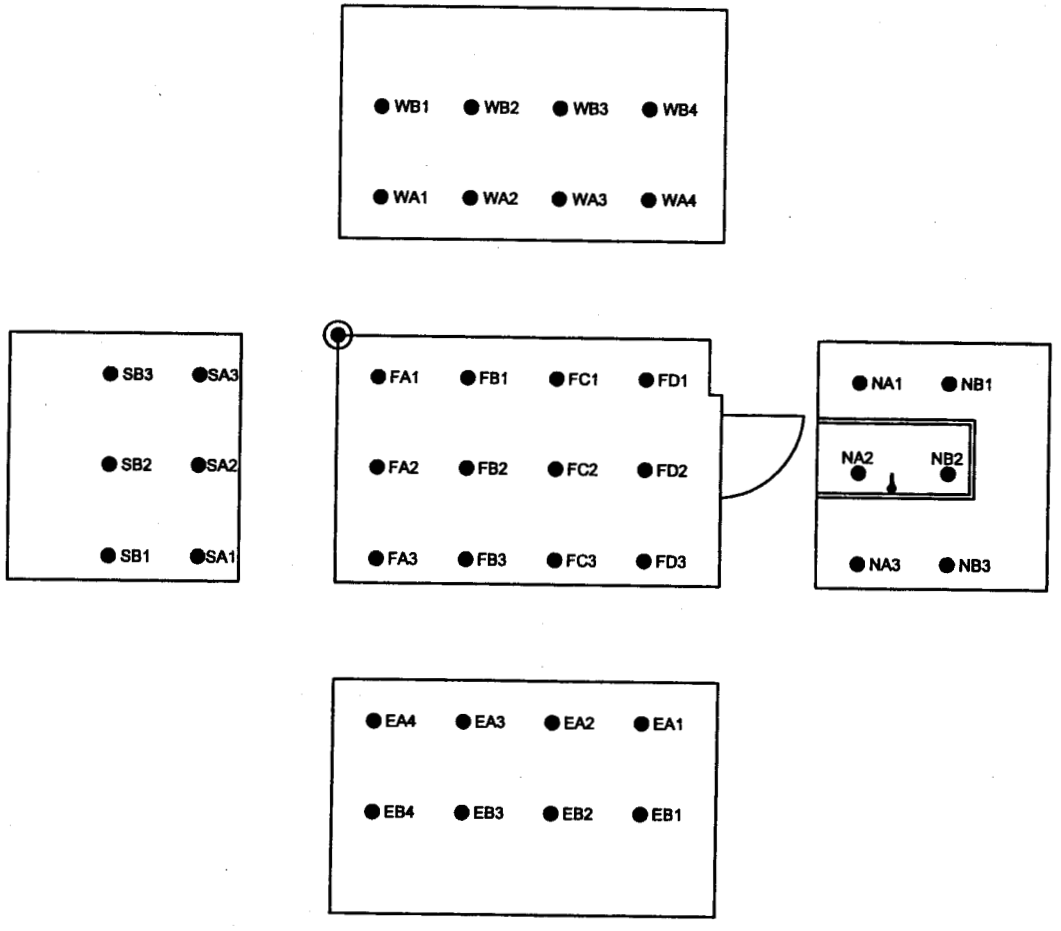
BUILDING B-24 ROOM 221C



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	221C		
Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FC1	250	321	241	-50	<MDC
2	Wall	WB2	250	321	283	184	<MDC
3	Wall	NB1	250	321	273	128	<MDC
4	Benchtop	FB3	250	321	287	206	<MDC
5	Wall	SA2	250	321	254	22	<MDC
6	Floor	FA1	250	321	232	-100	<MDC
7	Wall	EA1	250	321	251	6	<MDC
8	Wall	EB3	250	321	282	179	<MDC
9	Wall	NA3	250	321	277	151	<MDC
10	Floor	FD2	250	321	300	279	<MDC
11	Ceiling	CA3	250	321	285	195	<MDC
12	Upper Wall	NC2	250	321	260	56	<MDC
13	Drawer	FB3	250	321	301	285	<MDC
14	Sink	FB3	250	321	214	-201	<MDC
15	Trap	FB3	250	321	225	-140	<MDC
16	Fridge 1 out	FA0	250	321	229	-117	<MDC
17	Fridge 2 out	FC1	250	321	243	-39	<MDC

Survey Type:	Fixed-Gamma		Survey Unit:	221C		
Instrument ID:	J		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FC1	7	3,188	2	-1,314	<MDC
2	Wall	WB2	7	3,188	1	-1,577	<MDC
3	Wall	NB1	7	3,188	4	-788	<MDC
4	Benchtop	FB3	7	3,188	3	-1,051	<MDC
5	Wall	SA2	7	3,188	3	-1,051	<MDC
6	Floor	FA1	7	3,188	3	-1,051	<MDC
7	Wall	EA1	7	3,188	7	0	<MDC
8	Wall	EB3	7	3,188	5	-526	<MDC
9	Wall	NA3	7	3,188	3	-1,051	<MDC
10	Floor	FD2	7	3,188	4	-788	<MDC
11	Ceiling	CA3	7	3,188	7	0	<MDC
12	Upper Wall	NC2	7	3,188	2	-1,314	<MDC
13	Drawer	FB3	7	3,188	5	-526	<MDC
14	Sink	FB3	7	3,188	1	-1,577	<MDC
15	Trap	FB3	7	3,188	1	-1,577	<MDC
16	Fridge 1 out	FA0	7	3,188	2	-1,314	<MDC
17	Fridge 2 out	FC1	7	3,188	3	-1,051	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Scans Survey Unit: 221C

Instrument Information:

Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	250	943	250	340	<MDC	<MDC

Survey Type: Removable H-3 Survey Unit: 221C

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	16	38	44	44
2	Floor	FA2	16	38	27	<MDC
3	Floor	FA3	16	38	10	<MDC
4	Floor	FB1	16	38	24	<MDC
5	Floor	FB2	16	38	12	<MDC
6	Floor	FB3	16	38	10	<MDC
7	Floor	FC1	16	38	13	<MDC
8	Floor	FC2	16	38	24	<MDC
9	Floor	FC3	16	38	12	<MDC
10	Floor	FD1	16	38	36	<MDC
11	Floor	FD2	16	38	22	<MDC
12	Floor	FD3	16	38	12	<MDC
13	Wall	NA1	16	38	25	<MDC
14	Wall	NA2	16	38	19	<MDC
15	Wall	NA3	16	38	22	<MDC
16	Wall	NB1	16	38	30	<MDC
17	Wall	NB2	16	38	8	<MDC
18	Wall	NB3	16	38	9	<MDC
19	Wall	EA1	16	38	18	<MDC
20	Wall	EA2	16	38	18	<MDC
21	Wall	EA3	16	38	20	<MDC
22	Wall	EA4	16	38	251	251
23	Wall	EB1	16	38	12	<MDC
24	Wall	EB2	16	38	26	<MDC
25	Wall	EB3	16	38	42	42
26	Wall	EB4	16	38	13	<MDC
27	Wall	SA1	16	38	9	<MDC
28	Wall	SA2	16	38	8	<MDC
29	Wall	SA3	16	38	22	<MDC
30	Wall	SB1	16	38	29	<MDC
31	Wall	SB2	16	38	1	<MDC
32	Wall	SB3	16	38	27	<MDC
33	Wall	WA1	16	38	26	<MDC
34	Wall	WA2	16	38	25	<MDC
35	Wall	WA3	16	38	25	<MDC
36	Wall	WA4	16	38	20	<MDC
37	Wall	WB1	16	38	21	<MDC
38	Wall	WB2	16	38	12	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 221C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
39	Wall	WB3	16	38	23	<MDC
40	Wall	WB4	16	38	16	<MDC
41	Ceiling	CA3	16	38	27	<MDC
42	Upper wall	NC2	16	38	7	<MDC
43	Drawers	FB3	16	38	23	<MDC
44	Sink	FB3	16	38	35	<MDC
45	Trap	FB3	16	38	22	<MDC
46	Fridge 1 in	FA1	16	38	14	<MDC
47	Fridge 1 out	FA1	16	38	28	<MDC
48	Fridge 2 in	FC1	16	38	6	<MDC
49	Fridge 2 out	FC1	16	38	19	<MDC

Survey Type: Removable C-14 Survey Unit: 221C

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	14	17	11	<MDC
2	Floor	FA2	14	17	12	<MDC
3	Floor	FA3	14	17	16	<MDC
4	Floor	FB1	14	17	17	<MDC
5	Floor	FB2	14	17	17	<MDC
6	Floor	FB3	14	17	22	22
7	Floor	FC1	14	17	18	18
8	Floor	FC2	14	17	20	20
9	Floor	FC3	14	17	17	<MDC
10	Floor	FD1	14	17	17	<MDC
11	Floor	FD2	14	17	12	<MDC
12	Floor	FD3	14	17	12	<MDC
13	Wall	NA1	14	17	13	<MDC
14	Wall	NA2	14	17	8	<MDC
15	Wall	NA3	14	17	12	<MDC
16	Wall	NB1	14	17	15	<MDC
17	Wall	NB2	14	17	16	<MDC
18	Wall	NB3	14	17	13	<MDC
19	Wall	EA1	14	17	12	<MDC
20	Wall	EA2	14	17	12	<MDC
21	Wall	EA3	14	17	16	<MDC
22	Wall	EA4	14	17	22	22
23	Wall	EB1	14	17	14	<MDC
24	Wall	EB2	14	17	22	22
25	Wall	EB3	14	17	15	<MDC
26	Wall	EB4	14	17	8	<MDC
27	Wall	SA1	14	17	20	20
28	Wall	SA2	14	17	16	<MDC
29	Wall	SA3	14	17	17	<MDC
30	Wall	SB1	14	17	9	<MDC
31	Wall	SB2	14	17	18	18
32	Wall	SB3	14	17	14	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 221C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
33	Wall	WA1	14	17	5	<MDC
34	Wall	WA2	14	17	8	<MDC
35	Wall	WA3	14	17	13	<MDC
36	Wall	WA4	14	17	8	<MDC
37	Wall	WB1	14	17	10	<MDC
38	Wall	WB2	14	17	21	21
39	Wall	WB3	14	17	13	<MDC
40	Wall	WB4	14	17	9	<MDC
41	Ceiling	CA3	14	17	6	<MDC
42	Upper wall	NC2	14	17	16	<MDC
43	Drawers	FB3	14	17	21	21
44	Sink	FB3	14	17	12	<MDC
45	Trap	FB3	14	17	13	<MDC
46	Fridge 1 in	FA1	14	17	1	<MDC
47	Fridge 1 out	FA1	14	17	16	<MDC
48	Fridge 2 in	FC1	14	17	16	<MDC
49	Fridge 2 out	FC1	14	17	14	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 221C

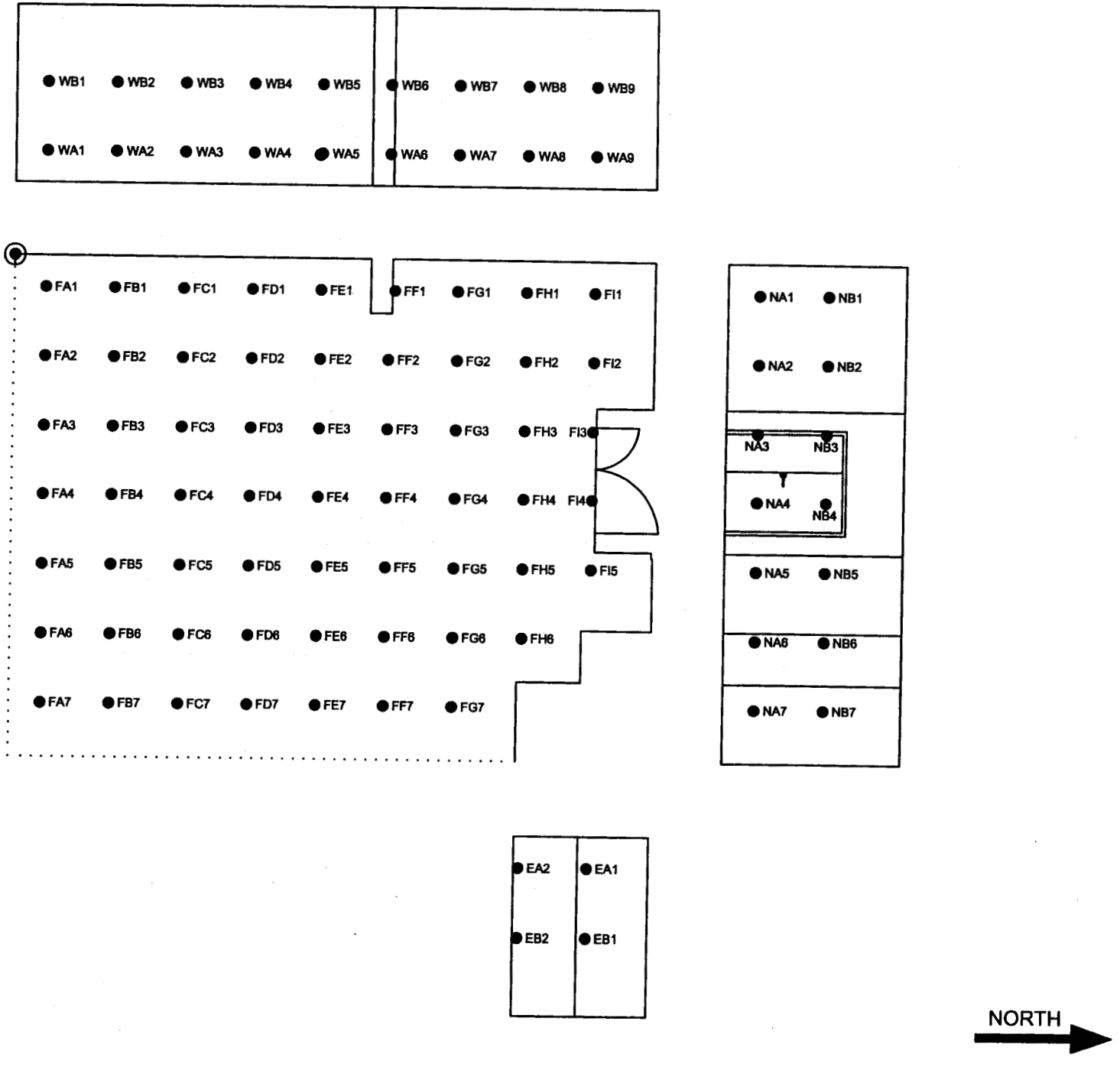
Instrument ID: C Survey Date: 03/17/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Floor	FC1	5
2	Wall	WB2	6
3	Wall	NB1	5
4	Benchtop	FB3	5
5	Wall	SA2	5
6	Floor	FA1	5
7	Wall	EA1	5
8	Wall	EB3	5
9	Wall	NA3	5
10	Floor	FD2	5
11	Ceiling	CA3	5
12	Upper Wall	NC2	5
13	Drawer	FB3	5
14	Sink	FB3	5
15	Trap	FB3	5
16	Fridge 1 in	FA1	5
17	Fridge 1 out	FA1	5
18	Fridge 2 in	FC1	5
19	Fridge 2 out	FC1	5

Building 24, Room 222

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 222



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	222		
Instrument ID:	E		Survey Date:	03/18/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	EB6	175	481	186	109	<MDC
2	Wall	EA2	175	481	177	20	<MDC
3	Floor	FC5	175	481	212	366	<MDC
4	Floor	FE2	175	481	200	247	<MDC
5	Floor	FH5	175	481	203	277	<MDC
6	Wall	NA5	175	481	180	49	<MDC
7	Wall	NB2	175	481	203	277	<MDC
8	Wall	WB8	175	481	196	208	<MDC
9	Wall	WA9	175	481	168	-69	<MDC
10	Wall	WB2	175	481	178	30	<MDC
11	Ceiling	CF6	175	481	278	1,018	1,018
12	Ceiling	CC1	175	481	295	1,186	1,186
13	Upper wall	NC3	175	481	205	297	<MDC
14	Upper wall	WC3	175	481	187	119	<MDC
15	Hood 1	FH1	175	481	184	89	<MDC
16	Hood 1	FH1	175	481	185	99	<MDC
17	Hood 1	FH1	175	481	168	-69	<MDC
18	Hood 1	FH1	175	481	155	-198	<MDC
19	Hood 1	FH1	175	481	210	346	<MDC
20	Hood 2	FH6	175	481	183	79	<MDC
21	Hood 2	FH6	175	481	185	99	<MDC
22	Hood 2	FH6	175	481	160	-148	<MDC
23	Hood 2	FH6	175	481	179	40	<MDC
24	Hood 2	FH6	175	481	175	0	<MDC
25	Sink 1	FG1	175	481	211	356	<MDC
26	Trap 1	FG1	175	481	197	217	<MDC
27	Sink 2	FE3	175	481	196	208	<MDC
28	Trap 2	FE3	175	481	166	-89	<MDC
29	Sink 3	FH6	175	481	200	247	<MDC
30	Trap 3	FH6	175	481	160	-148	<MDC
31	Sink 4	FF6	175	481	161	-138	<MDC
32	Trap 4	FF6	175	481	184	89	<MDC
33	Fridge 1 in	FH5	175	481	159	-158	<MDC
34	Fridge 1 out	FH5	175	481	158	-168	<MDC
35	Fridge 2 in	FG4	175	481	178	30	<MDC
36	Fridge 2 out	FG4	175	481	152	-227	<MDC
37	Fridge 3 in	FF4	175	481	204	287	<MDC
38	Fridge 3 out	FF4	175	481	162	-128	<MDC
39	Equipment	FD1	175	481	200	247	<MDC
40	Drawer	FD1	175	481	206	306	<MDC
41	Drawer	FC6	175	481	189	138	<MDC
42	Benchtop	FD4	175	481	187	119	<MDC
43	Benchtop	FE1	175	481	174	-10	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Fixed-Gamma		Survey Unit:	222		
Instrument ID:	J		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	EB6	7	3,188	4	-788	<MDC
2	Wall	EA2	7	3,188	3	-1,051	<MDC
3	Floor	FC5	7	3,188	8	263	<MDC
4	Floor	FE2	7	3,188	7	0	<MDC
5	Floor	FH5	7	3,188	2	-1,314	<MDC
6	Wall	NA5	7	3,188	7	0	<MDC
7	Wall	NB2	7	3,188	6	-263	<MDC
8	Wall	WB8	7	3,188	5	-526	<MDC
9	Wall	WA9	7	3,188	2	-1,314	<MDC
10	Wall	WB2	7	3,188	2	-1,314	<MDC
11	Ceiling	CF6	7	3,188	5	-526	<MDC
12	Ceiling	CC1	7	3,188	5	-526	<MDC
13	Upper wall	NC3	7	3,188	5	-526	<MDC
14	Upper wall	WC3	7	3,188	5	-526	<MDC
15	Hood 1	FH1	7	3,188	4	-788	<MDC
16	Hood 1	FH1	7	3,188	2	-1,314	<MDC
17	Hood 1	FH1	7	3,188	4	-788	<MDC
18	Hood 1	FH1	7	3,188	3	-1,051	<MDC
19	Hood 1	FH1	7	3,188	2	-1,314	<MDC
20	Hood 2	FH6	7	3,188	3	-1,051	<MDC
21	Hood 2	FH6	7	3,188	2	-1,314	<MDC
22	Hood 2	FH6	7	3,188	4	-788	<MDC
23	Hood 2	FH6	7	3,188	1	-1,577	<MDC
24	Hood 2	FH6	7	3,188	3	-1,051	<MDC
25	Sink 1	FG1	7	3,188	3	-1,051	<MDC
26	Trap 1	FG1	7	3,188	2	-1,314	<MDC
27	Sink 2	FE3	7	3,188	5	-526	<MDC
28	Trap 2	FE3	7	3,188	6	-263	<MDC
29	Sink 3	FH6	7	3,188	3	-1,051	<MDC
30	Trap 3	FH6	7	3,188	5	-526	<MDC
31	Sink 4	FF6	7	3,188	2	-1,314	<MDC
32	Trap 4	FF6	7	3,188	3	-1,051	<MDC
33	Fridge 1 in	FH5	7	3,188	2	-1,314	<MDC
34	Fridge 1 out	FH5	7	3,188	3	-1,051	<MDC
35	Fridge 2 in	FG4	7	3,188	6	-263	<MDC
36	Fridge 2 out	FG4	7	3,188	3	-1,051	<MDC
37	Fridge 3 in	FF4	7	3,188	1	-1,577	<MDC
38	Fridge 3 out	FF4	7	3,188	4	-788	<MDC
39	Equipment	FD1	7	3,188	2	-1,314	<MDC
40	Drawer	FD1	7	3,188	5	-526	<MDC
41	Drawer	FC6	7	3,188	3	-1,051	<MDC
42	Benchtop	FD4	7	3,188	2	-1,314	<MDC
43	Benchtop	FE1	7	3,188	3	-1,051	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: **Scans** Survey Unit: 222

Instrument Information:

Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	250	943	250	410	<MDC	<MDC

Survey Type: **Removable H-3** Survey Unit: 222

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	30	50	12	<MDC
2	Floor	FA2	30	50	16	<MDC
3	Floor	FA3	30	50	26	<MDC
4	Floor	FA4	30	50	11	<MDC
5	Floor	FA5	30	50	12	<MDC
6	Floor	FA6	30	50	7	<MDC
7	Floor	FB1	30	50	13	<MDC
8	Floor	FB2	30	50	7	<MDC
9	Floor	FB3	30	50	13	<MDC
10	Floor	FB4	30	50	6	<MDC
11	Floor	FB5	30	50	19	<MDC
12	Floor	FB6	30	50	25	<MDC
13	Floor	FC1	30	50	2	<MDC
14	Floor	FC2	30	50	15	<MDC
15	Floor	FC3	30	50	19	<MDC
16	Floor	FC4	30	50	14	<MDC
17	Floor	FC5	30	50	15	<MDC
18	Floor	FC6	30	50	14	<MDC
19	Floor	FD1	30	50	11	<MDC
20	Floor	FD2	30	50	15	<MDC
21	Floor	FD3	30	50	11	<MDC
22	Floor	FD4	30	50	26	<MDC
23	Floor	FD5	30	50	8	<MDC
24	Floor	FD6	30	50	41	<MDC
25	Floor	FE1	30	50	8	<MDC
26	Floor	FE2	30	50	5	<MDC
27	Floor	FE3	30	50	20	<MDC
28	Floor	FE4	30	50	24	<MDC
29	Floor	FE5	30	50	22	<MDC
30	Floor	FE6	30	50	28	<MDC
31	Floor	FF1	30	50	13	<MDC
32	Floor	FF2	30	50	17	<MDC
33	Floor	FF3	30	50	9	<MDC
34	Floor	FF4	30	50	20	<MDC
35	Floor	FF5	30	50	32	<MDC
36	Floor	FF6	30	50	31	<MDC
37	Floor	FG1	30	50	14	<MDC
38	Floor	FG2	30	50	10	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 222

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
39	Floor	FG3	30	50	17	<MDC
40	Floor	FG4	30	50	12	<MDC
41	Floor	FG5	30	50	15	<MDC
42	Floor	FG6	30	50	5	<MDC
43	Floor	FH1	30	50	18	<MDC
44	Floor	FH2	30	50	5	<MDC
45	Floor	FH3	30	50	17	<MDC
46	Floor	FH4	30	50	22	<MDC
47	Floor	FH5	30	50	10	<MDC
48	Floor	FH6	30	50	19	<MDC
49	Floor	FI1	30	50	9	<MDC
50	Floor	FI2	30	50	8	<MDC
51	Floor	FI3	30	50	14	<MDC
52	Floor	FI4	30	50	20	<MDC
53	Floor	FI5	30	50	33	<MDC
54	Floor	FI6	30	50	16	<MDC
55	Wall	NA1	30	50	15	<MDC
56	Wall	NA2	30	50	22	<MDC
57	Wall	NA3	30	50	6	<MDC
58	Wall	NA4	30	50	5	<MDC
59	Wall	NA5	30	50	17	<MDC
60	Wall	NA6	30	50	26	<MDC
61	Wall	NB1	30	50	15	<MDC
62	Wall	NB2	30	50	-1	<MDC
63	Wall	NB3	30	50	14	<MDC
64	Wall	NB4	30	50	15	<MDC
65	Wall	NB5	30	50	-3	<MDC
66	Wall	NB6	30	50	6	<MDC
67	Wall	EA1	30	50	10	<MDC
68	Wall	EA2	30	50	4	<MDC
69	Wall	EA3	30	50	18	<MDC
70	Wall	EA4	30	50	6	<MDC
71	Wall	EA5	30	50	7	<MDC
72	Wall	EA6	30	50	15	<MDC
73	Wall	EA7	30	50	17	<MDC
74	Wall	EA8	30	50	20	<MDC
75	Wall	EA9	30	50	9	<MDC
76	Wall	EB1	30	50	12	<MDC
77	Wall	EB2	30	50	13	<MDC
78	Wall	EB3	30	50	40	<MDC
79	Wall	EB4	30	50	15	<MDC
80	Wall	EB5	30	50	25	<MDC
81	Wall	EB6	30	50	18	<MDC
82	Wall	EB7	30	50	12	<MDC
83	Wall	EB8	30	50	10	<MDC
84	Wall	EB9	30	50	13	<MDC
85	Wall	WA1	30	50	13	<MDC
86	Wall	WA2	30	50	4	<MDC
87	Wall	WA3	30	50	206	206
88	Wall	WA4	30	50	20	<MDC
89	Wall	WA5	30	50	22	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 222

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
90	Wall	WA6	30	50	40	<MDC
91	Wall	WA7	30	50	15	<MDC
92	Wall	WA8	30	50	16	<MDC
93	Wall	WA9	30	50	28	<MDC
94	Wall	WB1	30	50	125	125
95	Wall	WB2	30	50	16	<MDC
96	Wall	WB3	30	50	16	<MDC
97	Wall	WB4	30	50	7	<MDC
98	Wall	WB5	30	50	18	<MDC
99	Wall	WB6	30	50	23	<MDC
100	Wall	WB7	30	50	14	<MDC
101	Wall	WB8	30	50	20	<MDC
102	Wall	WB9	30	50	35	<MDC
103	Ceiling	CF6	30	50	22	<MDC
104	Ceiling	CC1	30	50	8	<MDC
105	Upper Wall	NC3	30	50	26	<MDC
106	Upper Wall	WC3	30	50	16	<MDC
107	Hood 1	FH1	30	50	19	<MDC
108	Hood 1	FH1	30	50	20	<MDC
109	Hood 1	FH1	30	50	15	<MDC
110	Hood 1	FH1	30	50	19	<MDC
111	Hood 1	FH1	30	50	11	<MDC
112	Hood 2	FH6	30	50	17	<MDC
113	Hood 2	FH6	30	50	29	<MDC
114	Hood 2	FH6	30	50	28	<MDC
115	Hood 2	FH6	30	50	26	<MDC
116	Hood 2	FH6	30	50	12	<MDC
117	Sink 1	FG1	30	50	12	<MDC
118	Trap 1	FG1	30	50	13	<MDC
119	Sink 2	FE3	30	50	7	<MDC
120	Trap 2	FE3	30	50	11	<MDC
121	Sink 3	FH6	30	50	25	<MDC
122	Trap 3	FH6	30	50	15	<MDC
123	Sink 4	FF6	30	50	22	<MDC
124	Trap 4	FF6	30	50	17	<MDC
125	Fridge 1 in	FH5	30	50	28	<MDC
126	Fridge 1 out	FH5	30	50	33	<MDC
127	Fridge 2 in	FG4	30	50	22	<MDC
128	Fridge 2 out	FG4	30	50	25	<MDC
129	Fridge 3 in	FF4	30	50	43	<MDC
130	Fridge 3 out	FF4	30	50	17	<MDC
131	Equipment	FD1	30	50	24	<MDC
132	Equipment	FD1	30	50	61	61
133	Equipment	FD1	30	50	57	57
134	Equipment	FE1	30	50	27	<MDC
135	Equipment	FE1	30	50	29	<MDC
136	Equipment	FE1	30	50	29	<MDC
137	Equipment	FB6	30	50	15	<MDC
138	Equipment	FB6	30	50	21	<MDC
139	Equipment	FB6	30	50	12	<MDC
140	Equipment	FC6	30	50	55	55

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 222

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
141	Equipment	FC6	30	50	31	<MDC
142	Equipment	FC6	30	50	36	<MDC
143	Drawers	FD1	30	50	23	<MDC
144	Drawers	FC6	30	50	34	<MDC
145	Workbench	FD4	30	50	24	<MDC
146	Workbench	FE1	30	50	5	<MDC

Survey Type: Removable C-14 Survey Unit: 222

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	11	16	16	16
2	Floor	FA2	11	16	14	<MDC
3	Floor	FA3	11	16	19	19
4	Floor	FA4	11	16	17	17
5	Floor	FA5	11	16	10	<MDC
6	Floor	FA6	11	16	14	<MDC
7	Floor	FB1	11	16	23	23
8	Floor	FB2	11	16	17	17
9	Floor	FB3	11	16	12	<MDC
10	Floor	FB4	11	16	10	<MDC
11	Floor	FB5	11	16	16	16
12	Floor	FB6	11	16	12	<MDC
13	Floor	FC1	11	16	17	17
14	Floor	FC2	11	16	10	<MDC
15	Floor	FC3	11	16	12	<MDC
16	Floor	FC4	11	16	16	16
17	Floor	FC5	11	16	13	<MDC
18	Floor	FC6	11	16	10	<MDC
19	Floor	FD1	11	16	14	<MDC
20	Floor	FD2	11	16	10	<MDC
21	Floor	FD3	11	16	17	17
22	Floor	FD4	11	16	9	<MDC
23	Floor	FD5	11	16	9	<MDC
24	Floor	FD6	11	16	10	<MDC
25	Floor	FE1	11	16	21	21
26	Floor	FE2	11	16	12	<MDC
27	Floor	FE3	11	16	14	<MDC
28	Floor	FE4	11	16	13	<MDC
29	Floor	FE5	11	16	12	<MDC
30	Floor	FE6	11	16	19	19
31	Floor	FF1	11	16	16	16
32	Floor	FF2	11	16	17	17
33	Floor	FF3	11	16	6	<MDC
34	Floor	FF4	11	16	4	<MDC
35	Floor	FF5	11	16	17	17
36	Floor	FF6	11	16	12	<MDC
37	Floor	FG1	11	16	14	<MDC

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Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 222

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
38	Floor	FG2	11	16	20	20
39	Floor	FG3	11	16	12	<MDC
40	Floor	FG4	11	16	14	<MDC
41	Floor	FG5	11	16	12	<MDC
42	Floor	FG6	11	16	18	18
43	Floor	FH1	11	16	14	<MDC
44	Floor	FH2	11	16	17	17
45	Floor	FH3	11	16	6	<MDC
46	Floor	FH4	11	16	10	<MDC
47	Floor	FH5	11	16	14	<MDC
48	Floor	FH6	11	16	10	<MDC
49	Floor	FI1	11	16	17	17
50	Floor	FI2	11	16	16	16
51	Floor	FI3	11	16	19	19
52	Floor	FI4	11	16	19	19
53	Floor	FI5	11	16	10	<MDC
54	Floor	FI6	11	16	10	<MDC
55	Wall	NA1	11	16	13	<MDC
56	Wall	NA2	11	16	12	<MDC
57	Wall	NA3	11	16	16	16
58	Wall	NA4	11	16	12	<MDC
59	Wall	NA5	11	16	12	<MDC
60	Wall	NA6	11	16	9	<MDC
61	Wall	NB1	11	16	12	<MDC
62	Wall	NB2	11	16	20	20
63	Wall	NB3	11	16	18	18
64	Wall	NB4	11	16	12	<MDC
65	Wall	NB5	11	16	13	<MDC
66	Wall	NB6	11	16	9	<MDC
67	Wall	EA1	11	16	10	<MDC
68	Wall	EA2	11	16	19	19
69	Wall	EA3	11	16	8	<MDC
70	Wall	EA4	11	16	20	20
71	Wall	EA5	11	16	17	17
72	Wall	EA6	11	16	18	18
73	Wall	EA7	11	16	12	<MDC
74	Wall	EA8	11	16	25	25
75	Wall	EA9	11	16	13	<MDC
76	Wall	EB1	11	16	13	<MDC
77	Wall	EB2	11	16	17	17
78	Wall	EB3	11	16	10	<MDC
79	Wall	EB4	11	16	15	<MDC
80	Wall	EB5	11	16	10	<MDC
81	Wall	EB6	11	16	12	<MDC
82	Wall	EB7	11	16	13	<MDC
83	Wall	EB8	11	16	10	<MDC
84	Wall	EB9	11	16	8	<MDC
85	Wall	WA1	11	16	16	16
86	Wall	WA2	11	16	14	<MDC
87	Wall	WA3	11	16	26	26
88	Wall	WA4	11	16	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 222

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
89	Wall	WA5	11	16	23	23
90	Wall	WA6	11	16	23	23
91	Wall	WA7	11	16	17	17
92	Wall	WA8	11	16	10	<MDC
93	Wall	WA9	11	16	13	<MDC
94	Wall	WB1	11	16	21	21
95	Wall	WB2	11	16	21	21
96	Wall	WB3	11	16	14	<MDC
97	Wall	WB4	11	16	6	<MDC
98	Wall	WB5	11	16	16	16
99	Wall	WB6	11	16	10	<MDC
100	Wall	WB7	11	16	26	26
101	Wall	WB8	11	16	9	<MDC
102	Wall	WB9	11	16	10	<MDC
103	Ceiling	CF6	11	16	23	23
104	Ceiling	CC1	11	16	14	<MDC
105	Upper Wall	NC3	11	16	15	<MDC
106	Upper Wall	WC3	11	16	16	16
107	Hood 1	FH1	11	16	10	<MDC
108	Hood 1	FH1	11	16	9	<MDC
109	Hood 1	FH1	11	16	5	<MDC
110	Hood 1	FH1	11	16	9	<MDC
111	Hood 1	FH1	11	16	18	18
112	Hood 2	FH6	11	16	12	<MDC
113	Hood 2	FH6	11	16	23	23
114	Hood 2	FH6	11	16	17	17
115	Hood 2	FH6	11	16	18	18
116	Hood 2	FH6	11	16	14	<MDC
117	Sink 1	FG1	11	16	16	16
118	Trap 1	FG1	11	16	18	18
119	Sink 2	FE3	11	16	17	17
120	Trap 2	FE3	11	16	16	16
121	Sink 3	FH6	11	16	17	17
122	Trap 3	FH6	11	16	15	<MDC
123	Sink 4	FF6	11	16	13	<MDC
124	Trap 4	FF6	11	16	15	<MDC
125	Fridge 1 in	FH5	11	16	23	23
126	Fridge 1 out	FH5	11	16	13	<MDC
127	Fridge 2 in	FG4	11	16	14	<MDC
128	Fridge 2 out	FG4	11	16	15	<MDC
129	Fridge 3 in	FF4	11	16	14	<MDC
130	Fridge 3 out	FF4	11	16	19	19
131	Equipment	FD1	11	16	12	<MDC
132	Equipment	FD1	11	16	225	225
133	Equipment	FD1	11	16	36	36
134	Equipment	FE1	11	16	11	<MDC
135	Equipment	FE1	11	16	22	22
136	Equipment	FE1	11	16	14	<MDC
137	Equipment	FB6	11	16	26	26
138	Equipment	FB6	11	16	17	17
139	Equipment	FB6	11	16	23	23

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 222

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
140	Equipment	FC6	11	16	46	46
141	Equipment	FC6	11	16	17	17
142	Equipment	FC6	11	16	19	19
143	Drawers	FD1	11	16	17	17
144	Drawers	FC6	11	16	18	18
145	Workbench	FD4	11	16	13	<MDC
146	Workbench	FE1	11	16	20	20

Survey Type: Gamma Dose Rates Survey Unit: 222

Instrument ID: C Survey Date: 03/18/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	EB6	5
2	Wall	EA2	5
3	Floor	FC5	6
4	Floor	FE2	5
5	Floor	FH5	6
6	Wall	NA5	6
7	Wall	NB2	5
8	Wall	WB8	5
9	Wall	WA9	5
10	Wall	WB2	5
11	Ceiling	CF6	6
12	Ceiling	CC1	6
13	Upper wall	NC3	5
14	Upper wall	WC3	6
15	Hood 1	FH1	5
16	Hood 1	FH1	5
17	Hood 1	FH1	5
18	Hood 1	FH1	5
19	Hood 1	FH1	5
20	Hood 2	FH6	5
21	Hood 2	FH6	5
22	Hood 2	FH6	5
23	Hood 2	FH6	5
24	Hood 2	FH6	5
25	Sink 1	FG1	5
26	Trap 1	FG1	5
27	Sink 2	FE3	5
28	Trap 2	FE3	5
29	Sink 3	FH6	5
30	Trap 3	FH6	5
31	Sink 4	FF6	6
32	Trap 4	FF6	6
33	Fridge 1 in	FH5	5
34	Fridge 1 out	FH5	5
35	Fridge 2 in	FG4	5
36	Fridge 2 out	FG4	5
37	Fridge 3 in	FF4	5

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 222

#	Location	Survey Point	Dose Rate (urem/hr)
38	Fridge 3 out	FF4	5
39	Equipment	FD1	5
40	Drawer	FD1	6
41	Drawer	FC6	6
42	Benchtop	FD4	6
43	Benchtop	FE1	6

Building 24, Room 222C

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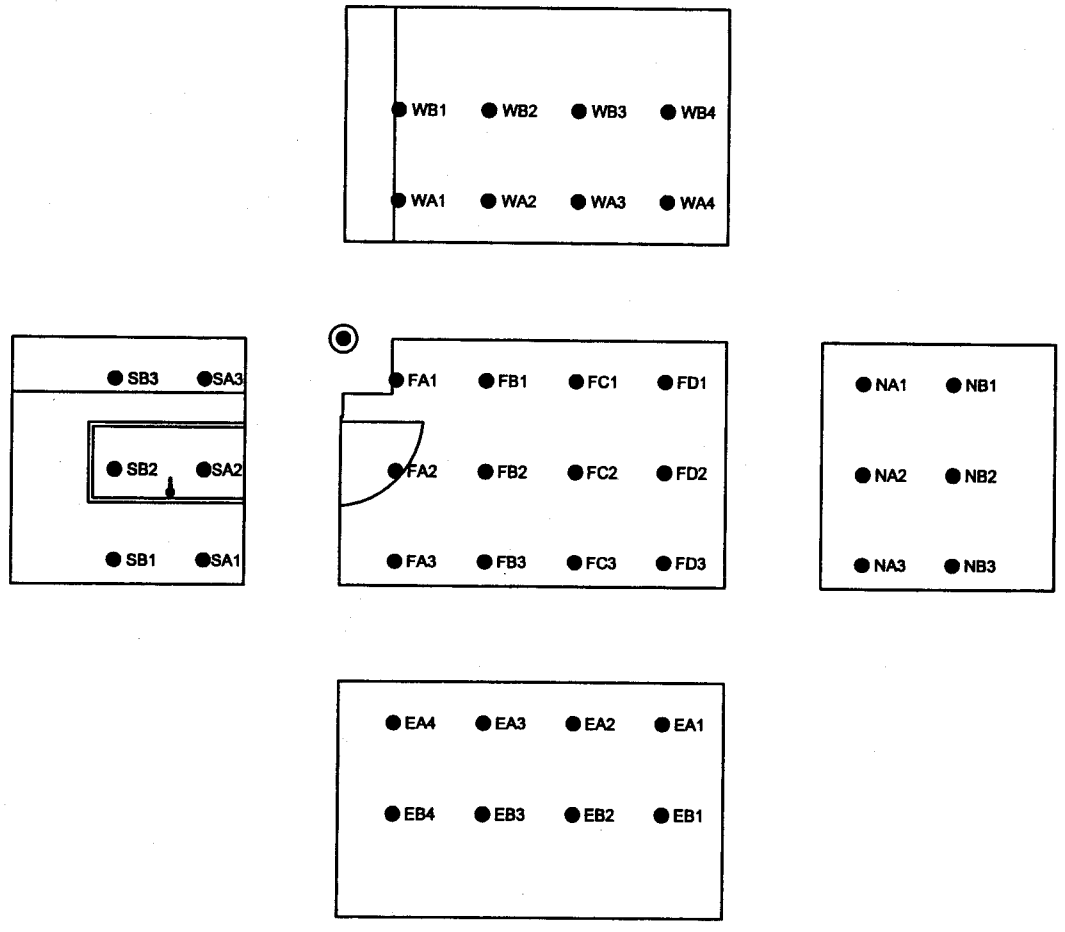
BUILDING B-24 ROOM 222C



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	222 C		
Instrument ID:	E		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Glass	WA2	170	474	143	-267	<MDC
2	Metal	WA4	170	474	142	-277	<MDC
3	Wall	NB3	170	474	215	445	<MDC
4	Wall	EA1	170	474	153	-168	<MDC
5	Metal	NA3	170	474	134	-356	<MDC
6	Wall	EA1	170	474	174	40	<MDC
7	Wall	EA2	170	474	141	-287	<MDC
8	Floor	FB1	170	474	159	-109	<MDC
9	Floor	FD2	170	474	183	128	<MDC
10	Floor	FA3	170	474	187	168	<MDC
11	Ceiling	CB3	170	474	163	-69	<MDC
12	Upper wall	NC2	170	474	156	-138	<MDC
13	Sink	FC3	170	474	147	-227	<MDC
14	Drawer	EA2	170	474	150	-198	<MDC
15	Bench	EB3	170	474	148	-217	<MDC
16	Fridge in	FD1	170	474	156	-138	<MDC
17	Fridge out	FD1	170	474	119	-504	<MDC
18	Pb shield 1	FD3	170	474	159	-109	<MDC
19	Pb shield 2	FD3	170	474	138	-316	<MDC
20	Pb shield 3	FD3	170	474	149	-208	<MDC
21	Buckets	FD3	170	474	164	-59	<MDC
22	Pb shield 4	FD3	170	474	172	20	<MDC
23	Mantel 1	FD3	170	474	156	-138	<MDC
24	Mantel 2	FD3	170	474	164	-59	<MDC
25	Pb box	FD3	170	474	155	-148	<MDC
26	Shield	FD3	170	474	151	-188	<MDC

Survey Type:	Fixed-Gamma		Survey Unit:	222 C		
Instrument ID:	J		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Glass	WA2	7	3,188	5	-526	<MDC
2	Metal	WA4	7	3,188	4	-788	<MDC
3	Wall	NB3	7	3,188	7	0	<MDC
4	Wall	EA1	7	3,188	2	-1,314	<MDC
5	Metal	NA3	7	3,188	4	-788	<MDC
6	Wall	EA1	7	3,188	4	-788	<MDC
7	Floor	EA2	7	3,188	5	-526	<MDC
8	Floor	FB1	7	3,188	5	-526	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Fixed-Gamma Survey Unit: 222 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
9	Ceiling	FD2	7	3,188	1	-1,577	<MDC
10	Upper wall	FA3	7	3,188	7	0	<MDC
11	Sink	CB3	7	3,188	5	-526	<MDC
12	Drawer	NC2	7	3,188	4	-788	<MDC
13	Bench	FC3	7	3,188	4	-788	<MDC
14	Fridge in	EA2	7	3,188	7	0	<MDC
15	Fridge out	EB3	7	3,188	3	-1,051	<MDC
16	Pb box	FD1	7	3,188	3	-1,051	<MDC
17	Shield	FD1	7	3,188	3	-1,051	<MDC
18	Wall	FD3	7	3,188	9	526	<MDC
19	Floor	FD3	7	3,188	8	263	<MDC
20	Buckets	FD3	7	3,188	5	-526	<MDC
21	Mantel 1	FD3	7	3,188	5	-526	<MDC
22	Mantel 2	FD3	7	3,188	3	-1,051	<MDC

Survey Type: Scans Survey Unit: 222 C

Instrument Information:

Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	250	943	250	310	<MDC	<MDC

Survey Type: Removable H-3 Survey Unit: 222 C

Instrument ID:	Beckman LS6500		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	30	50	21	<MDC
2	Floor	FA2	30	50	17	<MDC
3	Floor	FA3	30	50	30	<MDC
4	Floor	FB1	30	50	27	<MDC
5	Floor	FB2	30	50	29	<MDC
6	Floor	FB3	30	50	15	<MDC
7	Floor	FC1	30	50	22	<MDC
8	Floor	FC2	30	50	21	<MDC
9	Floor	FC3	30	50	24	<MDC
10	Floor	FD1	30	50	20	<MDC
11	Floor	FD2	30	50	27	<MDC
12	Floor	FD3	30	50	37	<MDC
13	Wall	NA1	30	50	37	<MDC
14	Wall	NA2	30	50	20	<MDC
15	Wall	NA3	30	50	22	<MDC
16	Wall	NB1	30	50	5	<MDC
17	Wall	NB2	30	50	23	<MDC
18	Wall	NB3	30	50	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 222-C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
19	Wall	EA1	30	50	68	68
20	Wall	EA2	30	50	21	<MDC
21	Wall	EA3	30	50	19	<MDC
22	Wall	EA4	30	50	14	<MDC
23	Wall	EB1	30	50	23	<MDC
24	Wall	EB2	30	50	27	<MDC
25	Wall	EB3	30	50	27	<MDC
26	Wall	EB4	30	50	18	<MDC
27	Wall	SA1	30	50	21	<MDC
28	Wall	SA2	30	50	8	<MDC
29	Wall	SA3	30	50	24	<MDC
30	Wall	SA4	30	50	15	<MDC
31	Wall	SB1	30	50	28	<MDC
32	Wall	SB2	30	50	28	<MDC
33	Wall	SB3	30	50	34	<MDC
34	Wall	SB4	30	50	22	<MDC
35	Wall	WA1	30	50	29	<MDC
36	Wall	WA2	30	50	27	<MDC
37	Wall	WA3	30	50	31	<MDC
38	Wall	WA4	30	50	23	<MDC
39	Wall	WB1	30	50	22	<MDC
40	Wall	WB2	30	50	18	<MDC
41	Wall	WB3	30	50	33	<MDC
42	Wall	WB4	30	50	28	<MDC
43	Ceiling	CB3	30	50	25	<MDC
44	Upper wall	NC2	30	50	15	<MDC
45	Sink	FC3	30	50	156	156
46	Trap	FC3	30	50	56	56
47	Drawer	EA2	30	50	27	<MDC
48	Workbench	FB3	30	50	54	54
49	Fridge in	FD1	30	50	41	<MDC
50	Fridge out	FD1	30	50	34	<MDC
51	Pb shield 1	FD3	30	50	21	<MDC
52	Pb shield 2	FD3	30	50	34	<MDC
53	Pb shield 3	FD3	30	50	19	<MDC
54	Buckets	FD3	30	50	29	<MDC
55	Pb shield 4	FD3	30	50	17	<MDC
56	Mantel 1	FD3	30	50	12	<MDC
57	Mantel 2	FD3	30	50	36	<MDC
58	Pb. Shield	FD3	30	50	30	<MDC
59	Shield with bottle	FD3	30	50	-1	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable C-14		Survey Unit:	222 C14	
Instrument ID:	Beckman LS6500		Survey Date:	03/21/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	11	16	20	20
2	Floor	FA2	11	16	22	22
3	Floor	FA3	11	16	13	<MDC
4	Floor	FB1	11	16	20	20
5	Floor	FB2	11	16	23	23
6	Floor	FB3	11	16	20	20
7	Floor	FC1	11	16	14	<MDC
8	Floor	FC2	11	16	13	<MDC
9	Floor	FC3	11	16	16	16
10	Floor	FD1	11	16	14	<MDC
11	Floor	FD2	11	16	17	17
12	Floor	FD3	11	16	24	24
13	Wall	NA1	11	16	14	<MDC
14	Wall	NA2	11	16	17	17
15	Wall	NA3	11	16	14	<MDC
16	Wall	NB1	11	16	13	<MDC
17	Wall	NB2	11	16	22	22
18	Wall	NB3	11	16	17	17
19	Wall	EA1	11	16	22	22
20	Wall	EA2	11	16	18	18
21	Wall	EA3	11	16	27	27
22	Wall	EA4	11	16	26	26
23	Wall	EB1	11	16	21	21
24	Wall	EB2	11	16	29	29
25	Wall	EB3	11	16	13	<MDC
26	Wall	EB4	11	16	17	17
27	Wall	SA1	11	16	18	18
28	Wall	SA2	11	16	14	<MDC
29	Wall	SA3	11	16	21	21
30	Wall	SA4	11	16	17	17
31	Wall	SB1	11	16	21	21
32	Wall	SB2	11	16	16	16
33	Wall	SB3	11	16	18	18
34	Wall	SB4	11	16	18	18
35	Wall	WA1	11	16	18	18
36	Wall	WA2	11	16	15	<MDC
37	Wall	WA3	11	16	19	19
38	Wall	WA4	11	16	25	25
39	Wall	WB1	11	16	21	21
40	Wall	WB2	11	16	21	21
41	Wall	WB3	11	16	18	18
42	Wall	WB4	11	16	7	<MDC
43	Ceiling	CB3	11	16	18	18
44	Upper wall	NC2	11	16	23	23
45	Sink	FC3	11	16	382	382
46	Trap	FC3	11	16	50	50
47	Drawer	EA2	11	16	17	17
48	Workbench	FB3	11	16	26	26

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 222 C

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Fridge in	FD1	11	16	31	31
50	Fridge out	FD1	11	16	17	17
51	Pb shield 1	FD3	11	16	23	23
52	Pb shield 2	FD3	11	16	19	19
53	Pb shield 3	FD3	11	16	8	<MDC
54	Buckets	FD3	11	16	15	<MDC
55	Pb shield 4	FD3	11	16	30	30
56	Mantel 1	FD3	11	16	17	17
57	Mantel 2	FD3	11	16	23	23
58	Pb. Shield	FD3	11	16	17	17
59	Shield with bottle	FD3	11	16	34	34

Survey Type: Gamma Dose Rates Survey Unit: 222 C

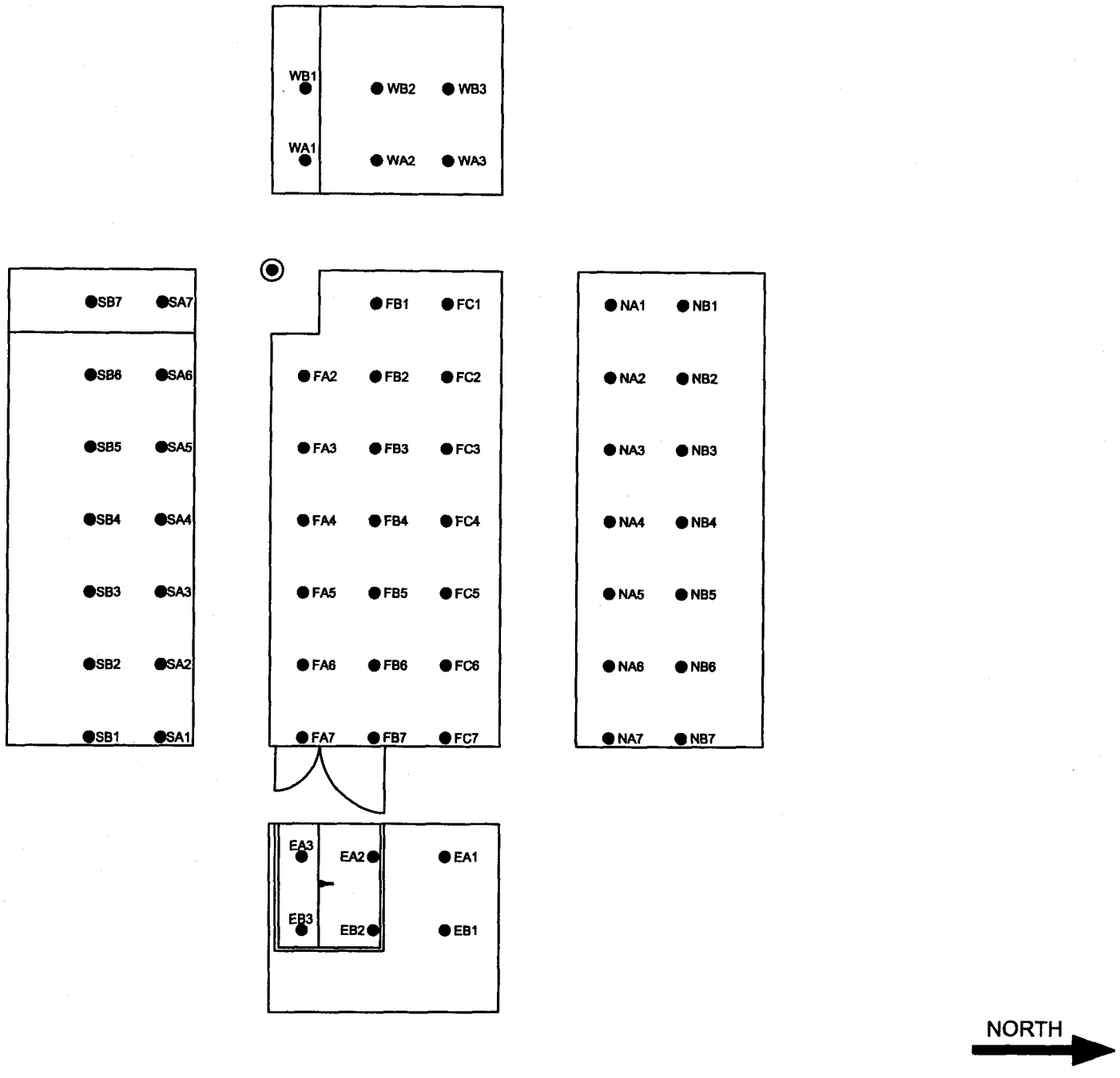
Instrument ID: C Survey Date: 03/17/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Glass	WA2	4
2	Metal	WA4	5
3	Wall	NB3	5
4	Wall	EA1	5
5	Metal	NA3	5
6	Wall	EA1	5
7	Wall	EA2	5
8	Floor	FB1	5
9	Floor	FD2	5
10	Floor	FA3	5
11	Ceiling	CB3	5
12	Upper wall	NC2	5
13	Sink	FC3	5
14	Drawer	EA2	5
15	Bench	EB3	5
16	Fridge in	FD1	5
17	Fridge out	FD1	5
18	Pb shield 1	FD3	5
19	Pb shield 2	FD3	5
20	Pb shield 3	FD3	5
21	Buckets	FD3	5
22	Pb shield 4	FD3	5
23	Mantel 1	FD3	5
24	Mantel 2	FD3	5
25	Pb box	FD3	5
26	Shield	FD3	5

Building 24, Room 234

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-24 ROOM 234



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Survey Data

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type:	Fixed-Beta		Survey Unit:	234		
Instrument ID:	E		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WB1	150	447	177	267	<MDC
2	Wall	WA3	150	447	163	128	<MDC
3	Metal	NA2	150	447	115	-346	<MDC
4	Wall	NB4	150	447	133	-168	<MDC
5	Glass	EB2	150	447	196	455	455
6	Glass	SB6	150	447	171	208	<MDC
7	Wall	SB4	150	447	189	385	<MDC
8	Metal	SA3	150	447	171	208	<MDC
9	Floor	FC3	150	447	167	168	<MDC
10	Floor	FA5	150	447	134	-158	<MDC
11	Ceiling	CC4	150	447	198	474	474
12	Upper wall	WC3	150	447	179	287	<MDC
13	Hood 1	FA2	150	447	158	79	<MDC
14	Hood 1	FA2	150	447	177	267	<MDC
15	Hood 1	FA2	150	447	140	-99	<MDC
16	Hood 1	FA2	150	447	157	69	<MDC
17	Hood 1	FA2	150	447	167	168	<MDC
18	Hood 2	FC2	150	447	149	-10	<MDC
19	Hood 2	FC2	150	447	141	-89	<MDC
20	Hood 2	FC2	150	447	152	20	<MDC
21	Hood 2	FC2	150	447	138	-119	<MDC
22	Hood 2	FC2	150	447	151	10	<MDC
23	Hood 3	FC5	150	447	129	-208	<MDC
24	Hood 3	FC5	150	447	147	-30	<MDC
25	Hood 3	FC5	150	447	154	40	<MDC
26	Hood 3	FC5	150	447	155	49	<MDC
27	Hood 3	FC5	150	447	142	-79	<MDC
28	Fridge in	FA5	150	447	126	-237	<MDC
29	Fridge out	FA5	150	447	130	-198	<MDC
30	Drawers	FC4	150	447	108	-415	<MDC
31	Workbench	FC4	150	447	127	-227	<MDC
32	Sink	FA3	150	447	140	-99	<MDC
33	Trap	FA3	150	447	130	-198	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Fixed-Gamma		Survey Unit:	234		
Instrument ID:	J		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Investigation Level:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WB1	7	3,188	3	-1,051	<MDC
2	Wall	WA3	7	3,188	7	0	<MDC
3	Metal	NA2	7	3,188	2	-1,314	<MDC
4	Wall	NB4	7	3,188	3	-1,051	<MDC
5	Glass	EB2	7	3,188	4	-788	<MDC
6	Glass	SB6	7	3,188	6	-263	<MDC
7	Wall	SB4	7	3,188	3	-1,051	<MDC
8	Metal	SA3	7	3,188	6	-263	<MDC
9	Floor	FC3	7	3,188	4	-788	<MDC
10	Floor	FA5	7	3,188	3	-1,051	<MDC
11	Ceiling	CC4	7	3,188	3	-1,051	<MDC
12	Upper wall	WC3	7	3,188	7	0	<MDC
13	Hood 1	FA2	7	3,188	6	-263	<MDC
14	Hood 1	FA2	7	3,188	6	-263	<MDC
15	Hood 1	FA2	7	3,188	4	-788	<MDC
16	Hood 1	FA2	7	3,188	4	-788	<MDC
17	Hood 1	FA2	7	3,188	6	-263	<MDC
18	Hood 2	FC2	7	3,188	1	-1,577	<MDC
19	Hood 2	FC2	7	3,188	3	-1,051	<MDC
20	Hood 2	FC2	7	3,188	4	-788	<MDC
21	Hood 2	FC2	7	3,188	1	-1,577	<MDC
22	Hood 2	FC2	7	3,188	3	-1,051	<MDC
23	Hood 3	FC5	7	3,188	2	-1,314	<MDC
24	Hood 3	FC5	7	3,188	2	-1,314	<MDC
25	Hood 3	FC5	7	3,188	0	-1,840	<MDC
26	Hood 3	FC5	7	3,188	4	-788	<MDC
27	Hood 3	FC5	7	3,188	2	-1,314	<MDC
28	Fridge in	FA5	7	3,188	6	-263	<MDC
29	Fridge out	FA5	7	3,188	3	-1,051	<MDC
30	Drawers	FC4	7	3,188	4	-788	<MDC
31	Workbench	FC4	7	3,188	4	-788	<MDC
32	Sink	FA3	7	3,188	3	-1,051	<MDC
33	Trap	FA3	7	3,188	5	-526	<MDC

Survey Type:	Scans		Survey Unit:	234		
Instrument Information:						
Instrument ID:	D		Survey Date:	03/17/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	300	1,033	320	350	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type:	Removable H-3		Survey Unit:	234	
Instrument ID:	Beckman LS6500		Survey Date:	03/22/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	16	38	40	40
2	Floor	FA2	16	38	56	56
3	Floor	FA3	16	38	61	61
4	Floor	FA4	16	38	60	60
5	Floor	FA5	16	38	48	48
6	Floor	FA6	16	38	52	52
7	Floor	FB1	16	38	46	46
8	Floor	FB2	16	38	33	<MDC
9	Floor	FB3	16	38	19	<MDC
10	Floor	FB4	16	38	44	44
11	Floor	FB5	16	38	30	<MDC
12	Floor	FB6	16	38	19	<MDC
13	Floor	FC1	16	38	29	<MDC
14	Floor	FC2	16	38	33	<MDC
15	Floor	FC3	16	38	36	<MDC
16	Floor	FC4	16	38	28	<MDC
17	Floor	FC5	16	38	34	<MDC
18	Floor	FC6	16	38	33	<MDC
19	Wall	NA1	16	38	14	<MDC
20	Wall	NA2	16	38	13	<MDC
21	Wall	NA3	16	38	21	<MDC
22	Wall	NA4	16	38	38	<MDC
23	Wall	NA5	16	38	35	<MDC
24	Wall	NA6	16	38	34	<MDC
25	Wall	NB1	16	38	18	<MDC
26	Wall	NB2	16	38	39	39
27	Wall	NB3	16	38	50	50
28	Wall	NB4	16	38	36	<MDC
29	Wall	NB5	16	38	33	<MDC
30	Wall	NB6	16	38	30	<MDC
31	Wall	EA1	16	38	35	<MDC
32	Wall	EA2	16	38	30	<MDC
33	Wall	EA3	16	38	28	<MDC
34	Wall	EB1	16	38	28	<MDC
35	Wall	EB2	16	38	37	<MDC
36	Wall	EB3	16	38	22	<MDC
37	Wall	SA1	16	38	38	<MDC
38	Wall	SA2	16	38	31	<MDC
39	Wall	SA3	16	38	37	<MDC
40	Wall	SA4	16	38	18	<MDC
41	Wall	SA5	16	38	43	43
42	Wall	SA6	16	38	33	<MDC
43	Wall	SB1	16	38	19	<MDC
44	Wall	SB2	16	38	20	<MDC
45	Wall	SB3	16	38	29	<MDC
46	Wall	SB4	16	38	21	<MDC
47	Wall	SB5	16	38	31	<MDC
48	Wall	SB6	16	38	32	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 234

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
49	Wall	WA1	16	38	27	<MDC
50	Wall	WA2	16	38	16	<MDC
51	Wall	WA3	16	38	25	<MDC
52	Wall	WB1	16	38	28	<MDC
53	Wall	WB2	16	38	14	<MDC
54	Wall	WB3	16	38	27	<MDC
55	Ceiling	CC4	16	38	12	<MDC
56	Upper wall	WC3	16	38	8	<MDC
57	Hood 1	FA2	16	38	14	<MDC
58	Hood 1	FA2	16	38	21	<MDC
59	Hood 1	FA2	16	38	18	<MDC
60	Hood 1	FA2	16	38	28	<MDC
61	Hood 1	FA2	16	38	2	<MDC
62	Hood 2	FC2	16	38	12	<MDC
63	Hood 2	FC2	16	38	25	<MDC
64	Hood 2	FC2	16	38	11	<MDC
65	Hood 2	FC2	16	38	12	<MDC
66	Hood 2	FC2	16	38	18	<MDC
67	Hood 3	FC5	16	38	11	<MDC
68	Hood 3	FC5	16	38	21	<MDC
69	Hood 3	FC5	16	38	16	<MDC
70	Hood 3	FC5	16	38	20	<MDC
71	Hood 3	FC5	16	38	8	<MDC
72	Fridge in	FA5	16	38	21	<MDC
73	Fridge out	FA5	16	38	5	<MDC
74	Drawers	FC4	16	38	1	<MDC
75	Workbench	FC4	16	38	21	<MDC
76	Sink	FA3	16	38	31	<MDC
77	Trap	FA3	16	38	35	<MDC
78	Vacuum line Hood 1	FA2	16	38	26	<MDC
79	Vacuum line Hood 2	FC2	16	38	9	<MDC
80	Vacuum line Hood 3	FC5	16	38	21	<MDC

Survey Type: Removable C-14 Survey Unit: 234

Instrument ID:	Beckman LS6500		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	14	17	14	<MDC
2	Floor	FA2	14	17	28	28
3	Floor	FA3	14	17	25	25
4	Floor	FA4	14	17	18	18
5	Floor	FA5	14	17	17	<MDC
6	Floor	FA6	14	17	19	19
7	Floor	FB1	14	17	15	<MDC
8	Floor	FB2	14	17	14	<MDC
9	Floor	FB3	14	17	18	18
10	Floor	FB4	14	17	21	21
11	Floor	FB5	14	17	8	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 234

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
12	Floor	FB6	14	17	23	23
13	Floor	FC1	14	17	18	18
14	Floor	FC2	14	17	22	22
15	Floor	FC3	14	17	10	<MDC
16	Floor	FC4	14	17	8	<MDC
17	Floor	FC5	14	17	15	<MDC
18	Floor	FC6	14	17	13	<MDC
19	Wall	NA1	14	17	10	<MDC
20	Wall	NA2	14	17	13	<MDC
21	Wall	NA3	14	17	20	20
22	Wall	NA4	14	17	9	<MDC
23	Wall	NA5	14	17	19	19
24	Wall	NA6	14	17	20	20
25	Wall	NB1	14	17	19	19
26	Wall	NB2	14	17	17	<MDC
27	Wall	NB3	14	17	6	<MDC
28	Wall	NB4	14	17	17	<MDC
29	Wall	NB5	14	17	22	22
30	Wall	NB6	14	17	14	<MDC
31	Wall	EA1	14	17	19	19
32	Wall	EA2	14	17	14	<MDC
33	Wall	EA3	14	17	21	21
34	Wall	EB1	14	17	16	<MDC
35	Wall	EB2	14	17	25	25
36	Wall	EB3	14	17	17	<MDC
37	Wall	SA1	14	17	14	<MDC
38	Wall	SA2	14	17	13	<MDC
39	Wall	SA3	14	17	21	21
40	Wall	SA4	14	17	22	22
41	Wall	SA5	14	17	15	<MDC
42	Wall	SA6	14	17	18	18
43	Wall	SB1	14	17	20	20
44	Wall	SB2	14	17	21	21
45	Wall	SB3	14	17	12	<MDC
46	Wall	SB4	14	17	17	<MDC
47	Wall	SB5	14	17	8	<MDC
48	Wall	SB6	14	17	21	21
49	Wall	WA1	14	17	15	<MDC
50	Wall	WA2	14	17	9	<MDC
51	Wall	WA3	14	17	23	23
52	Wall	WB1	14	17	18	18
53	Wall	WB2	14	17	16	<MDC
54	Wall	WB3	14	17	13	<MDC
55	Ceiling	CC4	14	17	17	<MDC
56	Upper wall	WC3	14	17	7	<MDC
57	Hood 1	FA2	14	17	22	22
58	Hood 1	FA2	14	17	14	<MDC
59	Hood 1	FA2	14	17	17	<MDC
60	Hood 1	FA2	14	17	14	<MDC
61	Hood 1	FA2	14	17	12	<MDC
62	Hood 2	FC2	14	17	26	26

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 24 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 234

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
63	Hood 2	FC2	14	17	18	18
64	Hood 2	FC2	14	17	20	20
65	Hood 2	FC2	14	17	22	22
66	Hood 2	FC2	14	17	12	<MDC
67	Hood 3	FC5	14	17	13	<MDC
68	Hood 3	FC5	14	17	14	<MDC
69	Hood 3	FC5	14	17	12	<MDC
70	Hood 3	FC5	14	17	17	<MDC
71	Hood 3	FC5	14	17	12	<MDC
72	Fridge in	FA5	14	17	16	<MDC
73	Fridge out	FA5	14	17	20	20
74	Drawers	FC4	14	17	25	25
75	Workbench	FC4	14	17	13	<MDC
76	Sink	FA3	14	17	16	<MDC
77	Trap	FA3	14	17	10	<MDC
78	Vacuum line Hood 1	FA2	14	17	12	<MDC
79	Vacuum line Hood 2	FC2	14	17	13	<MDC
80	Vacuum line Hood 3	FC5	14	17	31	31

Survey Type: Gamma Dose Rates Survey Unit: 234

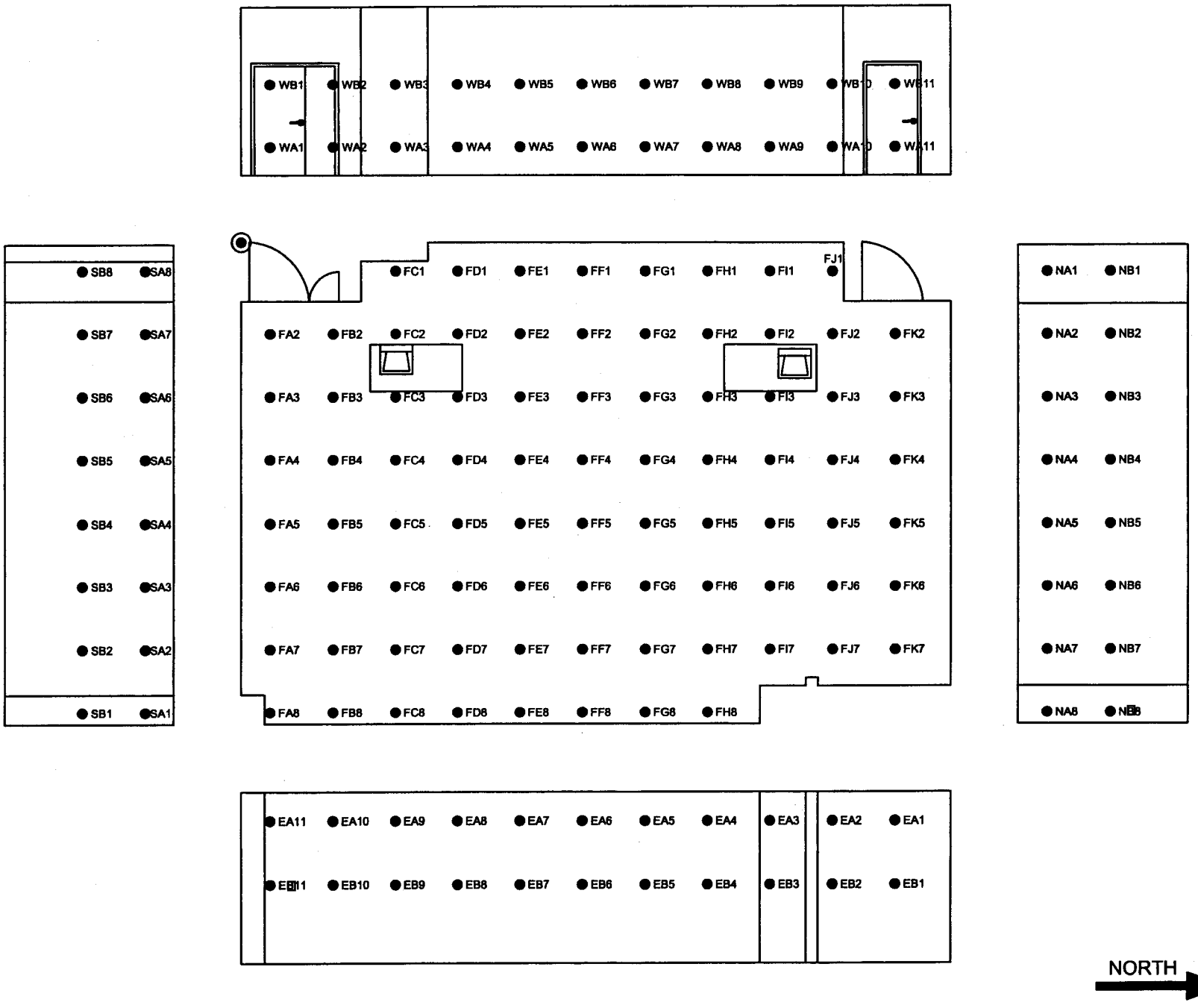
Instrument ID: C Survey Date: 03/17/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WB1	6
2	Wall	WA3	7
3	Metal	NA2	6
4	Wall	NB4	6
5	Glass	EB2	8
6	Glass	SB6	7
7	Wall	SB4	8
8	Metal	SA3	6
9	Floor	FC3	7
10	Floor	FA5	7
11	Ceiling	CC4	6
12	Upper wall	WC3	6
13	Hood 1	FA2	6
14	Hood 1	FA2	6
15	Hood 1	FA2	6
16	Hood 1	FA2	6
17	Hood 1	FA2	6
18	Hood 2	FC2	7
19	Hood 2	FC2	6
20	Hood 2	FC2	7
21	Hood 2	FC2	7
22	Hood 2	FC2	6
23	Hood 3	FC5	7
24	Hood 3	FC5	6
25	Hood 3	FC5	7
26	Hood 3	FC5	6
27	Hood 3	FC5	6
28	Fridge in	FA5	6
29	Fridge out	FA5	6
30	Drawers	FC4	6
31	Workbench	FC4	7
32	Sink	FA3	6
33	Trap	FA3	7

Building 31, Room RA205

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 SECOND FLOOR ROOM
RA-205



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 205

Instrument Information:

Instrument ID:	G		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	NA3	65	295	70	48	<MDC
2	Wall	EB1	65	295	71	57	<MDC
3	Glass	EB6	65	295	84	182	<MDC
4	Wall	SB7	65	295	70	48	<MDC
5	Metal	WA7	65	295	87	210	<MDC
6	Benchtop	FI4	65	295	82	163	<MDC
7	Benchtop	FH1	65	295	75	96	<MDC
8	Floor	FF4	65	295	77	115	<MDC
9	Floor	FB7	65	295	66	10	<MDC
10	Floor	FA2	65	295	65	0	<MDC
11	Ceiling	CK3	65	295	86	201	<MDC
12	Ceiling	CC2	65	295	69	38	<MDC
13	Upper wall	WC9	65	295	84	182	<MDC
14	Upper wall	EC9	65	295	80	143	<MDC
15	Benchtop	FK4	65	295	57	-76	<MDC
16	Benchtop	FD5	65	295	64	-10	<MDC
17	Drawer	FK3	65	295	60	-48	<MDC
18	Drawer	FD4	65	295	85	191	<MDC
19	Trap	FI4	65	295	57	-76	<MDC
20	Sink	FI2	65	295	71	57	<MDC
21	Trap	FI2	65	295	54	-105	<MDC
22	Trap	FF4	65	295	60	-48	<MDC
23	Trap	FE1	65	295	75	96	<MDC
24	Sink	FC2	65	295	52	-124	<MDC
25	Trap	FC2	65	295	60	-48	<MDC
26	Trap	FC4	65	295	61	-38	<MDC
27	Hood 1 - vent	FE1	65	295	80	143	<MDC
28	Hood 1 - base	FE1	65	295	84	182	<MDC
29	Hood 1 - rear	FE1	65	295	79	134	<MDC
30	Hood 1 - left	FE1	65	295	74	86	<MDC
31	Hood 1 - right	FE1	65	295	73	76	<MDC
32	Hood 2 - vent	FA4	65	295	88	220	<MDC
33	Hood 2 - base	FA4	65	295	68	29	<MDC
34	Hood 2 - rear	FA4	65	295	57	-76	<MDC
35	Hood 2 - left	FA4	65	295	64	-10	<MDC
36	Hood 2 - right	FA4	65	295	66	10	<MDC
37	Fridge - in	FD1	65	295	52	-124	<MDC
38	Fridge - out	FD1	65	295	74	86	<MDC
39	Hood 3 - vent	FF1	65	295	87	210	<MDC
40	Hood 3 - base	FF1	65	295	79	134	<MDC
41	Hood 3 - rear	FF1	65	295	93	268	<MDC
42	Hood 3 - left	FF1	65	295	81	153	<MDC
43	Hood 3 - right	FF1	65	295	102	354	354
44	Hood 3 - right	FF1	65	295	102	354	354
45	Hood 3 - right	FF1	65	295	102	354	354
46	Hood 3 - right	FF1	65	295	102	354	354

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Scans Survey Unit: 205

Instrument Information:

Instrument ID:	G		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	75	885	80	120	<MDC	<MDC

Survey Type: Removable H-3 Survey Unit: 205

Instrument ID:	Beckman LS6500		Survey Date:	03/28/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	27	70	17	<MDC
2	Floor	FA2	27	70	16	<MDC
3	Floor	FA3	27	70	17	<MDC
4	Floor	FA4	27	70	21	<MDC
5	Floor	FA5	27	70	25	<MDC
6	Floor	FA6	27	70	9	<MDC
7	Floor	FA7	27	70	21	<MDC
8	Floor	FA8	27	70	28	<MDC
9	Floor	FB1	27	70	26	<MDC
10	Floor	FB2	27	70	21	<MDC
11	Floor	FB3	27	70	15	<MDC
12	Floor	FB4	27	70	2	<MDC
13	Floor	FB5	27	70	16	<MDC
14	Floor	FB6	27	70	22	<MDC
15	Floor	FB7	27	70	2	<MDC
16	Floor	FB8	27	70	11	<MDC
17	Floor	FC1	27	70	3	<MDC
18	Floor	FC2	27	70	20	<MDC
19	Floor	FC3	27	70	10	<MDC
20	Floor	FC4	27	70	16	<MDC
21	Floor	FC5	27	70	22	<MDC
22	Floor	FC6	27	70	21	<MDC
23	Floor	FC7	27	70	15	<MDC
24	Floor	FC8	27	70	15	<MDC
25	Floor	FD1	27	70	19	<MDC
26	Floor	FD2	27	70	39	<MDC
27	Floor	FD3	27	70	21	<MDC
28	Floor	FD4	27	70	16	<MDC
29	Floor	FD5	27	70	22	<MDC
30	Floor	FD6	27	70	39	<MDC
31	Floor	FD7	27	70	39	<MDC
32	Floor	FD8	27	70	22	<MDC
33	Floor	FE1	27	70	18	<MDC
34	Floor	FE2	27	70	8	<MDC
35	Floor	FE3	27	70	5	<MDC
36	Floor	FE4	27	70	14	<MDC
37	Floor	FE5	27	70	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 205

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
38	Floor	FE6	27	70	35	<MDC
39	Floor	FE7	27	70	24	<MDC
40	Floor	FE8	27	70	11	<MDC
41	Floor	FF1	27	70	6	<MDC
42	Floor	FF2	27	70	12	<MDC
43	Floor	FF3	27	70	14	<MDC
44	Floor	FF4	27	70	14	<MDC
45	Floor	FF5	27	70	14	<MDC
46	Floor	FF6	27	70	28	<MDC
47	Floor	FF7	27	70	18	<MDC
48	Floor	FF8	27	70	24	<MDC
49	Floor	FG1	27	70	6	<MDC
50	Floor	FG2	27	70	23	<MDC
51	Floor	FG3	27	70	20	<MDC
52	Floor	FG4	27	70	15	<MDC
53	Floor	FG5	27	70	14	<MDC
54	Floor	FG6	27	70	17	<MDC
55	Floor	FG7	27	70	35	<MDC
56	Floor	FG8	27	70	21	<MDC
57	Floor	FH1	27	70	22	<MDC
58	Floor	FH2	27	70	13	<MDC
59	Floor	FH3	27	70	11	<MDC
60	Floor	FH4	27	70	31	<MDC
61	Floor	FH5	27	70	46	<MDC
62	Floor	FH6	27	70	8	<MDC
63	Floor	FH7	27	70	17	<MDC
64	Floor	FH8	27	70	11	<MDC
65	Floor	FI1	27	70	15	<MDC
66	Floor	FI2	27	70	7	<MDC
67	Floor	FI3	27	70	29	<MDC
68	Floor	FI4	27	70	6	<MDC
69	Floor	FI5	27	70	18	<MDC
70	Floor	FI6	27	70	12	<MDC
71	Floor	FI7	27	70	22	<MDC
72	Floor	FJ1	27	70	23	<MDC
73	Floor	FJ2	27	70	1	<MDC
74	Floor	FJ3	27	70	15	<MDC
75	Floor	FJ4	27	70	6	<MDC
76	Floor	FJ5	27	70	16	<MDC
77	Floor	FJ6	27	70	16	<MDC
78	Floor	FJ7	27	70	23	<MDC
79	Floor	FK1	27	70	7	<MDC
80	Floor	FK2	27	70	18	<MDC
81	Floor	FK3	27	70	9	<MDC
82	Floor	FK4	27	70	17	<MDC
83	Floor	FK5	27	70	12	<MDC
84	Floor	FK6	27	70	21	<MDC
85	Floor	FK7	27	70	15	<MDC
86	Wall	WA1	27	70	24	<MDC
87	Wall	WA2	27	70	8	<MDC
88	Wall	WA3	27	70	29	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 205

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
89	Wall	WA4	27	70	7	<MDC
90	Wall	WA5	27	70	23	<MDC
91	Wall	WA6	27	70	31	<MDC
92	Wall	WA7	27	70	16	<MDC
93	Wall	WA8	27	70	10	<MDC
94	Wall	WA9	27	70	28	<MDC
95	Wall	WA10	27	70	20	<MDC
96	Wall	WA11	27	70	28	<MDC
97	Wall	WB1	27	70	12	<MDC
98	Wall	WB2	27	70	22	<MDC
99	Wall	WB3	27	70	4	<MDC
100	Wall	WB4	27	70	5	<MDC
101	Wall	WB5	27	70	31	<MDC
102	Wall	WB6	27	70	3	<MDC
103	Wall	WB7	27	70	9	<MDC
104	Wall	WB8	27	70	30	<MDC
105	Wall	WB9	27	70	33	<MDC
106	Wall	WB10	27	70	1	<MDC
107	Wall	WB11	27	70	11	<MDC
108	Wall	NA1	27	70	13	<MDC
109	Wall	NA2	27	70	15	<MDC
110	Wall	NA3	27	70	22	<MDC
111	Wall	NA4	27	70	17	<MDC
112	Wall	NA5	27	70	22	<MDC
113	Wall	NA6	27	70	18	<MDC
114	Wall	NA7	27	70	17	<MDC
115	Wall	NA8	27	70	18	<MDC
116	Wall	NB1	27	70	30	<MDC
117	Wall	NB2	27	70	27	<MDC
118	Wall	NB3	27	70	1	<MDC
119	Wall	NB4	27	70	20	<MDC
120	Wall	NB5	27	70	17	<MDC
121	Wall	NB6	27	70	28	<MDC
122	Wall	NB7	27	70	11	<MDC
123	Wall	NB8	27	70	5	<MDC
124	Wall	EB11	27	70	35	<MDC
125	Wall	EB10	27	70	24	<MDC
126	Wall	EB9	27	70	10	<MDC
127	Wall	EB8	27	70	28	<MDC
128	Wall	EB7	27	70	17	<MDC
129	Wall	EB6	27	70	14	<MDC
130	Wall	EB5	27	70	27	<MDC
131	Wall	EB4	27	70	7	<MDC
132	Wall	EB3	27	70	11	<MDC
133	Wall	EB2	27	70	14	<MDC
134	Wall	EB1	27	70	23	<MDC
135	Wall	EA11	27	70	17	<MDC
136	Wall	EA10	27	70	19	<MDC
137	Wall	EA9	27	70	15	<MDC
138	Wall	EA8	27	70	15	<MDC
139	Wall	EA7	27	70	9	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 20

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
140	Wall	EA6	27	70	30	<MDC
141	Wall	EA5	27	70	15	<MDC
142	Wall	EA4	27	70	8	<MDC
143	Wall	EA3	27	70	13	<MDC
144	Wall	EA2	27	70	22	<MDC
145	Wall	EA1	27	70	78	78
146	Wall	SA1	27	70	7	<MDC
147	Wall	SA2	27	70	28	<MDC
148	Wall	SA3	27	70	14	<MDC
149	Wall	SA4	27	70	19	<MDC
150	Wall	SA5	27	70	19	<MDC
151	Wall	SA6	27	70	29	<MDC
152	Wall	SA7	27	70	17	<MDC
153	Wall	SA8	27	70	24	<MDC
154	Wall	SB1	27	70	23	<MDC
155	Wall	SB2	27	70	10	<MDC
156	Wall	SB3	27	70	1	<MDC
157	Wall	SB4	27	70	35	<MDC
158	Wall	SB5	27	70	27	<MDC
159	Wall	SB6	27	70	8	<MDC
160	Wall	SB7	27	70	18	<MDC
161	Wall	SB8	27	70	17	<MDC
162	Ceiling	CK3	27	70	-103	<MDC
163	Ceiling	CC2	27	70	40	<MDC
164	Upper wall	WC9	27	70	35	<MDC
165	Upper wall	EC9	27	70	23	<MDC
166	Benchtop	FK4	27	70	28	<MDC
167	Benchtop	FD5	27	70	17	<MDC
168	Drawer	FK3	27	70	25	<MDC
169	Drawer	FD4	27	70	2	<MDC
170	Sink	FI4	27	70	18	<MDC
171	Trap	FI4	27	70	25	<MDC
172	Sink	FI2	27	70	6	<MDC
173	Trap	FI2	27	70	7	<MDC
174	Sink	FF4	27	70	20	<MDC
175	Trap	FF4	27	70	13	<MDC
176	Sink	FE1	27	70	9	<MDC
177	Trap	FE1	27	70	25	<MDC
178	Sink	FC2	27	70	35	<MDC
179	Trap	FC2	27	70	16	<MDC
180	Sink	FC4	27	70	19	<MDC
181	Trap	FC4	27	70	24	<MDC
182	Hood 1 - vent	FE1	27	70	34	<MDC
183	Hood 1 - base	FE1	27	70	7	<MDC
184	Hood 1 - rear	FE1	27	70	25	<MDC
185	Hood 1 - left	FE1	27	70	20	<MDC
186	Hood 1 - right	FE1	27	70	14	<MDC
187	Hood 2 - vent	FA4	27	70	15	<MDC
188	Hood 2 - base	FA4	27	70	16	<MDC
189	Hood 2 - rear	FA4	27	70	8	<MDC
190	Hood 2 - left	FA4	27	70	16	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 205

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
191	Hood 2 - right	FA4	27	70	26	<MDC
192	Fridge - in	FD1	27	70	32	<MDC
193	Fridge - out	FD1	27	70	15	<MDC
194	Hood 3 - vent	FF1	27	70	6	<MDC
195	Hood 3 - base	FF1	27	70	21	<MDC
196	Hood 3 - rear	FF1	27	70	47	<MDC
197	Hood 3 - left	FF1	27	70	4	<MDC
198	Hood 3 - right	FF1	27	70	43	<MDC

Survey Type: Removable C-14 Survey Unit: 205

Instrument ID:	Beckman LS6500		Survey Date:	03/28/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	6	19	10	<MDC
2	Floor	FA2	6	19	5	<MDC
3	Floor	FA3	6	19	10	<MDC
4	Floor	FA4	6	19	13	<MDC
5	Floor	FA5	6	19	18	<MDC
6	Floor	FA6	6	19	13	<MDC
7	Floor	FA7	6	19	14	<MDC
8	Floor	FA8	6	19	9	<MDC
9	Floor	FB1	6	19	4	<MDC
10	Floor	FB2	6	19	5	<MDC
11	Floor	FB3	6	19	9	<MDC
12	Floor	FB4	6	19	17	<MDC
13	Floor	FB5	6	19	12	<MDC
14	Floor	FB6	6	19	10	<MDC
15	Floor	FB7	6	19	16	<MDC
16	Floor	FB8	6	19	5	<MDC
17	Floor	FC1	6	19	14	<MDC
18	Floor	FC2	6	19	12	<MDC
19	Floor	FC3	6	19	18	<MDC
20	Floor	FC4	6	19	17	<MDC
21	Floor	FC5	6	19	6	<MDC
22	Floor	FC6	6	19	14	<MDC
23	Floor	FC7	6	19	14	<MDC
24	Floor	FC8	6	19	17	<MDC
25	Floor	FD1	6	19	21	21
26	Floor	FD2	6	19	14	<MDC
27	Floor	FD3	6	19	23	23
28	Floor	FD4	6	19	12	<MDC
29	Floor	FD5	6	19	17	<MDC
30	Floor	FD6	6	19	11	<MDC
31	Floor	FD7	6	19	11	<MDC
32	Floor	FD8	6	19	6	<MDC
33	Floor	FE1	6	19	12	<MDC
34	Floor	FE2	6	19	9	<MDC
35	Floor	FE3	6	19	17	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 20

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
36	Floor	FE4	6	19	12	<MDC
37	Floor	FE5	6	19	15	<MDC
38	Floor	FE6	6	19	8	<MDC
39	Floor	FE7	6	19	10	<MDC
40	Floor	FE8	6	19	16	<MDC
41	Floor	FF1	6	19	20	20
42	Floor	FF2	6	19	18	<MDC
43	Floor	FF3	6	19	19	<MDC
44	Floor	FF4	6	19	17	<MDC
45	Floor	FF5	6	19	19	<MDC
46	Floor	FF6	6	19	12	<MDC
47	Floor	FF7	6	19	13	<MDC
48	Floor	FF8	6	19	6	<MDC
49	Floor	FG1	6	19	14	<MDC
50	Floor	FG2	6	19	13	<MDC
51	Floor	FG3	6	19	6	<MDC
52	Floor	FG4	6	19	16	<MDC
53	Floor	FG5	6	19	18	<MDC
54	Floor	FG6	6	19	10	<MDC
55	Floor	FG7	6	19	8	<MDC
56	Floor	FG8	6	19	14	<MDC
57	Floor	FH1	6	19	9	<MDC
58	Floor	FH2	6	19	10	<MDC
59	Floor	FH3	6	19	18	<MDC
60	Floor	FH4	6	19	8	<MDC
61	Floor	FH5	6	19	10	<MDC
62	Floor	FH6	6	19	10	<MDC
63	Floor	FH7	6	19	15	<MDC
64	Floor	FH8	6	19	13	<MDC
65	Floor	FI1	6	19	10	<MDC
66	Floor	FI2	6	19	13	<MDC
67	Floor	FI3	6	19	13	<MDC
68	Floor	FI4	6	19	16	<MDC
69	Floor	FI5	6	19	23	23
70	Floor	FI6	6	19	8	<MDC
71	Floor	FI7	6	19	13	<MDC
72	Floor	FJ1	6	19	8	<MDC
73	Floor	FJ2	6	19	10	<MDC
74	Floor	FJ3	6	19	10	<MDC
75	Floor	FJ4	6	19	16	<MDC
76	Floor	FJ5	6	19	8	<MDC
77	Floor	FJ6	6	19	8	<MDC
78	Floor	FJ7	6	19	8	<MDC
79	Floor	FK1	6	19	23	23
80	Floor	FK2	6	19	13	<MDC
81	Floor	FK3	6	19	18	<MDC
82	Floor	FK4	6	19	15	<MDC
83	Floor	FK5	6	19	8	<MDC
84	Floor	FK6	6	19	5	<MDC
85	Floor	FK7	6	19	10	<MDC
86	Wall	WA1	6	19	5	<MDC
87	Wall	WA2	6	19	8	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 205

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
88	Wall	WA3	6	19	21	21
89	Wall	WA4	6	19	13	<MDC
90	Wall	WA5	6	19	8	<MDC
91	Wall	WA6	6	19	15	<MDC
92	Wall	WA7	6	19	18	<MDC
93	Wall	WA8	6	19	23	23
94	Wall	WA9	6	19	5	<MDC
95	Wall	WA10	6	19	8	<MDC
96	Wall	WA11	6	19	2	<MDC
97	Wall	WB1	6	19	8	<MDC
98	Wall	WB2	6	19	10	<MDC
99	Wall	WB3	6	19	21	21
100	Wall	WB4	6	19	8	<MDC
101	Wall	WB5	6	19	8	<MDC
102	Wall	WB6	6	19	23	23
103	Wall	WB7	6	19	5	<MDC
104	Wall	WB8	6	19	10	<MDC
105	Wall	WB9	6	19	10	<MDC
106	Wall	WB10	6	19	10	<MDC
107	Wall	WB11	6	19	10	<MDC
108	Wall	NA1	6	19	5	<MDC
109	Wall	NA2	6	19	8	<MDC
110	Wall	NA3	6	19	8	<MDC
111	Wall	NA4	6	19	23	23
112	Wall	NA5	6	19	21	21
113	Wall	NA6	6	19	10	<MDC
114	Wall	NA7	6	19	13	<MDC
115	Wall	NA8	6	19	21	21
116	Wall	NB1	6	19	5	<MDC
117	Wall	NB2	6	19	18	<MDC
118	Wall	NB3	6	19	21	21
119	Wall	NB4	6	19	5	<MDC
120	Wall	NB5	6	19	15	<MDC
121	Wall	NB6	6	19	15	<MDC
122	Wall	NB7	6	19	10	<MDC
123	Wall	NB8	6	19	8	<MDC
124	Wall	EB11	6	19	15	<MDC
125	Wall	EB10	6	19	15	<MDC
126	Wall	EB9	6	19	23	23
127	Wall	EB8	6	19	13	<MDC
128	Wall	EB7	6	19	15	<MDC
129	Wall	EB6	6	19	13	<MDC
130	Wall	EB5	6	19	15	<MDC
131	Wall	EB4	6	19	23	23
132	Wall	EB3	6	19	21	21
133	Wall	EB2	6	19	13	<MDC
134	Wall	EB1	6	19	8	<MDC
135	Wall	EA11	6	19	26	26
136	Wall	EA10	6	19	10	<MDC
137	Wall	EA9	6	19	10	<MDC
138	Wall	EA8	6	19	10	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 20

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
139	Wall	EA7	6	19	5	<MDC
140	Wall	EA6	6	19	13	<MDC
141	Wall	EA5	6	19	8	<MDC
142	Wall	EA4	6	19	8	<MDC
143	Wall	EA3	6	19	5	<MDC
144	Wall	EA2	6	19	10	<MDC
145	Wall	EA1	6	19	18	<MDC
146	Wall	SA1	6	19	13	<MDC
147	Wall	SA2	6	19	13	<MDC
148	Wall	SA3	6	19	13	<MDC
149	Wall	SA4	6	19	18	<MDC
150	Wall	SA5	6	19	8	<MDC
151	Wall	SA6	6	19	20	20
152	Wall	SA7	6	19	13	<MDC
153	Wall	SA8	6	19	15	<MDC
154	Wall	SB1	6	19	8	<MDC
155	Wall	SB2	6	19	3	<MDC
156	Wall	SB3	6	19	18	<MDC
157	Wall	SB4	6	19	13	<MDC
158	Wall	SB5	6	19	5	<MDC
159	Wall	SB6	6	19	28	28
160	Wall	SB7	6	19	10	<MDC
161	Wall	SB8	6	19	13	<MDC
162	Ceiling	CK3	6	19	379	379
163	Ceiling	CC2	6	19	18	<MDC
164	Upper wall	WC9	6	19	23	23
165	Upper wall	EC9	6	19	18	<MDC
166	Benchtop	FK4	6	19	13	<MDC
167	Benchtop	FD5	6	19	2	<MDC
168	Drawer	FK3	6	19	13	<MDC
169	Drawer	FD4	6	19	16	<MDC
170	Sink	FI4	6	19	23	23
171	Trap	FI4	6	19	2	<MDC
172	Sink	FI2	6	19	16	<MDC
173	Trap	FI2	6	19	13	<MDC
174	Sink	FF4	6	19	8	<MDC
175	Trap	FF4	6	19	8	<MDC
176	Sink	FE1	6	19	8	<MDC
177	Trap	FE1	6	19	15	<MDC
178	Sink	FC2	6	19	8	<MDC
179	Trap	FC2	6	19	18	<MDC
180	Sink	FC4	6	19	21	21
181	Trap	FC4	6	19	18	<MDC
182	Hood 1 - vent	FE1	6	19	0	<MDC
183	Hood 1 - base	FE1	6	19	13	<MDC
184	Hood 1 - rear	FE1	6	19	13	<MDC
185	Hood 1 - left	FE1	6	19	26	26
186	Hood 1 - right	FE1	6	19	13	<MDC
187	Hood 2 - vent	FA4	6	19	8	<MDC
188	Hood 2 - base	FA4	6	19	15	<MDC
189	Hood 2 - rear	FA4	6	19	31	31

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 205

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
190	Hood 2 - left	FA4	6	19	5	<MDC
191	Hood 2 - right	FA4	6	19	28	28
192	Fridge - in	FD1	6	19	10	<MDC
193	Fridge - out	FD1	6	19	8	<MDC
194	Hood 3 - vent	FF1	6	19	13	<MDC
195	Hood 3 - base	FF1	6	19	13	<MDC
196	Hood 3 - rear	FF1	6	19	5	<MDC
197	Hood 3 - left	FF1	6	19	10	<MDC
198	Hood 3 - right	FF1	6	19	20	20

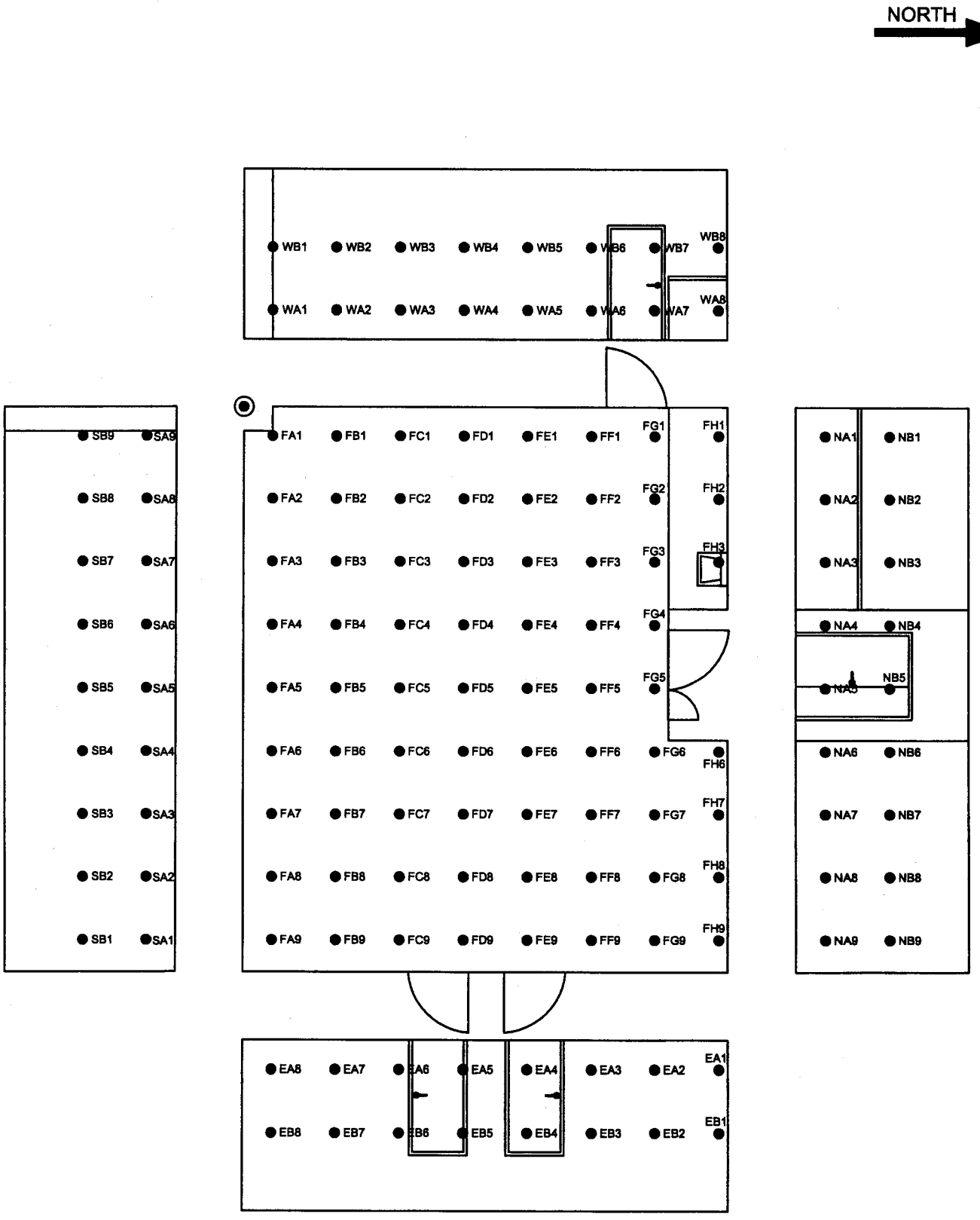
Survey Type: Gamma Dose Rates Survey Unit: 205

Instrument ID: C Survey Date: 03/22/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Metal	NA3	7
2	Wall	EB1	6
3	Glass	EB6	6
4	Wall	SB7	7
5	Metal	WA7	7
6	Benchtop	FI4	7
7	Benchtop	FH1	6
8	Floor	FF4	6
9	Floor	FB7	6
10	Floor	FA2	7
11	Ceiling	CK3	7
12	Ceiling	CC2	7
13	Upper wall	WC9	7
14	Upper wall	EC9	6
15	Benchtop	FK4	6
16	Benchtop	FD5	7
17	Drawer	FK3	7
18	Drawer	FD4	7
19	Sink	FI4	7
20	Trap	FI4	6
21	Sink	FI2	6
22	Trap	FI2	6
23	Sink	FF4	6
24	Trap	FF4	6
25	Sink	FE1	6
26	Trap	FE1	6
27	Sink	FC2	7
28	Trap	FC2	7
29	Sink	FC4	6
30	Trap	FC4	6
31	Hood 1 - vent	FE1	7
32	Hood 1 - base	FE1	7
33	Hood 1 - rear	FE1	7
34	Hood 1 - left	FE1	7
35	Hood 1 - right	FE1	6
36	Hood 2 - vent	FA4	6
37	Hood 2 - base	FA4	6
38	Hood 2 - rear	FA4	6
39	Hood 2 - left	FA4	6
40	Hood 2 - right	FA4	6
41	Fridge - in	FD1	6
42	Fridge - out	FD1	6
45	Hood 3 - rear	FF1	6
46	Hood 3 - left	FF1	6
47	Hood 3 - right	FF1	6

Building 31, Room RA257



BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 SECOND FLOOR ROOM
RA-257

SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 257

Instrument Information:

Instrument ID:	G		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	EA6	65	295	86	201	<MDC
2	Wall	SB4	65	295	79	134	<MDC
3	Wall	WB1	65	295	78	124	<MDC
4	Metal	WA6	65	295	74	86	<MDC
5	Glass	NB3	65	295	93	268	<MDC
6	Metal	NA6	65	295	74	86	<MDC
7	Floor	FD9	65	295	74	86	<MDC
8	Floor	FF8	65	295	74	86	<MDC
9	Benchtop	FB6	65	295	67	19	<MDC
10	Floor	FF2	65	295	77	115	<MDC
11	Ceiling	CH3	65	295	95	287	<MDC
12	Ceiling	CA9	65	295	95	287	<MDC
13	Upper wall	NC4	65	295	93	268	<MDC
14	Upper wall	EC4	65	295	70	48	<MDC
15	Benchtop	FD3	65	295	57	-76	<MDC
16	Benchtop	FD7	65	295	63	-19	<MDC
17	Hood 1 - base	FE1	65	295	65	0	<MDC
18	Hood 1 - vent	FE1	65	295	77	115	<MDC
19	Hood 1 - rear	FE1	65	295	70	48	<MDC
20	Hood 1 -Jeft	FE1	65	295	70	48	<MDC
21	Hood 1 - right	FE1	65	295	55	-96	<MDC
22	Hood 2 - base	FC1	65	295	61	-38	<MDC
23	Hood 2 - vent	FC1	65	295	66	10	<MDC
24	Hood 2 - rear	FC1	65	295	87	210	<MDC
25	Hood 2 - left	FC1	65	295	68	29	<MDC
26	Hood 2 - right	FC1	65	295	64	-10	<MDC
27	Sink	FH3	65	295	69	38	<MDC
28	Trap	FH3	65	295	55	-96	<MDC
29	Trap	FD4	65	295	70	48	<MDC
30	Trap	FD7	65	295	56	-86	<MDC

Survey Type: Scans Survey Unit: 257

Instrument Information:

Instrument ID:	G		Survey Date:	03/21/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	65	824	60	85	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 25

Instrument ID:	3eckman LS6500		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	27	48	28	<MDC
2	Floor	FA2	27	48	9	<MDC
3	Floor	FA3	27	48	25	<MDC
4	Floor	FA4	27	48	16	<MDC
5	Floor	FA5	27	48	13	<MDC
6	Floor	FA6	27	48	19	<MDC
7	Floor	FA7	27	48	24	<MDC
8	Floor	FA8	27	48	24	<MDC
9	Floor	FA9	27	48	12	<MDC
10	Floor	FB1	27	48	26	<MDC
11	Floor	FB2	27	48	183	183
12	Floor	FB3	27	48	14	<MDC
13	Floor	FB4	27	48	11	<MDC
14	Floor	FB5	27	48	10	<MDC
15	Floor	FB6	27	48	6	<MDC
16	Floor	FB7	27	48	13	<MDC
17	Floor	FB8	27	48	15	<MDC
18	Floor	FB9	27	48	18	<MDC
19	Floor	FC1	27	48	22	<MDC
20	Floor	FC2	27	48	3	<MDC
21	Floor	FC3	27	48	13	<MDC
22	Floor	FC4	27	48	13	<MDC
23	Floor	FC5	27	48	7	<MDC
24	Floor	FC6	27	48	8	<MDC
25	Floor	FC7	27	48	26	<MDC
26	Floor	FC8	27	48	14	<MDC
27	Floor	FC9	27	48	14	<MDC
28	Floor	FD1	27	48	22	<MDC
29	Floor	FD2	27	48	6	<MDC
30	Floor	FD3	27	48	11	<MDC
31	Floor	FD4	27	48	22	<MDC
32	Floor	FD5	27	48	16	<MDC
33	Floor	FD6	27	48	20	<MDC
34	Floor	FD7	27	48	10	<MDC
35	Floor	FD8	27	48	7	<MDC
36	Floor	FD9	27	48	20	<MDC
37	Floor	FE1	27	48	19	<MDC
38	Floor	FE2	27	48	26	<MDC
39	Floor	FE3	27	48	16	<MDC
40	Floor	FE4	27	48	26	<MDC
41	Floor	FE5	27	48	17	<MDC
42	Floor	FE6	27	48	16	<MDC
43	Floor	FE7	27	48	12	<MDC
44	Floor	FE8	27	48	15	<MDC
45	Floor	FE9	27	48	16	<MDC
46	Floor	FF1	27	48	20	<MDC
47	Floor	FF2	27	48	22	<MDC
48	Floor	FF3	27	48	38	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 26

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Floor	FF4	27	48	12	<MDC
50	Floor	FF5	27	48	15	<MDC
51	Floor	FF6	27	48	16	<MDC
52	Floor	FF7	27	48	32	<MDC
53	Floor	FF8	27	48	22	<MDC
54	Floor	FF9	27	48	14	<MDC
55	Floor	FG1	27	48	18	<MDC
56	Floor	FG2	27	48	17	<MDC
57	Floor	FG3	27	48	10	<MDC
58	Floor	FG4	27	48	22	<MDC
59	Floor	FG5	27	48	20	<MDC
60	Floor	FG6	27	48	22	<MDC
61	Floor	FG7	27	48	18	<MDC
62	Floor	FG8	27	48	17	<MDC
63	Floor	FG9	27	48	15	<MDC
64	Floor	FH1	27	48	10	<MDC
65	Floor	FH2	27	48	13	<MDC
66	Floor	FH3	27	48	14	<MDC
67	Floor	FH4	27	48	20	<MDC
68	Floor	FH5	27	48	25	<MDC
69	Floor	FH6	27	48	24	<MDC
70	Floor	FH7	27	48	26	<MDC
71	Floor	FH8	27	48	15	<MDC
72	Floor	FH9	27	48	16	<MDC
73	Wall	NA1	27	48	21	<MDC
74	Wall	NA2	27	48	29	<MDC
75	Wall	NA3	27	48	16	<MDC
76	Wall	NA4	27	48	25	<MDC
77	Wall	NA5	27	48	12	<MDC
78	Wall	NA6	27	48	12	<MDC
79	Wall	NA7	27	48	14	<MDC
80	Wall	NA8	27	48	24	<MDC
81	Wall	NA9	27	48	9	<MDC
82	Wall	NB1	27	48	6	<MDC
83	Wall	NB2	27	48	10	<MDC
84	Wall	NB3	27	48	10	<MDC
85	Wall	NB4	27	48	11	<MDC
86	Wall	NB5	27	48	-1	<MDC
87	Wall	NB6	27	48	19	<MDC
88	Wall	NB7	27	48	4	<MDC
89	Wall	NB8	27	48	12	<MDC
90	Wall	NB9	27	48	26	<MDC
91	Wall	EA1	27	48	2	<MDC
92	Wall	EA2	27	48	18	<MDC
93	Wall	EA3	27	48	-7	<MDC
94	Wall	EA4	27	48	14	<MDC
95	Wall	EA5	27	48	1	<MDC
96	Wall	EA6	27	48	10	<MDC
97	Wall	EA7	27	48	1	<MDC
98	Wall	EA8	27	48	32	<MDC
99	Wall	EB1	27	48	14	<MDC

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Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 25

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
100	Wall	EB2	27	48	6	<MDC
101	Wall	EB3	27	48	6	<MDC
102	Wall	EB4	27	48	3	<MDC
103	Wall	EB5	27	48	2	<MDC
104	Wall	EB6	27	48	15	<MDC
105	Wall	EB7	27	48	9	<MDC
106	Wall	EB8	27	48	13	<MDC
107	Wall	SA1	27	48	16	<MDC
108	Wall	SA2	27	48	20	<MDC
109	Wall	SA3	27	48	10	<MDC
110	Wall	SA4	27	48	6	<MDC
111	Wall	SA5	27	48	13	<MDC
112	Wall	SA6	27	48	11	<MDC
113	Wall	SA7	27	48	12	<MDC
114	Wall	SA8	27	48	6	<MDC
115	Wall	SA9	27	48	19	<MDC
116	Wall	SB1	27	48	23	<MDC
117	Wall	SB2	27	48	6	<MDC
118	Wall	SB3	27	48	10	<MDC
119	Wall	SB4	27	48	4	<MDC
120	Wall	SB5	27	48	34	<MDC
121	Wall	SB6	27	48	9	<MDC
122	Wall	SB7	27	48	13	<MDC
123	Wall	SB8	27	48	20	<MDC
124	Wall	SB9	27	48	18	<MDC
125	Wall	WA1	27	48	9	<MDC
126	Wall	WA2	27	48	9	<MDC
127	Wall	WA3	27	48	15	<MDC
128	Wall	WA4	27	48	15	<MDC
129	Wall	WA5	27	48	13	<MDC
130	Wall	WA6	27	48	-3	<MDC
131	Wall	WA7	27	48	4	<MDC
132	Wall	WA8	27	48	6	<MDC
133	Wall	WB1	27	48	26	<MDC
134	Wall	WB2	27	48	5	<MDC
135	Wall	WB3	27	48	-2	<MDC
136	Wall	WB4	27	48	4	<MDC
137	Wall	WB5	27	48	18	<MDC
138	Wall	WB6	27	48	17	<MDC
139	Wall	WB7	27	48	7	<MDC
140	Wall	WB8	27	48	-1	<MDC
141	Ceiling	CH3	27	48	11	<MDC
142	Ceiling	CA9	27	48	11	<MDC
143	Upper wall	NC4	27	48	4	<MDC
144	Upper wall	EC4	27	48	7	<MDC
145	Benchtop	FD3	27	48	18	<MDC
146	Benchtop	FD7	27	48	18	<MDC
147	Drawer	FD3	27	48	16	<MDC
148	Drawer	FD7	27	48	19	<MDC
149	Hood 1 - base	FE1	27	48	30	<MDC
150	Hood 1 - vent	FE1	27	48	21	<MDC

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Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 257

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
151	Hood 1 - rear	FE1	27	48	12	<MDC
152	Hood 1 - left	FE1	27	48	20	<MDC
153	Hood 1 - right	FE1	27	48	13	<MDC
154	Hood 2 - base	FC1	27	48	25	<MDC
155	Hood 2 - vent	FC1	27	48	21	<MDC
156	Hood 2 - rear	FC1	27	48	22	<MDC
157	Hood 2 - left	FC1	27	48	27	<MDC
158	Hood 2 - right	FC1	27	48	20	<MDC
159	Sink	FE1	27	48	28	<MDC
160	Trap	FE1	27	48	20	<MDC
161	Sink	FC1	27	48	20	<MDC
162	Trap	FC1	27	48	10	<MDC
163	Sink	FH3	27	48	18	<MDC
164	Trap	FH3	27	48	17	<MDC
165	Sink	FD4	27	48	21	<MDC
166	Trap	FD4	27	48	15	<MDC
167	Sink	FD7	27	48	14	<MDC
168	Trap	FD7	27	48	18	<MDC

Survey Type: Removable C-14 Survey Unit: 257

Instrument ID:	Beckman LS6500		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	13	17	11	<MDC
2	Floor	FA2	13	17	28	28
3	Floor	FA3	13	17	7	<MDC
4	Floor	FA4	13	17	19	19
5	Floor	FA5	13	17	16	<MDC
6	Floor	FA6	13	17	15	<MDC
7	Floor	FA7	13	17	12	<MDC
8	Floor	FA8	13	17	15	<MDC
9	Floor	FA9	13	17	12	<MDC
10	Floor	FB1	13	17	9	<MDC
11	Floor	FB2	13	17	16	<MDC
12	Floor	FB3	13	17	20	20
13	Floor	FB4	13	17	15	<MDC
14	Floor	FB5	13	17	11	<MDC
15	Floor	FB6	13	17	8	<MDC
16	Floor	FB7	13	17	15	<MDC
17	Floor	FB8	13	17	17	17
18	Floor	FB9	13	17	20	20
19	Floor	FC1	13	17	16	<MDC
20	Floor	FC2	13	17	16	<MDC
21	Floor	FC3	13	17	11	<MDC
22	Floor	FC4	13	17	11	<MDC
23	Floor	FC5	13	17	28	28
24	Floor	FC6	13	17	9	<MDC
25	Floor	FC7	13	17	19	19

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Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 25

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
26	Floor	FC8	13	17	13	<MDC
27	Floor	FC9	13	17	19	19
28	Floor	FD1	13	17	23	23
29	Floor	FD2	13	17	20	20
30	Floor	FD3	13	17	9	<MDC
31	Floor	FD4	13	17	7	<MDC
32	Floor	FD5	13	17	9	<MDC
33	Floor	FD6	13	17	12	<MDC
34	Floor	FD7	13	17	12	<MDC
35	Floor	FD8	13	17	17	17
36	Floor	FD9	13	17	5	<MDC
37	Floor	FE1	13	17	8	<MDC
38	Floor	FE2	13	17	21	21
39	Floor	FE3	13	17	16	<MDC
40	Floor	FE4	13	17	11	<MDC
41	Floor	FE5	13	17	19	19
42	Floor	FE6	13	17	15	<MDC
43	Floor	FE7	13	17	12	<MDC
44	Floor	FE8	13	17	17	17
45	Floor	FE9	13	17	15	<MDC
46	Floor	FF1	13	17	10	<MDC
47	Floor	FF2	13	17	13	<MDC
48	Floor	FF3	13	17	11	<MDC
49	Floor	FF4	13	17	14	<MDC
50	Floor	FF5	13	17	18	18
51	Floor	FF6	13	17	19	19
52	Floor	FF7	13	17	15	<MDC
53	Floor	FF8	13	17	15	<MDC
54	Floor	FF9	13	17	9	<MDC
55	Floor	FG1	13	17	18	18
56	Floor	FG2	13	17	15	<MDC
57	Floor	FG3	13	17	16	<MDC
58	Floor	FG4	13	17	12	<MDC
59	Floor	FG5	13	17	14	<MDC
60	Floor	FG6	13	17	8	<MDC
61	Floor	FG7	13	17	12	<MDC
62	Floor	FG8	13	17	22	22
63	Floor	FG9	13	17	17	17
64	Floor	FH1	13	17	8	<MDC
65	Floor	FH2	13	17	11	<MDC
66	Floor	FH3	13	17	17	17
67	Floor	FH4	13	17	13	<MDC
68	Floor	FH5	13	17	10	<MDC
69	Floor	FH6	13	17	18	18
70	Floor	FH7	13	17	8	<MDC
71	Floor	FH8	13	17	12	<MDC
72	Floor	FH9	13	17	18	18
73	Wall	NA1	13	17	15	<MDC
74	Wall	NA2	13	17	8	<MDC
75	Wall	NA3	13	17	9	<MDC
76	Wall	NA4	13	17	11	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable G-14 Survey Unit: 25

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
77	Wall	NA5	13	17	17	17
78	Wall	NA6	13	17	16	<MDC
79	Wall	NA7	13	17	12	<MDC
80	Wall	NA8	13	17	13	<MDC
81	Wall	NA9	13	17	12	<MDC
82	Wall	NB1	13	17	15	<MDC
83	Wall	NB2	13	17	9	<MDC
84	Wall	NB3	13	17	15	<MDC
85	Wall	NB4	13	17	13	<MDC
86	Wall	NB5	13	17	19	19
87	Wall	NB6	13	17	17	17
88	Wall	NB7	13	17	23	23
89	Wall	NB8	13	17	7	<MDC
90	Wall	NB9	13	17	13	<MDC
91	Wall	EA1	13	17	23	23
92	Wall	EA2	13	17	13	<MDC
93	Wall	EA3	13	17	27	27
94	Wall	EA4	13	17	24	24
95	Wall	EA5	13	17	20	20
96	Wall	EA6	13	17	9	<MDC
97	Wall	EA7	13	17	13	<MDC
98	Wall	EA8	13	17	23	23
99	Wall	EB1	13	17	17	17
100	Wall	EB2	13	17	19	19
101	Wall	EB3	13	17	15	<MDC
102	Wall	EB4	13	17	16	<MDC
103	Wall	EB5	13	17	28	28
104	Wall	EB6	13	17	25	25
105	Wall	EB7	13	17	17	17
106	Wall	EB8	13	17	15	<MDC
107	Wall	SA1	13	17	12	<MDC
108	Wall	SA2	13	17	15	<MDC
109	Wall	SA3	13	17	11	<MDC
110	Wall	SA4	13	17	20	20
111	Wall	SA5	13	17	19	19
112	Wall	SA6	13	17	19	19
113	Wall	SA7	13	17	11	<MDC
114	Wall	SA8	13	17	13	<MDC
115	Wall	SA9	13	17	13	<MDC
116	Wall	SB1	13	17	13	<MDC
117	Wall	SB2	13	17	4	<MDC
118	Wall	SB3	13	17	20	20
119	Wall	SB4	13	17	13	<MDC
120	Wall	SB5	13	17	12	<MDC
121	Wall	SB6	13	17	23	23
122	Wall	SB7	13	17	19	19
123	Wall	SB8	13	17	16	<MDC
124	Wall	SB9	13	17	13	<MDC
125	Wall	WA1	13	17	13	<MDC
126	Wall	WA2	13	17	17	17
127	Wall	WA3	13	17	16	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 25

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
128	Wall	WA4	13	17	9	<MDC
129	Wall	WA5	13	17	19	19
130	Wall	WA6	13	17	23	23
131	Wall	WA7	13	17	23	23
132	Wall	WA8	13	17	15	<MDC
133	Wall	WB1	13	17	12	<MDC
134	Wall	WB2	13	17	11	<MDC
135	Wall	WB3	13	17	20	20
136	Wall	WB4	13	17	17	17
137	Wall	WB5	13	17	19	19
138	Wall	WB6	13	17	12	<MDC
139	Wall	WB7	13	17	17	17
140	Wall	WB8	13	17	17	17
141	Ceiling	CH3	13	17	19	19
142	Ceiling	CA9	13	17	15	<MDC
143	Upper wall	NC4	13	17	12	<MDC
144	Upper wall	EC4	13	17	16	<MDC
145	Benchtop	FD3	13	17	15	<MDC
146	Benchtop	FD7	13	17	10	<MDC
147	Drawer	FD3	13	17	10	<MDC
148	Drawer	FD7	13	17	11	<MDC
149	Hood 1 - base	FE1	13	17	17	17
150	Hood 1 - vent	FE1	13	17	11	<MDC
151	Hood 1 - rear	FE1	13	17	14	<MDC
152	Hood 1 - left	FE1	13	17	10	<MDC
153	Hood 1 - right	FE1	13	17	15	<MDC
154	Hood 2 - base	FC1	13	17	11	<MDC
155	Hood 2 - vent	FC1	13	17	18	18
156	Hood 2 - rear	FC1	13	17	9	<MDC
157	Hood 2 - left	FC1	13	17	13	<MDC
158	Hood 2 - right	FC1	13	17	17	17
159	Sink	FE1	13	17	9	<MDC
160	Trap	FE1	13	17	13	<MDC
161	Sink	FC1	13	17	17	17
162	Trap	FC1	13	17	14	<MDC
163	Sink	FH3	13	17	17	17
164	Trap	FH3	13	17	18	18
165	Sink	FD4	13	17	11	<MDC
166	Trap	FD4	13	17	19	19
167	Sink	FD7	13	17	28	28
168	Trap	FD7	13	17	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

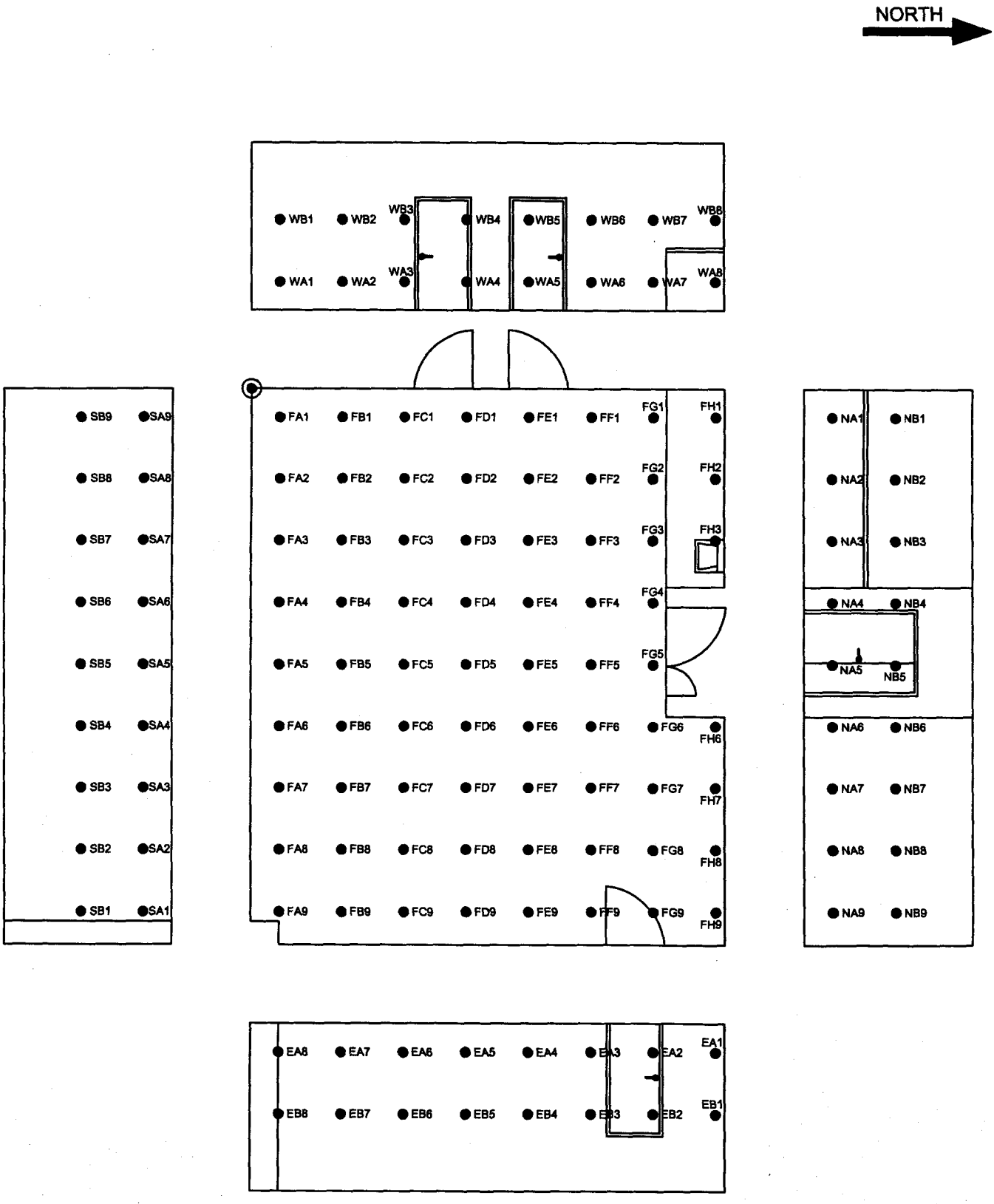
Survey Type: Gamma Dose Rates Survey Unit: 267

Instrument ID: C Survey Date: 03/22/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	EA6	6
2	Wall	SB4	6
3	Wall	WB1	6
4	Metal	WA6	6
5	Glass	NB3	6
6	Metal	NA6	6
7	Floor	FD9	6
8	Floor	FF8	6
9	Benchtop	FB6	6
10	Floor	FF2	6
11	Ceiling	CH3	5
12	Ceiling	CA9	5
13	Upper wall	NC4	5
14	Upper wall	EC4	5
15	Benchtop	FD3	6
16	Benchtop	FD7	6
17	Hood 1 - base	FE1	5
18	Hood 1 - vent	FE1	5
19	Hood 1 - rear	FE1	5
20	Hood 1 - left	FE1	5
21	Hood 1 - right	FE1	5
22	Hood 2 - base	FC1	5
23	Hood 2 - vent	FC1	5
24	Hood 2 - rear	FC1	5
25	Hood 2 - left	FC1	5
26	Hood 2 - right	FC1	5
27	Sink	FE1	6
28	Trap	FE1	6
29	Sink	FC1	5
30	Trap	FC1	5
31	Sink	FH3	5
32	Trap	FH3	5
33	Sink	FD4	5
34	Trap	FD4	5
35	Sink	FD7	5
36	Trap	FD7	5

Building 31, Room RA259



BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 SECOND FLOOR ROOM
RA-259

SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 259

Instrument Information:

Instrument ID:	E		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	NA8	145	440	147	20	<MDC
2	Wall	EA2	145	440	168	227	<MDC
3	Wall	EB6	145	440	147	20	<MDC
4	Wall	SA5	145	440	143	-20	<MDC
5	Wall	SB8	145	440	152	69	<MDC
6	Wall	WB2	145	440	147	20	<MDC
7	Wall	WA6	145	440	148	30	<MDC
8	Floor	FB2	145	440	141	-40	<MDC
9	Floor	FB7	145	440	181	356	<MDC
10	Floor	FF5	145	440	173	277	<MDC
11	Ceiling	CH3	145	440	238	919	919
12	Ceiling	CE4	145	440	213	672	672
13	Upper wall	NC5	145	440	145	0	<MDC
14	Upper wall	EC3	145	440	127	-178	<MDC
15	Hood 1 - rear	FE9	145	440	153	79	<MDC
16	Hood 1 - base	FE9	145	440	156	109	<MDC
17	Hood 1 - left	FE9	145	440	163	178	<MDC
18	Hood 1 - right	FE9	145	440	183	376	<MDC
19	Hood 1 - vent	FE9	145	440	180	346	<MDC
20	Sink	FH3	145	440	142	-30	<MDC
21	Trap	FH3	145	440	152	69	<MDC
22	Sink	FE3	145	440	129	-158	<MDC
23	Trap	FE3	145	440	134	-109	<MDC
24	Sink	FE6	145	440	157	119	<MDC
25	Trap	FE6	145	440	156	109	<MDC
26	Sink	FE9	145	440	160	148	<MDC
27	Trap	FE9	145	440	150	49	<MDC
28	Sink	FC9	145	440	151	59	<MDC
29	Trap	FC9	145	440	155	99	<MDC
30	Benchtop	FE4	145	440	156	109	<MDC
31	Benchtop	FE7	145	440	154	89	<MDC
32	Drawer	FE4	145	440	125	-198	<MDC
33	Drawer	FE7	145	440	148	30	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Scans Survey Unit: 259

Instrument Information:

Instrument ID:	E		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	145	1,272	160	210	<MDC	<MDC

Survey Type: Removable H-3 Survey Unit: 259

Instrument ID:	Beckman LS6500		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	27	48	6	<MDC
2	Floor	FA2	27	48	8	<MDC
3	Floor	FA3	27	48	11	<MDC
4	Floor	FA4	27	48	3	<MDC
5	Floor	FA5	27	48	10	<MDC
6	Floor	FA6	27	48	14	<MDC
7	Floor	FA7	27	48	10	<MDC
8	Floor	FA8	27	48	1	<MDC
9	Floor	FA9	27	48	17	<MDC
10	Floor	FB1	27	48	78	78
11	Floor	FB2	27	48	11	<MDC
12	Floor	FB3	27	48	1	<MDC
13	Floor	FB4	27	48	12	<MDC
14	Floor	FB5	27	48	7	<MDC
15	Floor	FB6	27	48	-2	<MDC
16	Floor	FB7	27	48	8	<MDC
17	Floor	FB8	27	48	4	<MDC
18	Floor	FB9	27	48	4	<MDC
19	Floor	FC1	27	48	2	<MDC
20	Floor	FC2	27	48	4	<MDC
21	Floor	FC3	27	48	11	<MDC
22	Floor	FC4	27	48	11	<MDC
23	Floor	FC5	27	48	10	<MDC
24	Floor	FC6	27	48	16	<MDC
25	Floor	FC7	27	48	26	<MDC
26	Floor	FC8	27	48	20	<MDC
27	Floor	FC9	27	48	4	<MDC
28	Floor	FD1	27	48	6	<MDC
29	Floor	FD2	27	48	9	<MDC
30	Floor	FD3	27	48	-3	<MDC
31	Floor	FD4	27	48	17	<MDC
32	Floor	FD5	27	48	13	<MDC
33	Floor	FD6	27	48	1	<MDC
34	Floor	FD7	27	48	-1	<MDC
35	Floor	FD8	27	48	-1	<MDC
36	Floor	FD9	27	48	3	<MDC
37	Floor	FE1	27	48	11	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 25

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
38	Floor	FE2	27	48	6	<MDC
39	Floor	FE3	27	48	12	<MDC
40	Floor	FE4	27	48	-3	<MDC
41	Floor	FE5	27	48	8	<MDC
42	Floor	FE6	27	48	27	<MDC
43	Floor	FE7	27	48	7	<MDC
44	Floor	FE8	27	48	2	<MDC
45	Floor	FE9	27	48	5	<MDC
46	Floor	FF1	27	48	24	<MDC
47	Floor	FF2	27	48	5	<MDC
48	Floor	FF3	27	48	11	<MDC
49	Floor	FF4	27	48	3	<MDC
50	Floor	FF5	27	48	21	<MDC
51	Floor	FF6	27	48	18	<MDC
52	Floor	FF7	27	48	3	<MDC
53	Floor	FF8	27	48	11	<MDC
54	Floor	FF9	27	48	7	<MDC
55	Floor	FG1	27	48	2	<MDC
56	Floor	FG2	27	48	18	<MDC
57	Floor	FG3	27	48	19	<MDC
58	Floor	FG4	27	48	12	<MDC
59	Floor	FG5	27	48	20	<MDC
60	Floor	FG6	27	48	22	<MDC
61	Floor	FG7	27	48	18	<MDC
62	Floor	FG8	27	48	15	<MDC
63	Floor	FG9	27	48	7	<MDC
64	Floor	FH1	27	48	19	<MDC
65	Floor	FH2	27	48	-1	<MDC
66	Floor	FH3	27	48	4	<MDC
67	Floor	FH6	27	48	13	<MDC
68	Floor	FH7	27	48	13	<MDC
69	Floor	FH8	27	48	5	<MDC
70	Floor	FH9	27	48	1	<MDC
71	Wall	NA1	27	48	19	<MDC
72	Wall	NA2	27	48	-2	<MDC
73	Wall	NA3	27	48	18	<MDC
74	Wall	NA4	27	48	7	<MDC
75	Wall	NA5	27	48	20	<MDC
76	Wall	NA6	27	48	4	<MDC
77	Wall	NA7	27	48	-1	<MDC
78	Wall	NA8	27	48	7	<MDC
79	Wall	NA9	27	48	3	<MDC
80	Wall	NB1	27	48	-1	<MDC
81	Wall	NB2	27	48	4	<MDC
82	Wall	NB3	27	48	8	<MDC
83	Wall	NB4	27	48	-4	<MDC
84	Wall	NB5	27	48	3	<MDC
85	Wall	NB6	27	48	-4	<MDC
86	Wall	NB7	27	48	20	<MDC
87	Wall	NB8	27	48	12	<MDC
88	Wall	NB9	27	48	8	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 259

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
89	Wall	EA1	27	48	6	<MDC
90	Wall	EA2	27	48	12	<MDC
91	Wall	EA3	27	48	3	<MDC
92	Wall	EA4	27	48	12	<MDC
93	Wall	EA5	27	48	10	<MDC
94	Wall	EA6	27	48	12	<MDC
95	Wall	EA7	27	48	5	<MDC
96	Wall	EA8	27	48	-1	<MDC
97	Wall	EB1	27	48	20	<MDC
98	Wall	EB2	27	48	9	<MDC
99	Wall	EB3	27	48	2	<MDC
100	Wall	EB4	27	48	18	<MDC
101	Wall	EB5	27	48	9	<MDC
102	Wall	EB6	27	48	6	<MDC
103	Wall	EB7	27	48	6	<MDC
104	Wall	EB8	27	48	6	<MDC
105	Wall	SA1	27	48	5	<MDC
106	Wall	SA2	27	48	12	<MDC
107	Wall	SA3	27	48	1	<MDC
108	Wall	SA4	27	48	5	<MDC
109	Wall	SA5	27	48	11	<MDC
110	Wall	SA6	27	48	50	50
111	Wall	SA7	27	48	25	<MDC
112	Wall	SA8	27	48	6	<MDC
113	Wall	SA9	27	48	9	<MDC
114	Wall	SB1	27	48	4	<MDC
115	Wall	SB2	27	48	19	<MDC
116	Wall	SB3	27	48	1	<MDC
117	Wall	SB4	27	48	1	<MDC
118	Wall	SB5	27	48	13	<MDC
119	Wall	SB6	27	48	7	<MDC
120	Wall	SB7	27	48	4	<MDC
121	Wall	SB8	27	48	2	<MDC
122	Wall	SB9	27	48	9	<MDC
123	Wall	WA1	27	48	6	<MDC
124	Wall	WA2	27	48	14	<MDC
125	Wall	WA3	27	48	8	<MDC
126	Wall	WA4	27	48	11	<MDC
127	Wall	WA5	27	48	11	<MDC
128	Wall	WA6	27	48	5	<MDC
129	Wall	WA7	27	48	7	<MDC
130	Wall	WA8	27	48	7	<MDC
131	Wall	WB1	27	48	8	<MDC
132	Wall	WB2	27	48	15	<MDC
133	Wall	WB3	27	48	5	<MDC
134	Wall	WB4	27	48	-4	<MDC
135	Wall	WB5	27	48	16	<MDC
136	Wall	WB6	27	48	10	<MDC
137	Wall	WB7	27	48	-1	<MDC
138	Wall	WB8	27	48	2	<MDC
139	Ceiling	CH3	27	48	12	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 259

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
140	Ceiling	CE4	27	48	1	<MDC
141	Upper wall	NC5	27	48	13	<MDC
142	Upper wall	EC3	27	48	-1	<MDC
143	Hood 1 - rear	FE9	27	48	11	<MDC
144	Hood 1 - base	FE9	27	48	13	<MDC
145	Hood 1 - left	FE9	27	48	10	<MDC
146	Hood 1 - right	FE9	27	48	3	<MDC
147	Hood 1 - vent	FE9	27	48	22	<MDC
148	Sink	FH3	27	48	3	<MDC
149	Trap	FH3	27	48	9	<MDC
150	Sink	FE3	27	48	7	<MDC
151	Trap	FE3	27	48	92	92
152	Sink	FE6	27	48	5	<MDC
153	Trap	FE6	27	48	9	<MDC
154	Sink	FE9	27	48	15	<MDC
155	Trap	FE9	27	48	4	<MDC
156	Sink	FC9	27	48	14	<MDC
157	Trap	FC9	27	48	13	<MDC
158	Benchtop	FE4	27	48	7	<MDC
159	Benchtop	FE7	27	48	6	<MDC
160	Drawer	FE4	27	48	-2	<MDC
161	Drawer	FE7	27	48	14	<MDC

Survey Type: Removable C-14 Survey Unit: 259

Instrument ID:	Beckman LS6500		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	13	17	19	19
2	Floor	FA2	13	17	21	21
3	Floor	FA3	13	17	13	<MDC
4	Floor	FA4	13	17	15	<MDC
5	Floor	FA5	13	17	16	<MDC
6	Floor	FA6	13	17	15	<MDC
7	Floor	FA7	13	17	17	17
8	Floor	FA8	13	17	20	20
9	Floor	FA9	13	17	12	<MDC
10	Floor	FB1	13	17	16	<MDC
11	Floor	FB2	13	17	9	<MDC
12	Floor	FB3	13	17	19	19
13	Floor	FB4	13	17	19	19
14	Floor	FB5	13	17	17	17
15	Floor	FB6	13	17	26	26
16	Floor	FB7	13	17	21	21
17	Floor	FB8	13	17	12	<MDC
18	Floor	FB9	13	17	17	17
19	Floor	FC1	13	17	17	17
20	Floor	FC2	13	17	7	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 259

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
21	Floor	FC3	13	17	20	20
22	Floor	FC4	13	17	22	22
23	Floor	FC5	13	17	23	23
24	Floor	FC6	13	17	15	<MDC
25	Floor	FC7	13	17	11	<MDC
26	Floor	FC8	13	17	11	<MDC
27	Floor	FC9	13	17	12	<MDC
28	Floor	FD1	13	17	9	<MDC
29	Floor	FD2	13	17	19	19
30	Floor	FD3	13	17	17	17
31	Floor	FD4	13	17	8	<MDC
32	Floor	FD5	13	17	16	<MDC
33	Floor	FD6	13	17	24	24
34	Floor	FD7	13	17	17	17
35	Floor	FD8	13	17	24	24
36	Floor	FD9	13	17	11	<MDC
37	Floor	FE1	13	17	15	<MDC
38	Floor	FE2	13	17	24	24
39	Floor	FE3	13	17	13	<MDC
40	Floor	FE4	13	17	17	17
41	Floor	FE5	13	17	20	20
42	Floor	FE6	13	17	12	<MDC
43	Floor	FE7	13	17	17	17
44	Floor	FE8	13	17	17	17
45	Floor	FE9	13	17	5	<MDC
46	Floor	FF1	13	17	9	<MDC
47	Floor	FF2	13	17	12	<MDC
48	Floor	FF3	13	17	15	<MDC
49	Floor	FF4	13	17	20	20
50	Floor	FF5	13	17	16	<MDC
51	Floor	FF6	13	17	12	<MDC
52	Floor	FF7	13	17	16	<MDC
53	Floor	FF8	13	17	13	<MDC
54	Floor	FF9	13	17	17	17
55	Floor	FG1	13	17	17	17
56	Floor	FG2	13	17	11	<MDC
57	Floor	FG3	13	17	9	<MDC
58	Floor	FG4	13	17	13	<MDC
59	Floor	FG5	13	17	24	24
60	Floor	FG6	13	17	8	<MDC
61	Floor	FG7	13	17	11	<MDC
62	Floor	FG8	13	17	8	<MDC
63	Floor	FG9	13	17	19	19
64	Floor	FH1	13	17	15	<MDC
65	Floor	FH2	13	17	13	<MDC
66	Floor	FH3	13	17	19	19
67	Floor	FH6	13	17	20	20
68	Floor	FH7	13	17	16	<MDC
69	Floor	FH8	13	17	16	<MDC
70	Floor	FH9	13	17	15	<MDC
71	Wall	NA1	13	17	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 25

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
72	Wall	NA2	13	17	15	<MDC
73	Wall	NA3	13	17	15	<MDC
74	Wall	NA4	13	17	17	17
75	Wall	NA5	13	17	11	<MDC
76	Wall	NA6	13	17	17	17
77	Wall	NA7	13	17	17	17
78	Wall	NA8	13	17	12	<MDC
79	Wall	NA9	13	17	15	<MDC
80	Wall	NB1	13	17	17	17
81	Wall	NB2	13	17	17	17
82	Wall	NB3	13	17	11	<MDC
83	Wall	NB4	13	17	24	24
84	Wall	NB5	13	17	15	<MDC
85	Wall	NB6	13	17	20	20
86	Wall	NB7	13	17	4	<MDC
87	Wall	NB8	13	17	12	<MDC
88	Wall	NB9	13	17	15	<MDC
89	Wall	EA1	13	17	15	<MDC
90	Wall	EA2	13	17	21	21
91	Wall	EA3	13	17	15	<MDC
92	Wall	EA4	13	17	16	<MDC
93	Wall	EA5	13	17	16	<MDC
94	Wall	EA6	13	17	12	<MDC
95	Wall	EA7	13	17	11	<MDC
96	Wall	EA8	13	17	7	<MDC
97	Wall	EB1	13	17	16	<MDC
98	Wall	EB2	13	17	12	<MDC
99	Wall	EB3	13	17	17	17
100	Wall	EB4	13	17	15	<MDC
101	Wall	EB5	13	17	13	<MDC
102	Wall	EB6	13	17	15	<MDC
103	Wall	EB7	13	17	20	20
104	Wall	EB8	13	17	19	19
105	Wall	SA1	13	17	21	21
106	Wall	SA2	13	17	12	<MDC
107	Wall	SA3	13	17	15	<MDC
108	Wall	SA4	13	17	21	21
109	Wall	SA5	13	17	9	<MDC
110	Wall	SA6	13	17	20	20
111	Wall	SA7	13	17	11	<MDC
112	Wall	SA8	13	17	13	<MDC
113	Wall	SA9	13	17	23	23
114	Wall	SB1	13	17	17	17
115	Wall	SB2	13	17	17	17
116	Wall	SB3	13	17	16	<MDC
117	Wall	SB4	13	17	16	<MDC
118	Wall	SB5	13	17	13	<MDC
119	Wall	SB6	13	17	21	21
120	Wall	SB7	13	17	24	24
121	Wall	SB8	13	17	17	17
122	Wall	SB9	13	17	19	19

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 259

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
123	Wall	WA1	13	17	8	<MDC
124	Wall	WA2	13	17	7	<MDC
125	Wall	WA3	13	17	16	<MDC
126	Wall	WA4	13	17	13	<MDC
127	Wall	WA5	13	17	13	<MDC
128	Wall	WA6	13	17	16	<MDC
129	Wall	WA7	13	17	16	<MDC
130	Wall	WA8	13	17	17	17
131	Wall	WB1	13	17	15	<MDC
132	Wall	WB2	13	17	15	<MDC
133	Wall	WB3	13	17	11	<MDC
134	Wall	WB4	13	17	13	<MDC
135	Wall	WB5	13	17	13	<MDC
136	Wall	WB6	13	17	11	<MDC
137	Wall	WB7	13	17	17	17
138	Wall	WB8	13	17	17	17
139	Ceiling	CH3	13	17	21	21
140	Ceiling	CE4	13	17	20	20
141	Upper wall	NC5	13	17	20	20
142	Upper wall	EC3	13	17	19	19
143	Hood 1 - rear	FE9	13	17	19	19
144	Hood 1 - base	FE9	13	17	9	<MDC
145	Hood 1 - left	FE9	13	17	16	<MDC
146	Hood 1 - right	FE9	13	17	15	<MDC
147	Hood 1 - vent	FE9	13	17	11	<MDC
148	Sink	FH3	13	17	16	<MDC
149	Trap	FH3	13	17	12	<MDC
150	Sink	FE3	13	17	17	17
151	Trap	FE3	13	17	18	18
152	Sink	FE6	13	17	11	<MDC
153	Trap	FE6	13	17	17	17
154	Sink	FE9	13	17	23	23
155	Trap	FE9	13	17	19	19
156	Sink	FC9	13	17	17	17
157	Trap	FC9	13	17	11	<MDC
158	Benchtop	FE4	13	17	7	<MDC
159	Benchtop	FE7	13	17	13	<MDC
160	Drawer	FE4	13	17	20	20
161	Drawer	FE7	13	17	12	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 25

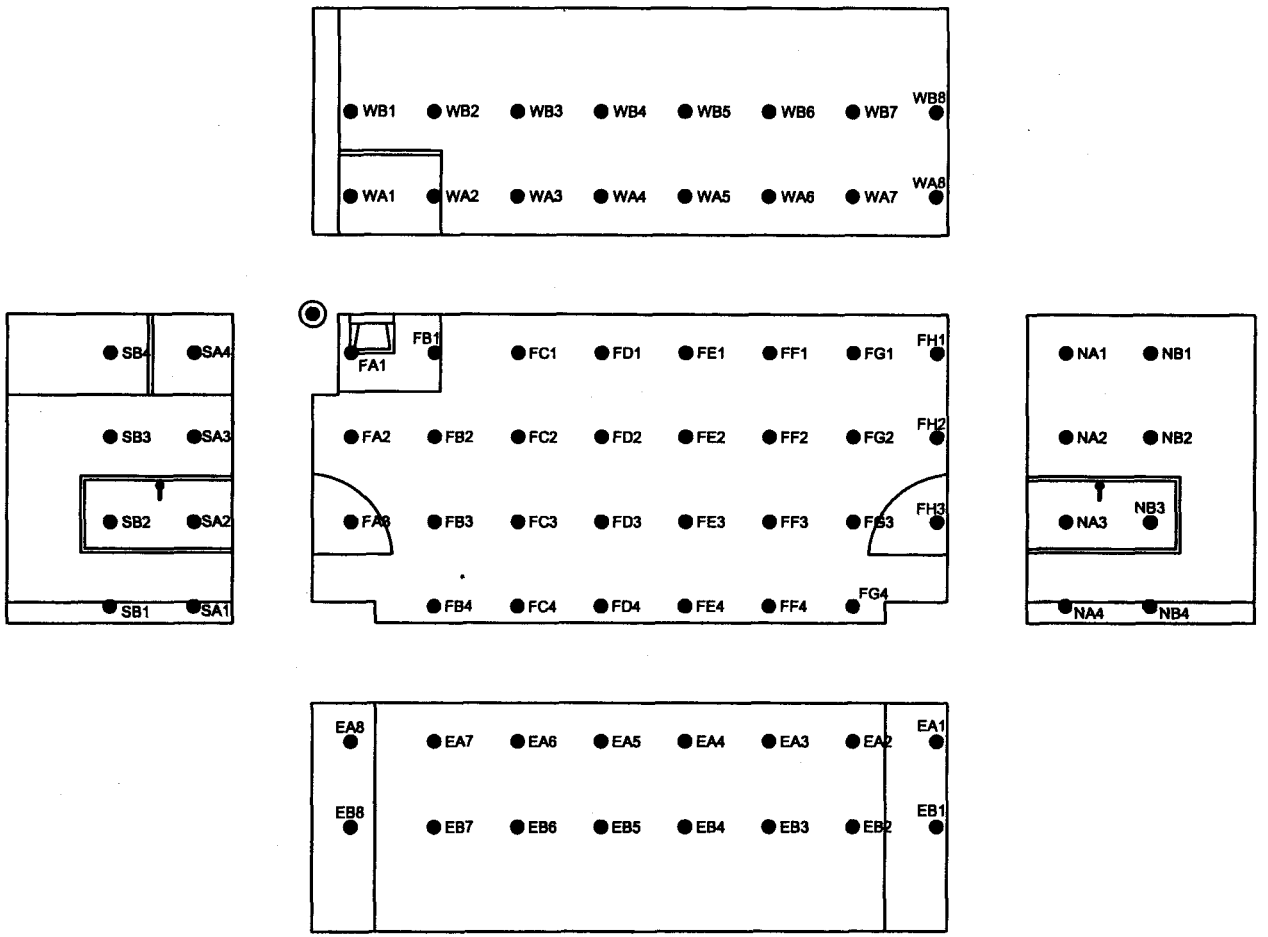
Instrument ID: C Survey Date: 03/22/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	NA8	6
2	Wall	EA2	6
3	Wall	EB6	6
4	Wall	SA5	5
5	Wall	SB8	5
6	Wall	WB2	5
7	Wall	WA6	5
8	Floor	FB2	6
9	Floor	FB7	6
10	Floor	FF5	6
11	Ceiling	CH3	6
12	Ceiling	CE4	6
13	Upper wall	NC5	6
14	Upper wall	EC3	6
15	Hood 1 - rear	FE9	5
16	Hood 1 - base	FE9	5
17	Hood 1 - left	FE9	5
18	Hood 1 - right	FE9	5
19	Hood 1 - vent	FE9	5
20	Sink	FH3	5
21	Trap	FH3	5
22	Sink	FE3	5
23	Trap	FE3	5
24	Sink	FE6	5
25	Trap	FE6	5
26	Sink	FE9	5
27	Trap	FE9	5
28	Sink	FC9	5
29	Trap	FC9	5
30	Benchtop	FE4	5
31	Benchtop	FE7	5
32	Drawer	FE4	5
33	Drawer	FE7	5

Building 31, Room RA264

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 SECOND FLOOR ROOM
RA-264



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 264

Instrument Information:

Instrument ID:	E		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	SB2	170	474	161	-89	<MDC
2	Wall	EA7	170	474	147	-227	<MDC
3	Wall	EB3	170	474	178	79	<MDC
4	Wall	NB3	170	474	173	30	<MDC
5	Wall	NA1	170	474	174	40	<MDC
6	Wall	WB6	170	474	172	20	<MDC
7	Wall	WA3	170	474	166	-40	<MDC
8	Floor	FD2	170	474	187	168	<MDC
9	Floor	FE4	170	474	173	30	<MDC
10	Floor	FA2	170	474	199	287	<MDC
11	Ceiling	CG4	170	474	231	603	603
12	Upper wall	NC2	170	474	214	435	<MDC
13	Benchtop	FA1	170	474	186	158	<MDC
14	Drawer	FA1	170	474	183	128	<MDC
15	Sink	FA1	170	474	173	30	<MDC
16	Trap	FA1	170	474	165	-49	<MDC
17	Fridge - out	FH1	170	474	182	119	<MDC
18	Fridge - out	FF1	170	474	164	-59	<MDC
19	Fridge - out	FD1	170	474	180	99	<MDC
20	Speedvac	FF4	170	474	148	-217	<MDC
21	Aspirator	FF4	170	474	164	-59	<MDC

Survey Type: Scans Survey Unit: 264

Instrument Information:

Instrument ID:	E		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	170	1,378	170	233	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 26

Instrument ID:	Beckman LS6500		Survey Date:	03/24/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	27	48	9	<MDC
2	Floor	FA2	27	48	5	<MDC
3	Floor	FA3	27	48	13	<MDC
4	Floor	FA4	27	48	6	<MDC
5	Floor	FB1	27	48	6	<MDC
6	Floor	FB2	27	48	6	<MDC
7	Floor	FB3	27	48	15	<MDC
8	Floor	FB4	27	48	11	<MDC
9	Floor	FC1	27	48	13	<MDC
10	Floor	FC2	27	48	1	<MDC
11	Floor	FC3	27	48	14	<MDC
12	Floor	FC4	27	48	11	<MDC
13	Floor	FD1	27	48	10	<MDC
14	Floor	FD2	27	48	17	<MDC
15	Floor	FD3	27	48	2	<MDC
16	Floor	FD4	27	48	3	<MDC
17	Floor	FE1	27	48	4	<MDC
18	Floor	FE2	27	48	2	<MDC
19	Floor	FE3	27	48	15	<MDC
20	Floor	FE4	27	48	5	<MDC
21	Floor	FF1	27	48	7	<MDC
22	Floor	FF2	27	48	-3	<MDC
23	Floor	FF3	27	48	9	<MDC
24	Floor	FF4	27	48	5	<MDC
25	Floor	FG1	27	48	3	<MDC
26	Floor	FG2	27	48	29	<MDC
27	Floor	FG3	27	48	18	<MDC
28	Floor	FG4	27	48	9	<MDC
29	Floor	FH1	27	48	11	<MDC
30	Floor	FH2	27	48	-3	<MDC
31	Floor	FH3	27	48	-4	<MDC
32	Floor	FH4	27	48	1	<MDC
33	Wall	NA1	27	48	14	<MDC
34	Wall	NA2	27	48	4	<MDC
35	Wall	NA3	27	48	9	<MDC
36	Wall	NA4	27	48	9	<MDC
37	Wall	NB1	27	48	15	<MDC
38	Wall	NB2	27	48	12	<MDC
39	Wall	NB3	27	48	14	<MDC
40	Wall	NB4	27	48	-3	<MDC
41	Wall	EA1	27	48	14	<MDC
42	Wall	EA2	27	48	7	<MDC
43	Wall	EA3	27	48	16	<MDC
44	Wall	EA4	27	48	3	<MDC
45	Wall	EA5	27	48	5	<MDC
46	Wall	EA6	27	48	14	<MDC
47	Wall	EA7	27	48	1	<MDC
48	Wall	EA8	27	48	11	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 26

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Wall	EB1	27	48	16	<MDC
50	Wall	EB2	27	48	6	<MDC
51	Wall	EB3	27	48	18	<MDC
52	Wall	EB4	27	48	25	<MDC
53	Wall	EB5	27	48	10	<MDC
54	Wall	EB6	27	48	22	<MDC
55	Wall	EB7	27	48	1	<MDC
56	Wall	EB8	27	48	16	<MDC
57	Wall	SA1	27	48	5	<MDC
58	Wall	SA2	27	48	14	<MDC
59	Wall	SA3	27	48	12	<MDC
60	Wall	SA4	27	48	6	<MDC
61	Wall	SB1	27	48	5	<MDC
62	Wall	SB2	27	48	20	<MDC
63	Wall	SB3	27	48	1	<MDC
64	Wall	SB4	27	48	14	<MDC
65	Wall	WA1	27	48	9	<MDC
66	Wall	WA2	27	48	2	<MDC
67	Wall	WA3	27	48	1	<MDC
68	Wall	WA4	27	48	10	<MDC
69	Wall	WA5	27	48	6	<MDC
70	Wall	WA6	27	48	9	<MDC
71	Wall	WA7	27	48	1	<MDC
72	Wall	WA8	27	48	7	<MDC
73	Wall	WB1	27	48	-3	<MDC
74	Wall	WB2	27	48	23	<MDC
75	Wall	WB3	27	48	9	<MDC
76	Wall	WB4	27	48	15	<MDC
77	Wall	WB5	27	48	13	<MDC
78	Wall	WB6	27	48	13	<MDC
79	Wall	WB7	27	48	1	<MDC
80	Wall	WB8	27	48	15	<MDC
81	Ceiling	CG4	27	48	3	<MDC
82	Upper wall	NC2	27	48	15	<MDC
83	Benchtop	FA1	27	48	10	<MDC
84	Drawer	FA1	27	48	12	<MDC
85	Sink	FA1	27	48	2	<MDC
86	Trap	FA1	27	48	15	<MDC
87	Fridge - in	FH1	27	48	11	<MDC
88	Fridge - out	FH1	27	48	16	<MDC
89	Fridge - in	FF1	27	48	8	<MDC
90	Fridge - out	FF1	27	48	1	<MDC
91	Fridge - in	FD1	27	48	11	<MDC
92	Fridge - out	FD1	27	48	5	<MDC
93	Speedvac	FF4	27	48	11	<MDC
94	Aspirator	FF4	27	48	7	<MDC
95	Entropech	FF4	27	48	9	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 26

Instrument ID:	Beckman LS6500		Survey Date:	03/24/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	13	17	9	<MDC
2	Floor	FA2	13	17	16	<MDC
3	Floor	FA3	13	17	16	<MDC
4	Floor	FA4	13	17	19	19
5	Floor	FB1	13	17	15	<MDC
6	Floor	FB2	13	17	13	<MDC
7	Floor	FB3	13	17	17	17
8	Floor	FB4	13	17	16	<MDC
9	Floor	FC1	13	17	16	<MDC
10	Floor	FC2	13	17	20	20
11	Floor	FC3	13	17	17	17
12	Floor	FC4	13	17	15	<MDC
13	Floor	FD1	13	17	17	17
14	Floor	FD2	13	17	13	<MDC
15	Floor	FD3	13	17	17	17
16	Floor	FD4	13	17	16	<MDC
17	Floor	FE1	13	17	19	19
18	Floor	FE2	13	17	18	18
19	Floor	FE3	13	17	23	23
20	Floor	FE4	13	17	12	<MDC
21	Floor	FF1	13	17	19	19
22	Floor	FF2	13	17	12	<MDC
23	Floor	FF3	13	17	17	17
24	Floor	FF4	13	17	11	<MDC
25	Floor	FG1	13	17	11	<MDC
26	Floor	FG2	13	17	6	<MDC
27	Floor	FG3	13	17	16	<MDC
28	Floor	FG4	13	17	13	<MDC
29	Floor	FH1	13	17	9	<MDC
30	Floor	FH2	13	17	16	<MDC
31	Floor	FH3	13	17	19	19
32	Floor	FH4	13	17	20	20
33	Wall	NA1	13	17	17	17
34	Wall	NA2	13	17	23	23
35	Wall	NA3	13	17	17	17
36	Wall	NA4	13	17	13	<MDC
37	Wall	NB1	13	17	11	<MDC
38	Wall	NB2	13	17	11	<MDC
39	Wall	NB3	13	17	19	19
40	Wall	NB4	13	17	17	17
41	Wall	EA1	13	17	8	<MDC
42	Wall	EA2	13	17	17	17
43	Wall	EA3	13	17	8	<MDC
44	Wall	EA4	13	17	15	<MDC
45	Wall	EA5	13	17	21	21
46	Wall	EA6	13	17	17	17
47	Wall	EA7	13	17	15	<MDC
48	Wall	EA8	13	17	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-12 Survey Unit: 26

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
49	Wall	EB1	13	17	19	19
50	Wall	EB2	13	17	15	<MDC
51	Wall	EB3	13	17	15	<MDC
52	Wall	EB4	13	17	12	<MDC
53	Wall	EB5	13	17	11	<MDC
54	Wall	EB6	13	17	11	<MDC
55	Wall	EB7	13	17	24	24
56	Wall	EB8	13	17	13	<MDC
57	Wall	SA1	13	17	16	<MDC
58	Wall	SA2	13	17	13	<MDC
59	Wall	SA3	13	17	17	17
60	Wall	SA4	13	17	9	<MDC
61	Wall	SB1	13	17	11	<MDC
62	Wall	SB2	13	17	12	<MDC
63	Wall	SB3	13	17	16	<MDC
64	Wall	SB4	13	17	8	<MDC
65	Wall	WA1	13	17	24	24
66	Wall	WA2	13	17	17	17
67	Wall	WA3	13	17	8	<MDC
68	Wall	WA4	13	17	11	<MDC
69	Wall	WA5	13	17	15	<MDC
70	Wall	WA6	13	17	17	17
71	Wall	WA7	13	17	15	<MDC
72	Wall	WA8	13	17	12	<MDC
73	Wall	WB1	13	17	16	<MDC
74	Wall	WB2	13	17	15	<MDC
75	Wall	WB3	13	17	12	<MDC
76	Wall	WB4	13	17	16	<MDC
77	Wall	WB5	13	17	15	<MDC
78	Wall	WB6	13	17	9	<MDC
79	Wall	WB7	13	17	15	<MDC
80	Wall	WB8	13	17	16	<MDC
81	Ceiling	CG4	13	17	15	<MDC
82	Upper wall	NC2	13	17	12	<MDC
83	Benchtop	FA1	13	17	11	<MDC
84	Drawer	FA1	13	17	17	17
85	Sink	FA1	13	17	12	<MDC
86	Trap	FA1	13	17	21	21
87	Fridge - in	FH1	13	17	15	<MDC
88	Fridge - out	FH1	13	17	11	<MDC
89	Fridge - in	FF1	13	17	10	<MDC
90	Fridge - out	FF1	13	17	19	19
91	Fridge - in	FD1	13	17	13	<MDC
92	Fridge - out	FD1	13	17	12	<MDC
93	Speedvac	FF4	13	17	15	<MDC
94	Aspirator	FF4	13	17	17	17
95	Entropech	FF4	13	17	19	19

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 264

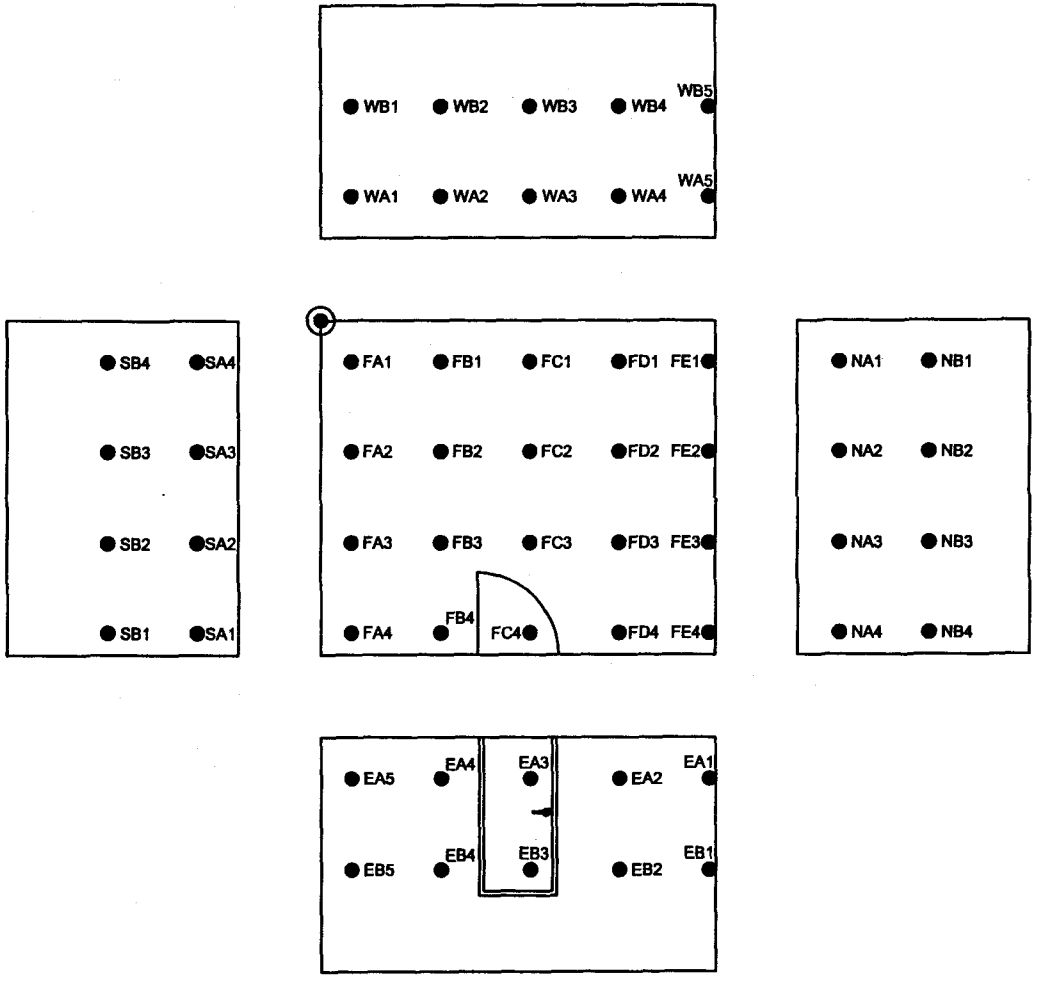
Instrument ID: C Survey Date: 03/22/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	SB2	4
2	Wall	EA7	4
3	Wall	EB3	5
4	Wall	NB3	5
5	Wall	NA1	5
6	Wall	WB6	5
7	Wall	WA3	5
8	Floor	FD2	5
9	Floor	FE4	5
10	Floor	FA2	5
11	Ceiling	CG4	5
12	Upper wall	NC2	5
13	Benchtop	FA1	5
14	Drawer	FA1	5
15	Sink	FA1	5
16	Trap	FA1	5
17	Fridge - in	FH1	5
18	Fridge - out	FH1	5
19	Fridge - in	FF1	5
20	Fridge - out	FF1	5
21	Fridge - in	FD1	5
22	Fridge - out	FD1	5
23	Speedvac	FF4	5
24	Aspirator	FF4	5

Building 31, Room RA306

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 THIRD FLOOR ROOM RA-306



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta **Survey Unit: 306**

Instrument Information:

Instrument ID:	G		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	WA2	65	295	71	57	<MDC
2	Wall	WA5	65	295	74	86	<MDC
3	Wall	NB2	65	295	84	182	<MDC
4	Metal	EB2	65	295	78	124	<MDC
5	Metal	EA3	65	295	76	105	<MDC
6	Wall	EA5	65	295	71	57	<MDC
7	Wall	SB2	65	295	59	-57	<MDC
8	Floor	FB2	65	295	64	-10	<MDC
9	Floor	FC3	65	295	61	-38	<MDC
10	Floor	FA3	65	295	60	-48	<MDC
11	Ceiling	CB1	65	295	87	210	<MDC
12	Upper wall	EC4	65	295	81	153	<MDC

Survey Type: Scans **Survey Unit: 306**

Instrument Information:

Instrument ID:	G		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	65	824	70	100	<MDC	<MDC

Survey Type: Removable H-3 **Survey Unit: 306**

Instrument ID:	Beckman LS6500		Survey Date:	03/29/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	10	48	32	<MDC
2	Floor	FA2	10	48	32	<MDC
3	Floor	FA3	10	48	11	<MDC
4	Floor	FA4	10	48	8	<MDC
5	Floor	FB1	10	48	27	<MDC
6	Floor	FB2	10	48	27	<MDC
7	Floor	FB3	10	48	31	<MDC
8	Floor	FB4	10	48	11	<MDC
9	Floor	FC1	10	48	14	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 306

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
10	Floor	FC2	10	48	24	<MDC
11	Floor	FC3	10	48	23	<MDC
12	Floor	FC4	10	48	35	<MDC
13	Floor	FD1	10	48	1	<MDC
14	Floor	FD2	10	48	1	<MDC
15	Floor	FD3	10	48	16	<MDC
16	Floor	FD4	10	48	18	<MDC
17	Floor	FE1	10	48	26	<MDC
18	Floor	FE2	10	48	21	<MDC
19	Floor	FE3	10	48	10	<MDC
20	Floor	FE4	10	48	17	<MDC
21	Wall	SA4	10	48	21	<MDC
22	Wall	SA3	10	48	11	<MDC
23	Wall	SA2	10	48	25	<MDC
24	Wall	SA1	10	48	8	<MDC
25	Wall	SB4	10	48	16	<MDC
26	Wall	SB3	10	48	21	<MDC
27	Wall	SB2	10	48	6	<MDC
28	Wall	SB1	10	48	-4	<MDC
29	Wall	WA5	10	48	19	<MDC
30	Wall	WA4	10	48	1	<MDC
31	Wall	WA3	10	48	13	<MDC
32	Wall	WA2	10	48	9	<MDC
33	Wall	WA1	10	48	14	<MDC
34	Wall	WB5	10	48	34	<MDC
35	Wall	WB4	10	48	12	<MDC
36	Wall	WB3	10	48	18	<MDC
37	Wall	WB2	10	48	9	<MDC
38	Wall	WB1	10	48	23	<MDC
39	Wall	NA1	10	48	18	<MDC
40	Wall	NA2	10	48	24	<MDC
41	Wall	NA3	10	48	8	<MDC
42	Wall	NA4	10	48	6	<MDC
43	Wall	NB1	10	48	26	<MDC
44	Wall	NB2	10	48	9	<MDC
45	Wall	NB3	10	48	10	<MDC
46	Wall	NB4	10	48	23	<MDC
47	Wall	EA1	10	48	5	<MDC
48	Wall	EA2	10	48	17	<MDC
49	Wall	EA3	10	48	11	<MDC
50	Wall	EA4	10	48	18	<MDC
51	Wall	EA5	10	48	23	<MDC
52	Wall	EB1	10	48	11	<MDC
53	Wall	EB2	10	48	21	<MDC
54	Wall	EB3	10	48	12	<MDC
55	Wall	EB4	10	48	20	<MDC
56	Wall	EB5	10	48	18	<MDC
57	Ceiling	CB1	10	48	1	<MDC
58	Upper wall	EC4	10	48	17	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type:	Removable C-14		Survey Unit:	306	
Instrument ID:	Beckman LS6500		Survey Date:	03/29/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	10	23	18	<MDC
2	Floor	FA2	10	23	15	<MDC
3	Floor	FA3	10	23	10	<MDC
4	Floor	FA4	10	23	18	<MDC
5	Floor	FB1	10	23	8	<MDC
6	Floor	FB2	10	23	18	<MDC
7	Floor	FB3	10	23	5	<MDC
8	Floor	FB4	10	23	23	<MDC
9	Floor	FC1	10	23	13	<MDC
10	Floor	FC2	10	23	5	<MDC
11	Floor	FC3	10	23	18	<MDC
12	Floor	FC4	10	23	15	<MDC
13	Floor	FD1	10	23	10	<MDC
14	Floor	FD2	10	23	21	<MDC
15	Floor	FD3	10	23	8	<MDC
16	Floor	FD4	10	23	13	<MDC
17	Floor	FE1	10	23	18	<MDC
18	Floor	FE2	10	23	23	<MDC
19	Floor	FE3	10	23	23	<MDC
20	Floor	FE4	10	23	26	26
21	Wall	SA4	10	23	2	<MDC
22	Wall	SA3	10	23	21	<MDC
23	Wall	SA2	10	23	13	<MDC
24	Wall	SA1	10	23	31	31
25	Wall	SB4	10	23	18	<MDC
26	Wall	SB3	10	23	13	<MDC
27	Wall	SB2	10	23	26	26
28	Wall	SB1	10	23	13	<MDC
29	Wall	WA5	10	23	8	<MDC
30	Wall	WA4	10	23	18	<MDC
31	Wall	WA3	10	23	15	<MDC
32	Wall	WA2	10	23	5	<MDC
33	Wall	WA1	10	23	13	<MDC
34	Wall	WB5	10	23	8	<MDC
35	Wall	WB4	10	23	8	<MDC
36	Wall	WB3	10	23	13	<MDC
37	Wall	WB2	10	23	16	<MDC
38	Wall	WB1	10	23	18	<MDC
39	Wall	NA1	10	23	13	<MDC
40	Wall	NA2	10	23	5	<MDC
41	Wall	NA3	10	23	21	<MDC
42	Wall	NA4	10	23	15	<MDC
43	Wall	NB1	10	23	8	<MDC
44	Wall	NB2	10	23	18	<MDC
45	Wall	NB3	10	23	23	<MDC
46	Wall	NB4	10	23	8	<MDC
47	Wall	EA1	10	23	28	28
48	Wall	EA2	10	23	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 306

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Wall	EA3	10	23	10	<MDC
50	Wall	EA4	10	23	21	<MDC
51	Wall	EA5	10	23	18	<MDC
52	Wall	EB1	10	23	10	<MDC
53	Wall	EB2	10	23	13	<MDC
54	Wall	EB3	10	23	8	<MDC
55	Wall	EB4	10	23	8	<MDC
56	Wall	EB5	10	23	13	<MDC
57	Ceiling	CB1	10	23	21	<MDC
58	Upper wall	EC4	10	23	15	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 306

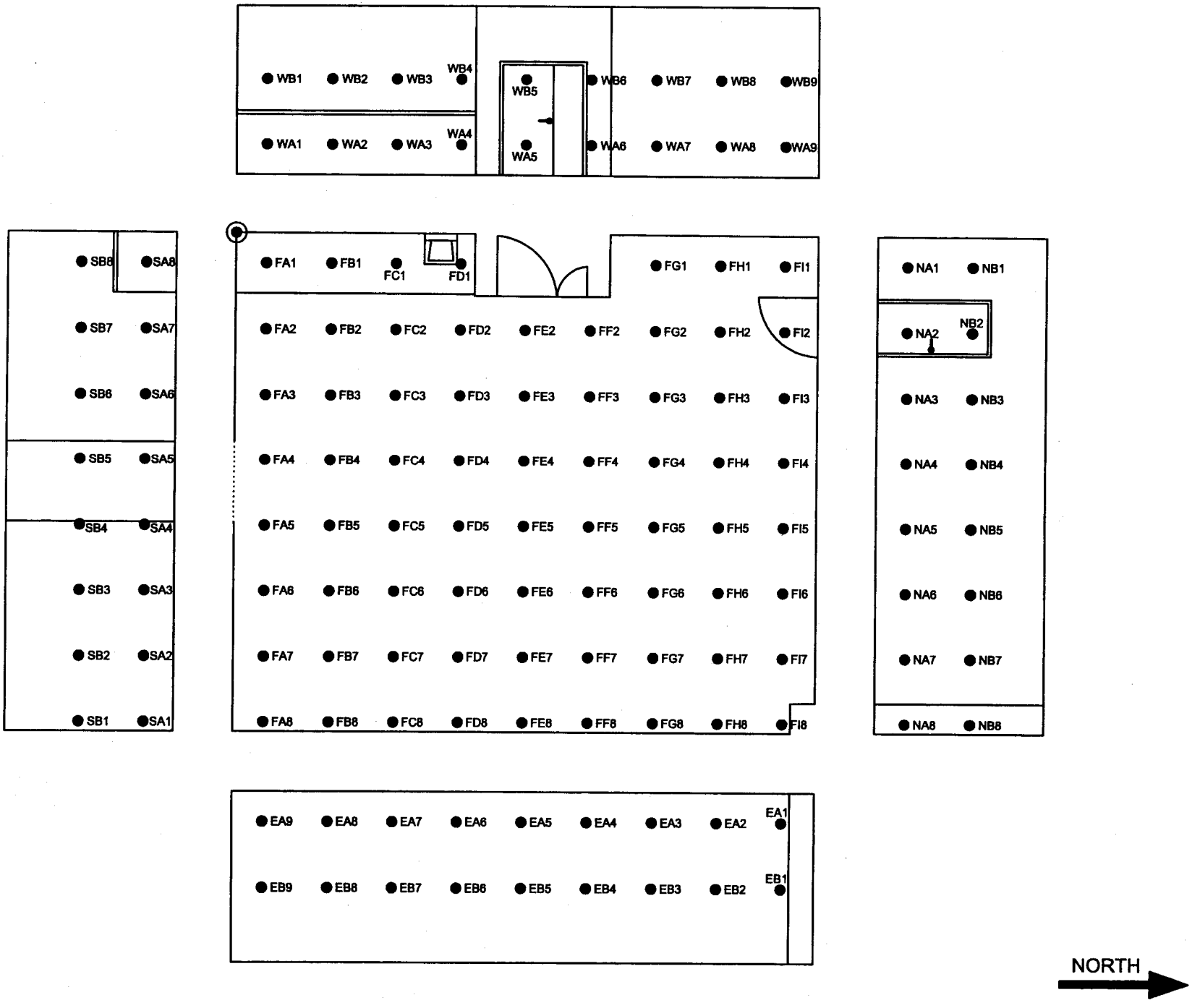
Instrument ID: C Survey Date: 03/22/05

Background (R_b): 6 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	WA2	6
2	Wall	WA5	6
3	Wall	NB2	6
4	Metal	EB2	6
5	Metal	EA3	6
6	Wall	EA5	6
7	Wall	SB2	6
8	Floor	FB2	6
9	Floor	FC3	6
10	Floor	FA3	6
11	Ceiling	CB1	6
12	Upper wall	EC4	6

Building 31, Room RA309

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 THIRD FLOOR ROOM RA-309



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 309

Instrument Information:

Instrument ID:	E		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	NA1	175	481	162	-128	<MDC
2	Wall	NB5	175	481	195	198	<MDC
3	Wall	EB2	175	481	187	119	<MDC
4	Wall	SB7	175	481	165	-99	<MDC
5	Wall	SA8	175	481	164	-109	<MDC
6	Wall	WB5	175	481	203	277	<MDC
7	Floor	FF2	175	481	193	178	<MDC
8	Floor	FH5	175	481	205	297	<MDC
9	Floor	FE3	175	481	222	465	<MDC
10	Floor	FB4	175	481	204	287	<MDC
11	Ceiling	CG2	175	481	313	1,364	1,364
12	Ceiling	CD2	175	481	275	988	988
13	Upper wall	NC1	175	481	156	-188	<MDC
14	Upper wall	SC4	175	481	190	148	<MDC
15	Benchtop	FI6	175	481	198	227	<MDC
16	Benchtop	FA2	175	481	169	-59	<MDC
17	Drawer	FI6	175	481	170	-49	<MDC
18	Drawer	FA2	175	481	179	40	<MDC
19	Sink	FD4	175	481	157	-178	<MDC
20	Trap	FD1	175	481	184	89	<MDC

Survey Type: Scans Survey Unit: 309

Instrument Information:

Instrument ID:	G		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	70	884	70	110	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 309

Instrument ID:	Beckman LS6500		Survey Date:	03/29/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	10	48	13	<MDC
2	Floor	FA2	10	48	13	<MDC
3	Floor	FA3	10	48	27	<MDC
4	Floor	FA4	10	48	12	<MDC
5	Floor	FA5	10	48	30	<MDC
6	Floor	FA6	10	48	16	<MDC
7	Floor	FA7	10	48	34	<MDC
8	Floor	FA8	10	48	8	<MDC
9	Floor	FB1	10	48	22	<MDC
10	Floor	FB2	10	48	19	<MDC
11	Floor	FB3	10	48	11	<MDC
12	Floor	FB4	10	48	29	<MDC
13	Floor	FB5	10	48	26	<MDC
14	Floor	FB6	10	48	17	<MDC
15	Floor	FB7	10	48	32	<MDC
16	Floor	FB8	10	48	13	<MDC
17	Floor	FC1	10	48	19	<MDC
18	Floor	FC2	10	48	1	<MDC
19	Floor	FC3	10	48	4	<MDC
20	Floor	FC4	10	48	27	<MDC
21	Floor	FC5	10	48	13	<MDC
22	Floor	FC6	10	48	24	<MDC
23	Floor	FC7	10	48	33	<MDC
24	Floor	FC8	10	48	-1	<MDC
25	Floor	FD1	10	48	12	<MDC
26	Floor	FD2	10	48	9	<MDC
27	Floor	FD3	10	48	13	<MDC
28	Floor	FD4	10	48	23	<MDC
29	Floor	FD5	10	48	12	<MDC
30	Floor	FD6	10	48	10	<MDC
31	Floor	FD7	10	48	33	<MDC
32	Floor	FD8	10	48	21	<MDC
33	Floor	FE1	10	48	32	<MDC
34	Floor	FE2	10	48	32	<MDC
35	Floor	FE3	10	48	10	<MDC
36	Floor	FE4	10	48	23	<MDC
37	Floor	FE5	10	48	21	<MDC
38	Floor	FE6	10	48	20	<MDC
39	Floor	FE7	10	48	13	<MDC
40	Floor	FE8	10	48	27	<MDC
41	Floor	FF1	10	48	21	<MDC
42	Floor	FF2	10	48	13	<MDC
43	Floor	FF3	10	48	9	<MDC
44	Floor	FF4	10	48	27	<MDC
45	Floor	FF5	10	48	18	<MDC
46	Floor	FF6	10	48	5	<MDC
47	Floor	FF7	10	48	26	<MDC
48	Floor	FF8	10	48	10	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 399

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Floor	FG1	10	48	25	<MDC
50	Floor	FG2	10	48	14	<MDC
51	Floor	FG3	10	48	27	<MDC
52	Floor	FG4	10	48	8	<MDC
53	Floor	FG5	10	48	6	<MDC
54	Floor	FG6	10	48	19	<MDC
55	Floor	FG7	10	48	9	<MDC
56	Floor	FG8	10	48	21	<MDC
57	Floor	FH1	10	48	20	<MDC
58	Floor	FH2	10	48	22	<MDC
59	Floor	FH3	10	48	28	<MDC
60	Floor	FH4	10	48	16	<MDC
61	Floor	FH5	10	48	17	<MDC
62	Floor	FH6	10	48	40	<MDC
63	Floor	FH7	10	48	23	<MDC
64	Floor	FH8	10	48	21	<MDC
65	Floor	FI1	10	48	20	<MDC
66	Floor	FI2	10	48	11	<MDC
67	Floor	FI3	10	48	28	<MDC
68	Floor	FI4	10	48	21	<MDC
69	Floor	FI5	10	48	19	<MDC
70	Floor	FI6	10	48	19	<MDC
71	Floor	FI7	10	48	13	<MDC
72	Floor	FI8	10	48	9	<MDC
73	Wall	NA1	10	48	12	<MDC
74	Wall	NA2	10	48	-1	<MDC
75	Wall	NA3	10	48	17	<MDC
76	Wall	NA4	10	48	20	<MDC
77	Wall	NA5	10	48	23	<MDC
78	Wall	NA6	10	48	22	<MDC
79	Wall	NA7	10	48	11	<MDC
80	Wall	NA8	10	48	15	<MDC
81	Wall	NB1	10	48	5	<MDC
82	Wall	NB2	10	48	23	<MDC
83	Wall	NB3	10	48	34	<MDC
84	Wall	NB4	10	48	1	<MDC
85	Wall	NB5	10	48	20	<MDC
86	Wall	NB6	10	48	3	<MDC
87	Wall	NB7	10	48	19	<MDC
88	Wall	NB8	10	48	23	<MDC
89	Wall	EA1	10	48	15	<MDC
90	Wall	EA2	10	48	20	<MDC
91	Wall	EA3	10	48	23	<MDC
92	Wall	EA4	10	48	21	<MDC
93	Wall	EA5	10	48	12	<MDC
94	Wall	EA6	10	48	24	<MDC
95	Wall	EA7	10	48	13	<MDC
96	Wall	EA8	10	48	8	<MDC
97	Wall	EA9	10	48	12	<MDC
98	Wall	EB1	10	48	21	<MDC
99	Wall	EB2	10	48	25	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 309

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
100	Wall	EB3	10	48	7	<MDC
101	Wall	EB4	10	48	12	<MDC
102	Wall	EB5	10	48	9	<MDC
103	Wall	EB6	10	48	18	<MDC
104	Wall	EB7	10	48	28	<MDC
105	Wall	EB8	10	48	26	<MDC
106	Wall	EB9	10	48	26	<MDC
107	Wall	SA1	10	48	26	<MDC
108	Wall	SA2	10	48	31	<MDC
109	Wall	SA3	10	48	24	<MDC
110	Wall	SA4	10	48	19	<MDC
111	Wall	SA5	10	48	14	<MDC
112	Wall	SA6	10	48	22	<MDC
113	Wall	SA7	10	48	19	<MDC
114	Wall	SA8	10	48	18	<MDC
115	Wall	SB1	10	48	81	81
116	Wall	SB2	10	48	40	<MDC
117	Wall	SB3	10	48	29	<MDC
118	Wall	SB4	10	48	21	<MDC
119	Wall	SB5	10	48	23	<MDC
120	Wall	SB6	10	48	14	<MDC
121	Wall	SB7	10	48	18	<MDC
122	Wall	SB8	10	48	12	<MDC
123	Wall	WA1	10	48	12	<MDC
124	Wall	WA2	10	48	12	<MDC
125	Wall	WA3	10	48	40	<MDC
126	Wall	WA4	10	48	8	<MDC
127	Wall	WA5	10	48	41	<MDC
128	Wall	WA6	10	48	22	<MDC
129	Wall	WA7	10	48	6	<MDC
130	Wall	WA8	10	48	29	<MDC
131	Wall	WA9	10	48	24	<MDC
132	Wall	WB1	10	48	13	<MDC
133	Wall	WB2	10	48	23	<MDC
134	Wall	WB3	10	48	15	<MDC
135	Wall	WB4	10	48	18	<MDC
136	Wall	WB5	10	48	19	<MDC
137	Wall	WB6	10	48	11	<MDC
138	Wall	WB7	10	48	26	<MDC
139	Wall	WB8	10	48	21	<MDC
140	Wall	WB9	10	48	22	<MDC
141	Ceiling	CG2	10	48	17	<MDC
142	Ceiling	CD2	10	48	6	<MDC
143	Upper wall	NC1	10	48	18	<MDC
144	Upper wall	SC4	10	48	8	<MDC
145	Benchtop	FI6	10	48	21	<MDC
146	Benchtop	FA2	10	48	11	<MDC
147	Drawer	FI6	10	48	5	<MDC
148	Drawer	FA2	10	48	11	<MDC
149	Sink	FG4	10	48	14	<MDC
150	Trap	FG4	10	48	24	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 309

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
151	Sink	FD4	10	48	25	<MDC
152	Trap	FD4	10	48	2	<MDC
153	Sink	FD1	10	48	17	<MDC
154	Trap	FD1	10	48	21	<MDC
155	Sink	FI4	10	48	18	<MDC
156	Trap	FI4	10	48	6	<MDC

Survey Type: Removable C-14 Survey Unit: 309

Instrument ID:	Beckman LS6500		Survey Date:	03/29/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm² (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	10	23	15	<MDC
2	Floor	FA2	10	23	16	<MDC
3	Floor	FA3	10	23	18	<MDC
4	Floor	FA4	10	23	8	<MDC
5	Floor	FA5	10	23	10	<MDC
6	Floor	FA6	10	23	18	<MDC
7	Floor	FA7	10	23	8	<MDC
8	Floor	FA8	10	23	21	<MDC
9	Floor	FB1	10	23	10	<MDC
10	Floor	FB2	10	23	10	<MDC
11	Floor	FB3	10	23	10	<MDC
12	Floor	FB4	10	23	2	<MDC
13	Floor	FB5	10	23	21	<MDC
14	Floor	FB6	10	23	15	<MDC
15	Floor	FB7	10	23	23	<MDC
16	Floor	FB8	10	23	15	<MDC
17	Floor	FC1	10	23	18	<MDC
18	Floor	FC2	10	23	21	<MDC
19	Floor	FC3	10	23	31	31
20	Floor	FC4	10	23	5	<MDC
21	Floor	FC5	10	23	5	<MDC
22	Floor	FC6	10	23	15	<MDC
23	Floor	FC7	10	23	13	<MDC
24	Floor	FC8	10	23	13	<MDC
25	Floor	FD1	10	23	8	<MDC
26	Floor	FD2	10	23	18	<MDC
27	Floor	FD3	10	23	26	26
28	Floor	FD4	10	23	18	<MDC
29	Floor	FD5	10	23	18	<MDC
30	Floor	FD6	10	23	13	<MDC
31	Floor	FD7	10	23	10	<MDC
32	Floor	FD8	10	23	13	<MDC
33	Floor	FE1	10	23	15	<MDC
34	Floor	FE2	10	23	5	<MDC
35	Floor	FE3	10	23	16	<MDC
36	Floor	FE4	10	23	8	<MDC
37	Floor	FE5	10	23	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 309

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
38	Floor	FE6	10	23	26	26
39	Floor	FE7	10	23	15	<MDC
40	Floor	FE8	10	23	8	<MDC
41	Floor	FF1	10	23	13	<MDC
42	Floor	FF2	10	23	5	<MDC
43	Floor	FF3	10	23	16	<MDC
44	Floor	FF4	10	23	18	<MDC
45	Floor	FF5	10	23	13	<MDC
46	Floor	FF6	10	23	18	<MDC
47	Floor	FF7	10	23	10	<MDC
48	Floor	FF8	10	23	13	<MDC
49	Floor	FG1	10	23	13	<MDC
50	Floor	FG2	10	23	13	<MDC
51	Floor	FG3	10	23	18	<MDC
52	Floor	FG4	10	23	10	<MDC
53	Floor	FG5	10	23	16	<MDC
54	Floor	FG6	10	23	10	<MDC
55	Floor	FG7	10	23	18	<MDC
56	Floor	FG8	10	23	26	26
57	Floor	FH1	10	23	28	28
58	Floor	FH2	10	23	13	<MDC
59	Floor	FH3	10	23	28	28
60	Floor	FH4	10	23	18	<MDC
61	Floor	FH5	10	23	15	<MDC
62	Floor	FH6	10	23	15	<MDC
63	Floor	FH7	10	23	31	31
64	Floor	FH8	10	23	26	26
65	Floor	FI1	10	23	18	<MDC
66	Floor	FI2	10	23	10	<MDC
67	Floor	FI3	10	23	15	<MDC
68	Floor	FI4	10	23	15	<MDC
69	Floor	FI5	10	23	10	<MDC
70	Floor	FI6	10	23	10	<MDC
71	Floor	FI7	10	23	18	<MDC
72	Floor	FI8	10	23	29	29
73	Wall	NA1	10	23	21	<MDC
74	Wall	NA2	10	23	23	<MDC
75	Wall	NA3	10	23	36	36
76	Wall	NA4	10	23	18	<MDC
77	Wall	NA5	10	23	31	31
78	Wall	NA6	10	23	23	<MDC
79	Wall	NA7	10	23	23	<MDC
80	Wall	NA8	10	23	21	<MDC
81	Wall	NB1	10	23	29	29
82	Wall	NB2	10	23	21	<MDC
83	Wall	NB3	10	23	31	31
84	Wall	NB4	10	23	31	31
85	Wall	NB5	10	23	18	<MDC
86	Wall	NB6	10	23	23	<MDC
87	Wall	NB7	10	23	10	<MDC
88	Wall	NB8	10	23	21	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 305

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
89	Wall	EA1	10	23	23	<MDC
90	Wall	EA2	10	23	18	<MDC
91	Wall	EA3	10	23	10	<MDC
92	Wall	EA4	10	23	15	<MDC
93	Wall	EA5	10	23	8	<MDC
94	Wall	EA6	10	23	18	<MDC
95	Wall	EA7	10	23	16	<MDC
96	Wall	EA8	10	23	0	<MDC
97	Wall	EA9	10	23	21	<MDC
98	Wall	EB1	10	23	13	<MDC
99	Wall	EB2	10	23	13	<MDC
100	Wall	EB3	10	23	13	<MDC
101	Wall	EB4	10	23	18	<MDC
102	Wall	EB5	10	23	18	<MDC
103	Wall	EB6	10	23	2	<MDC
104	Wall	EB7	10	23	5	<MDC
105	Wall	EB8	10	23	13	<MDC
106	Wall	EB9	10	23	13	<MDC
107	Wall	SA1	10	23	10	<MDC
108	Wall	SA2	10	23	8	<MDC
109	Wall	SA3	10	23	18	<MDC
110	Wall	SA4	10	23	21	<MDC
111	Wall	SA5	10	23	23	<MDC
112	Wall	SA6	10	23	10	<MDC
113	Wall	SA7	10	23	8	<MDC
114	Wall	SA8	10	23	13	<MDC
115	Wall	SB1	10	23	20	<MDC
116	Wall	SB2	10	23	13	<MDC
117	Wall	SB3	10	23	10	<MDC
118	Wall	SB4	10	23	13	<MDC
119	Wall	SB5	10	23	18	<MDC
120	Wall	SB6	10	23	13	<MDC
121	Wall	SB7	10	23	10	<MDC
122	Wall	SB8	10	23	18	<MDC
123	Wall	WA1	10	23	18	<MDC
124	Wall	WA2	10	23	18	<MDC
125	Wall	WA3	10	23	23	<MDC
126	Wall	WA4	10	23	8	<MDC
127	Wall	WA5	10	23	10	<MDC
128	Wall	WA6	10	23	10	<MDC
129	Wall	WA7	10	23	16	<MDC
130	Wall	WA8	10	23	13	<MDC
131	Wall	WA9	10	23	18	<MDC
132	Wall	WB1	10	23	5	<MDC
133	Wall	WB2	10	23	18	<MDC
134	Wall	WB3	10	23	10	<MDC
135	Wall	WB4	10	23	23	<MDC
136	Wall	WB5	10	23	21	<MDC
137	Wall	WB6	10	23	10	<MDC
138	Wall	WB7	10	23	21	<MDC
139	Wall	WB8	10	23	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 309

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
140	Wall	WB9	10	23	23	<MDC
141	Ceiling	CG2	10	23	5	<MDC
142	Ceiling	CD2	10	23	16	<MDC
143	Upper wall	NC1	10	23	21	<MDC
144	Upper wall	SC4	10	23	8	<MDC
145	Benchtop	FI6	10	23	13	<MDC
146	Benchtop	FA2	10	23	10	<MDC
147	Drawer	FI6	10	23	18	<MDC
148	Drawer	FA2	10	23	10	<MDC
149	Sink	FG4	10	23	23	<MDC
150	Trap	FG4	10	23	18	<MDC
151	Sink	FD4	10	23	13	<MDC
152	Trap	FD4	10	23	16	<MDC
153	Sink	FD1	10	23	15	<MDC
154	Trap	FD1	10	23	5	<MDC
155	Sink	FI4	10	23	13	<MDC
156	Trap	FI4	10	23	5	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 309

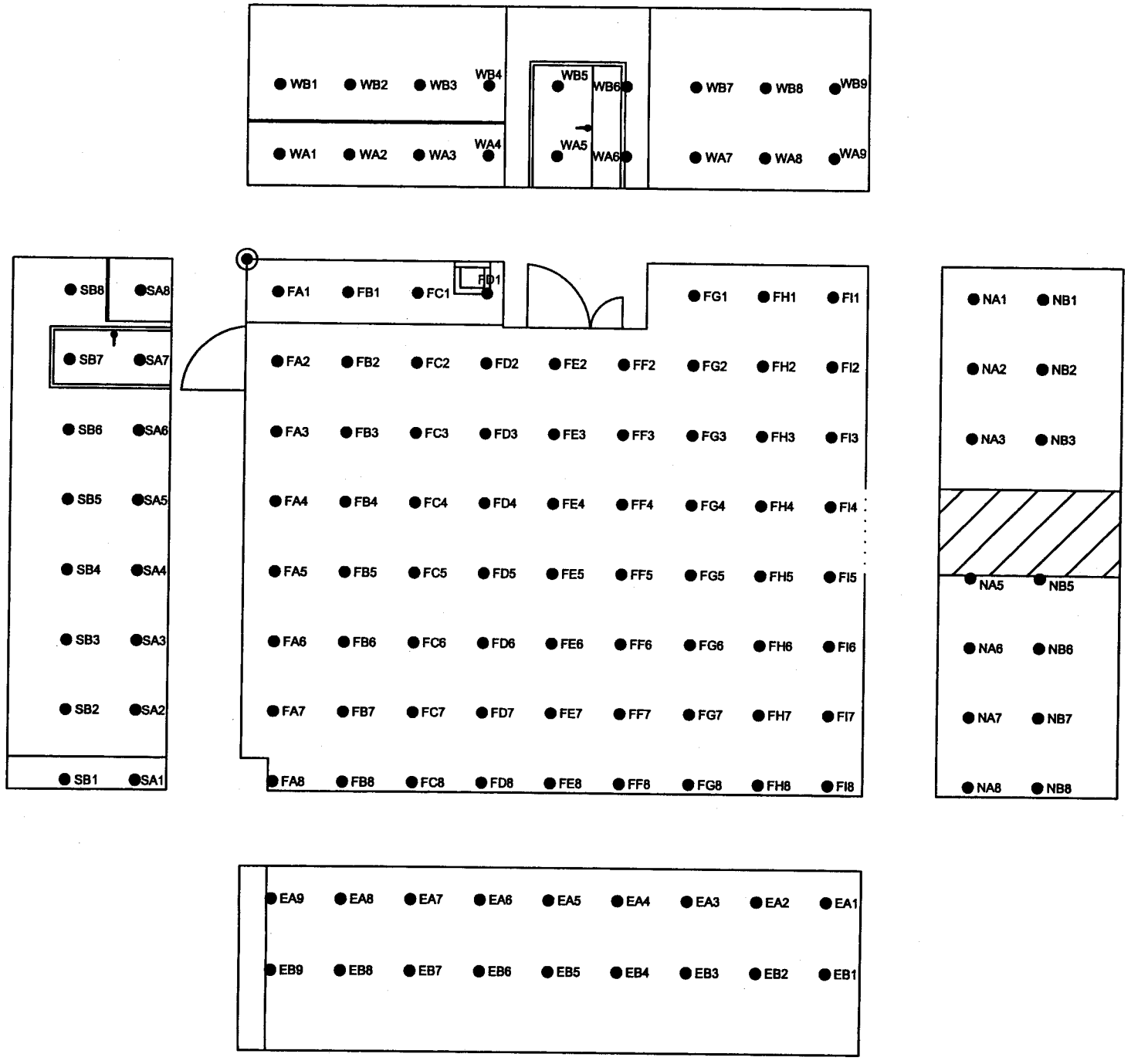
Instrument ID: C Survey Date: 03/22/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	NA1	5
2	Wall	NB5	5
3	Wall	EB2	5
4	Wall	SB7	5
5	Wall	SA8	5
6	Wall	WB5	5
7	Floor	FF2	5
8	Floor	FH5	5
9	Floor	FE3	5
10	Floor	FB4	5
11	Ceiling	CG2	5
12	Ceiling	CD2	5
13	Upper wall	NC1	5
14	Upper wall	SC4	5
15	Benchtop	FI6	5
16	Benchtop	FA2	5
17	Drawer	FI6	5
18	Drawer	FA2	5
19	Sink	FG4	5
20	Trap	FG4	5
21	Sink	FD4	5
22	Trap	FD4	5
23	Sink	FD1	5
24	Trap	FD1	5
25	Sink	FI4	5
26	Trap	FI4	5

Building 31, Room RA311

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 THIRD FLOOR ROOM RA-311



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 31

Instrument Information:

Instrument ID:	G		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	WA4	100	359	115	143	<MDC
2	Glass	NA3	100	359	106	57	<MDC
3	Glass	EB1	100	359	96	-38	<MDC
4	Metal	SA3	100	359	103	29	<MDC
5	Glass	SB7	100	359	117	163	<MDC
6	Benchtop	FI5	100	359	96	-38	<MDC
7	Floor	FH5	100	359	103	29	<MDC
8	Benchtop	FF8	100	359	102	19	<MDC
9	Floor	FE2	100	359	103	29	<MDC
10	Floor	FB2	100	359	105	48	<MDC
11	Ceiling	CA6	100	359	159	564	564
12	Ceiling	CD1	100	359	139	373	373
13	Upper wall	NC3	100	359	108	76	<MDC
14	Upper wall	WC4	100	359	106	57	<MDC
15	Benchtop	FD3	100	359	96	-38	<MDC
16	Benchtop	FF8	100	359	109	86	<MDC
17	Drawer	FD3	100	359	112	115	<MDC
18	Drawer	FF8	100	359	95	-48	<MDC
19	Sink	FD1	100	359	103	29	<MDC
20	Trap	FD1	100	359	144	421	421
21	Hood - vent	FA4	100	359	136	344	<MDC
22	Hood - rear	FA4	100	359	136	344	<MDC
23	Hood - left	FA4	100	359	107	67	<MDC
24	Hood - right	FA4	100	359	125	239	<MDC
25	Hood - base	FA4	100	359	79	-201	<MDC
26	Fridge - out	FI3	100	359	101	10	<MDC
27	Fridge - out	FH1	100	359	110	96	<MDC
28	Equipment	FA6	100	359	90	-96	<MDC

Survey Type: Scans Survey Unit: 31

Instrument Information:

Instrument ID:	E		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	180	1,371	200	250	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 31

Instrument ID:	Beckman LS6500		Survey Date:	03/29/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	10	48	16	<MDC
2	Floor	FA2	10	48	14	<MDC
3	Floor	FA3	10	48	27	<MDC
4	Floor	FA4	10	48	10	<MDC
5	Floor	FA5	10	48	32	<MDC
6	Floor	FA6	10	48	5	<MDC
7	Floor	FA7	10	48	14	<MDC
8	Floor	FA8	10	48	18	<MDC
9	Floor	FB1	10	48	11	<MDC
10	Floor	FB2	10	48	20	<MDC
11	Floor	FB3	10	48	30	<MDC
12	Floor	FB4	10	48	6	<MDC
13	Floor	FB5	10	48	2	<MDC
14	Floor	FB6	10	48	16	<MDC
15	Floor	FB7	10	48	19	<MDC
16	Floor	FB8	10	48	20	<MDC
17	Floor	FC1	10	48	17	<MDC
18	Floor	FC2	10	48	7	<MDC
19	Floor	FC3	10	48	23	<MDC
20	Floor	FC4	10	48	8	<MDC
21	Floor	FC5	10	48	13	<MDC
22	Floor	FC6	10	48	9	<MDC
23	Floor	FC7	10	48	16	<MDC
24	Floor	FC8	10	48	21	<MDC
25	Floor	FD1	10	48	18	<MDC
26	Floor	FD2	10	48	18	<MDC
27	Floor	FD3	10	48	10	<MDC
28	Floor	FD4	10	48	8	<MDC
29	Floor	FD5	10	48	24	<MDC
30	Floor	FD6	10	48	14	<MDC
31	Floor	FD7	10	48	39	<MDC
32	Floor	FD8	10	48	18	<MDC
33	Floor	FE1	10	48	8	<MDC
34	Floor	FE2	10	48	32	<MDC
35	Floor	FE3	10	48	15	<MDC
36	Floor	FE4	10	48	22	<MDC
37	Floor	FE5	10	48	14	<MDC
38	Floor	FE6	10	48	14	<MDC
39	Floor	FE7	10	48	35	<MDC
40	Floor	FE8	10	48	13	<MDC
41	Floor	FF1	10	48	12	<MDC
42	Floor	FF2	10	48	19	<MDC
43	Floor	FF3	10	48	25	<MDC
44	Floor	FF4	10	48	9	<MDC
45	Floor	FF5	10	48	12	<MDC
46	Floor	FF6	10	48	12	<MDC
47	Floor	FF7	10	48	19	<MDC
48	Floor	FF8	10	48	18	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
49	Floor	FG1	10	48	26	<MDC
50	Floor	FG2	10	48	16	<MDC
51	Floor	FG3	10	48	7	<MDC
52	Floor	FG4	10	48	6	<MDC
53	Floor	FG5	10	48	43	<MDC
54	Floor	FG6	10	48	4	<MDC
55	Floor	FG7	10	48	13	<MDC
56	Floor	FG8	10	48	9	<MDC
57	Floor	FH1	10	48	14	<MDC
58	Floor	FH2	10	48	11	<MDC
59	Floor	FH3	10	48	1	<MDC
60	Floor	FH4	10	48	1	<MDC
61	Floor	FH5	10	48	11	<MDC
62	Floor	FH6	10	48	9	<MDC
63	Floor	FH7	10	48	16	<MDC
64	Floor	FH8	10	48	9	<MDC
65	Floor	FI1	10	48	10	<MDC
66	Floor	FI2	10	48	4	<MDC
67	Floor	FI3	10	48	18	<MDC
68	Floor	FI4	10	48	9	<MDC
69	Floor	FI5	10	48	12	<MDC
70	Floor	FI6	10	48	21	<MDC
71	Floor	FI7	10	48	29	<MDC
72	Floor	FI8	10	48	20	<MDC
73	Wall	EA1	10	48	14	<MDC
74	Wall	EA2	10	48	22	<MDC
75	Wall	EA3	10	48	11	<MDC
76	Wall	EA4	10	48	15	<MDC
77	Wall	EA5	10	48	-1	<MDC
78	Wall	EA6	10	48	7	<MDC
79	Wall	EA7	10	48	13	<MDC
80	Wall	EA8	10	48	17	<MDC
81	Wall	EA9	10	48	14	<MDC
82	Wall	EB1	10	48	15	<MDC
83	Wall	EB2	10	48	12	<MDC
84	Wall	EB3	10	48	1	<MDC
85	Wall	EB4	10	48	16	<MDC
86	Wall	EB5	10	48	36	<MDC
87	Wall	EB6	10	48	10	<MDC
88	Wall	EB7	10	48	14	<MDC
89	Wall	EB8	10	48	13	<MDC
90	Wall	EB9	10	48	29	<MDC
91	Wall	SA1	10	48	9	<MDC
92	Wall	SA2	10	48	14	<MDC
93	Wall	SA3	10	48	11	<MDC
94	Wall	SA4	10	48	29	<MDC
95	Wall	SA5	10	48	30	<MDC
96	Wall	SA6	10	48	15	<MDC
97	Wall	SA7	10	48	52	52
98	Wall	SA8	10	48	2	<MDC
99	Wall	SB1	10	48	12	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
100	Wall	SB2	10	48	16	<MDC
101	Wall	SB3	10	48	19	<MDC
102	Wall	SB4	10	48	7	<MDC
103	Wall	SB5	10	48	7	<MDC
104	Wall	SB6	10	48	30	<MDC
105	Wall	SB7	10	48	10	<MDC
106	Wall	SB8	10	48	15	<MDC
107	Wall	WA1	10	48	12	<MDC
108	Wall	WA2	10	48	23	<MDC
109	Wall	WA3	10	48	18	<MDC
110	Wall	WA4	10	48	20	<MDC
111	Wall	WA5	10	48	15	<MDC
112	Wall	WA6	10	48	20	<MDC
113	Wall	WA7	10	48	4	<MDC
114	Wall	WA8	10	48	10	<MDC
115	Wall	WA9	10	48	7	<MDC
116	Wall	WB1	10	48	21	<MDC
117	Wall	WB2	10	48	15	<MDC
118	Wall	WB3	10	48	3	<MDC
119	Wall	WB4	10	48	-2	<MDC
120	Wall	WB5	10	48	9	<MDC
121	Wall	WB6	10	48	12	<MDC
122	Wall	WB7	10	48	10	<MDC
123	Wall	WB8	10	48	27	<MDC
124	Wall	WB9	10	48	3	<MDC
125	Wall	NA1	10	48	10	<MDC
126	Wall	NA2	10	48	20	<MDC
127	Wall	NA3	10	48	26	<MDC
128	Wall	NA5	10	48	29	<MDC
129	Wall	NA6	10	48	5	<MDC
130	Wall	NA7	10	48	10	<MDC
131	Wall	NA8	10	48	9	<MDC
132	Wall	NB1	10	48	23	<MDC
133	Wall	NB2	10	48	18	<MDC
134	Wall	NB3	10	48	-2	<MDC
135	Wall	NB5	10	48	12	<MDC
136	Wall	NB6	10	48	23	<MDC
137	Wall	NB7	10	48	23	<MDC
138	Wall	NB8	10	48	16	<MDC
139	Equipment	FA6	10	48	1	<MDC
140	Equipment	FA6	10	48	-4	<MDC
141	Ceiling	CA6	10	48	14	<MDC
142	Ceiling	CD1	10	48	-3	<MDC
143	Upper wall	NC3	10	48	11	<MDC
144	Upper wall	WC4	10	48	12	<MDC
145	Benchtop	FD3	10	48	29	<MDC
146	Benchtop	FF8	10	48	15	<MDC
147	Drawer	FD3	10	48	33	<MDC
148	Drawer	FF8	10	48	9	<MDC
149	Sink	FG4	10	48	10	<MDC
150	Trap	FG4	10	48	16	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 311

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
151	Sink	FD4	10	48	4	<MDC
152	Trap	FD4	10	48	6	<MDC
153	Sink	FD1	10	48	3	<MDC
154	Trap	FD1	10	48	19	<MDC
155	Hood - vent	FA4	10	48	18	<MDC
156	Hood - rear	FA4	10	48	-5	<MDC
157	Hood - left	FA4	10	48	15	<MDC
158	Hood - right	FA4	10	48	15	<MDC
159	Hood - base	FA4	10	48	5	<MDC
160	Sink	FA4	10	48	15	<MDC
161	Trap	FA4	10	48	16	<MDC
162	Fridge - out	FI3	10	48	11	<MDC
163	Fridge - in	FI3	10	48	26	<MDC
164	Fridge - out	FH1	10	48	8	<MDC
165	Fridge - in	FH1	10	48	13	<MDC
166	Equipment	FA6	10	48	2	<MDC
167	Equipment	FA6	10	48	9	<MDC
168	Equipment	FA6	10	48	4	<MDC

Survey Type: Removable C-14 Survey Unit: 311

Instrument ID:	Beckman LS6500		Survey Date:	03/29/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	10	23	18	<MDC
2	Floor	FA2	10	23	13	<MDC
3	Floor	FA3	10	23	8	<MDC
4	Floor	FA4	10	23	16	<MDC
5	Floor	FA5	10	23	15	<MDC
6	Floor	FA6	10	23	8	<MDC
7	Floor	FA7	10	23	23	<MDC
8	Floor	FA8	10	23	13	<MDC
9	Floor	FB1	10	23	10	<MDC
10	Floor	FB2	10	23	18	<MDC
11	Floor	FB3	10	23	0	<MDC
12	Floor	FB4	10	23	5	<MDC
13	Floor	FB5	10	23	16	<MDC
14	Floor	FB6	10	23	18	<MDC
15	Floor	FB7	10	23	10	<MDC
16	Floor	FB8	10	23	5	<MDC
17	Floor	FC1	10	23	15	<MDC
18	Floor	FC2	10	23	13	<MDC
19	Floor	FC3	10	23	21	<MDC
20	Floor	FC4	10	23	10	<MDC
21	Floor	FC5	10	23	5	<MDC
22	Floor	FC6	10	23	18	<MDC
23	Floor	FC7	10	23	8	<MDC
24	Floor	FC8	10	23	15	<MDC
25	Floor	FD1	10	23	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
26	Floor	FD2	10	23	13	<MDC
27	Floor	FD3	10	23	3	<MDC
28	Floor	FD4	10	23	8	<MDC
29	Floor	FD5	10	23	5	<MDC
30	Floor	FD6	10	23	23	<MDC
31	Floor	FD7	10	23	5	<MDC
32	Floor	FD8	10	23	13	<MDC
33	Floor	FE1	10	23	10	<MDC
34	Floor	FE2	10	23	5	<MDC
35	Floor	FE3	10	23	10	<MDC
36	Floor	FE4	10	23	13	<MDC
37	Floor	FE5	10	23	26	26
38	Floor	FE6	10	23	13	<MDC
39	Floor	FE7	10	23	8	<MDC
40	Floor	FE8	10	23	18	<MDC
41	Floor	FF1	10	23	8	<MDC
42	Floor	FF2	10	23	10	<MDC
43	Floor	FF3	10	23	15	<MDC
44	Floor	FF4	10	23	18	<MDC
45	Floor	FF5	10	23	18	<MDC
46	Floor	FF6	10	23	8	<MDC
47	Floor	FF7	10	23	10	<MDC
48	Floor	FF8	10	23	23	<MDC
49	Floor	FG1	10	23	13	<MDC
50	Floor	FG2	10	23	8	<MDC
51	Floor	FG3	10	23	13	<MDC
52	Floor	FG4	10	23	16	<MDC
53	Floor	FG5	10	23	5	<MDC
54	Floor	FG6	10	23	10	<MDC
55	Floor	FG7	10	23	15	<MDC
56	Floor	FG8	10	23	18	<MDC
57	Floor	FH1	10	23	13	<MDC
58	Floor	FH2	10	23	21	<MDC
59	Floor	FH3	10	23	10	<MDC
60	Floor	FH4	10	23	21	<MDC
61	Floor	FH5	10	23	13	<MDC
62	Floor	FH6	10	23	29	29
63	Floor	FH7	10	23	18	<MDC
64	Floor	FH8	10	23	5	<MDC
65	Floor	FI1	10	23	16	<MDC
66	Floor	FI2	10	23	21	<MDC
67	Floor	FI3	10	23	13	<MDC
68	Floor	FI4	10	23	8	<MDC
69	Floor	FI5	10	23	8	<MDC
70	Floor	FI6	10	23	5	<MDC
71	Floor	FI7	10	23	15	<MDC
72	Floor	FI8	10	23	8	<MDC
73	Wall	EA1	10	23	16	<MDC
74	Wall	EA2	10	23	13	<MDC
75	Wall	EA3	10	23	13	<MDC
76	Wall	EA4	10	23	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit:

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
77	Wall	EA5	10	23	13	<MDC
78	Wall	EA6	10	23	23	<MDC
79	Wall	EA7	10	23	29	29
80	Wall	EA8	10	23	16	<MDC
81	Wall	EA9	10	23	23	<MDC
82	Wall	EB1	10	23	23	<MDC
83	Wall	EB2	10	23	10	<MDC
84	Wall	EB3	10	23	18	<MDC
85	Wall	EB4	10	23	10	<MDC
86	Wall	EB5	10	23	8	<MDC
87	Wall	EB6	10	23	26	26
88	Wall	EB7	10	23	13	<MDC
89	Wall	EB8	10	23	16	<MDC
90	Wall	EB9	10	23	13	<MDC
91	Wall	SA1	10	23	29	29
92	Wall	SA2	10	23	47	47
93	Wall	SA3	10	23	10	<MDC
94	Wall	SA4	10	23	5	<MDC
95	Wall	SA5	10	23	13	<MDC
96	Wall	SA6	10	23	10	<MDC
97	Wall	SA7	10	23	23	<MDC
98	Wall	SA8	10	23	16	<MDC
99	Wall	SB1	10	23	18	<MDC
100	Wall	SB2	10	23	18	<MDC
101	Wall	SB3	10	23	8	<MDC
102	Wall	SB4	10	23	34	34
103	Wall	SB5	10	23	13	<MDC
104	Wall	SB6	10	23	13	<MDC
105	Wall	SB7	10	23	16	<MDC
106	Wall	SB8	10	23	10	<MDC
107	Wall	WA1	10	23	31	31
108	Wall	WA2	10	23	18	<MDC
109	Wall	WA3	10	23	13	<MDC
110	Wall	WA4	10	23	8	<MDC
111	Wall	WA5	10	23	10	<MDC
112	Wall	WA6	10	23	18	<MDC
113	Wall	WA7	10	23	21	<MDC
114	Wall	WA8	10	23	5	<MDC
115	Wall	WA9	10	23	13	<MDC
116	Wall	WB1	10	23	5	<MDC
117	Wall	WB2	10	23	21	<MDC
118	Wall	WB3	10	23	23	<MDC
119	Wall	WB4	10	23	16	<MDC
120	Wall	WB5	10	23	8	<MDC
121	Wall	WB6	10	23	29	29
122	Wall	WB7	10	23	13	<MDC
123	Wall	WB8	10	23	8	<MDC
124	Wall	WB9	10	23	13	<MDC
125	Wall	NA1	10	23	16	<MDC
126	Wall	NA2	10	23	8	<MDC
127	Wall	NA3	10	23	23	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit:

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
128	Wall	NA5	10	23	13	<MDC
129	Wall	NA6	10	23	18	<MDC
130	Wall	NA7	10	23	16	<MDC
131	Wall	NA8	10	23	18	<MDC
132	Wall	NB1	10	23	8	<MDC
133	Wall	NB2	10	23	13	<MDC
134	Wall	NB3	10	23	16	<MDC
135	Wall	NB5	10	23	28	28
136	Wall	NB6	10	23	10	<MDC
137	Wall	NB7	10	23	10	<MDC
138	Wall	NB8	10	23	39	39
139	Equipment	FA6	10	23	18	<MDC
140	Equipment	FA6	10	23	23	<MDC
141	Ceiling	CA6	10	23	16	<MDC
142	Ceiling	CD1	10	23	31	31
143	Upper wall	NC3	10	23	23	<MDC
144	Upper wall	WC4	10	23	21	<MDC
145	Benchtop	FD3	10	23	13	<MDC
146	Benchtop	FF8	10	23	10	<MDC
147	Drawer	FD3	10	23	13	<MDC
148	Drawer	FF8	10	23	18	<MDC
149	Sink	FG4	10	23	26	26
150	Trap	FG4	10	23	39	39
151	Sink	FD4	10	23	21	<MDC
152	Trap	FD4	10	23	16	<MDC
153	Sink	FD1	10	23	13	<MDC
154	Trap	FD1	10	23	10	<MDC
155	Hood - vent	FA4	10	23	8	<MDC
156	Hood - rear	FA4	10	23	24	24
157	Hood - left	FA4	10	23	31	31
158	Hood - right	FA4	10	23	10	<MDC
159	Hood - base	FA4	10	23	18	<MDC
160	Sink	FA4	10	23	21	<MDC
161	Trap	FA4	10	23	18	<MDC
162	Fridge - out	FI3	10	23	23	<MDC
163	Fridge - in	FI3	10	23	13	<MDC
164	Fridge - out	FH1	10	23	21	<MDC
165	Fridge - in	FH1	10	23	8	<MDC
166	Equipment	FA6	10	23	16	<MDC
167	Equipment	FA6	10	23	18	<MDC
168	Equipment	FA6	10	23	21	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 31

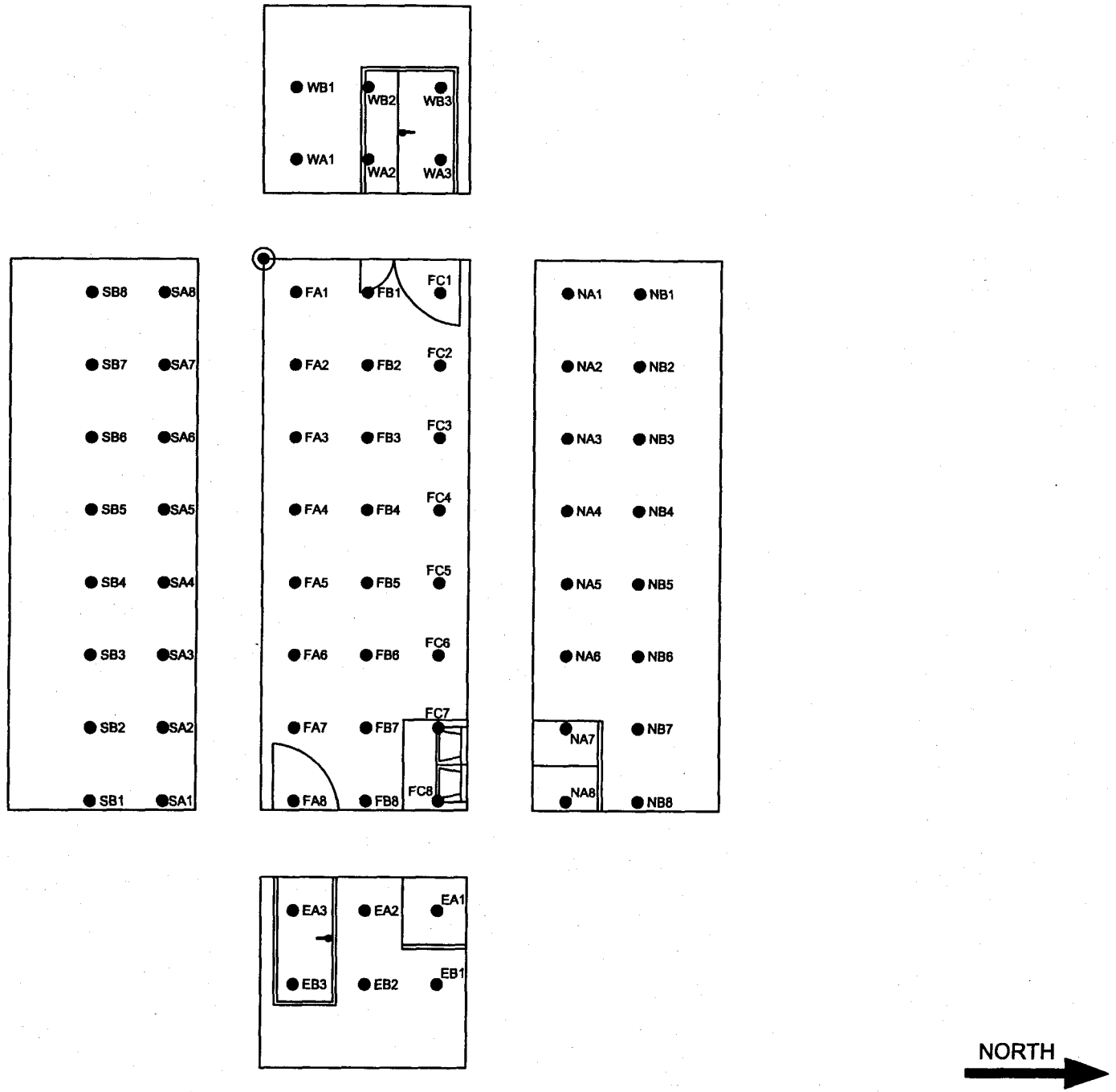
Instrument ID: C Survey Date: 03/24/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Metal	WA4	5
2	Glass	NA3	5
3	Glass	EB1	5
4	Metal	SA3	5
5	Glass	SB7	5
6	Benchtop	FI5	5
7	Floor	FH5	5
8	Benchtop	FF8	5
9	Floor	FE2	5
10	Floor	FB2	5
11	Ceiling	CA6	5
12	Ceiling	CD1	5
13	Upper wall	NC3	5
14	Upper wall	WC4	5
15	Benchtop	FD3	5
16	Benchtop	FF8	5
17	Drawer	FD3	5
18	Drawer	FF8	5
19	Sink	FG4	5
20	Trap	FG4	5
21	Sink	FD4	5
22	Trap	FD4	5
23	Sink	FD1	5
24	Trap	FD1	5
25	Hood - vent	FA4	5
26	Hood - rear	FA4	5
27	Hood - left	FA4	5
28	Hood - right	FA4	5
29	Hood - base	FA4	5
30	Sink	FA4	5
31	Trap	FA4	5
32	Fridge - out	FI3	5
33	Fridge - in	FI3	5
34	Fridge - out	FH1	5
35	Fridge - in	FH1	5
36	Equipment	FA6	5

Building 31, Room RA316

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 THIRD FLOOR ROOM RA-316



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 316

Instrument Information:

Instrument ID:	G		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	SB2	65	295	69	38	<MDC
2	Wall	SA5	65	295	57	-76	<MDC
3	Wall	WB1	65	295	81	153	<MDC
4	Metal	WA3	65	295	55	-96	<MDC
5	Glass	NB3	65	295	57	-76	<MDC
6	Wall	NA7	65	295	77	115	<MDC
7	Wall	EB2	65	295	67	19	<MDC
8	Floor	FA5	65	295	46	-182	<MDC
9	Metal	FA6	65	295	69	38	<MDC
10	Floor	FB4	65	295	66	10	<MDC
11	Ceiling	CC7	65	295	55	-96	<MDC
12	Upper wall	WC3	65	295	55	-96	<MDC
13	Benchtop	FC3	65	295	58	-67	<MDC
14	Drawer	FC8	65	295	59	-57	<MDC
15	Sink	FC7	65	295	87	210	<MDC
16	Trap	FC7	65	295	108	411	411
17	Sink	FC8	65	295	61	-38	<MDC
18	Trap	FC8	65	295	45	-191	<MDC
19	Equipment	FC7	65	295	51	-134	<MDC

Survey Type: Scans Survey Unit: 316

Instrument Information:

Instrument ID:	G		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	90	970	100	200	<MDC	1,052

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type:	Removable H3		Survey Unit:	340		
Instrument ID:	Beckman LS6500		Survey Date:	03/28/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	27	48	16	<MDC
2	Floor	FA2	27	48	15	<MDC
3	Floor	FA3	27	48	15	<MDC
4	Floor	FA4	27	48	17	<MDC
5	Floor	FA5	27	48	16	<MDC
6	Floor	FA6	27	48	14	<MDC
7	Floor	FA7	27	48	18	<MDC
8	Floor	FA8	27	48	19	<MDC
9	Floor	FB1	27	48	22	<MDC
10	Floor	FB2	27	48	26	<MDC
11	Floor	FB3	27	48	14	<MDC
12	Floor	FB4	27	48	13	<MDC
13	Floor	FB5	27	48	15	<MDC
14	Floor	FB6	27	48	15	<MDC
15	Floor	FB7	27	48	19	<MDC
16	Floor	FB8	27	48	22	<MDC
17	Floor	FC1	27	48	14	<MDC
18	Floor	FC2	27	48	20	<MDC
19	Floor	FC3	27	48	26	<MDC
20	Floor	FC4	27	48	8	<MDC
21	Floor	FC5	27	48	17	<MDC
22	Floor	FC6	27	48	13	<MDC
23	Floor	FC7	27	48	16	<MDC
24	Floor	FC8	27	48	21	<MDC
25	Wall	EA1	27	48	21	<MDC
26	Wall	EA2	27	48	8	<MDC
27	Wall	EA3	27	48	8	<MDC
28	Wall	EB1	27	48	13	<MDC
29	Wall	EB2	27	48	17	<MDC
30	Wall	EB3	27	48	10	<MDC
31	Wall	SA1	27	48	15	<MDC
32	Wall	SA2	27	48	18	<MDC
33	Wall	SA3	27	48	9	<MDC
34	Wall	SA4	27	48	18	<MDC
35	Wall	SA5	27	48	4	<MDC
36	Wall	SA6	27	48	25	<MDC
37	Wall	SA7	27	48	12	<MDC
38	Wall	SA8	27	48	21	<MDC
39	Wall	SB1	27	48	9	<MDC
40	Wall	SB2	27	48	5	<MDC
41	Wall	SB3	27	48	18	<MDC
42	Wall	SB4	27	48	8	<MDC
43	Wall	SB5	27	48	16	<MDC
44	Wall	SB6	27	48	18	<MDC
45	Wall	SB7	27	48	13	<MDC
46	Wall	SB8	27	48	18	<MDC
47	Wall	WA1	27	48	15	<MDC
48	Wall	WA2	27	48	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 316

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
49	Wall	WA3	27	48	25	<MDC
50	Wall	WB1	27	48	19	<MDC
51	Wall	WB2	27	48	14	<MDC
52	Wall	WB3	27	48	8	<MDC
53	Wall	NA1	27	48	24	<MDC
54	Wall	NA2	27	48	5	<MDC
55	Wall	NA3	27	48	13	<MDC
56	Wall	NA4	27	48	19	<MDC
57	Wall	NA5	27	48	14	<MDC
58	Wall	NA6	27	48	14	<MDC
59	Wall	NA7	27	48	19	<MDC
60	Wall	NA8	27	48	33	<MDC
61	Wall	NB1	27	48	17	<MDC
62	Wall	NB2	27	48	10	<MDC
63	Wall	NB3	27	48	7	<MDC
64	Wall	NB4	27	48	16	<MDC
65	Wall	NB5	27	48	22	<MDC
66	Wall	NB6	27	48	14	<MDC
67	Wall	NB7	27	48	18	<MDC
68	Wall	NB8	27	48	19	<MDC
69	Ceiling	CC7	27	48	19	<MDC
70	Upper wall	WC3	27	48	13	<MDC
71	Benchtop	FC3	27	48	11	<MDC
72	Drawer	FC8	27	48	17	<MDC
73	Sink	FC7	27	48	14	<MDC
74	Trap	FC7	27	48	33	<MDC
75	Sink	FC8	27	48	15	<MDC
76	Trap	FC8	27	48	10	<MDC
77	Equipment	FC7	27	48	21	<MDC
78	Equipment	FC7	27	48	21	<MDC

Survey Type: Removable C-14 Survey Unit: 316

Instrument ID:	Beckman LS6500		Survey Date:	03/28/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	6	13	21	21
2	Floor	FA2	6	13	15	15
3	Floor	FA3	6	13	13	13
4	Floor	FA4	6	13	16	16
5	Floor	FA5	6	13	17	17
6	Floor	FA6	6	13	18	18
7	Floor	FA7	6	13	10	<MDC
8	Floor	FA8	6	13	18	18
9	Floor	FB1	6	13	12	<MDC
10	Floor	FB2	6	13	12	<MDC
11	Floor	FB3	6	13	18	18
12	Floor	FB4	6	13	15	15

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: [illegible]

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
13	Floor	FB5	6	13	26	26
14	Floor	FB6	6	13	15	15
15	Floor	FB7	6	13	14	14
16	Floor	FB8	6	13	9	<MDC
17	Floor	FC1	6	13	13	13
18	Floor	FC2	6	13	17	17
19	Floor	FC3	6	13	9	<MDC
20	Floor	FC4	6	13	13	13
21	Floor	FC5	6	13	14	14
22	Floor	FC6	6	13	15	15
23	Floor	FC7	6	13	12	<MDC
24	Floor	FC8	6	13	8	<MDC
25	Wall	EA1	6	13	13	13
26	Wall	EA2	6	13	16	16
27	Wall	EA3	6	13	18	18
28	Wall	EB1	6	13	14	14
29	Wall	EB2	6	13	13	13
30	Wall	EB3	6	13	19	19
31	Wall	SA1	6	13	10	<MDC
32	Wall	SA2	6	13	10	<MDC
33	Wall	SA3	6	13	21	21
34	Wall	SA4	6	13	17	17
35	Wall	SA5	6	13	14	14
36	Wall	SA6	6	13	11	<MDC
37	Wall	SA7	6	13	13	13
38	Wall	SA8	6	13	11	<MDC
39	Wall	SB1	6	13	10	<MDC
40	Wall	SB2	6	13	17	17
41	Wall	SB3	6	13	12	<MDC
42	Wall	SB4	6	13	13	13
43	Wall	SB5	6	13	18	18
44	Wall	SB6	6	13	15	15
45	Wall	SB7	6	13	14	14
46	Wall	SB8	6	13	21	21
47	Wall	WA1	6	13	13	13
48	Wall	WA2	6	13	10	<MDC
49	Wall	WA3	6	13	6	<MDC
50	Wall	WB1	6	13	13	13
51	Wall	WB2	6	13	18	18
52	Wall	WB3	6	13	21	21
53	Wall	NA1	6	13	13	13
54	Wall	NA2	6	13	25	25
55	Wall	NA3	6	13	18	18
56	Wall	NA4	6	13	12	<MDC
57	Wall	NA5	6	13	14	14
58	Wall	NA6	6	13	23	23
59	Wall	NA7	6	13	10	<MDC
60	Wall	NA8	6	13	9	<MDC
61	Wall	NB1	6	13	12	<MDC
62	Wall	NB2	6	13	19	19
63	Wall	NB3	6	13	23	23

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 316

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
64	Wall	NB4	6	13	6	<MDC
65	Wall	NB5	6	13	14	14
66	Wall	NB6	6	13	12	<MDC
67	Wall	NB7	6	13	12	<MDC
68	Wall	NB8	6	13	14	14
69	Ceiling	CC7	6	13	19	19
70	Upper wall	WC3	6	13	15	15
71	Benchtop	FC3	6	13	12	<MDC
72	Drawer	FC8	6	13	22	22
73	Sink	FC7	6	13	14	14
74	Trap	FC7	6	13	17	17
75	Sink	FC8	6	13	10	<MDC
76	Trap	FC8	6	13	16	16
77	Equipment	FC7	6	13	24	24
78	Equipment	FC7	6	13	11	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 316

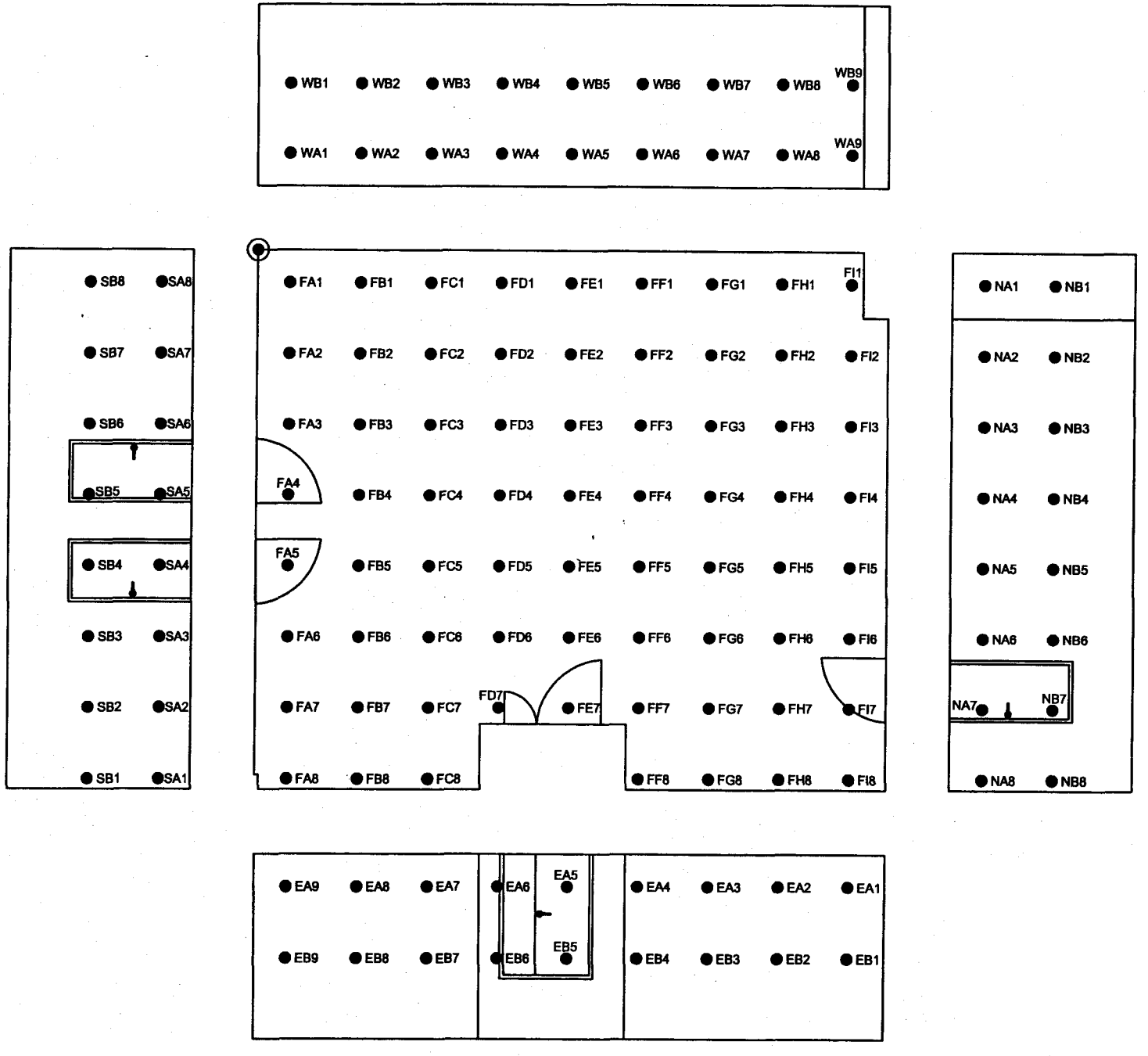
Instrument ID: C Survey Date: 03/23/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Metal	SB2	5
2	Wall	SA5	5
3	Wall	WB1	5
4	Metal	WA3	5
5	Glass	NB3	5
6	Wall	NA7	5
7	Wall	EB2	5
8	Floor	FA5	5
9	Metal	FA6	5
10	Floor	FB4	5
11	Ceiling	CC7	5
12	Upper wall	WC3	5
13	Benchtop	FC3	5
14	Drawer	FC8	5
15	Sink	FC7	5
16	Trap	FC7	5
17	Sink	FC8	5
18	Trap	FC8	5
19	Equipment	FC7	5

Building 31, Room RA317

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 THIRD FLOOR ROOM RA-317



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 317

Instrument Information:

Instrument ID:	E		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	*Maximum Release Criteria:*	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Metal	EA2	160	461	149	-109	<MDC
2	Glass	EB7	160	461	182	217	<MDC
3	Glass	SA3	160	461	151	-89	<MDC
4	Metal	WB3	160	461	172	119	<MDC
5	Glass	WA7	160	461	139	-208	<MDC
6	Benchtop	NB7	160	461	181	208	<MDC
7	Floor	FH4	160	461	152	-79	<MDC
8	Benchtop	FE2	160	461	162	20	<MDC
9	Floor	FC6	160	461	158	-20	<MDC
10	Floor	FB2	160	461	168	79	<MDC
11	Ceiling	CD4	160	461	201	405	<MDC
12	Ceiling	CE2	160	461	198	376	<MDC
13	Upper wall	SC3	160	461	166	59	<MDC
14	Upper wall	WC4	160	461	165	49	<MDC
15	Benchtop	FG8	160	461	172	119	<MDC
16	Benchtop	FE1	160	461	178	178	<MDC
17	Drawer	FG8	160	461	164	40	<MDC
18	Drawer	FE1	160	461	168	79	<MDC
19	Sink	FF8	160	461	162	20	<MDC
20	Trap	FF8	160	461	157	-30	<MDC
21	Sink	FF5	160	461	157	-30	<MDC
22	Hood - base	FI5	160	461	160	0	<MDC
23	Hood - left	FI5	160	461	151	-89	<MDC
24	Hood - right	FI5	160	461	170	99	<MDC
25	Hood - rear	FI5	160	461	153	-69	<MDC

Survey Type: Scans Survey Unit: 317

Instrument Information:

Instrument ID:	E		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	184	1,433	170	240	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 31

Instrument ID: Beckman LS6500			Survey Date:	03/30/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	8	44	58	58
2	Floor	FA2	8	44	25	<MDC
3	Floor	FA3	8	44	42	<MDC
4	Floor	FA4	8	44	19	<MDC
5	Floor	FA5	8	44	14	<MDC
6	Floor	FA6	8	44	27	<MDC
7	Floor	FA7	8	44	34	<MDC
8	Floor	FA8	8	44	23	<MDC
9	Floor	FB1	8	44	27	<MDC
10	Floor	FB2	8	44	24	<MDC
11	Floor	FB3	8	44	14	<MDC
12	Floor	FB4	8	44	41	<MDC
13	Floor	FB5	8	44	18	<MDC
14	Floor	FB6	8	44	26	<MDC
15	Floor	FB7	8	44	18	<MDC
16	Floor	FB8	8	44	24	<MDC
17	Floor	FC1	8	44	6	<MDC
18	Floor	FC2	8	44	26	<MDC
19	Floor	FC3	8	44	24	<MDC
20	Floor	FC4	8	44	27	<MDC
21	Floor	FC5	8	44	31	<MDC
22	Floor	FC6	8	44	21	<MDC
23	Floor	FC7	8	44	27	<MDC
24	Floor	FC8	8	44	6	<MDC
25	Floor	FD1	8	44	35	<MDC
26	Floor	FD2	8	44	16	<MDC
27	Floor	FD3	8	44	19	<MDC
28	Floor	FD4	8	44	30	<MDC
29	Floor	FD5	8	44	32	<MDC
30	Floor	FD6	8	44	23	<MDC
31	Floor	FD7	8	44	8	<MDC
32	Floor	FE1	8	44	23	<MDC
33	Floor	FE2	8	44	30	<MDC
34	Floor	FE3	8	44	20	<MDC
35	Floor	FE4	8	44	30	<MDC
36	Floor	FE5	8	44	24	<MDC
37	Floor	FE6	8	44	9	<MDC
38	Floor	FE7	8	44	18	<MDC
39	Floor	FF1	8	44	23	<MDC
40	Floor	FF2	8	44	24	<MDC
41	Floor	FF3	8	44	42	<MDC
42	Floor	FF4	8	44	27	<MDC
43	Floor	FF5	8	44	24	<MDC
44	Floor	FF6	8	44	11	<MDC
45	Floor	FF7	8	44	15	<MDC
46	Floor	FF8	8	44	28	<MDC
47	Floor	FG1	8	44	24	<MDC
48	Floor	FG2	8	44	33	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
49	Floor	FG3	8	44	17	<MDC
50	Floor	FG4	8	44	34	<MDC
51	Floor	FG5	8	44	16	<MDC
52	Floor	FG6	8	44	28	<MDC
53	Floor	FG7	8	44	16	<MDC
54	Floor	FG8	8	44	39	<MDC
55	Floor	FH1	8	44	15	<MDC
56	Floor	FH2	8	44	13	<MDC
57	Floor	FH3	8	44	19	<MDC
58	Floor	FH4	8	44	12	<MDC
59	Floor	FH5	8	44	18	<MDC
60	Floor	FH6	8	44	85	85
61	Floor	FH7	8	44	25	<MDC
62	Floor	FH8	8	44	16	<MDC
63	Floor	FI1	8	44	15	<MDC
64	Floor	FI2	8	44	261	261
65	Floor	FI3	8	44	12	<MDC
66	Floor	FI4	8	44	19	<MDC
67	Floor	FI5	8	44	14	<MDC
68	Floor	FI6	8	44	33	<MDC
69	Floor	FI7	8	44	15	<MDC
70	Floor	FI8	8	44	35	<MDC
71	Floor	EA1	8	44	255	255
72	Floor	EA2	8	44	28	<MDC
73	Wall	EA3	8	44	5	<MDC
74	Wall	EA4	8	44	23	<MDC
75	Wall	EA5	8	44	14	<MDC
76	Wall	EA6	8	44	23	<MDC
77	Wall	EA7	8	44	10	<MDC
78	Wall	EA8	8	44	17	<MDC
79	Wall	EA9	8	44	18	<MDC
80	Wall	EB1	8	44	4	<MDC
81	Wall	EB2	8	44	3	<MDC
82	Wall	EB3	8	44	17	<MDC
83	Wall	EB4	8	44	20	<MDC
84	Wall	EB5	8	44	7	<MDC
85	Wall	EB6	8	44	10	<MDC
86	Wall	EB7	8	44	12	<MDC
87	Wall	EB8	8	44	26	<MDC
88	Wall	EB9	8	44	34	<MDC
89	Wall	SA1	8	44	12	<MDC
90	Wall	SA2	8	44	39	<MDC
91	Wall	SA3	8	44	27	<MDC
92	Wall	SA4	8	44	18	<MDC
93	Wall	SA5	8	44	9	<MDC
94	Wall	SA6	8	44	8	<MDC
95	Wall	SA7	8	44	21	<MDC
96	Wall	SA8	8	44	35	<MDC
97	Wall	SB1	8	44	10	<MDC
98	Wall	SB2	8	44	13	<MDC
99	Wall	SB3	8	44	3	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
100	Wall	SB4	8	44	34	<MDC
101	Wall	SB5	8	44	22	<MDC
102	Wall	SB6	8	44	15	<MDC
103	Wall	SB7	8	44	28	<MDC
104	Wall	SB8	8	44	14	<MDC
105	Wall	WA1	8	44	10	<MDC
106	Wall	WA2	8	44	13	<MDC
107	Wall	WA3	8	44	9	<MDC
108	Wall	WA4	8	44	17	<MDC
109	Wall	WA5	8	44	15	<MDC
110	Wall	WA6	8	44	32	<MDC
111	Wall	WA7	8	44	26	<MDC
112	Wall	WA8	8	44	19	<MDC
113	Wall	WA9	8	44	20	<MDC
114	Wall	WB1	8	44	16	<MDC
115	Wall	WB2	8	44	-1	<MDC
116	Wall	WB3	8	44	14	<MDC
117	Wall	WB4	8	44	32	<MDC
118	Wall	WB5	8	44	23	<MDC
119	Wall	WB6	8	44	9	<MDC
120	Wall	WB7	8	44	7	<MDC
121	Wall	WB8	8	44	50	50
122	Wall	WB9	8	44	29	<MDC
123	Wall	NA1	8	44	8	<MDC
124	Wall	NA2	8	44	21	<MDC
125	Wall	NA3	8	44	8	<MDC
126	Wall	NA4	8	44	8	<MDC
127	Wall	NA5	8	44	23	<MDC
128	Wall	NA6	8	44	28	<MDC
129	Wall	NA7	8	44	10	<MDC
130	Wall	NA8	8	44	30	<MDC
131	Wall	NB1	8	44	2	<MDC
132	Wall	NB2	8	44	25	<MDC
133	Wall	NB3	8	44	16	<MDC
134	Wall	NB4	8	44	17	<MDC
135	Wall	NB5	8	44	17	<MDC
136	Wall	NB6	8	44	24	<MDC
137	Wall	NB7	8	44	14	<MDC
138	Wall	NB8	8	44	34	<MDC
139	Ceiling	CD4	8	44	7	<MDC
140	Ceiling	CE2	8	44	7	<MDC
141	Upper wall	SC3	8	44	35	<MDC
142	Upper wall	WC4	8	44	26	<MDC
143	Benchtop	FG8	8	44	24	<MDC
144	Benchtop	FE1	8	44	34	<MDC
145	Drawer	FG8	8	44	4	<MDC
146	Drawer	FE1	8	44	39	<MDC
147	Sink	FC5	8	44	12	<MDC
148	Trap	FC5	8	44	27	<MDC
149	Sink	FF8	8	44	8	<MDC
150	Trap	FF8	8	44	12	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 317

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
151	Sink	FF5	8	44	13	<MDC
152	Trap	FF5	8	44	2	<MDC
153	Hood - vent	FI5	8	44	11	<MDC
154	Hood - base	FI5	8	44	32	<MDC
155	Hood - left	FI5	8	44	2	<MDC
156	Hood - right	FI5	8	44	15	<MDC
157	Hood - rear	FI5	8	44	10	<MDC
158	Sink	FI6	8	44	15	<MDC
159	Trap	FI6	8	44	3	<MDC

Survey Type: Removable C-14 Survey Unit: 317

Instrument ID:	Beckman LS6500		Survey Date:	03/30/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm²	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm²	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
1	Floor	FA1	12	25	10	<MDC
2	Floor	FA2	12	25	13	<MDC
3	Floor	FA3	12	25	15	<MDC
4	Floor	FA4	12	25	25	25
5	Floor	FA5	12	25	13	<MDC
6	Floor	FA6	12	25	15	<MDC
7	Floor	FA7	12	25	18	<MDC
8	Floor	FA8	12	25	8	<MDC
9	Floor	FB1	12	25	26	26
10	Floor	FB2	12	25	15	<MDC
11	Floor	FB3	12	25	13	<MDC
12	Floor	FB4	12	25	8	<MDC
13	Floor	FB5	12	25	13	<MDC
14	Floor	FB6	12	25	8	<MDC
15	Floor	FB7	12	25	10	<MDC
16	Floor	FB8	12	25	15	<MDC
17	Floor	FC1	12	25	3	<MDC
18	Floor	FC2	12	25	8	<MDC
19	Floor	FC3	12	25	15	<MDC
20	Floor	FC4	12	25	18	<MDC
21	Floor	FC5	12	25	18	<MDC
22	Floor	FC6	12	25	13	<MDC
23	Floor	FC7	12	25	8	<MDC
24	Floor	FC8	12	25	16	<MDC
25	Floor	FD1	12	25	15	<MDC
26	Floor	FD2	12	25	18	<MDC
27	Floor	FD3	12	25	18	<MDC
28	Floor	FD4	12	25	10	<MDC
29	Floor	FD5	12	25	15	<MDC
30	Floor	FD6	12	25	21	<MDC
31	Floor	FD7	12	25	10	<MDC
32	Floor	FE1	12	25	8	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
33	Floor	FE2	12	25	18	<MDC
34	Floor	FE3	12	25	15	<MDC
35	Floor	FE4	12	25	10	<MDC
36	Floor	FE5	12	25	18	<MDC
37	Floor	FE6	12	25	5	<MDC
38	Floor	FE7	12	25	13	<MDC
39	Floor	FF1	12	25	18	<MDC
40	Floor	FF2	12	25	2	<MDC
41	Floor	FF3	12	25	18	<MDC
42	Floor	FF4	12	25	8	<MDC
43	Floor	FF5	12	25	5	<MDC
44	Floor	FF6	12	25	21	<MDC
45	Floor	FF7	12	25	10	<MDC
46	Floor	FF8	12	25	13	<MDC
47	Floor	FG1	12	25	5	<MDC
48	Floor	FG2	12	25	23	<MDC
49	Floor	FG3	12	25	15	<MDC
50	Floor	FG4	12	25	8	<MDC
51	Floor	FG5	12	25	15	<MDC
52	Floor	FG6	12	25	23	<MDC
53	Floor	FG7	12	25	5	<MDC
54	Floor	FG8	12	25	13	<MDC
55	Floor	FH1	12	25	10	<MDC
56	Floor	FH2	12	25	15	<MDC
57	Floor	FH3	12	25	18	<MDC
58	Floor	FH4	12	25	18	<MDC
59	Floor	FH5	12	25	21	<MDC
60	Floor	FH6	12	25	13	<MDC
61	Floor	FH7	12	25	13	<MDC
62	Floor	FH8	12	25	15	<MDC
63	Floor	FI1	12	25	21	<MDC
64	Floor	FI2	12	25	14	<MDC
65	Floor	FI3	12	25	8	<MDC
66	Floor	FI4	12	25	18	<MDC
67	Floor	FI5	12	25	13	<MDC
68	Floor	FI6	12	25	18	<MDC
69	Floor	FI7	12	25	21	<MDC
70	Floor	FI8	12	25	15	<MDC
71	Floor	EA1	12	25	27	27
72	Floor	EA2	12	25	23	<MDC
73	Wall	EA3	12	25	18	<MDC
74	Wall	EA4	12	25	18	<MDC
75	Wall	EA5	12	25	13	<MDC
76	Wall	EA6	12	25	5	<MDC
77	Wall	EA7	12	25	23	<MDC
78	Wall	EA8	12	25	23	<MDC
79	Wall	EA9	12	25	10	<MDC
80	Wall	EB1	12	25	10	<MDC
81	Wall	EB2	12	25	23	<MDC
82	Wall	EB3	12	25	13	<MDC
83	Wall	EB4	12	25	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
84	Wall	EB5	12	25	13	<MDC
85	Wall	EB6	12	25	13	<MDC
86	Wall	EB7	12	25	8	<MDC
87	Wall	EB8	12	25	21	<MDC
88	Wall	EB9	12	25	15	<MDC
89	Wall	SA1	12	25	15	<MDC
90	Wall	SA2	12	25	20	<MDC
91	Wall	SA3	12	25	5	<MDC
92	Wall	SA4	12	25	31	31
93	Wall	SA5	12	25	16	<MDC
94	Wall	SA6	12	25	8	<MDC
95	Wall	SA7	12	25	10	<MDC
96	Wall	SA8	12	25	13	<MDC
97	Wall	SB1	12	25	23	<MDC
98	Wall	SB2	12	25	15	<MDC
99	Wall	SB3	12	25	23	<MDC
100	Wall	SB4	12	25	5	<MDC
101	Wall	SB5	12	25	8	<MDC
102	Wall	SB6	12	25	31	31
103	Wall	SB7	12	25	13	<MDC
104	Wall	SB8	12	25	10	<MDC
105	Wall	WA1	12	25	13	<MDC
106	Wall	WA2	12	25	15	<MDC
107	Wall	WA3	12	25	15	<MDC
108	Wall	WA4	12	25	13	<MDC
109	Wall	WA5	12	25	21	<MDC
110	Wall	WA6	12	25	2	<MDC
111	Wall	WA7	12	25	8	<MDC
112	Wall	WA8	12	25	18	<MDC
113	Wall	WA9	12	25	15	<MDC
114	Wall	WB1	12	25	15	<MDC
115	Wall	WB2	12	25	13	<MDC
116	Wall	WB3	12	25	10	<MDC
117	Wall	WB4	12	25	13	<MDC
118	Wall	WB5	12	25	8	<MDC
119	Wall	WB6	12	25	18	<MDC
120	Wall	WB7	12	25	23	<MDC
121	Wall	WB8	12	25	13	<MDC
122	Wall	WB9	12	25	10	<MDC
123	Wall	NA1	12	25	21	<MDC
124	Wall	NA2	12	25	13	<MDC
125	Wall	NA3	12	25	8	<MDC
126	Wall	NA4	12	25	8	<MDC
127	Wall	NA5	12	25	21	<MDC
128	Wall	NA6	12	25	5	<MDC
129	Wall	NA7	12	25	13	<MDC
130	Wall	NA8	12	25	10	<MDC
131	Wall	NB1	12	25	16	<MDC
132	Wall	NB2	12	25	13	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
133	Wall	NB3	12	25	8	<MDC
134	Wall	NB4	12	25	15	<MDC
135	Wall	NB5	12	25	13	<MDC
136	Wall	NB6	12	25	15	<MDC
137	Wall	NB7	12	25	13	<MDC
138	Wall	NB8	12	25	5	<MDC
139	Ceiling	CD4	12	25	13	<MDC
140	Ceiling	CE2	12	25	13	<MDC
141	Upper wall	SC3	12	25	15	<MDC
142	Upper wall	WC4	12	25	23	<MDC
143	Benchtop	FG8	12	25	18	<MDC
144	Benchtop	FE1	12	25	8	<MDC
145	Drawer	FG8	12	25	10	<MDC
146	Drawer	FE1	12	25	5	<MDC
147	Sink	FC5	12	25	18	<MDC
148	Trap	FC5	12	25	8	<MDC
149	Sink	FF8	12	25	10	<MDC
150	Trap	FF8	12	25	8	<MDC
151	Sink	FF5	12	25	15	<MDC
152	Trap	FF5	12	25	16	<MDC
153	Hood - vent	FI5	12	25	21	<MDC
154	Hood - base	FI5	12	25	15	<MDC
155	Hood - left	FI5	12	25	16	<MDC
156	Hood - right	FI5	12	25	10	<MDC
157	Hood - rear	FI5	12	25	16	<MDC
158	Sink	FI6	12	25	10	<MDC
159	Trap	FI6	12	25	23	<MDC

Survey Type: Gamma Dose Rates Survey Unit: 31

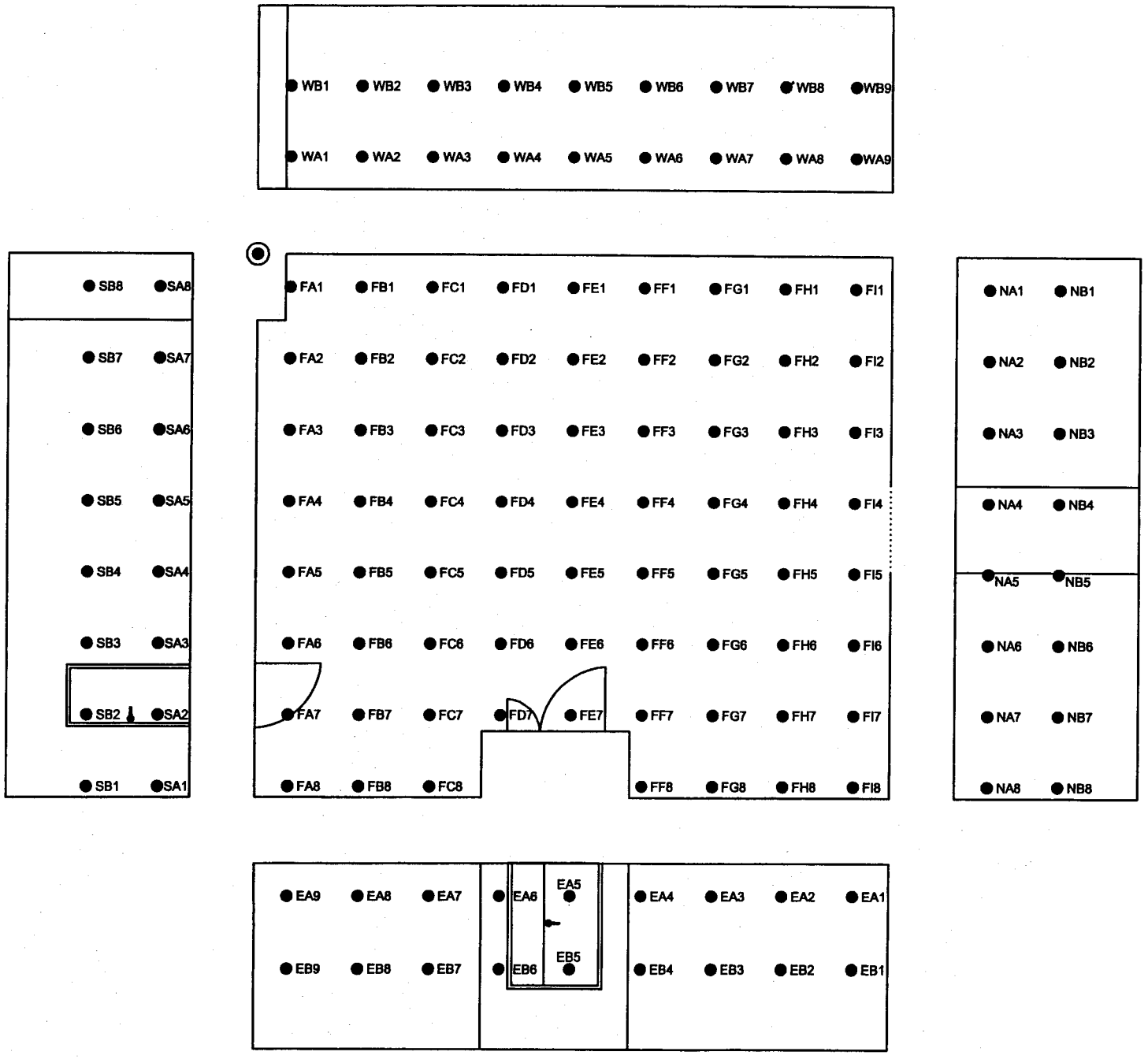
Instrument ID: C Survey Date: 03/23/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)	#	Location	Survey Point	Dose Rate (urem/hr)
1	Metal	EA2	5	17	Drawer	FG8	5
2	Glass	EB7	5	18	Drawer	FE1	5
3	Glass	SA3	5	19	Sink	FC5	5
4	Metal	WB3	5	20	Trap	FC5	5
5	Glass	WA7	5	21	Sink	FF8	5
6	Benchtop	NB7	5	22	Trap	FF8	5
7	Floor	FH4	5	23	Sink	FF5	5
8	Benchtop	FE2	5	24	Trap	FF5	5
9	Floor	FC6	5	25	Hood - vent	FI5	5
10	Floor	FB2	5	26	Hood - base	FI5	5
11	Ceiling	CD4	5	27	Hood - left	FI5	5
12	Ceiling	CE2	5	28	Hood - right	FI5	5
13	Upper wall	SC3	5	29	Hood - rear	FI5	5
14	Upper wall	WC4	5	30	Sink	FI6	5
15	Benchtop	FG8	5	31	Trap	FI6	5
16	Benchtop	FE1	5				

Building 31, Room RA319

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 THIRD FLOOR ROOM RA-319



SCIENTECH

Survey Data

Survey Name: Bayer Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 319

Instrument Information:

Instrument ID:	E		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	EA2	160	461	168	79	<MDC
2	Wall	EB8	160	461	156	-40	<MDC
3	Wall	SA3	160	461	169	89	<MDC
4	Wall	SB7	160	461	161	10	<MDC
5	Wall	WA2	160	461	162	20	<MDC
6	Wall	WB7	160	461	183	227	<MDC
7	Wall	NA2	160	461	184	237	<MDC
8	Floor	FH6	160	461	188	277	<MDC
9	Floor	FE5	160	461	179	188	<MDC
10	Floor	FD2	160	461	184	237	<MDC
11	Ceiling	CA4	160	461	178	178	<MDC
12	Ceiling	CF7	160	461	201	405	<MDC
13	Upper wall	NC3	160	461	182	217	<MDC
14	Upper wall	EC3	160	461	153	-69	<MDC
15	Benchtop	FE1	160	461	180	198	<MDC
16	Benchtop	FG8	160	461	186	257	<MDC
17	Drawer	FE1	160	461	179	188	<MDC
18	Drawer	FG8	160	461	167	69	<MDC
19	Sink	FA5	160	461	163	30	<MDC
20	Trap	FA5	160	461	155	-49	<MDC
21	Sink	FF8	160	461	183	227	<MDC
22	Trap	FF8	160	461	184	237	<MDC
23	Sink	FF6	160	461	167	69	<MDC
24	Trap	FF6	160	461	205	445	<MDC
25	Hood - vent	FA6	160	461	188	277	<MDC
26	Hood - base	FA6	160	461	153	-69	<MDC
27	Hood - left	FA6	160	461	170	99	<MDC
28	Hood - right	FA6	160	461	199	385	<MDC
29	Hood - rear	FA6	160	461	194	336	<MDC

Survey Type: Scans Survey Unit: 319

Instrument Information:

Instrument ID:	E		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	160	1,336	175	220	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 319

Instrument ID:	Beckman LS6500		Survey Date:	03/30/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	8	44	17	<MDC
2	Floor	FA2	8	44	16	<MDC
3	Floor	FA3	8	44	30	<MDC
4	Floor	FA4	8	44	21	<MDC
5	Floor	FA5	8	44	13	<MDC
6	Floor	FA6	8	44	17	<MDC
7	Floor	FA7	8	44	26	<MDC
8	Floor	FA8	8	44	19	<MDC
9	Floor	FB1	8	44	21	<MDC
10	Floor	FB2	8	44	9	<MDC
11	Floor	FB3	8	44	21	<MDC
12	Floor	FB4	8	44	8	<MDC
13	Floor	FB5	8	44	10	<MDC
14	Floor	FB6	8	44	35	<MDC
15	Floor	FB7	8	44	15	<MDC
16	Floor	FB8	8	44	9	<MDC
17	Floor	FC1	8	44	25	<MDC
18	Floor	FC2	8	44	21	<MDC
19	Floor	FC3	8	44	50	50
20	Floor	FC4	8	44	14	<MDC
21	Floor	FC5	8	44	30	<MDC
22	Floor	FC6	8	44	12	<MDC
23	Floor	FC7	8	44	18	<MDC
24	Floor	FC8	8	44	25	<MDC
25	Floor	FD1	8	44	22	<MDC
26	Floor	FD2	8	44	16	<MDC
27	Floor	FD3	8	44	8	<MDC
28	Floor	FD4	8	44	28	<MDC
29	Floor	FD5	8	44	11	<MDC
30	Floor	FD6	8	44	25	<MDC
31	Floor	FD7	8	44	25	<MDC
32	Floor	FE1	8	44	13	<MDC
33	Floor	FE2	8	44	25	<MDC
34	Floor	FE3	8	44	29	<MDC
35	Floor	FE4	8	44	-3	<MDC
36	Floor	FE5	8	44	27	<MDC
37	Floor	FE6	8	44	36	<MDC
38	Floor	FE7	8	44	25	<MDC
39	Floor	FF1	8	44	52	52
40	Floor	FF2	8	44	19	<MDC
41	Floor	FF3	8	44	17	<MDC
42	Floor	FF4	8	44	9	<MDC
43	Floor	FF5	8	44	18	<MDC
44	Floor	FF6	8	44	2	<MDC
45	Floor	FF7	8	44	13	<MDC
46	Floor	FF8	8	44	13	<MDC
47	Floor	FG1	8	44	7	<MDC
48	Floor	FG2	8	44	19	<MDC

SCIENTECH

Survey Name: Bayer Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 319

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Floor	FG3	8	44	10	<MDC
50	Floor	FG4	8	44	26	<MDC
51	Floor	FG5	8	44	31	<MDC
52	Floor	FG6	8	44	21	<MDC
53	Floor	FG7	8	44	13	<MDC
54	Floor	FG8	8	44	2	<MDC
55	Floor	FH1	8	44	31	<MDC
56	Floor	FH2	8	44	26	<MDC
57	Floor	FH3	8	44	23	<MDC
58	Floor	FH4	8	44	10	<MDC
59	Floor	FH5	8	44	11	<MDC
60	Floor	FH6	8	44	33	<MDC
61	Floor	FH7	8	44	3	<MDC
62	Floor	FH8	8	44	22	<MDC
63	Floor	FI1	8	44	34	<MDC
64	Floor	FI2	8	44	46	46
65	Floor	FI3	8	44	22	<MDC
66	Floor	FI4	8	44	18	<MDC
67	Floor	FI5	8	44	1	<MDC
68	Floor	FI6	8	44	10	<MDC
69	Floor	FI7	8	44	8	<MDC
70	Floor	FI8	8	44	81	81
71	Wall	EA1	8	44	24	<MDC
72	Wall	EA2	8	44	6	<MDC
73	Wall	EA3	8	44	45	45
74	Wall	EA4	8	44	4	<MDC
75	Wall	EA5	8	44	22	<MDC
76	Wall	EA6	8	44	17	<MDC
77	Wall	EA7	8	44	14	<MDC
78	Wall	EA8	8	44	6	<MDC
79	Wall	EA9	8	44	1	<MDC
80	Wall	EB1	8	44	17	<MDC
81	Wall	EB2	8	44	65	65
82	Wall	EB3	8	44	-2	<MDC
83	Wall	EB4	8	44	9	<MDC
84	Wall	EB5	8	44	16	<MDC
85	Wall	EB6	8	44	28	<MDC
86	Wall	EB7	8	44	17	<MDC
87	Wall	EB8	8	44	19	<MDC
88	Wall	EB9	8	44	42	<MDC
89	Wall	SA1	8	44	16	<MDC
90	Wall	SA2	8	44	10	<MDC
91	Wall	SA3	8	44	26	<MDC
92	Wall	SA4	8	44	16	<MDC
93	Wall	SA5	8	44	4	<MDC
94	Wall	SA6	8	44	31	<MDC
95	Wall	SA7	8	44	16	<MDC
96	Wall	SA8	8	44	10	<MDC
97	Wall	SB1	8	44	22	<MDC
98	Wall	SB2	8	44	-2	<MDC
99	Wall	SB3	8	44	14	<MDC

SCIENTECH

Survey Name: Bayer Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 31

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
100	Wall	SB4	8	44	11	<MDC
101	Wall	SB5	8	44	19	<MDC
102	Wall	SB6	8	44	19	<MDC
103	Wall	SB7	8	44	7	<MDC
104	Wall	SB8	8	44	7	<MDC
105	Wall	WA1	8	44	11	<MDC
106	Wall	WA2	8	44	13	<MDC
107	Wall	WA3	8	44	29	<MDC
108	Wall	WA4	8	44	21	<MDC
109	Wall	WA5	8	44	14	<MDC
110	Wall	WA6	8	44	12	<MDC
111	Wall	WA7	8	44	13	<MDC
112	Wall	WA8	8	44	25	<MDC
113	Wall	WA9	8	44	20	<MDC
114	Wall	WB1	8	44	-1	<MDC
115	Wall	WB2	8	44	29	<MDC
116	Wall	WB3	8	44	18	<MDC
117	Wall	WB4	8	44	13	<MDC
118	Wall	WB5	8	44	-2	<MDC
119	Wall	WB6	8	44	68	68
120	Wall	WB7	8	44	6	<MDC
121	Wall	WB8	8	44	15	<MDC
122	Wall	WB9	8	44	27	<MDC
123	Wall	NA1	8	44	-1	<MDC
124	Wall	NA2	8	44	30	<MDC
125	Wall	NA3	8	44	8	<MDC
126	Wall	NA4	8	44	14	<MDC
127	Wall	NA5	8	44	20	<MDC
128	Wall	NA6	8	44	18	<MDC
129	Wall	NA7	8	44	23	<MDC
130	Wall	NA8	8	44	22	<MDC
131	Wall	NB1	8	44	2	<MDC
132	Wall	NB2	8	44	14	<MDC
133	Wall	NB3	8	44	13	<MDC
134	Wall	NB4	8	44	26	<MDC
135	Wall	NB5	8	44	15	<MDC
136	Wall	NB6	8	44	33	<MDC
137	Wall	NB7	8	44	6	<MDC
138	Wall	NB8	8	44	23	<MDC
139	Ceiling	CA4	8	44	26	<MDC
140	Ceiling	CF7	8	44	15	<MDC
141	Upper wall	NC3	8	44	30	<MDC
142	Upper wall	EC3	8	44	41	<MDC
143	Benchtop	FE1	8	44	27	<MDC
144	Benchtop	FG8	8	44	29	<MDC
145	Drawer	FE1	8	44	30	<MDC
146	Drawer	FG8	8	44	28	<MDC
147	Sink	FA5	8	44	20	<MDC
148	Trap	FA5	8	44	19	<MDC
149	Sink	FC6	8	44	21	<MDC
150	Trap	FC6	8	44	26	<MDC

SCIENTECH

Survey Name: Bayer Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 319

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
151	Sink	FF8	8	44	26	<MDC
152	Trap	FF8	8	44	13	<MDC
153	Sink	FF6	8	44	0	<MDC
154	Trap	FF6	8	44	27	<MDC
155	Sink	FA6	8	44	19	<MDC
156	Trap	FA6	8	44	24	<MDC
157	Hood - vent	FA6	8	44	24	<MDC
158	Hood - base	FA6	8	44	15	<MDC
159	Hood - left	FA6	8	44	34	<MDC
160	Hood - right	FA6	8	44	26	<MDC
161	Hood - rear	FA6	8	44	22	<MDC
162	Sink	FA5	8	44	21	<MDC
163	Trap	FA5	8	44	1	<MDC

Survey Type: Removable C-14 Survey Unit: 319

Instrument ID:	Beckman LS6500		Survey Date:	03/30/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	12	25	5	<MDC
2	Floor	FA2	12	25	8	<MDC
3	Floor	FA3	12	25	18	<MDC
4	Floor	FA4	12	25	13	<MDC
5	Floor	FA5	12	25	15	<MDC
6	Floor	FA6	12	25	13	<MDC
7	Floor	FA7	12	25	10	<MDC
8	Floor	FA8	12	25	10	<MDC
9	Floor	FB1	12	25	13	<MDC
10	Floor	FB2	12	25	5	<MDC
11	Floor	FB3	12	25	2	<MDC
12	Floor	FB4	12	25	8	<MDC
13	Floor	FB5	12	25	26	26
14	Floor	FB6	12	25	13	<MDC
15	Floor	FB7	12	25	21	<MDC
16	Floor	FB8	12	25	16	<MDC
17	Floor	FC1	12	25	13	<MDC
18	Floor	FC2	12	25	13	<MDC
19	Floor	FC3	12	25	15	<MDC
20	Floor	FC4	12	25	23	<MDC
21	Floor	FC5	12	25	8	<MDC
22	Floor	FC6	12	25	18	<MDC
23	Floor	FC7	12	25	2	<MDC
24	Floor	FC8	12	25	13	<MDC
25	Floor	FD1	12	25	21	<MDC
26	Floor	FD2	12	25	28	28
27	Floor	FD3	12	25	21	<MDC
28	Floor	FD4	12	25	15	<MDC
29	Floor	FD5	12	25	21	<MDC

SCIENTECH

Survey Name: Bayer Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 319

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
132	Wall	NB2	12	25	10	<MDC
133	Wall	NB3	12	25	2	<MDC
134	Wall	NB4	12	25	8	<MDC
135	Wall	NB5	12	25	8	<MDC
136	Wall	NB6	12	25	5	<MDC
137	Wall	NB7	12	25	15	<MDC
138	Wall	NB8	12	25	15	<MDC
139	Ceiling	CA4	12	25	18	<MDC
140	Ceiling	CF7	12	25	8	<MDC
141	Upper wall	NC3	12	25	8	<MDC
142	Upper wall	EC3	12	25	13	<MDC
143	Benchtop	FE1	12	25	13	<MDC
144	Benchtop	FG8	12	25	8	<MDC
145	Drawer	FE1	12	25	18	<MDC
146	Drawer	FG8	12	25	13	<MDC
147	Sink	FA5	12	25	15	<MDC
148	Trap	FA5	12	25	10	<MDC
149	Sink	FC6	12	25	13	<MDC
150	Trap	FC6	12	25	10	<MDC
151	Sink	FF8	12	25	10	<MDC
152	Trap	FF8	12	25	15	<MDC
153	Sink	FF6	12	25	18	<MDC
154	Trap	FF6	12	25	18	<MDC
155	Sink	FA6	12	25	18	<MDC
156	Trap	FA6	12	25	13	<MDC
157	Hood - vent	FA6	12	25	15	<MDC
158	Hood - base	FA6	12	25	8	<MDC
159	Hood - left	FA6	12	25	13	<MDC
160	Hood - right	FA6	12	25	5	<MDC
161	Hood - rear	FA6	12	25	8	<MDC
162	Sink	FA5	12	25	15	<MDC
163	Trap	FA5	12	25	29	29

SCIENTECH

Survey Name: Bayer Building 31 Project No. 23562

Survey Type: Gamma Dose Rates Survey Unit: 319

Instrument ID: C Survey Date: 03/23/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	EA2	5
2	Wall	EB8	5
3	Wall	SA3	5
4	Wall	SB7	5
5	Wall	WA2	5
6	Wall	WB7	5
7	Wall	NA2	5
8	Floor	FH6	5
9	Floor	FE5	5
10	Floor	FD2	5
11	Ceiling	CA4	5
12	Ceiling	CF7	5
13	Upper wall	NC3	5
14	Upper wall	EC3	5
15	Benchtop	FE1	5
16	Benchtop	FG8	5
17	Drawer	FE1	5
18	Drawer	FG8	5
19	Sink	FA5	5
20	Trap	FA5	5
21	Sink	FF8	5
22	Trap	FF8	5
23	Sink	FF6	5
24	Trap	FF6	5
25	Sink	FA6	5
26	Trap	FA6	5
27	Hood - vent	FA6	5
28	Hood - base	FA6	5
29	Hood - left	FA6	5
30	Hood - right	FA6	5
31	Hood - rear	FA6	5
32	Sink	FA5	5
33	Trap	FA5	5
34	Sink	FA5	5
35	Trap	FA5	5

SCIENTECH

Survey Name: Bayer Building 31 Project No. 23562

Survey Type: Removable G-14 Survey Unit: 3-9

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
30	Floor	FD6	12	25	23	<MDC
31	Floor	FD7	12	25	13	<MDC
32	Floor	FE1	12	25	5	<MDC
33	Floor	FE2	12	25	13	<MDC
34	Floor	FE3	12	25	10	<MDC
35	Floor	FE4	12	25	31	31
36	Floor	FE5	12	25	8	<MDC
37	Floor	FE6	12	25	10	<MDC
38	Floor	FE7	12	25	13	<MDC
39	Floor	FF1	12	25	15	<MDC
40	Floor	FF2	12	25	18	<MDC
41	Floor	FF3	12	25	15	<MDC
42	Floor	FF4	12	25	5	<MDC
43	Floor	FF5	12	25	10	<MDC
44	Floor	FF6	12	25	26	26
45	Floor	FF7	12	25	15	<MDC
46	Floor	FF8	12	25	5	<MDC
47	Floor	FG1	12	25	10	<MDC
48	Floor	FG2	12	25	18	<MDC
49	Floor	FG3	12	25	23	<MDC
50	Floor	FG4	12	25	8	<MDC
51	Floor	FG5	12	25	15	<MDC
52	Floor	FG6	12	25	13	<MDC
53	Floor	FG7	12	25	5	<MDC
54	Floor	FG8	12	25	16	<MDC
55	Floor	FH1	12	25	15	<MDC
56	Floor	FH2	12	25	8	<MDC
57	Floor	FH3	12	25	18	<MDC
58	Floor	FH4	12	25	13	<MDC
59	Floor	FH5	12	25	10	<MDC
60	Floor	FH6	12	25	10	<MDC
61	Floor	FH7	12	25	13	<MDC
62	Floor	FH8	12	25	21	<MDC
63	Floor	FI1	12	25	18	<MDC
64	Floor	FI2	12	25	13	<MDC
65	Floor	FI3	12	25	21	<MDC
66	Floor	FI4	12	25	10	<MDC
67	Floor	FI5	12	25	18	<MDC
68	Floor	FI6	12	25	13	<MDC
69	Floor	FI7	12	25	21	<MDC
70	Floor	FI8	12	25	18	<MDC
71	Wall	EA1	12	25	15	<MDC
72	Wall	EA2	12	25	26	26
73	Wall	EA3	12	25	5	<MDC
74	Wall	EA4	12	25	21	<MDC
75	Wall	EA5	12	25	10	<MDC
76	Wall	EA6	12	25	13	<MDC
77	Wall	EA7	12	25	10	<MDC
78	Wall	EA8	12	25	15	<MDC
79	Wall	EA9	12	25	18	<MDC
80	Wall	EB1	12	25	13	<MDC

SCIENTECH

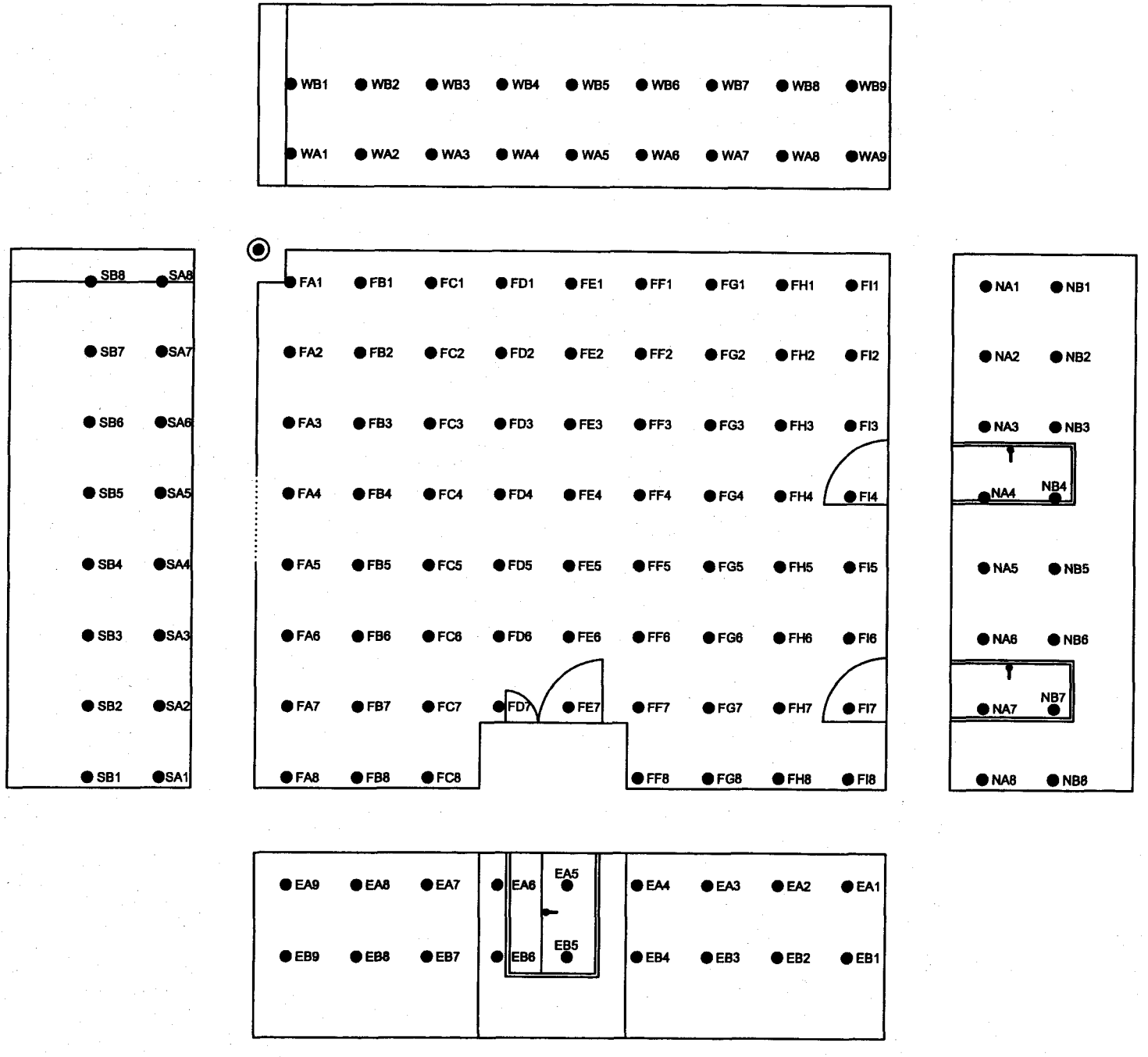
Survey Name: Bayer Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 319

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
81	Wall	EB2	12	25	20	<MDC
82	Wall	EB3	12	25	16	<MDC
83	Wall	EB4	12	25	15	<MDC
84	Wall	EB5	12	25	18	<MDC
85	Wall	EB6	12	25	13	<MDC
86	Wall	EB7	12	25	13	<MDC
87	Wall	EB8	12	25	8	<MDC
88	Wall	EB9	12	25	5	<MDC
89	Wall	SA1	12	25	18	<MDC
90	Wall	SA2	12	25	23	<MDC
91	Wall	SA3	12	25	8	<MDC
92	Wall	SA4	12	25	18	<MDC
93	Wall	SA5	12	25	10	<MDC
94	Wall	SA6	12	25	15	<MDC
95	Wall	SA7	12	25	18	<MDC
96	Wall	SA8	12	25	23	<MDC
97	Wall	SB1	12	25	21	<MDC
98	Wall	SB2	12	25	16	<MDC
99	Wall	SB3	12	25	13	<MDC
100	Wall	SB4	12	25	10	<MDC
101	Wall	SB5	12	25	8	<MDC
102	Wall	SB6	12	25	8	<MDC
103	Wall	SB7	12	25	10	<MDC
104	Wall	SB8	12	25	13	<MDC
105	Wall	WA1	12	25	10	<MDC
106	Wall	WA2	12	25	13	<MDC
107	Wall	WA3	12	25	8	<MDC
108	Wall	WA4	12	25	10	<MDC
109	Wall	WA5	12	25	10	<MDC
110	Wall	WA6	12	25	8	<MDC
111	Wall	WA7	12	25	15	<MDC
112	Wall	WA8	12	25	8	<MDC
113	Wall	WA9	12	25	15	<MDC
114	Wall	WB1	12	25	16	<MDC
115	Wall	WB2	12	25	0	<MDC
116	Wall	WB3	12	25	10	<MDC
117	Wall	WB4	12	25	15	<MDC
118	Wall	WB5	12	25	18	<MDC
119	Wall	WB6	12	25	18	<MDC
120	Wall	WB7	12	25	13	<MDC
121	Wall	WB8	12	25	21	<MDC
122	Wall	WB9	12	25	15	<MDC
123	Wall	NA1	12	25	13	<MDC
124	Wall	NA2	12	25	18	<MDC
125	Wall	NA3	12	25	18	<MDC
126	Wall	NA4	12	25	21	<MDC
127	Wall	NA5	12	25	15	<MDC
128	Wall	NA6	12	25	10	<MDC
129	Wall	NA7	12	25	5	<MDC
130	Wall	NA8	12	25	8	<MDC
131	Wall	NB1	12	25	16	<MDC

Building 31, Room RA321

BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 THIRD FLOOR ROOM RA-321



SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: **Fixed-Beta** Survey Unit: **321**

Instrument Information:

Instrument ID:	E		Survey Date:	03/23/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	EA6	160	461	164	40	<MDC
2	Wall	EB2	160	461	147	-128	<MDC
3	Wall	NA6	160	461	160	0	<MDC
4	Wall	WB5	160	461	162	20	<MDC
5	Wall	WA2	160	461	169	89	<MDC
6	Wall	SA6	160	461	155	-49	<MDC
7	Wall	SB3	160	461	180	198	<MDC
8	Floor	FD4	160	461	174	138	<MDC
9	Floor	FG7	160	461	177	168	<MDC
10	Floor	FH2	160	461	164	40	<MDC
11	Ceiling	CA6	160	461	211	504	504
12	Ceiling	CG6	160	461	227	662	662
13	Upper wall	EC7	160	461	197	366	<MDC
14	Upper wall	NC3	160	461	171	109	<MDC
15	Benchtop	FA5	160	461	170	99	<MDC
16	Benchtop	FI2	160	461	154	-59	<MDC
17	Drawer	FA5	160	461	162	20	<MDC
18	Drawer	FI2	160	461	149	-109	<MDC
19	Sink	FF8	160	461	178	178	<MDC
20	Trap	FF8	160	461	180	198	<MDC

Survey Type: **Scans** Survey Unit: **321**

Instrument Information:

Instrument ID:	G		Survey Date:	03/22/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	70	884	70	120	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type:	Removable H-3		Survey Unit:	321	
Instrument ID:	Beckman LS6500		Survey Date:	03/28/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	27	70	21	<MDC
2	Floor	FA2	27	70	16	<MDC
3	Floor	FA3	27	70	34	<MDC
4	Floor	FA4	27	70	19	<MDC
5	Floor	FA5	27	70	26	<MDC
6	Floor	FA6	27	70	27	<MDC
7	Floor	FA7	27	70	15	<MDC
8	Floor	FA8	27	70	25	<MDC
9	Floor	FB1	27	70	17	<MDC
10	Floor	FB2	27	70	23	<MDC
11	Floor	FB3	27	70	18	<MDC
12	Floor	FB4	27	70	16	<MDC
13	Floor	FB5	27	70	26	<MDC
14	Floor	FB6	27	70	13	<MDC
15	Floor	FB7	27	70	22	<MDC
16	Floor	FB8	27	70	21	<MDC
17	Floor	FC1	27	70	7	<MDC
18	Floor	FC2	27	70	12	<MDC
19	Floor	FC3	27	70	17	<MDC
20	Floor	FC4	27	70	18	<MDC
21	Floor	FC5	27	70	21	<MDC
22	Floor	FC6	27	70	33	<MDC
23	Floor	FC7	27	70	37	<MDC
24	Floor	FC8	27	70	29	<MDC
25	Floor	FD1	27	70	23	<MDC
26	Floor	FD2	27	70	20	<MDC
27	Floor	FD3	27	70	27	<MDC
28	Floor	FD4	27	70	43	<MDC
29	Floor	FD5	27	70	28	<MDC
30	Floor	FD6	27	70	13	<MDC
31	Floor	FD7	27	70	24	<MDC
32	Floor	FE1	27	70	19	<MDC
33	Floor	FE2	27	70	23	<MDC
34	Floor	FE3	27	70	34	<MDC
35	Floor	FE4	27	70	12	<MDC
36	Floor	FE5	27	70	4	<MDC
37	Floor	FE6	27	70	35	<MDC
38	Floor	FE7	27	70	24	<MDC
39	Floor	FF1	27	70	27	<MDC
40	Floor	FF2	27	70	24	<MDC
41	Floor	FF3	27	70	110	110
42	Floor	FF4	27	70	263	263
43	Floor	FF5	27	70	110	110
44	Floor	FF6	27	70	71	71
45	Floor	FF7	27	70	49	<MDC
46	Floor	FF8	27	70	85	85
47	Floor	FG1	27	70	83	83
48	Floor	FG2	27	70	-2	<MDC
49	Floor	FG3	27	70	30	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 321

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
50	Floor	FG4	27	70	26	<MDC
51	Floor	FG5	27	70	18	<MDC
52	Floor	FG6	27	70	15	<MDC
53	Floor	FG7	27	70	31	<MDC
54	Floor	FG8	27	70	16	<MDC
55	Floor	FH1	27	70	18	<MDC
56	Floor	FH2	27	70	4	<MDC
57	Floor	FH3	27	70	19	<MDC
58	Floor	FH4	27	70	23	<MDC
59	Floor	FH5	27	70	10	<MDC
60	Floor	FH6	27	70	5	<MDC
61	Floor	FH7	27	70	10	<MDC
62	Floor	FH8	27	70	3	<MDC
63	Floor	FI1	27	70	17	<MDC
64	Floor	FI2	27	70	4	<MDC
65	Floor	FI3	27	70	27	<MDC
66	Floor	FI4	27	70	27	<MDC
67	Floor	FI5	27	70	17	<MDC
68	Floor	FI6	27	70	3	<MDC
69	Floor	FI7	27	70	2	<MDC
70	Floor	FI8	27	70	16	<MDC
71	Wall	EA1	27	70	32	<MDC
72	Wall	EA2	27	70	22	<MDC
73	Wall	EA3	27	70	9	<MDC
74	Wall	EA4	27	70	16	<MDC
75	Wall	EA5	27	70	20	<MDC
76	Wall	EA6	27	70	2	<MDC
77	Wall	EA7	27	70	17	<MDC
78	Wall	EA8	27	70	18	<MDC
79	Wall	EA9	27	70	26	<MDC
80	Wall	EB1	27	70	22	<MDC
81	Wall	EB2	27	70	26	<MDC
82	Wall	EB3	27	70	11	<MDC
83	Wall	EB4	27	70	13	<MDC
84	Wall	EB5	27	70	5	<MDC
85	Wall	EB6	27	70	7	<MDC
86	Wall	EB7	27	70	1	<MDC
87	Wall	EB8	27	70	15	<MDC
88	Wall	EB9	27	70	2	<MDC
89	Wall	SA1	27	70	19	<MDC
90	Wall	SA2	27	70	14	<MDC
91	Wall	SA3	27	70	38	<MDC
92	Wall	SA4	27	70	17	<MDC
93	Wall	SA5	27	70	34	<MDC
94	Wall	SA6	27	70	16	<MDC
95	Wall	SA7	27	70	18	<MDC
96	Wall	SA8	27	70	7	<MDC
97	Wall	SB1	27	70	11	<MDC
98	Wall	SB2	27	70	17	<MDC
99	Wall	SB3	27	70	23	<MDC
100	Wall	SB4	27	70	25	<MDC
101	Wall	SB5	27	70	44	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 321

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
102	Wall	SB6	27	70	14	<MDC
103	Wall	SB7	27	70	102	102
104	Wall	SB8	27	70	32	<MDC
105	Wall	WA1	27	70	13	<MDC
106	Wall	WA2	27	70	13	<MDC
107	Wall	WA3	27	70	4	<MDC
108	Wall	WA4	27	70	1	<MDC
109	Wall	WA5	27	70	22	<MDC
110	Wall	WA6	27	70	10	<MDC
111	Wall	WA7	27	70	20	<MDC
112	Wall	WA8	27	70	8	<MDC
113	Wall	WA9	27	70	19	<MDC
114	Wall	WB1	27	70	15	<MDC
115	Wall	WB2	27	70	5	<MDC
116	Wall	WB3	27	70	23	<MDC
117	Wall	WB4	27	70	12	<MDC
118	Wall	WB5	27	70	14	<MDC
119	Wall	WB6	27	70	5	<MDC
120	Wall	WB7	27	70	-4	<MDC
121	Wall	WB8	27	70	10	<MDC
122	Wall	WB9	27	70	2	<MDC
123	Wall	NA1	27	70	23	<MDC
124	Wall	NA2	27	70	25	<MDC
125	Wall	NA3	27	70	9	<MDC
126	Wall	NA4	27	70	11	<MDC
127	Wall	NA5	27	70	23	<MDC
128	Wall	NA6	27	70	8	<MDC
129	Wall	NA7	27	70	20	<MDC
130	Wall	NA8	27	70	25	<MDC
131	Wall	NB1	27	70	26	<MDC
132	Wall	NB2	27	70	17	<MDC
133	Wall	NB3	27	70	26	<MDC
134	Wall	NB4	27	70	17	<MDC
135	Wall	NB5	27	70	2	<MDC
136	Wall	NB6	27	70	11	<MDC
137	Wall	NB7	27	70	12	<MDC
138	Wall	NB8	27	70	22	<MDC
139	Ceiling	CA6	27	70	16	<MDC
140	Ceiling	CG6	27	70	14	<MDC
141	Upper wall	EC7	27	70	14	<MDC
142	Upper wall	NC3	27	70	13	<MDC
143	Benchtop	FA5	27	70	19	<MDC
144	Benchtop	FI2	27	70	6	<MDC
145	Drawer	FA5	27	70	24	<MDC
146	Drawer	FI2	27	70	8	<MDC
147	Sink	FC6	27	70	13	<MDC
148	Trap	FC6	27	70	19	<MDC
149	Sink	FF6	27	70	27	<MDC
150	Trap	FF6	27	70	10	<MDC
151	Sink	FF8	27	70	19	<MDC
152	Trap	FF8	27	70	18	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type:	Removable C-14		Survey Unit:	321	
Instrument ID:	Beckman LS6500		Survey Date:	03/28/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	6	19	10	<MDC
2	Floor	FA2	6	19	15	<MDC
3	Floor	FA3	6	19	5	<MDC
4	Floor	FA4	6	19	18	<MDC
5	Floor	FA5	6	19	8	<MDC
6	Floor	FA6	6	19	5	<MDC
7	Floor	FA7	6	19	18	<MDC
8	Floor	FA8	6	19	23	23
9	Floor	FB1	6	19	2	<MDC
10	Floor	FB2	6	19	8	<MDC
11	Floor	FB3	6	19	21	21
12	Floor	FB4	6	19	15	<MDC
13	Floor	FB5	6	19	8	<MDC
14	Floor	FB6	6	19	15	<MDC
15	Floor	FB7	6	19	20	20
16	Floor	FB8	6	19	10	<MDC
17	Floor	FC1	6	19	10	<MDC
18	Floor	FC2	6	19	18	<MDC
19	Floor	FC3	6	19	13	<MDC
20	Floor	FC4	6	19	21	21
21	Floor	FC5	6	19	10	<MDC
22	Floor	FC6	6	19	18	<MDC
23	Floor	FC7	6	19	8	<MDC
24	Floor	FC8	6	19	10	<MDC
25	Floor	FD1	6	19	18	<MDC
26	Floor	FD2	6	19	2	<MDC
27	Floor	FD3	6	19	15	<MDC
28	Floor	FD4	6	19	20	20
29	Floor	FD5	6	19	23	23
30	Floor	FD6	6	19	13	<MDC
31	Floor	FD7	6	19	5	<MDC
32	Floor	FE1	6	19	8	<MDC
33	Floor	FE2	6	19	5	<MDC
34	Floor	FE3	6	19	5	<MDC
35	Floor	FE4	6	19	18	<MDC
36	Floor	FE5	6	19	10	<MDC
37	Floor	FE6	6	19	13	<MDC
38	Floor	FE7	6	19	15	<MDC
39	Floor	FF1	6	19	15	<MDC
40	Floor	FF2	6	19	13	<MDC
41	Floor	FF3	6	19	17	<MDC
42	Floor	FF4	6	19	11	<MDC
43	Floor	FF5	6	19	10	<MDC
44	Floor	FF6	6	19	25	25
45	Floor	FF7	6	19	26	26
46	Floor	FF8	6	19	7	<MDC
47	Floor	FG1	6	19	2	<MDC
48	Floor	FG2	6	19	18	<MDC
49	Floor	FG3	6	19	18	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 321

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
50	Floor	FG4	6	19	5	<MDC
51	Floor	FG5	6	19	10	<MDC
52	Floor	FG6	6	19	10	<MDC
53	Floor	FG7	6	19	15	<MDC
54	Floor	FG8	6	19	8	<MDC
55	Floor	FH1	6	19	21	21
56	Floor	FH2	6	19	21	21
57	Floor	FH3	6	19	8	<MDC
58	Floor	FH4	6	19	5	<MDC
59	Floor	FH5	6	19	13	<MDC
60	Floor	FH6	6	19	18	<MDC
61	Floor	FH7	6	19	13	<MDC
62	Floor	FH8	6	19	13	<MDC
63	Floor	FI1	6	19	2	<MDC
64	Floor	FI2	6	19	21	21
65	Floor	FI3	6	19	15	<MDC
66	Floor	FI4	6	19	8	<MDC
67	Floor	FI5	6	19	13	<MDC
68	Floor	FI6	6	19	13	<MDC
69	Floor	FI7	6	19	15	<MDC
70	Floor	FI8	6	19	15	<MDC
71	Wall	EA1	6	19	13	<MDC
72	Wall	EA2	6	19	10	<MDC
73	Wall	EA3	6	19	28	28
74	Wall	EA4	6	19	5	<MDC
75	Wall	EA5	6	19	15	<MDC
76	Wall	EA6	6	19	26	26
77	Wall	EA7	6	19	13	<MDC
78	Wall	EA8	6	19	10	<MDC
79	Wall	EA9	6	19	18	<MDC
80	Wall	EB1	6	19	18	<MDC
81	Wall	EB2	6	19	8	<MDC
82	Wall	EB3	6	19	10	<MDC
83	Wall	EB4	6	19	15	<MDC
84	Wall	EB5	6	19	18	<MDC
85	Wall	EB6	6	19	23	23
86	Wall	EB7	6	19	10	<MDC
87	Wall	EB8	6	19	10	<MDC
88	Wall	EB9	6	19	15	<MDC
89	Wall	SA1	6	19	18	<MDC
90	Wall	SA2	6	19	13	<MDC
91	Wall	SA3	6	19	18	<MDC
92	Wall	SA4	6	19	13	<MDC
93	Wall	SA5	6	19	5	<MDC
94	Wall	SA6	6	19	8	<MDC
95	Wall	SA7	6	19	13	<MDC
96	Wall	SA8	6	19	13	<MDC
97	Wall	SB1	6	19	10	<MDC
98	Wall	SB2	6	19	13	<MDC
99	Wall	SB3	6	19	5	<MDC
100	Wall	SB4	6	19	10	<MDC
101	Wall	SB5	6	19	10	<MDC

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Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 321

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
102	Wall	SB6	6	19	13	<MDC
103	Wall	SB7	6	19	10	<MDC
104	Wall	SB8	6	19	13	<MDC
105	Wall	WA1	6	19	15	<MDC
106	Wall	WA2	6	19	5	<MDC
107	Wall	WA3	6	19	10	<MDC
108	Wall	WA4	6	19	21	21
109	Wall	WA5	6	19	0	<MDC
110	Wall	WA6	6	19	23	23
111	Wall	WA7	6	19	5	<MDC
112	Wall	WA8	6	19	21	21
113	Wall	WA9	6	19	8	<MDC
114	Wall	WB1	6	19	13	<MDC
115	Wall	WB2	6	19	18	<MDC
116	Wall	WB3	6	19	8	<MDC
117	Wall	WB4	6	19	8	<MDC
118	Wall	WB5	6	19	23	23
119	Wall	WB6	6	19	18	<MDC
120	Wall	WB7	6	19	23	23
121	Wall	WB8	6	19	13	<MDC
122	Wall	WB9	6	19	16	<MDC
123	Wall	NA1	6	19	18	<MDC
124	Wall	NA2	6	19	13	<MDC
125	Wall	NA3	6	19	15	<MDC
126	Wall	NA4	6	19	10	<MDC
127	Wall	NA5	6	19	18	<MDC
128	Wall	NA6	6	19	8	<MDC
129	Wall	NA7	6	19	26	26
130	Wall	NA8	6	19	10	<MDC
131	Wall	NB1	6	19	10	<MDC
132	Wall	NB2	6	19	15	<MDC
133	Wall	NB3	6	19	10	<MDC
134	Wall	NB4	6	19	13	<MDC
135	Wall	NB5	6	19	26	26
136	Wall	NB6	6	19	10	<MDC
137	Wall	NB7	6	19	28	28
138	Wall	NB8	6	19	10	<MDC
139	Ceiling	CA6	6	19	15	<MDC
140	Ceiling	CG6	6	19	2	<MDC
141	Upper wall	EC7	6	19	2	<MDC
142	Upper wall	NC3	6	19	15	<MDC
143	Benchtop	FA5	6	19	8	<MDC
144	Benchtop	FI2	6	19	16	<MDC
145	Drawer	FA5	6	19	15	<MDC
146	Drawer	FI2	6	19	18	<MDC
147	Sink	FC6	6	19	15	<MDC
148	Trap	FC6	6	19	10	<MDC
149	Sink	FF6	6	19	15	<MDC
150	Trap	FF6	6	19	16	<MDC
151	Sink	FF8	6	19	8	<MDC
152	Trap	FF8	6	19	5	<MDC

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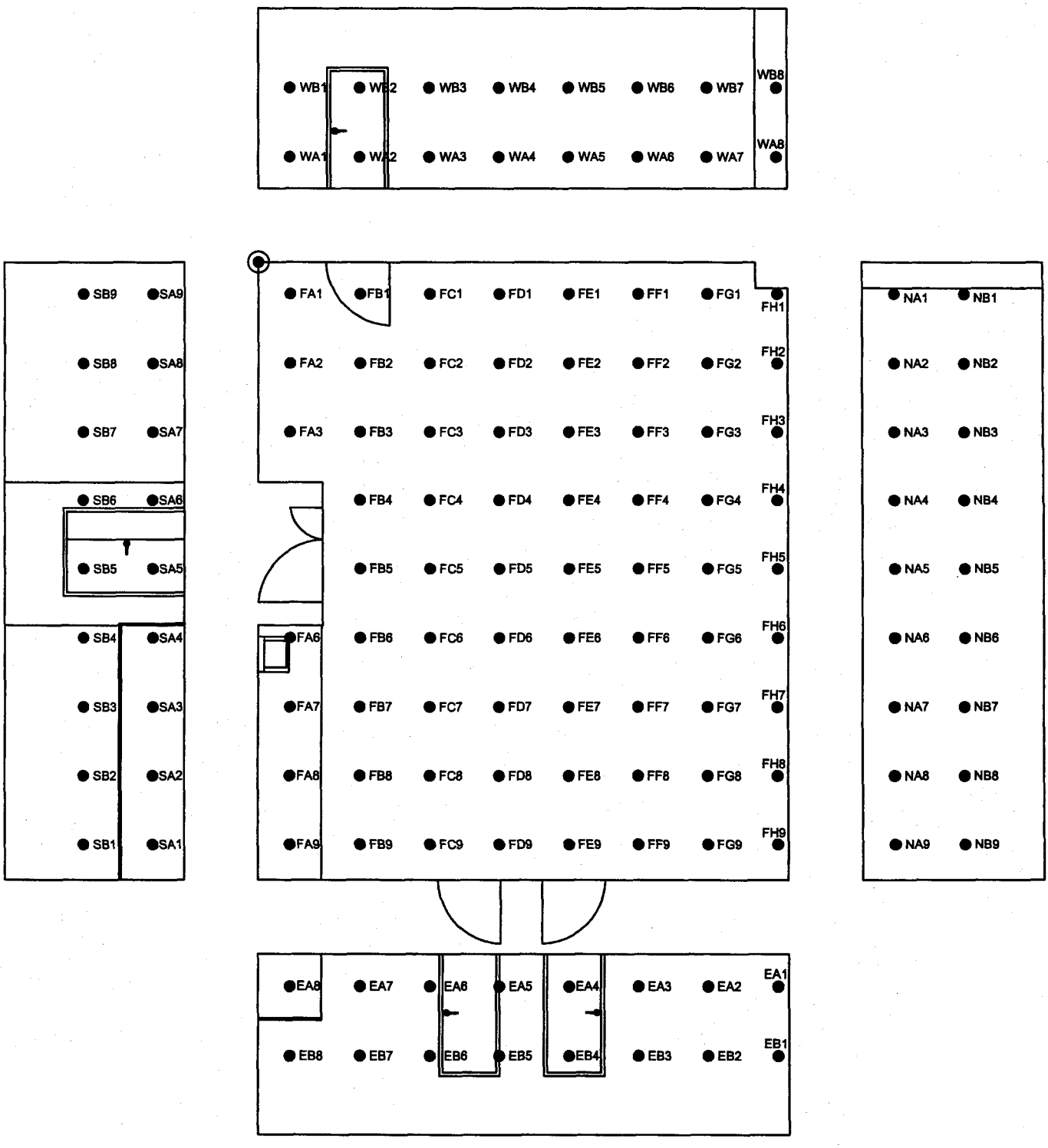
Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type:	Gamma Dose Rates		Survey Unit:	321
Instrument ID:	C		Survey Date:	03/23/05
Background (R_b):	5	urem/hr		

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	EA6	5
2	Wall	EB2	5
3	Wall	NA6	5
4	Wall	WB5	5
5	Wall	WA2	5
6	Wall	SA6	5
7	Wall	SB3	5
8	Floor	FD4	5
9	Floor	FG7	5
10	Floor	FH2	5
11	Ceiling	CA6	5
12	Ceiling	CG6	5
13	Upper wall	EC7	5
14	Upper wall	NC3	5
15	Benchtop	FA5	5
16	Benchtop	FI2	5
17	Drawer	FA5	5
18	Drawer	FI2	5
19	Sink	FC6	5
20	Trap	FC6	5
21	Sink	FF6	5
22	Trap	FF6	5
23	Sink	FF8	5
24	Trap	FF8	5

Building 31, Room RA369



BAYER PHARMACEUTICALS CORPORATION
BUILDING B-31 THIRD FLOOR ROOM RA-369

SCIENTECH

Survey Data

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Compiled by: 4/26/05 Reviewed by: 4/26/05

Survey Type: Fixed-Beta Survey Unit: 369

Instrument Information:

Instrument ID:	E		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Gross Total Counts Per Minute	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Wall	SA4	180	487	162	-178	<MDC
2	Wall	SB9	180	487	204	237	<MDC
3	Wall	WA3	180	487	162	-178	<MDC
4	Wall	WB7	180	487	185	49	<MDC
5	Wall	NB4	180	487	186	59	<MDC
6	Wall	NA8	180	487	181	10	<MDC
7	Wall	EA5	180	487	186	59	<MDC
8	Floor	FE8	180	487	220	395	<MDC
9	Floor	FG4	180	487	223	425	<MDC
10	Floor	FB2	180	487	224	435	<MDC
11	Ceiling	CB3	180	487	362	1,799	1,799
12	Ceiling	CD7	180	487	373	1,908	1,908
13	Upper wall	WC8	180	487	213	326	<MDC
14	Upper wall	EC5	180	487	215	346	<MDC
15	Benchtop	FF1	180	487	199	188	<MDC
16	Benchtop	FF9	180	487	190	99	<MDC
17	Drawer	FF1	180	487	197	168	<MDC
18	Drawer	FF9	180	487	165	-148	<MDC
19	Sink	FC1	180	487	209	287	<MDC
20	Trap	FC1	180	487	226	455	<MDC
21	Sink	FC3	180	487	169	-109	<MDC
22	Trap	FC3	180	487	179	-10	<MDC
23	Sink	FA6	180	487	233	524	524
24	Trap	FA6	180	487	212	316	<MDC
25	Hood - vent	FC1	180	487	216	356	<MDC
26	Hood - rear	FC1	180	487	224	435	<MDC
27	Hood - left	FC1	180	487	191	109	<MDC
28	Hood - right	FC1	180	487	182	20	<MDC
29	Hood - base	FC1	180	487	206	257	<MDC
30	Fridge - out	FB9	180	487	179	-10	<MDC
31	Fridge - out	FA9	180	487	186	59	<MDC

Survey Type: Scans Survey Unit: 369

Instrument Information:

Instrument ID:	E		Survey Date:	03/24/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	5,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	15,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Count Rate	MDC (dpm/100cm^2)	Mean Gross Count Rate	Max Gross Count Rate	Mean Activity (dpm/100cm^2)	Max Activity (dpm/100cm^2)
1	Floors and walls	All	180	1,417	200	241	<MDC	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H3 Survey Unit: 369

Instrument ID:	Beckman LS6500		Survey Date:	03/29/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	10	48	32	<MDC
2	Floor	FA2	10	48	27	<MDC
3	Floor	FA3	10	48	26	<MDC
4	Floor	FA4	10	48	105	105
5	Floor	FA5	10	48	23	<MDC
6	Floor	FA6	10	48	17	<MDC
7	Floor	FA7	10	48	29	<MDC
8	Floor	FA8	10	48	5	<MDC
9	Floor	FA9	10	48	19	<MDC
10	Floor	FB1	10	48	25	<MDC
11	Floor	FB2	10	48	34	<MDC
12	Floor	FB3	10	48	26	<MDC
13	Floor	FB4	10	48	32	<MDC
14	Floor	FB5	10	48	34	<MDC
15	Floor	FB6	10	48	166	166
16	Floor	FB7	10	48	32	<MDC
17	Floor	FB8	10	48	18	<MDC
18	Floor	FB9	10	48	84	84
19	Floor	FC1	10	48	9	<MDC
20	Floor	FC2	10	48	16	<MDC
21	Floor	FC3	10	48	23	<MDC
22	Floor	FC4	10	48	12	<MDC
23	Floor	FC5	10	48	11	<MDC
24	Floor	FC6	10	48	13	<MDC
25	Floor	FC7	10	48	10	<MDC
26	Floor	FC8	10	48	5	<MDC
27	Floor	FC9	10	48	14	<MDC
28	Floor	FD1	10	48	22	<MDC
29	Floor	FD2	10	48	12	<MDC
30	Floor	FD3	10	48	22	<MDC
31	Floor	FD4	10	48	14	<MDC
32	Floor	FD5	10	48	8	<MDC
33	Floor	FD6	10	48	8	<MDC
34	Floor	FD7	10	48	14	<MDC
35	Floor	FD8	10	48	34	<MDC
36	Floor	FD9	10	48	18	<MDC
37	Floor	FE1	10	48	24	<MDC
38	Floor	FE2	10	48	21	<MDC
39	Floor	FE3	10	48	16	<MDC
40	Floor	FE4	10	48	20	<MDC
41	Floor	FE5	10	48	7	<MDC
42	Floor	FE6	10	48	6	<MDC
43	Floor	FE7	10	48	10	<MDC
44	Floor	FE8	10	48	6	<MDC
45	Floor	FE9	10	48	22	<MDC
46	Floor	FF1	10	48	18	<MDC
47	Floor	FF2	10	48	6	<MDC
48	Floor	FF3	10	48	21	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 36

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
49	Floor	FF4	10	48	11	<MDC
50	Floor	FF5	10	48	31	<MDC
51	Floor	FF6	10	48	37	<MDC
52	Floor	FF7	10	48	11	<MDC
53	Floor	FF8	10	48	18	<MDC
54	Floor	FF9	10	48	29	<MDC
55	Floor	FG1	10	48	15	<MDC
56	Floor	FG2	10	48	38	<MDC
57	Floor	FG3	10	48	11	<MDC
58	Floor	FG4	10	48	1	<MDC
59	Floor	FG5	10	48	13	<MDC
60	Floor	FG6	10	48	22	<MDC
61	Floor	FG7	10	48	42	<MDC
62	Floor	FG8	10	48	23	<MDC
63	Floor	FG9	10	48	37	<MDC
64	Floor	FH1	10	48	14	<MDC
65	Floor	FH2	10	48	27	<MDC
66	Floor	FH3	10	48	7	<MDC
67	Floor	FH4	10	48	20	<MDC
68	Floor	FH5	10	48	35	<MDC
69	Floor	FH6	10	48	18	<MDC
70	Floor	FH7	10	48	5	<MDC
71	Floor	FH8	10	48	17	<MDC
72	Floor	FH9	10	48	18	<MDC
73	Wall	EA1	10	48	40	<MDC
74	Wall	EA2	10	48	39	<MDC
75	Wall	EA3	10	48	37	<MDC
76	Wall	EA4	10	48	10	<MDC
77	Wall	EA5	10	48	12	<MDC
78	Wall	EA6	10	48	2	<MDC
79	Wall	EA7	10	48	16	<MDC
80	Wall	EA8	10	48	5	<MDC
81	Wall	EB1	10	48	1	<MDC
82	Wall	EB2	10	48	13	<MDC
83	Wall	EB3	10	48	32	<MDC
84	Wall	EB4	10	48	28	<MDC
85	Wall	EB5	10	48	19	<MDC
86	Wall	EB6	10	48	20	<MDC
87	Wall	EB7	10	48	33	<MDC
88	Wall	EB8	10	48	11	<MDC
89	Wall	SA1	10	48	11	<MDC
90	Wall	SA2	10	48	30	<MDC
91	Wall	SA3	10	48	31	<MDC
92	Wall	SA4	10	48	19	<MDC
93	Wall	SA5	10	48	22	<MDC
94	Wall	SA6	10	48	13	<MDC
95	Wall	SA7	10	48	26	<MDC
96	Wall	SA8	10	48	43	<MDC
97	Wall	SA9	10	48	12	<MDC
98	Wall	SB1	10	48	20	<MDC
99	Wall	SB2	10	48	29	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 369

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm²)	Net Activity (dpm/100cm²)	Reportable Activity (dpm/100cm²)
100	Wall	SB3	10	48	25	<MDC
101	Wall	SB4	10	48	484	484
102	Wall	SB5	10	48	2	<MDC
103	Wall	SB6	10	48	21	<MDC
104	Wall	SB7	10	48	19	<MDC
105	Wall	SB8	10	48	27	<MDC
106	Wall	SB9	10	48	21	<MDC
107	Wall	WA1	10	48	15	<MDC
108	Wall	WA2	10	48	28	<MDC
109	Wall	WA3	10	48	29	<MDC
110	Wall	WA4	10	48	9	<MDC
111	Wall	WA5	10	48	23	<MDC
112	Wall	WA6	10	48	2	<MDC
113	Wall	WA7	10	48	14	<MDC
114	Wall	WA8	10	48	12	<MDC
115	Wall	WB1	10	48	26	<MDC
116	Wall	WB2	10	48	16	<MDC
117	Wall	WB3	10	48	12	<MDC
118	Wall	WB4	10	48	10	<MDC
119	Wall	WB5	10	48	4	<MDC
120	Wall	WB6	10	48	15	<MDC
121	Wall	WB7	10	48	23	<MDC
122	Wall	WB8	10	48	16	<MDC
123	Wall	NA1	10	48	25	<MDC
124	Wall	NA2	10	48	15	<MDC
125	Wall	NA3	10	48	13	<MDC
126	Wall	NA4	10	48	5	<MDC
127	Wall	NA5	10	48	25	<MDC
128	Wall	NA6	10	48	15	<MDC
129	Wall	NA7	10	48	6	<MDC
130	Wall	NA8	10	48	20	<MDC
131	Wall	NA9	10	48	17	<MDC
132	Wall	NB1	10	48	1	<MDC
133	Wall	NB2	10	48	7	<MDC
134	Wall	NB3	10	48	23	<MDC
135	Wall	NB4	10	48	98	98
136	Wall	NB5	10	48	22	<MDC
137	Wall	NB6	10	48	28	<MDC
138	Wall	NB7	10	48	17	<MDC
139	Wall	NB8	10	48	20	<MDC
140	Wall	NB9	10	48	25	<MDC
141	Ceiling	CB3	10	48	19	<MDC
142	Ceiling	CD7	10	48	9	<MDC
143	Upper wall	WC8	10	48	8	<MDC
144	Upper wall	EC5	10	48	19	<MDC
145	Benchtop	FF1	10	48	10	<MDC
146	Benchtop	FF9	10	48	19	<MDC
147	Drawer	FF1	10	48	13	<MDC
148	Drawer	FF9	10	48	15	<MDC
149	Sink	FC1	10	48	35	<MDC
150	Trap	FC1	10	48	32	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable H-3 Survey Unit: 369

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
151	Sink	FC3	10	48	21	<MDC
152	Trap	FC3	10	48	40	<MDC
153	Sink	FC6	10	48	30	<MDC
154	Trap	FC6	10	48	20	<MDC
155	Sink	FA6	10	48	27	<MDC
156	Trap	FA6	10	48	92	92
157	Hood - vent	FC1	10	48	19	<MDC
158	Hood - rear	FC1	10	48	17	<MDC
159	Hood - left	FC1	10	48	6	<MDC
160	Hood - right	FC1	10	48	10	<MDC
161	Hood - base	FC1	10	48	23	<MDC
162	Fridge - out	FB9	10	48	52	52
163	Fridge - in	FB9	10	48	29	<MDC
164	Fridge - out	FA9	10	48	-1	<MDC
165	Fridge - in	FA9	10	48	8	<MDC

Survey Type: Removable C-14 Survey Unit: 369

Instrument ID:	Beckman LS6500		Survey Date:	03/29/05		
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2	
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2	(Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	10	23	15	<MDC
2	Floor	FA2	10	23	15	<MDC
3	Floor	FA3	10	23	8	<MDC
4	Floor	FA4	10	23	7	<MDC
5	Floor	FA5	10	23	18	<MDC
6	Floor	FA6	10	23	13	<MDC
7	Floor	FA7	10	23	10	<MDC
8	Floor	FA8	10	23	18	<MDC
9	Floor	FA9	10	23	18	<MDC
10	Floor	FB1	10	23	10	<MDC
11	Floor	FB2	10	23	5	<MDC
12	Floor	FB3	10	23	18	<MDC
13	Floor	FB4	10	23	13	<MDC
14	Floor	FB5	10	23	18	<MDC
15	Floor	FB6	10	23	9	<MDC
16	Floor	FB7	10	23	10	<MDC
17	Floor	FB8	10	23	10	<MDC
18	Floor	FB9	10	23	15	<MDC
19	Floor	FC1	10	23	15	<MDC
20	Floor	FC2	10	23	15	<MDC
21	Floor	FC3	10	23	18	<MDC
22	Floor	FC4	10	23	18	<MDC
23	Floor	FC5	10	23	10	<MDC
24	Floor	FC6	10	23	15	<MDC
25	Floor	FC7	10	23	13	<MDC
26	Floor	FC8	10	23	18	<MDC
27	Floor	FC9	10	23	13	<MDC
28	Floor	FD1	10	23	10	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 365

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
29	Floor	FD2	10	23	8	<MDC
30	Floor	FD3	10	23	8	<MDC
31	Floor	FD4	10	23	23	<MDC
32	Floor	FD5	10	23	18	<MDC
33	Floor	FD6	10	23	18	<MDC
34	Floor	FD7	10	23	10	<MDC
35	Floor	FD8	10	23	15	<MDC
36	Floor	FD9	10	23	10	<MDC
37	Floor	FE1	10	23	13	<MDC
38	Floor	FE2	10	23	13	<MDC
39	Floor	FE3	10	23	15	<MDC
40	Floor	FE4	10	23	26	26
41	Floor	FE5	10	23	10	<MDC
42	Floor	FE6	10	23	13	<MDC
43	Floor	FE7	10	23	3	<MDC
44	Floor	FE8	10	23	13	<MDC
45	Floor	FE9	10	23	10	<MDC
46	Floor	FF1	10	23	10	<MDC
47	Floor	FF2	10	23	15	<MDC
48	Floor	FF3	10	23	13	<MDC
49	Floor	FF4	10	23	10	<MDC
50	Floor	FF5	10	23	13	<MDC
51	Floor	FF6	10	23	7	<MDC
52	Floor	FF7	10	23	10	<MDC
53	Floor	FF8	10	23	21	<MDC
54	Floor	FF9	10	23	20	<MDC
55	Floor	FG1	10	23	23	<MDC
56	Floor	FG2	10	23	15	<MDC
57	Floor	FG3	10	23	10	<MDC
58	Floor	FG4	10	23	21	<MDC
59	Floor	FG5	10	23	15	<MDC
60	Floor	FG6	10	23	21	<MDC
61	Floor	FG7	10	23	26	26
62	Floor	FG8	10	23	15	<MDC
63	Floor	FG9	10	23	18	<MDC
64	Floor	FH1	10	23	13	<MDC
65	Floor	FH2	10	23	15	<MDC
66	Floor	FH3	10	23	10	<MDC
67	Floor	FH4	10	23	15	<MDC
68	Floor	FH5	10	23	0	<MDC
69	Floor	FH6	10	23	10	<MDC
70	Floor	FH7	10	23	18	<MDC
71	Floor	FH8	10	23	23	<MDC
72	Floor	FH9	10	23	21	<MDC
73	Wall	EA1	10	23	2	<MDC
74	Wall	EA2	10	23	28	28
75	Wall	EA3	10	23	10	<MDC
76	Wall	EA4	10	23	3	<MDC
77	Wall	EA5	10	23	21	<MDC
78	Wall	EA6	10	23	36	36
79	Wall	EA7	10	23	8	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 36

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
80	Wall	EA8	10	23	8	<MDC
81	Wall	EB1	10	23	21	<MDC
82	Wall	EB2	10	23	18	<MDC
83	Wall	EB3	10	23	5	<MDC
84	Wall	EB4	10	23	15	<MDC
85	Wall	EB5	10	23	21	<MDC
86	Wall	EB6	10	23	18	<MDC
87	Wall	EB7	10	23	13	<MDC
88	Wall	EB8	10	23	13	<MDC
89	Wall	SA1	10	23	13	<MDC
90	Wall	SA2	10	23	10	<MDC
91	Wall	SA3	10	23	10	<MDC
92	Wall	SA4	10	23	10	<MDC
93	Wall	SA5	10	23	2	<MDC
94	Wall	SA6	10	23	16	<MDC
95	Wall	SA7	10	23	13	<MDC
96	Wall	SA8	10	23	8	<MDC
97	Wall	SA9	10	23	18	<MDC
98	Wall	SB1	10	23	18	<MDC
99	Wall	SB2	10	23	13	<MDC
100	Wall	SB3	10	23	26	26
101	Wall	SB4	10	23	187	187
102	Wall	SB5	10	23	16	<MDC
103	Wall	SB6	10	23	15	<MDC
104	Wall	SB7	10	23	10	<MDC
105	Wall	SB8	10	23	10	<MDC
106	Wall	SB9	10	23	5	<MDC
107	Wall	WA1	10	23	10	<MDC
108	Wall	WA2	10	23	13	<MDC
109	Wall	WA3	10	23	13	<MDC
110	Wall	WA4	10	23	15	<MDC
111	Wall	WA5	10	23	18	<MDC
112	Wall	WA6	10	23	16	<MDC
113	Wall	WA7	10	23	13	<MDC
114	Wall	WA8	10	23	28	28
115	Wall	WB1	10	23	10	<MDC
116	Wall	WB2	10	23	8	<MDC
117	Wall	WB3	10	23	18	<MDC
118	Wall	WB4	10	23	13	<MDC
119	Wall	WB5	10	23	10	<MDC
120	Wall	WB6	10	23	10	<MDC
121	Wall	WB7	10	23	8	<MDC
122	Wall	WB8	10	23	18	<MDC
123	Wall	NA1	10	23	20	<MDC
124	Wall	NA2	10	23	8	<MDC
125	Wall	NA3	10	23	15	<MDC
126	Wall	NA4	10	23	18	<MDC
127	Wall	NA5	10	23	10	<MDC
128	Wall	NA6	10	23	10	<MDC
129	Wall	NA7	10	23	13	<MDC
130	Wall	NA8	10	23	15	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 369

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
131	Wall	NA9	10	23	23	<MDC
132	Wall	NB1	10	23	10	<MDC
133	Wall	NB2	10	23	10	<MDC
134	Wall	NB3	10	23	8	<MDC
135	Wall	NB4	10	23	4	<MDC
136	Wall	NB5	10	23	8	<MDC
137	Wall	NB6	10	23	13	<MDC
138	Wall	NB7	10	23	33	33
139	Wall	NB8	10	23	5	<MDC
140	Wall	NB9	10	23	10	<MDC
141	Ceiling	CB3	10	23	8	<MDC
142	Ceiling	CD7	10	23	15	<MDC
143	Upper wall	WC8	10	23	8	<MDC
144	Upper wall	EC5	10	23	10	<MDC
145	Benchtop	FF1	10	23	16	<MDC
146	Benchtop	FF9	10	23	10	<MDC
147	Drawer	FF1	10	23	26	26
148	Drawer	FF9	10	23	21	<MDC
149	Sink	FC1	10	23	8	<MDC
150	Trap	FC1	10	23	15	<MDC
151	Sink	FC3	10	23	23	<MDC
152	Trap	FC3	10	23	13	<MDC
153	Sink	FC6	10	23	13	<MDC
154	Trap	FC6	10	23	8	<MDC
155	Sink	FA6	10	23	8	<MDC
156	Trap	FA6	10	23	15	<MDC
157	Hood - vent	FC1	10	23	23	<MDC
158	Hood - rear	FC1	10	23	15	<MDC
159	Hood - left	FC1	10	23	16	<MDC
160	Hood - right	FC1	10	23	13	<MDC
161	Hood - base	FC1	10	23	10	<MDC
162	Fridge - out	FB9	10	23	13	<MDC
163	Fridge - in	FB9	10	23	5	<MDC
164	Fridge - out	FA9	10	23	23	<MDC
165	Fridge - in	FA9	10	23	21	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building 31 Project No. 23562

Survey Type: Gamma Dose Rate Survey Unit: 36

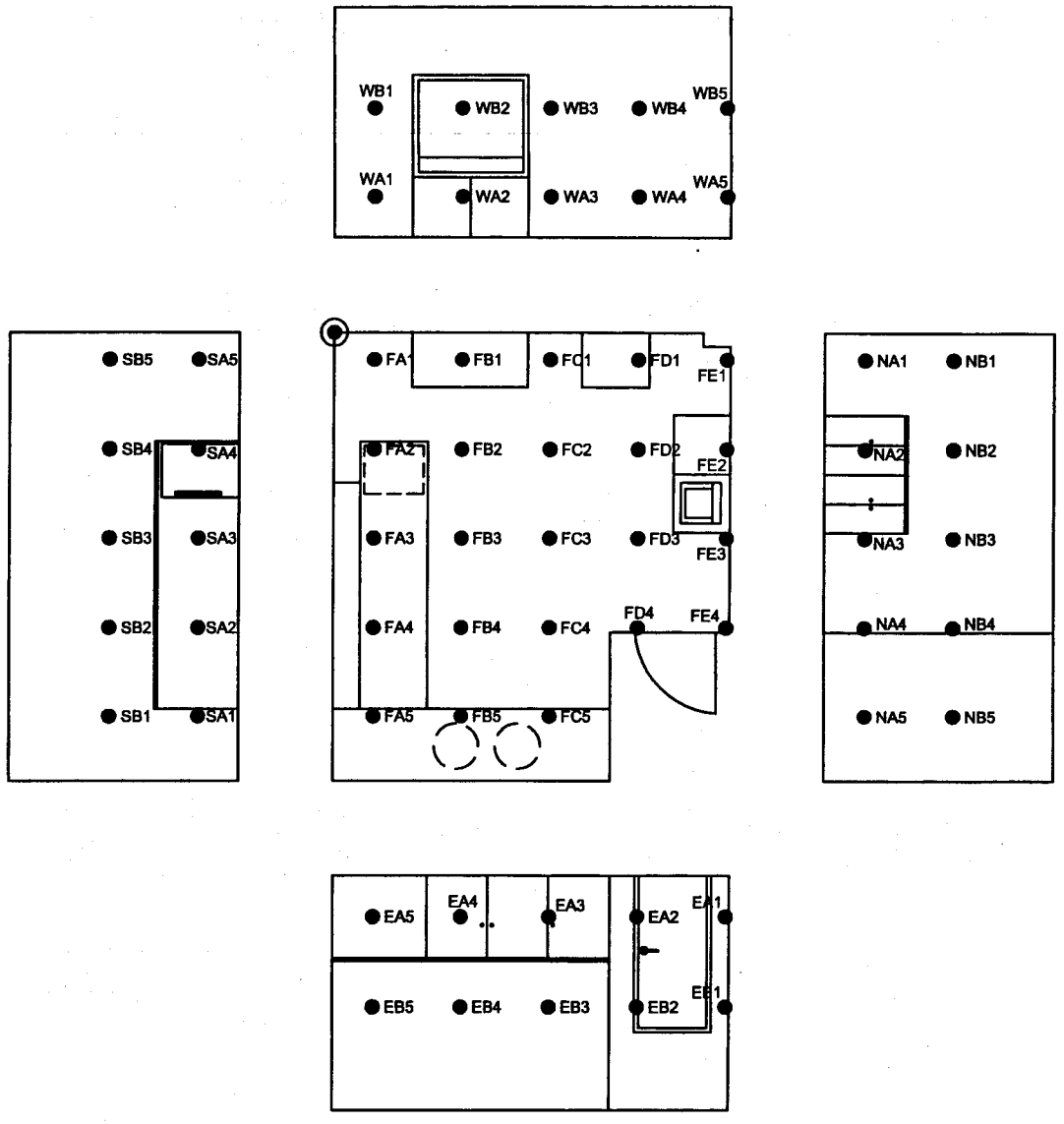
Instrument ID: C Survey Date: 03/24/05

Background (R_b): 5 urem/hr

#	Location	Survey Point	Dose Rate (urem/hr)
1	Wall	SA4	5
2	Wall	SB9	5
3	Wall	WA3	5
4	Wall	WB7	5
5	Wall	NB4	5
6	Wall	NA8	5
7	Wall	EA5	5
8	Floor	FE8	5
9	Floor	FG4	5
10	Floor	FB2	5
11	Ceiling	CB3	5
12	Ceiling	CD7	5
13	Upper wall	WC8	5
14	Upper wall	EC5	5
15	Benchtop	FF1	5
16	Benchtop	FF9	5
17	Drawer	FF1	5
18	Drawer	FF9	5
19	Sink	FC1	5
20	Trap	FC1	5
21	Sink	FC3	5
22	Trap	FC3	5
23	Sink	FC6	5
24	Trap	FC6	5
25	Sink	FA6	5
26	Trap	FA6	5
27	Hood - vent	FC1	5
28	Hood - rear	FC1	5
29	Hood - left	FC1	5
30	Hood - right	FC1	5
31	Hood - base	FC1	5
32	Fridge - out	FB9	5
33	Fridge - in	FB9	5
34	Fridge - out	FA9	5
35	Fridge - in	FA9	5

Building A-21, Room 103A

BAYER PHARMACEUTICALS CORPORATION
BUILDING A-21 ROOM 103A



NORTH

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building A-21 Project No. 23562

Survey Type: Removable H3 Survey Unit: 1012

Instrument ID:	Beckman LS6500		Survey Date:	03/29/05	
Sample Count Time (t_s):	1	min.	Average Release Criteria:	1,000	dpm/100 cm^2
Bkgrnd Count Time (t_b):	10	min.	Maximum Release Criteria:	1,000	dpm/100 cm^2 (Reg Guide 1.86)

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
1	Floor	FA1	10	48	14	<MDC
2	Floor	FA2	10	48	22	<MDC
3	Floor	FA3	10	48	11	<MDC
4	Floor	FA4	10	48	25	<MDC
5	Floor	FA5	10	48	19	<MDC
6	Floor	FB1	10	48	8	<MDC
7	Floor	FB2	10	48	2	<MDC
8	Floor	FB3	10	48	21	<MDC
9	Floor	FB4	10	48	15	<MDC
10	Floor	FB5	10	48	9	<MDC
11	Floor	FC1	10	48	12	<MDC
12	Floor	FC2	10	48	1	<MDC
13	Floor	FC3	10	48	5	<MDC
14	Floor	FC4	10	48	14	<MDC
15	Floor	FC5	10	48	12	<MDC
16	Floor	FD1	10	48	30	<MDC
17	Floor	FD2	10	48	17	<MDC
18	Floor	FD3	10	48	26	<MDC
19	Floor	FD4	10	48	22	<MDC
20	Floor	FE1	10	48	3	<MDC
21	Floor	FE2	10	48	29	<MDC
22	Floor	FE3	10	48	18	<MDC
23	Floor	FE4	10	48	-5	<MDC
24	Wall	NA1	10	48	12	<MDC
25	Wall	NA2	10	48	3	<MDC
26	Wall	NA3	10	48	23	<MDC
27	Wall	NA4	10	48	28	<MDC
28	Wall	NA5	10	48	10	<MDC
29	Wall	NB1	10	48	16	<MDC
30	Wall	NB2	10	48	19	<MDC
31	Wall	NB3	10	48	16	<MDC
32	Wall	NB4	10	48	-2	<MDC
33	Wall	NB5	10	48	5	<MDC
34	Wall	WA1	10	48	23	<MDC
35	Wall	WA2	10	48	7	<MDC
36	Wall	WA3	10	48	16	<MDC
37	Wall	WA4	10	48	2	<MDC
38	Wall	WA5	10	48	-4	<MDC
39	Wall	WB1	10	48	25	<MDC
40	Wall	WB2	10	48	22	<MDC
41	Wall	WB3	10	48	2	<MDC
42	Wall	WB4	10	48	1	<MDC
43	Wall	WB5	10	48	14	<MDC
44	Wall	SA1	10	48	-3	<MDC
45	Wall	SA2	10	48	43	<MDC
46	Wall	SA3	10	48	19	<MDC
47	Wall	SA4	10	48	15	<MDC
48	Wall	SA5	10	48	1	<MDC

SCIENTECH

Survey Name: Bayer Pharmaceuticals Building A-21 Project No. 23562

Survey Type: Removable C-14 Survey Unit: 105A

#	Location	Survey Point	Background Counts Per Minute	MDC (dpm/100cm^2)	Net Activity (dpm/100cm^2)	Reportable Activity (dpm/100cm^2)
11	Floor	FC1	10	23	8	<MDC
12	Floor	FC2	10	23	18	<MDC
13	Floor	FC3	10	23	18	<MDC
14	Floor	FC4	10	23	23	<MDC
15	Floor	FC5	10	23	28	28
16	Floor	FD1	10	23	21	<MDC
17	Floor	FD2	10	23	15	<MDC
18	Floor	FD3	10	23	10	<MDC
19	Floor	FD4	10	23	21	<MDC
20	Floor	FE1	10	23	13	<MDC
21	Floor	FE2	10	23	23	<MDC
22	Floor	FE3	10	23	23	<MDC
23	Floor	FE4	10	23	36	36
24	Wall	NA1	10	23	18	<MDC
25	Wall	NA2	10	23	34	34
26	Wall	NA3	10	23	18	<MDC
27	Wall	NA4	10	23	15	<MDC
28	Wall	NA5	10	23	16	<MDC
29	Wall	NB1	10	23	28	28
30	Wall	NB2	10	23	21	<MDC
31	Wall	NB3	10	23	8	<MDC
32	Wall	NB4	10	23	29	29
33	Wall	NB5	10	23	18	<MDC
34	Wall	WA1	10	23	28	28
35	Wall	WA2	10	23	34	34
36	Wall	WA3	10	23	8	<MDC
37	Wall	WA4	10	23	26	26
38	Wall	WA5	10	23	23	<MDC
39	Wall	WB1	10	23	13	<MDC
40	Wall	WB2	10	23	21	<MDC
41	Wall	WB3	10	23	26	26
42	Wall	WB4	10	23	31	31
43	Wall	WB5	10	23	13	<MDC
44	Wall	SA1	10	23	21	<MDC
45	Wall	SA2	10	23	15	<MDC
46	Wall	SA3	10	23	31	31
47	Wall	SA4	10	23	21	<MDC
48	Wall	SA5	10	23	31	31
49	Wall	SB1	10	23	23	<MDC
50	Wall	SB2	10	23	18	<MDC
51	Wall	SB3	10	23	26	26
52	Wall	SB4	10	23	23	<MDC
53	Wall	SB5	10	23	23	<MDC
54	Wall	EA1	10	23	21	<MDC
55	Wall	EA2	10	23	15	<MDC
56	Wall	EA3	10	23	23	<MDC
57	Wall	EA4	10	23	13	<MDC
58	Wall	EA5	10	23	21	<MDC
59	Wall	EB1	10	23	39	39
60	Wall	EB2	10	23	31	31
61	Wall	EB3	10	23	23	<MDC

PHILOTECHNICS

Laboratory Radiological Decommissioning Report

Prepared for:
Bayer Pharmaceuticals Corporation
400 Morgan Lane
West Haven, CT 06516
Radioactive Materials License # 06-13053-04

Survey Dates: July 24-28, 2006
Report Date: August 17, 2006

Prepared by:
Philotechnics, Ltd.
7676 Hazard Center Drive, Suite 500
San Diego, CA 92108

Philotechnics, Ltd.
7676 Hazard Center, Suite 500, San Diego, CA, 92108
Phone: 619.497.2682 • Fax: 619.497.2666
Email: rstrimble@philotechnics.com

DECOMMISSIONING REPORT CONTENTS

Section 1.0 – Executive Summary

A radiological survey was completed utilizing the requirements from the Nuclear Regulatory Commission (NRC) and recommendations from the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) in order to provide pertinent information for the decommissioning and unrestricted release of specified labs and affiliated areas located at 400 Morgan Lane from Broad Scope license #06-13053-04 of Bayer Pharmaceuticals Corporation (Bayer). A review of all data collection and analysis supports our professional opinion that these areas meet the criteria for unrestricted release based upon the following:

- ***All final scanning measurements were indistinguishable from background (below the scanning survey Minimum Detectable Concentration (MDC)).***

- ***All static measurements were well below our release criterion of 25.0 mRem/yr, with the majority of the data being indistinguishable from background (below the static survey MDC).***

- ***All wipe surveys were below our release criterion with the majority of the data being indistinguishable from background (below the MDC of the Scintillation Counter).***

- ***The total effective dose equivalent (TEDE) from any potential radioactive materials in the specified areas is calculated to be 0.15 mrem/year based upon maximum detectable concentrations of beta and gamma isotopes uniformly dispersed in a localized area.***

Section 2.0 – Project Scope, Findings and Summary

Prior to releasing restricted areas for unrestricted use, Bayer Pharmaceuticals requires under conditions of their broad scope license that an appropriate decommissioning survey and report be submitted for their review. This document provides the licensee with appropriate information to release specified labs and affiliated areas for unrestricted use.

In accordance with our agreement with Bayer Pharmaceuticals Corporation, Philotechnics performed a radiological decommissioning of specified research laboratories and affiliated areas. The decommissioning project at Bayer, located at 400 Morgan lane, encompassed surveys and review of specified impacted areas in the B-24 building. The survey and report provide pertinent information for the radiological decommissioning. The Final Status Survey and analytical data follow the guidance of MARSSIM (NUREG-1575) and NUREG-1507. The facility is a commercial/light industrial building used for research and development.

The following summarizes the independent conclusions representing Philotechnics's best professional judgment based on information and data available to us during the course of this project. Factual information regarding operations, conditions and test data provided by the client, owner or their representative has been assumed correct and complete based upon careful and diligent review of the safety program and past inspection records. Additionally, the conclusions presented are based on the conditions that existed at the time of the assessment. Note that on-site observation of the above referenced facilities consisted of readily visible, accessible areas only.

Table 1: Assessment Review

Assessment Component	Acceptable	Unacceptable	Section
License Review & Historical Use	X		4.0
Radiation Surveys			
A) Static Measurements – Hand-held instruments	X		5.0
B) Static Measurements – Scintillation Counter	X		5.0
C) Scanning Measurements – Hand-held instruments	X		5.0

Conclusions and Recommendations

Based upon the results of our survey, it is our professional opinion that areas specified in Table 3, within building B-24, located at 400 Morgan Lane are free of any radioactive contamination and/or radioactive material sources and may be released for unrestricted use. During the survey, Philotechnics verified that all labels, signs or other similar markings indicating the presence of radioactive materials have been removed or obliterated. Additionally, no concerns requiring further investigation exist at this time.

Project Team

The project team consisted of the following individuals:

Researched by:	Gary Nadeau, Robert Trimble
Surveyed by:	Frank Brown, Debra LePage and Benjamin Lumm
Written by:	Robert Trimble
Project Manager and Contact:	Robert Trimble

Closing

We appreciate the opportunity to provide this radiological decommissioning report and trust that the enclosed information is adequate for decision-making needs. Should you have any questions, please do not hesitate to call the undersigned.

Robert Trimble, M.S.
Health Physicist

Philotechnics, Ltd.
7676 Hazard Center, Suite 500, San Diego, CA, 92108
Phone: 619.497.2682 • Fax: 619.497.2666
Email: rstrimble@philotechnics.com

Section 3.0 – Assessment, Methodology and Report Limitations

The decommissioning process evaluates a property's environmental status for release of affected areas to allow unrestricted use by current or future tenants. The assessment involves the review of operations as they pertain to radioactive materials (RAM) use in order to identify potential radioactive contamination.

Assessment activities related to the laboratory decommissioning for the facility included the following tasks:

- A visual survey of both current and past RAM use areas in order to identify potential contamination and/or presence of radioactive materials
- Interviews with client personnel regarding current and historical use of RAM at the facility
- Review of existing documentation, as provided, regarding prior inspections, investigations, events or conditions at the facility related to RAM use
- Direct surveys of all laboratory areas with the use of portable hand-held radiation detection equipment to identify the presence of radioactive materials
- Indirect surveys to test for removable contamination with the use of a scintillation counter and wipes taken throughout the specified areas
- Preparation of a report documenting our findings, recommendations, and professional opinions regarding observed or suspected radiological concerns

Facility Point of Contact

At the facility, Robert Trimble met with Bill Galdenzi, who is the Radiation Safety Officer and Peter Babin, who works in Health, Environment & Safety for Bayer Pharmaceuticals. Mr. Galdenzi and Mr. Babin were able to provide specific information regarding radioactive materials use at the B-24 building based upon their historical knowledge of the facilities and implemented practices at Bayer.

Report Limitations

This report has been prepared solely for the use and benefit of Bayer Pharmaceuticals in compliance with NRC requirements and recommendations by MARSSIM (Multi-Agency Radiation Survey and Site Investigation Manual, NUREG-1575). Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the field of environmental science. This warranty is in lieu of all other warranties either expressed or implied. Philotechnics is not responsible for the

independent conclusions, opinions or recommendations made by others based on the field exploration presented in this report.

It must be noted that no investigation, or survey, can absolutely rule out the existence of radioactive materials. However, the survey was provided using acceptable industry practices and utilizing appropriate technology to provide statistical confidence with the data provided. This assessment has been based upon prior history, observable conditions, direct surveys and indirect surveys. There are limitations based upon this approach where contaminants can escape detection using these methods. Minimum detectable concentrations have been specified for the instrumentation used to qualify the detection limits.

The work performed in conjunction with this assessment and the data developed are intended as a description of available information at the dates and location given. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. In addition, this report is not intended as a regulatory agency compliance/safety audit or for the purpose of ensuring that all applicable permits and/or operating procedures are current and/or appropriate.

Section 4.0 License Review and Historical Use

Radioactive Materials (RAM) License

This decommissioning project for unrestricted release pertains to specified labs in the B-24 building located at 400 Morgan Lane operated under Bayer's radioactive materials license (#06-13053-04). A listing of the areas surveyed is detailed in the Restricted Area Summary (Table 3).

Bayer operates under a Type A Broad Scope license from the NRC. Historical use of isotopes at this facility included H-3, C-14, P-33 and I-125. The significant amendments pertaining to changes in their license are summarized below.

Bayer is currently authorized to possess the following isotopes as referenced by Amendment Number 11 of Radioactive Materials License 06-13053-04:

Table 2: RAM License Possession Limits

	Nuclide	Form	Possession Limit
A.	Any byproduct material with atomics numbers 1 through 83 and a physical half-life less than or equal to 120 days	Any	Not to exceed 100 millicuries per radionuclide and 1 curie total
B.	Hydrogen 3	Any	5 curies
C.	Carbon 14	Any	5 curies
D.	Phosphorus 32	Any	10 curies
E.	Phosphorus 33	Any	10 curies
F.	Sulfur 35	Any	10 curies
G.	Chlorine 36	Any	10 millicuries
H.	Calcium 45	Any	350 millicuries
I.	Iron 55	Any	100 millicuries
J.	Iodine 125	Any	1 curie
K.	Iodine 131	Any	1 curie
L.	Gadolinium 153	Any	10 millicuries
M.	Nickel 63	Sealed Sources	500 millicuries

Authorized Use

A. through M. Research and development as defined in 10 CFR 30.4; animal studies

Restricted Area Summary

Areas where radioactive materials were historically used are summarized in Table 3 and are identified on the diagrams in Appendix A.

Table 3: Restricted Area Summary

Resticted Area Summary		
Building	**Room #**	**Historical Isotope Usage**
B-24	RB-131	3H, 14C, 33P, 125I
B-24	RB-169A	3H, 14C, 33P, 125I
B-24	RB-169B	3H, 14C, 33P, 125I
B-24	RB-205	3H, 14C, 33P, 125I
B-24	RB-207	3H, 14C, 33P, 125I
B-24	RB-207C	3H, 14C, 33P, 125I
B-24	RB-211	3H, 14C, 33P, 125I
B-24	RB-211C	3H, 14C, 33P, 125I
B-24	RB-213	3H, 14C, 33P, 125I
B-24	RB-213C	3H, 14C, 33P, 125I
B-24	RB-218	3H, 14C, 33P, 125I
B-24	RB-219	3H, 14C, 33P, 125I
B-24	RB-219C	3H, 14C, 33P, 125I
B-24	RB-221	3H, 14C, 33P, 125I
B-24	RB-221C	3H, 14C, 33P, 125I
B-24	RB-224	3H, 14C, 33P, 125I

Historical Use

Bayer Pharmaceuticals is a research and development company that uses small quantities of radioactive materials (RAM) for purposes of tracers in chemical and biological studies. Bayer Pharmaceuticals operates their radiation safety program under a NRC Broad Scope License; however the historical use at the B-24 building was limited to H-3, C-14, P-33 and I-125. The survey model was developed and implemented to detect the isotopes used in each specific area, realizing that any potential contamination due to the short lived isotopes would have decayed by the time of the decommissioning survey.

Radioactive Materials Spills

By completing a review of pertinent records and an interview with Mr. Bill Galdenzi, the Radiation Safety Officer, we were able to ascertain that there have not been any significant radioactive materials spills affecting the specified areas. Significant spills are defined as those spills that were not readily cleaned up by the researcher and/or caused contamination to be found during follow-up or routine contamination surveys in excess of regulatory limits. Monthly contamination surveys were included in the historical review of the license and there were no indications of contamination levels over the criteria for release affecting the laboratories included in this decommissioning survey.

Section 5.0 – Radiation Surveys

Description of Radiation Surveys

During the period of July 24-28, 2006, Philotechnics completed a comprehensive wipe and meter survey in all accessible affected areas, which included benches, floors, cabinets, drains, sinks, hoods and other laboratory exhaust in the areas identified in Table 3. Survey maps depicting these areas are included as Appendix C.

The following instrumentation was used to quantify radiation levels:

- Bicron Electra 1B, with the following probe
  - ✓ BP19DD (beta probe)
    Serial # 4808 (Calibrated on 4/25/06)
- Bicron Electra, with the following probe
  - ✓ IBP19DD (beta probe)
    Serial # 450 (Calibrated on 5/16/06)
- Bicron Electra 1B, with the following probe
  - ✓ GP13A (gamma probe)
    Serial # 4422 (Calibrated on 2/22/06)
- Bicron Electra 1B, with the following probe
  - ✓ GP13A (gamma probe)
    Serial # 3118 (Calibrated on 1/05/06)
- Ludlum Model 2221, with the following probe
  - ✓ With 43-37 (beta probe),
    Serial #134537 (Calibrated on 6/16/06)
- Beckman Scintillation Counter (Operational Test 7/26/06)
  NIST certificate for H-3 and C-14 standards included

The instrument calibrations were completed using NIST traceable sources and the Certificates of Calibration are included as Appendix B.

Minimum Detectable Concentration (MDC) Calculations

Philotechnics analytical sheets are included as Appendix D, which show calculations for Static MDC for the Scintillation Counter, Static MDC for Hand-Held Instruments and Scanning MDC for Hand-Held Instruments. These calculations follow the guidance in MARSSIM NUREG-1575 and NUREG-1507. This information is used to verify the effectiveness of the instrumentation used in units of dpm/100 cm^2.

Area Classifications

Based on the results of the historical site assessment, facility areas were classified as impacted areas or non-impacted areas. Non-impacted areas are areas with no potential residual radioactivity from licensed activities. These include all property outside the building and non-

laboratory areas inside the building. Impacted areas are those areas that may have some level of potential residual radioactivity from licensed activities.

Impacted areas are typically divided into Class 1, 2, or 3 areas. Class 1 areas have the greatest potential for contamination and therefore receive the highest degree of survey effort for the final status survey, followed by Class 2 and then by Class 3. Table 4 lists the recommended maximum survey unit sizes based on floor area. It should be noted that these limits are recommended and are not absolute.

Class 1 Areas – Areas with the highest potential for contamination, and meet the following criteria: (1) impacted; (2) potential for delivering a dose above the release criterion; (3) potential for small areas of elevated activity; and (4) insufficient evidence to support classification as Class 2 or Class 3.

Class 2 Areas – Areas that meet the following criterion: (1) impacted; (2) low potential for delivering a dose above the release criterion; and (3) little or no potential for small areas of elevated activity.

Class 3 Areas – Areas that meet the following criterion: (1) impacted; (2) little or no potential for delivering a dose above the release criterion; and (3) little or no potential for small areas of elevated activity.

Non-impacted Areas: Building exterior, outside grounds, indoor areas other than those identified as restricted areas by the licensee, and surfaces above two meters in height in the areas specified below.

Impacted Class 1 Areas: None

Impacted Class 2 Areas: RB-205, RB-207, RB-207C, RB-211, RB-211C, RB-213, RB-213C, RB-219, RB-219C, RB-221, RB-221C and RB-224 including all surfaces less than two meters in height.

Impacted Class 3 Areas: RB-131, RB-169A, RB-169B and RB-218 including all surfaces less than two meters in height.

Table 4: Recommended Maximum Survey Unit Size Limits

Type of Survey Unit	Class 1	Class 2	Class 3
Structures	Up to 100 m^2	100 m^2 to 1,000 m^2	No limit
Land	Up to 2,000 m^2	2,000 m^2 to 10,000 m^2	No limit

Table 5: Laboratory Classification

Survey Unit	Classification	Rooms	Area
1	Class 3	RB-131	N/A
2	Class 3	RB-169A, RB-169B	N/A
3	Class 3	RB-218	N/A
4	Class 2	RB-205	49.7 m^2
5	Class 2	RB-207C	50.6 m^2
6	Class 2	RB-207	94.9 m^2
7	Class 2	RB-211	94.9 m^2
8	Class 2	RB-211C	38.7 m^2
9	Class 2	RB-213C	38.7 m^2
10	Class 2	RB-213	94.9 m^2
11	Class 2	RB-219	94.9 m^2
12	Class 2	RB-219C	38.7 m^2
13	Class 2	RB-221	94.9 m^2
14	Class 2	RB-221C	38.7 m^2
15	Class 2	RB-224	43.3 m^2
		Total Area	**772.9 m^2**

Survey Methodology

Our methodology for the Final Status Survey was broken down into two approaches based upon the different classifications. With a relative shift of 1 to 3 and Type I (α) and Type II (β) decision errors of 0.05, only 14 to 29 measurements per survey unit are necessary for the Class II areas. The number of measurements is determined by using Table 5.5 in NUREG 1575, Rev.1 "Values for N based upon Sign Test". MARSSIM recommendations were followed by determining the number of data points, calculating the required spacing between points, generating a random starting point, identifying the data grid point location and then adding supplemental locations.

The MARSSIM guidance recommends simple random measurement patterns for Class 3 survey units to ensure that the measurements are independent and support the assumptions of the statistical tests. For this survey, measurement locations were selected on a judgmental basis in order to sample in areas where potential contamination may exist.

Based upon the recommended survey unit sizes in Table 4 and our area classifications, all of the Class II areas could have been treated as a single survey unit because the total area was less than 1000 m^2. As a conservative measure each Class II area was made into its own survey unit.

Surface Scans

The following table compares MARSSIM recommendations and actual area coverage for the scan survey completed at Bayer located at 400 Morgan Lane.

Table 6: Scan Survey Coverage Comparison

Classification	Percentage of Surface Area Requiring Scan Coverage (MARSSIM)	Bayer Surface Area Scan Coverage
1	100%	N/A
2	10 – 100% (Judgmental)	80 – 100%
3	Judgmental	50%

These scan survey percentages were chosen in order to provide a more comprehensive survey of the impacted areas and a higher confidence that there was no contamination present. In the event of any elevated activity noted from the survey, the location would have been marked and additional measurements would have been taken to quantify the activity. ***All final scan surveys were below our release levels and therefore additional follow up was not required.***

Fixed or Static Measurements

Static measurements were completed at locations specified in the survey design. No additional areas were identified during the final scanning survey that would warrant specific static measurements. The probe was held as close to the surface as practical to determine a count rate in counts per minute. The data calculations from this survey are included as Appendix F. Appendix E provides a summary of background data points, which were collected in areas of similar construction to the areas being requested for release. ***All static measurements were below our established DCGL of 25.0 mRem/yr, with most of the data being indistinguishable from background (below the static survey MDC).***

Data Analysis

The following table summarizes MARSSIM guidance for conclusions based upon data provided by the Final Status Survey.

Table 7: Guidance for Survey Conclusions

Survey Result	Conclusion
All measurements less than $DCGL_w$	Survey unit meets release criterion
Average greater than $DCGL_w$	Survey unit does not meet release criterion
Any measurement greater than $DCGL_w$ and the average less then $DCGL_w$	Conduct sign test and elevated measurement comparison

The $DCGL_w$'s have been selected by using a 25 millirem per year release criterion.

Table 8: Established DGGL$_w$'s for Survey

Isotope	DCGL$_w$'s (DPM/100 cm^2)	Removable DCGL$_w$'s (DPM/100 cm^2)
H-3	1.25×10^8	1.25×10^7
C-14	3.75×10^6	3.75×10^5
P-33	4.25×10^7	4.25×10^6
I-125	6.75×10^5	6.75×10^4

The limiting DCGL$_w$ for beta emitters is C-14 at 3.75×10^6 dpm/100 cm^2 and for gamma emitters is I-125 at 6.75×10^5 dpm/100 cm^2.

All wipe samples taken at the facility were counted on a Beckman Scintillation Counter for one minute. A data sheet, included as Appendix G, details the CPM results, the DPM conversions and indicates if the result is below the MDC of the instrumentation and/or the DCGL$_w$. The channels for the Beckman counter were set up so that H-3 and I-125 would be detected in Channel A, S-35 and C-14 in Channel B and all other beta emitters in Channel C. As detailed on the calculation sheets, ***all wipe surveys were below our established DCGL's, with the majority of the data indistinguishable from background (below the Minimum Detectable Concentration (MDC) of the instrumentation).***

Section 6.0 –Decontamination / Decommissioning Review

Decontamination

Decontamination is the physical or chemical process of reducing and preventing the spread or potential exposure from contamination. Decontamination options include the use of commercially available materials and/or equipment that will effectively remove radioactive materials from surface areas so that the contamination can be collected and properly disposed.

During our scan surveys, a section of pipe underneath the sink in lab RB-213 was found to have elevated readings above our action levels which required decontamination. Static measurements were taken to quantify the levels of radiation, which were below our $DCGL_w$. This low level of contamination could have been left in place, still meeting our release criteria; however as an ALARA measure we felt it was prudent to address any contamination found in the impacted areas. This area was remediated (piping removed) and the subsequent survey data for scan, static and wipe surveys were all below MDC. At the time of our review, action levels were based on 1% of the $DCGL_w$'s. The limiting $DCGL_w$ for beta emitters is 3.75×10^6 dpm/100 cm^2 (C-14) and for gamma emitters is 6.75×10^5 dpm/ 100 cm^2 (I-125).

Dose Calculations

To support the unrestricted release of the areas listed in Table 3 dose calculations were completed using DandD code Version2. The data sheets are included in Appendix G and doses were calculated using the maximum DPM static values of the survey to give a maximum potential dose resulting from any radioactive material that may not have been detected by the survey. It is important to recognize that this dose calculation assumes this level of contamination uniformly exists in all areas affected by the decommissioning and that this calculation is very conservative. ***The total effective dose equivalent (TEDE) from any potential radioactive materials in the specified areas is calculated to be 0.155 mrem/year.***

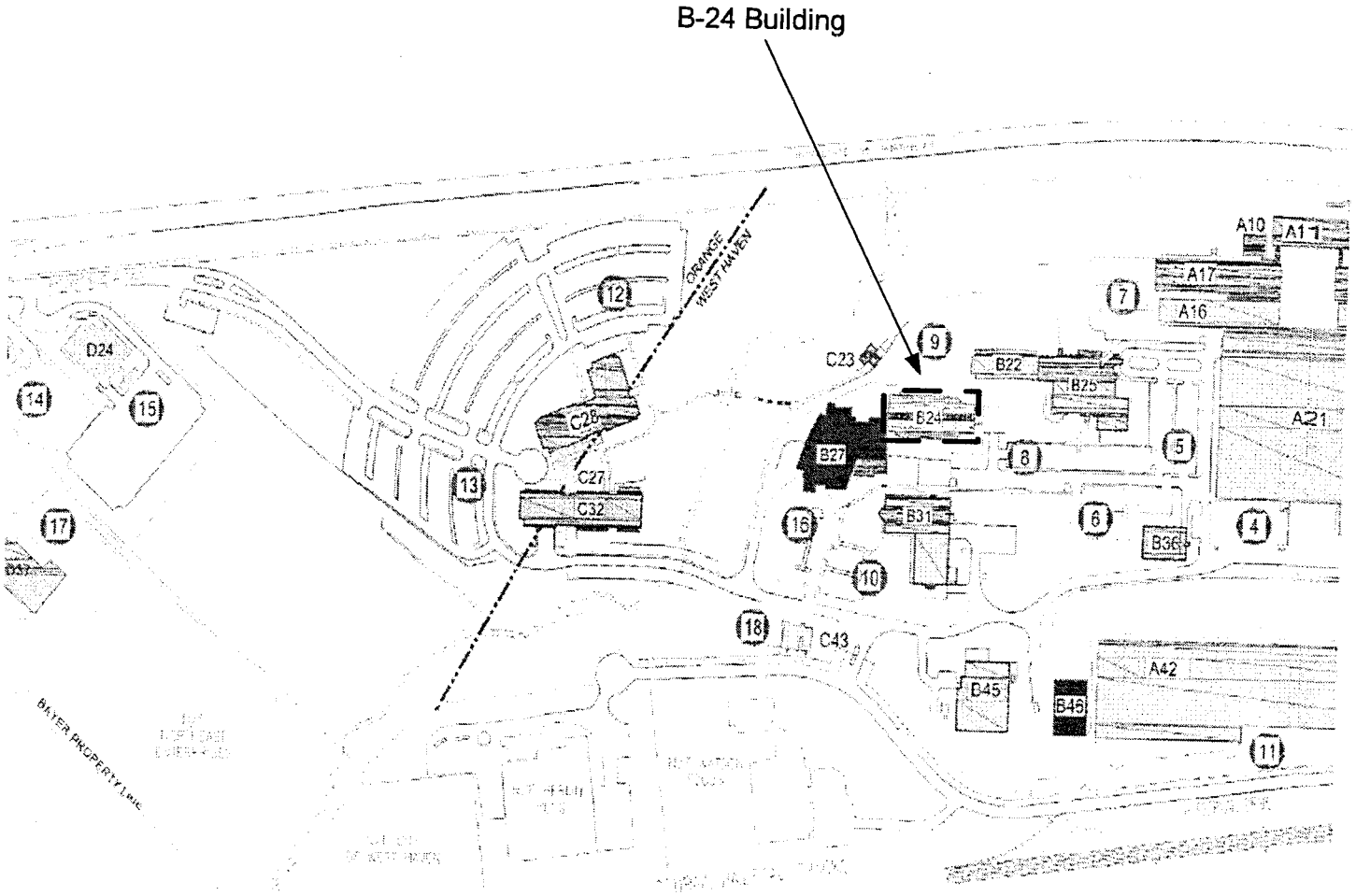
Decommissioning Review

Philotechnics has reviewed all of the applicable data pertaining to the history of radioactive materials use as well as the static and wipe surveys completed at Bayer Pharmaceuticals facility located at 400 Morgan Lane. It is our professional opinion that the specified areas listed in Table 3 are free of any radioactive materials and/or radioactive contamination and would qualify for unrestricted release.

APPENDIX A

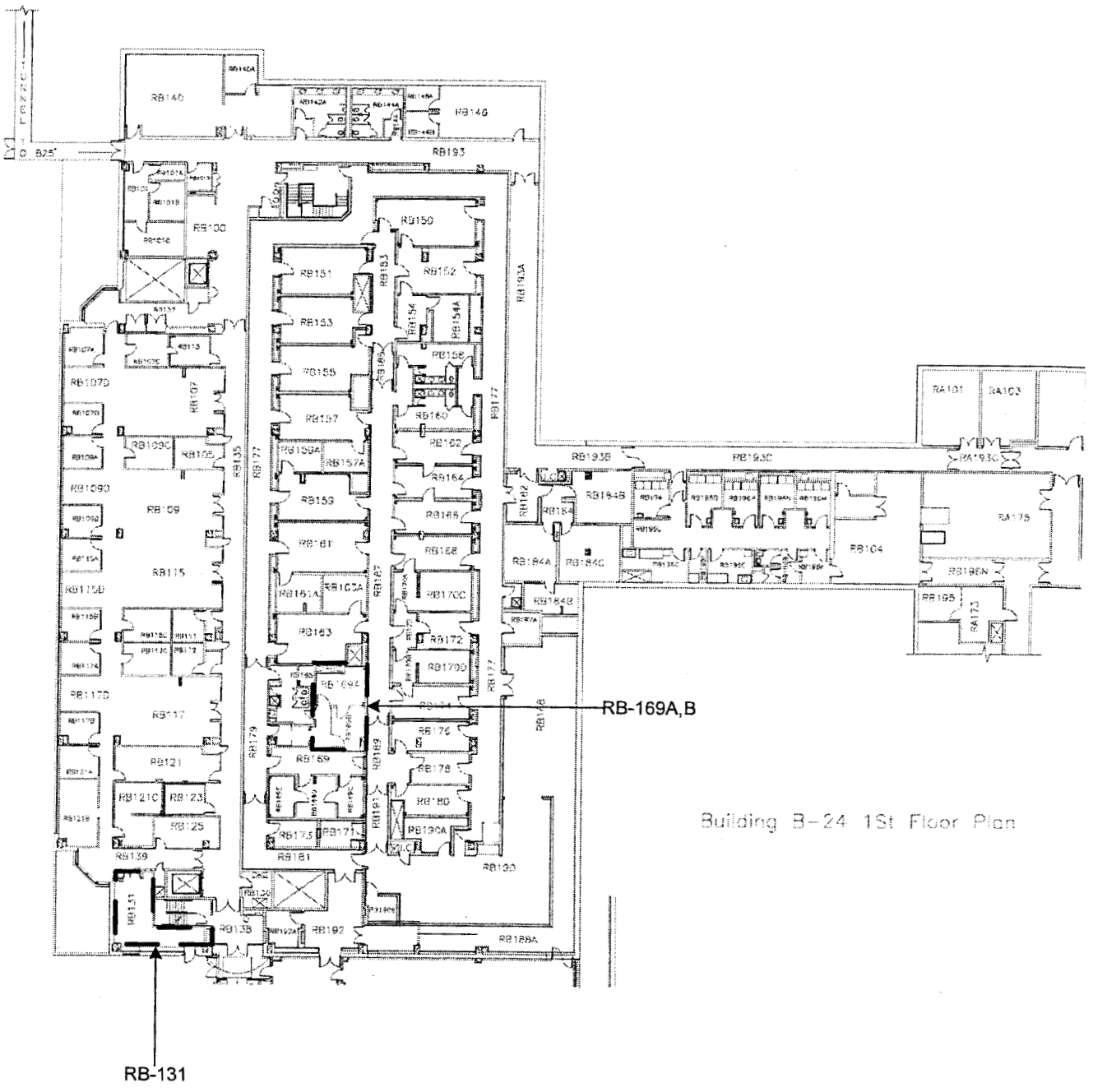
Bayer Pharmaceuticals Corporation Site Diagrams Identifying Decommissioning Areas

Bayer Pharmaceuticals Site Diagram
400 Morgan Lane
Site Diagram

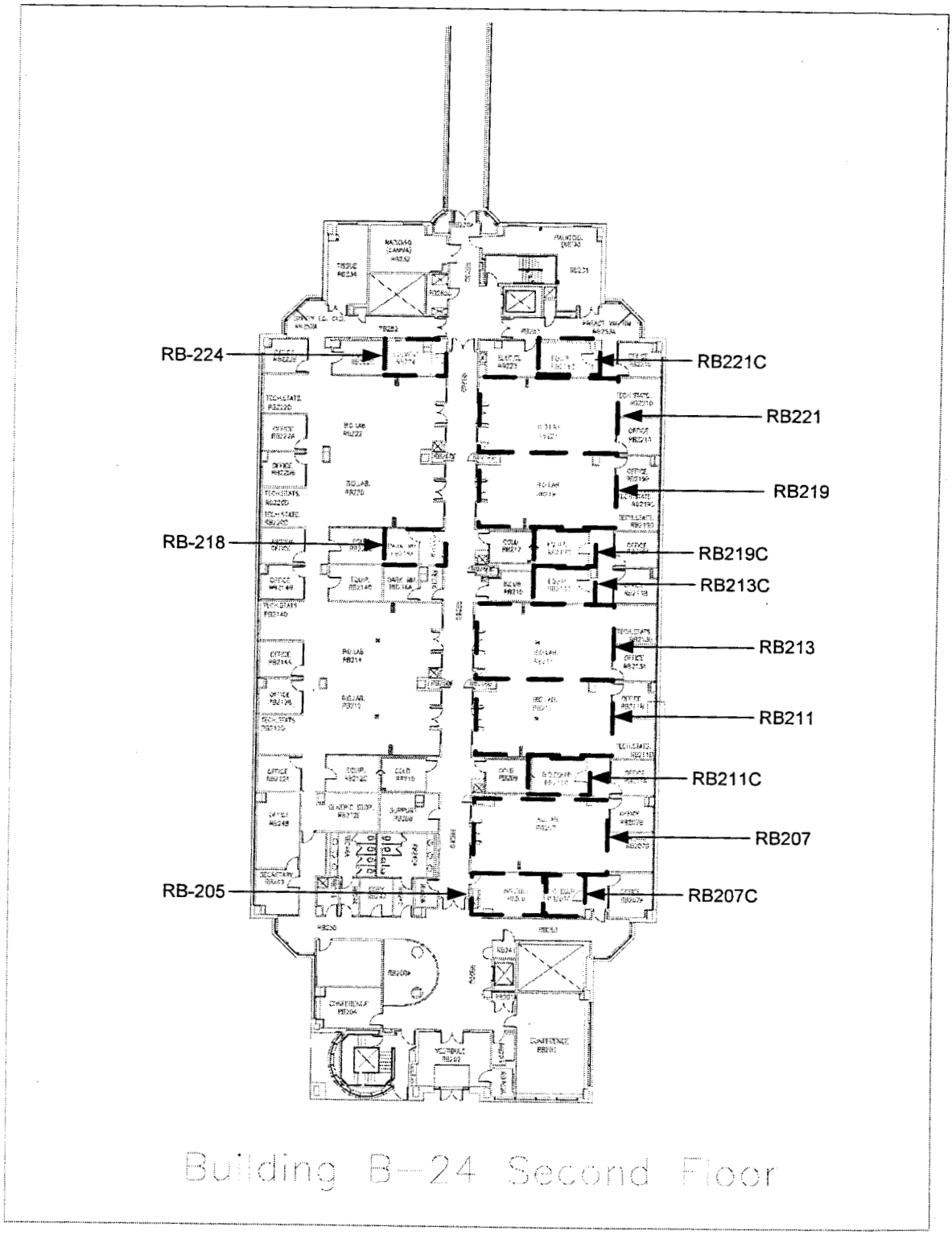


Current Decommissioned Areas

Bayer Pharmaceuticals Building Diagram
400 Morgan Lane
1st Floor



Bayer Pharmaceuticals Building Diagram
400 Morgan Lane
2nd Floor



APPENDIX B

Certificates of Calibration & Scintillation Check

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
Instrument Operational Check
7/25/2006

Counting Data:

Standard	Wide Open CPM
H-3	37,746
C-14	29,695
Blank	27

Isotope Information:

Analytical Sampling Date: 7/25/2006

Isotope	Initial Activity (DPM)	Calib. Date	Current Activity (DPM)
H-3	102,200	4/25/2000	71,852
C-14	46,000	4/25/2000	45,965

Efficiency Calculations:

Isotope	CPM	Corrected DPM	Efficiency
H-3	37,746	71,852	52.53%
C-14	29,695	45,965	64.60%
Gross Beta	67,441	117,817	57.24%

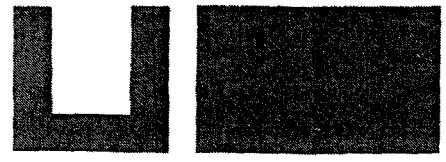
Ref. MARSSIM NUREG-1575
NUREG-1507

3. Radioactive material should be stored in a designated area in its original shipping container or labeled inner package.
4. Do not eat, drink, smoke, apply cosmetics, store, or prepare food in any area where radioactive materials are used.
5. Avoid direct contact with all radioactive materials by use of protective articles, such as disposable gloves and lab coats.
6. Use necessary precautions to prevent contamination of the laboratory and equipment, e.g., absorbent material on work surfaces, disposable lab ware.
7. Do not pipette by mouth.
8. Handle all sealed radioactive sources with care so as not to disturb the physical integrity of the capsule or ampoule.
9. This product may be disposed of without regard to its radioactive content provided all radioactive symbols and labels have been removed or de-faced. However, state, federal, or institutional requirements regarding any hazardous component(s) of this product must be addressed.
10. **These precautions are applicable to the handling and disposal of exempt quantity radioactive materials and may not be adequate for other kinds, quantities, or uses of radioactive material.**

Beckman Instruments, Inc., Fullerton, CA 92634-3100
April 1992 015-245208 Printed in U.S.A.

BECKMAN
MADE IN U.S.A.

594946 LIQUID SCINTILLATION STANDARDS SET



PRODUCT DESCRIPTION

The 594946 Liquid Scintillation Standards Set consists of three calibrated, sealed, unquenched samples of: (1) carbon-14, (2) hydrogen-3, and (3) unlabeled (blank) toluene in a scintillation solution. The scintillation solution used contains 4 grams of PPO (2,5-diphenyloxazole) and 0.05 gram of bis-MSB (p-bis[o-methylstyryl] benzene) per liter of scintillation-grade toluene. Both the PPO and bis-MSB are scintillation-grade fluors. All standards are furnished in 7-milliliter, low-potassium glass ampoules and sealed under nitrogen, with special precautions taken to exclude oxygen and moisture, which cause quenching. The radioactive standards are prepared by dispensing 4 milliliters of a ^{14}C or ^{3}H master solution into a 7-milliliter ampoule and flame-sealing it immediately. After leak-testing, a white paint is applied to the top of the ampoule, and a cap is attached. The blank standard is prepared in a similar way.

ACTIVITY CALIBRATION AND ERROR ANALYSIS

The ^{14}C and ^{3}H standards have been assayed for activity by comparison with the National Institute of Standards and Technology (NIST) carbon-14 solution standard, Standard Reference Material (SRM) No. 438 tartaric acid in 2M HCl, and tritium solution standard SRM No. 391-B-5, tritiated water in water. The H-Number method of calibration was used with secondary standards prepared from the NIST standards. The estimated activities for the activity standards and the reference dates for all standards are as follows:

H3	DPMs: 102,200	REF DATE:	25APR00
C14	DPMs: 46,000	REF DATE:	25APR00
BKG	DPMs: N/A	REF DATE:	25APR00

THE PRODUCTION LOT NO.s
FOR THE 3 STANDARDS ARE
AS FOLLOWS :

H3	–	HLB1608
C14	–	CLB0114
BKG	–	BLB2109

The overall uncertainties associated with the activity values are estimated to be less than ±3.5% for the ^{3}H and ±3.5% for the ^{14}C. These estimates are determined in accordance with error analysis procedures recommended by the International Commission on Radiation Units and Measurements (ICRU Report 12). The limits are calculated by arithmetically summing the uncertainty due to random errors at the 99% confidence level with the assessable systematic errors. Random errors arise from production and assay procedures such as dispensing, weighing and counting. Systematic errors consist of uncertainty in the activity of the NIST-based secondary standards, overall uncertainty of the NIST SRM No. 391-B-5 as a function of time (assuming a half-life of 12.43 years and a half-life uncertainty of 0.5%); uncertainties in the standard weights used for calibrating the balances used in gravimetric determinations, losses of activity by evaporation and uncertainties in corrections applied for the effects of impurities on the scintillation process.

RECOMMENDATIONS FOR USE

Unquenched standards can be used to:

1. Calibrate the instrument. Only one of these standards, ^{14}C or ^{3}H, can be used for calibration of your instrument. Refer to your Operator's Manual for proper calibration standard. *Use of any other standard from this set or another set requires the construction of new quench curves.*
2. Measure day-to-day ^{3}H and ^{14}C counting efficiencies for comparison with original factory specifications and for verifying stable system performance.
3. Measure E^2/B ratios for low-level activity counting.
4. Measure ^{3}H and ^{14}C "spillover" in dual-label counting channels.

The instrument Operator's Manual should be consulted for specific instructions on use of these standards.

LIMITATIONS ON USE

Unquenched standards should not be used to construct quench correction curves for calibration of *quenched* samples.

PRECAUTIONS ON STORAGE AND USE

These standards are prepared taking great care to exclude moisture, oxygen, and organic impurities which might affect their long-term stability. The fluors which they contain, however, are susceptible to photochemical degradation, and excessive exposure to sunlight or fluorescent lighting may result in their deterioration.

Samples should be stored in the dark at room temperature and, when in use, exposed only to incandescent lighting. This treatment will improve long-term stability—at least five years—and is highly recommended.

PRECAUTIONS AND THE SAFE USE OF EXEMPT QUANTITY RADIOACTIVE MATERIALS

1. The low quantity radioactive materials in these standards are exempt from U.S. Nuclear Regulatory Commission and state licensing requirements.
2. These radioactive materials are not for human use. Introduction into foods, beverages, cosmetics, drugs, or medicinals, or into products manufactured for commercial distribution is prohibited—exempt quantities should not be combined.

Duratek

CALIBRATION CERTIFICATE

Duratek Instrument Services
628 Gallaher Road
Kingston, TN 37763
Phone: (865) 376-8337
Fax: (865) 376-8331

This Certificate will be accompanied by Calibration Charts or Readings where applicable

CUSTOMER INFORMATION		INSTRUMENT INFORMATION	
Customer Name: Philotechnics Ltd.		Manufacturer: NE Technology	
Address: 118 Mitchell Road Oak Ridge, TN 37830		Model: Electra1B	Serial Number: 4808
Contact Name: Tim Pratt		Probe: BP19DD	Serial Number: 348
Contract Purchase Order Number: PO-0000366	Work Order Number: 2006-03659	Calibration Method: Electronic and Source	

INSTRUMENT CALIBRATION INFORMATION

Instrument Range (Auto Ranging)	Calibration Standard Value (cpm)	Instrument Response (cpm)		Comments	
		Before Calibration	After Calibration		
0-1K	200	200	200	Pulser: 101500	Cal Due: 09/28/06
0-1K	500	499	499	DVM: TW12662	Cal Due: 02/23/07
0-1K	800	800	800	D-812: 2816	Cal Due: 04/19/06
1K-10K	2,000	2,000	2,000	Humidity: 958670	Cal Due: 03/29/07
1K-10K	5,000	4,995	4,995	Temp: 23.7°C	Pressure: 737mmHg
1K-10K	8,000	8,000	8,000	Humidity: 56%	
10K-100K	20,000	20,000	20,000		
10K-100K	50,000	50,000	50,000	Audio: SAT	Backlight: SAT
10K-100K	80,000	80,000	80,000	Batt. Check: SAT	Overange: SAT
100K-1M	200,000	200,000	200,000		
100K-1M	500,000	499,000	499,000		
100K-1M	800,000	799,000	799,000	Calibrated in accordance with OEM Technical Manual and Industry applicable standards	
All readings within ±10% of Standard Values					

METER CALIBRATION TESTS				COMMENTS
Test 1 – Software Version	15	Test 5,6,7 Dac Tests	SAT	See detector calibration sheet for detector specific information. Calibration performed with dead time off.
Test 2 – Keypad Test	SAT	Test 8 – Calibrate HV	SAT	
Test 3 – Display Test	SAT	Test 9 – HV Error Check	SAT	
Test 4 – Option Switches	SAT			

STATEMENT OF CERTIFICATION

We Certify that the instrument listed above was calibrated and inspected prior to shipment and that it met all the Manufacturers published operating specifications. We further certify that our Calibration Measurements are traceable to the National Institute of Standards and Technology. (We are not responsible for damage incurred during shipment or use of this instrument).

Instrument Calibrated By: M. Paul	Reviewed By:	Date: 4/26/07
Calibration Date: 04/25/06	Calibration Due: 04/25/07	

Duratek

CALIBRATION CERTIFICATE

Duratek Instrument Services
628 Gallaher Road
Kingston, TN 37763
Phone: (865) 376-8337
Fax: (865) 376-8331

This Certificate will be accompanied by Calibration Charts or Readings where applicable

CUSTOMER INFORMATION		DETECTOR INFORMATION	
Customer Name: Philotechnics Ltd.		Manufacturer: NE Technology	
Address: 118 Mitchell Road Oak Ridge, TN 37830		Model: BP19DD	Serial Number: 348
Contact Name: Tim Pratt		Calibration Method: Electronic and Source	
Contract Purchase Order Number: PO-0000366	Work Order Number: 2006-03659		

DETECTOR PARAMETER SETUPS

Parameter	As Found	As Left	Parameter	As Found	As Left	Comments	
0	4.5	4.5	8	unit CPM	unit CPM	Pulser: 101500	Cal Due: 09/28/06
1	Off	Off	A	Off	Off	D-812: 2816	Cal Due: 04/19/06
3	920V	900V	b	Off	Off	Humidity: 958670	Cal Due: 03/29/07
4	3.00uA	3.00uA	c	Auto	Auto		
5	3uS	3uS	E	int	int	Temp: 23.7 °C	Pressure: 737mmHg
6	1.50V	1.50V	F	S66	S66	Humidity: 59%	
7	60s	60s	n	Off m	Off m	**Detector specific parameters must be entered into instrument manually in the SUPERVISOR mode**	

INSTRUMENT INFORMATION

Model	Serial Number	Calibration Due Date
Electra 1A	4808	04/25/2007

USED FOR EFFICIENCY DETERMINATION AND HV PLATEAUING

EFFICIENCY DETERMINATION FOR C^{14} #010002 at 260,460 DPM Certification Date: 12/14/99
EFFICIENCY DETERMINATION FOR Tc^{99}#119718 at 20,520 DPM Certification Date: 10/14/97

Background (CPM)	Gross Source Counts (CPM)	Net Source Counts (CPM)	Efficiency in % (Determined on contact)
467	18,900	18,433	7%% for C^{14}
467	4,153	3,686	18.0% for Tc^{99}

Gross source counts taken from an average of three one minute counts from the Heel, Middle, and Toe of Detector

STATEMENT OF CERTIFICATION

We Certify that the instrument listed above was calibrated and inspected prior to shipment and that it met all the Manufacturers published operating specifications. We further certify that our Calibration Measurements are traceable to the National Institute of Standards and Technology. (We are not responsible for damage incurred during shipment or use of this instrument).

Instrument Calibrated By: M. Pauli Reviewed By: Date: 4/26/06

Calibration Date: 4/26/06 Calibration Due: 04/26/07

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CALIBRATION CERTIFICATE

Duratek Instrument Services
628 Gallaher Road
Kingston, TN 37763
Phone: (865) 376-8337
Fax: (865) 376-8331

This Certificate will be accompanied by Calibration Charts or Readings where applicable

CUSTOMER INFORMATION		INSTRUMENT INFORMATION	
Customer Name: Philotechnics Ltd.		Manufacturer: NE Technology	
Address: 118 Mitchell Road Oak Ridge, TN 37830		Model: Electra	Serial Number: 450
Contact Name: Tim Pratt		Probe: IBP19DD	Serial Number: K106
Contract Purchase Order Number: PO-0000366	Work Order Number: 2006-03719	Calibration Method: Electronic and Source	

INSTRUMENT CALIBRATION INFORMATION

Instrument Range (Auto Ranging)	Calibration Standard Value (cpm)	Instrument Response (cpm)		Comments	
		Before Calibration	After Calibration		
0-1K	200	199	199	Pulser: 101500	Cal Due: 09/28/06
0-1K	500	499	499	DVM: TW12662	Cal Due: 02/23/07
0-1K	800	800	800	D-814: 2551	Cal Due: 10/13/06
1K-10K	2,000	2,000	2,000	Humidity: 958670	Cal Due: 03/29/07
1K-10K	5,000	5,004	5,004	Temp: 22.7 °C	Pressure: 737mmHg
1K-10K	8,000	8,000	8,000	Humidity: 45%	
10K-100K	20,000	20,000	20,000		
10K-100K	50,000	50,000	50,000	Audio: SAT	Backlight: SAT
10K-100K	80,000	80,000	80,000	Batt. Check: SAT	Overange: SAT
100K-1M	200,000	200,000	200,000		
100K-1M	500,000	500,000	500,000		
100K-1M	800,000	800,000	800,000	Calibrated in accordance with OEM Technical Manual and Industry applicable standards	
All readings within ±10% of Standard Values					

METER CALIBRATION TESTS				COMMENTS
Test 1 – Software Version	8	Test 5,6,7 Dac Tests	SAT	See detector calibration sheet for detector specific information. Instrument left in "Supervisor Mode" with parameters unlocked per customer request.
Test 2 – Keypad Test	SAT	Test 8 – Calibrate HV	SAT	
Test 3 – Display Test	SAT	Test 9 – HV Error Check	SAT	
Test 4 – Option Switches	SAT			

STATEMENT OF CERTIFICATION

We Certify that the instrument listed above was calibrated and inspected prior to shipment and that it met all the Manufacturers published operating specifications. We further certify that our Calibration Measurements are traceable to the National Institute of Standards and Technology. (We are not responsible for damage incurred during shipment or use of this instrument).

Instrument		
Calibrated By: M. Pauli	Reviewed By:	Date: 5/16/06
Calibration Date: 05/16/06		Calibration Due: 05/16/07

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CALIBRATION CERTIFICATE

Duratek Instrument Services
628 Gallaher Road
Kingston, TN 37763
Phone: (865) 376-8337
Fax: (865) 376-8331

This Certificate will be accompanied by Calibration Charts or Readings where applicable

CUSTOMER INFORMATION		DETECTOR INFORMATION	
Customer Name: Philotechnics Ltd.		Manufacturer: NE Technology	
Address: 118 Mitchell Road Oak Ridge, TN 37830		Model: IBP19DD	Serial Number: K106
Contact Name: Tim Pratt		Calibration Method: Electronic and Source	
Contract Purchase Order Number: PO-0000366	Work Order Number: 2006-03719		

DETECTOR PARAMETER SETUPS

Parameter	As Found	As Left	Parameter	As Found	As Left	Comments	
0	4.4	4.2	A	On	On	D-814: 2551	Cal Due: 10/13/06
1	Off	Off	b	Off	Off	Humidity: 958670	Cal Due: 03/29/07
3	750V	940V	c	Auto	Auto		
4	3.00uA	3.00uA	E	int	int		
5	3uS	3uS	F	566	566	Temp: 22.7 °C	Humidity: 45%
6	1.50V	1.50V	G	bp19	bp19	Pressure: 737mmHg	
7	60s	60s	H	106	106	** Parameters are loaded into the Selectra instrument automatically when smart detector is connected. **	
8	unit CPM	unit CPM					

INSTRUMENT INFORMATION

Model	Serial Number	Calibration Due Date
Electra 1A	450	05/16/07

USED FOR EFFICIENCY DETERMINATION AND HV PLATEAUING

EFFICIENCY DETERMINATION FOR C^{14} #010002 at 260,460 DPM Certification Date: 12/14/99
EFFICIENCY DETERMINATION FOR Tc^{99}#119718 at 20,520 DPM Certification Date: 10/14/97

Background (CPM)	Gross Source Counts (CPM)	Net Source Counts (CPM)	Efficiency in %(Determined on contact)
450	18,600	18,150	7.0% for C^{14}
450	3,746	3,296	16.1% for Tc^{99}

Gross source counts taken from an average of three one minute counts from the Heel, Middle, and Toe of Detector

Comments

STATEMENT OF CERTIFICATION

We Certify that the instrument listed above was calibrated and inspected prior to shipment and that it met all the Manufacturers published operating specifications. We further certify that our Calibration Measurements are traceable to the National Institute of Standards and Technology. (We are not responsible for damage incurred during shipment or use of this instrument).

Instrument

Calibrated By: M. Pa[illegible] Reviewed By: [illegible] Date: 5/16/06

Calibration Date: 05/16/06 Calibration Due: 05/16/07

Duratek

CALIBRATION CERTIFICATE

Duratek Instrument Services
628 Gallaher Road
Kingston, TN 37763
Phone: (865) 376-8337
Fax: (865) 376-8331

This Certificate will be accompanied by Calibration Charts or Readings where applicable

CUSTOMER INFORMATION		INSTRUMENT INFORMATION	
Customer Name: Philotechnics Ltd.		Manufacturer: NE Technology	
Address: 118 Mitchell Road Oak Ridge, TN 37830		Model: Electra 1B	Serial Number: 4422
Contact Name: Tim Pratt		Probe: GP13A	Serial Number: 336
Contract Purchase Order Number: PO-0000366	Work Order Number: 2006-03556	Calibration Method: Electronic and Source	

INSTRUMENT CALIBRATION INFORMATION

Instrument Range (Auto Ranging)	Calibration Standard Value (cpm)	Instrument Response (cpm) Before Calibration	Instrument Response (cpm) After Calibration	Comments	
0-1K	200	199	199	Pulser: 101500	Cal Due: 09/28/06
0-1K	500	499	499	DVM: TW12663	Cal Due: 03/30/06
0-1K	800	800	800	D-812: 2816	Cal Due: 04/19/06
1K-10K	2,000	2,000	2,000	Humidity: 958670	Cal Due: 03/22/06
1K-10K	5,000	4,996	4,996		
1K-10K	8,000	8,002	8,002	Temp: 24.6 °C	Pressure: 739mmHg
10K-100K	20,000	20,000	20,000	Humidity: 30%	
10K-100K	50,000	50,000	50,000		
10K-100K	80,000	80,300	80,300	Audio: SAT	Backlight: SAT
100K-1M	200,000	203,000	203,000	Batt. Check: SAT	Overange: SAT
100K-1M	500,000	512,000	512,000		
100K-1M	800,000	833,000	833,000	Calibrated in accordance with OEM Technical Manual and Industry applicable standards	
All readings within ±10% of Standard Values					

METER CALIBRATION TESTS				COMMENTS
Test 1 – Software Version	14	Test 5,6,7 Dac Tests	SAT	See detector calibration sheet for detector specific information. Calibration performed with dead time off. Instrument left in "User Mode" with parameters unlocked per customer request.
Test 2 – Keypad Test	SAT	Test 8 – Calibrate HV	SAT	
Test 3 – Display Test	SAT	Test 9 – HV Error Check	SAT	
Test 4 – Option Switches	SAT			

STATEMENT OF CERTIFICATION

We Certify that the instrument listed above was calibrated and inspected prior to shipment and that it met all the Manufacturers published operating specifications. We further certify that our Calibration Measurements are traceable to the National Institute of Standards and Technology. (We are not responsible for damage incurred during shipment or use of this instrument).

Instrument		
Calibrated By: M. Pauli	Reviewed By: Robert Woodell	Date: 2/22/06
Calibration Date: 02/22/06	Calibration Due: 02/22/07	

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CALIBRATION CERTIFICATE

Duratek Instrument Services
628 Gallaher Road
Kingston, TN 37763
Phone: (865) 376-8337
Fax: (865) 376-8331

This Certificate will be accompanied by Calibration Charts or Readings where applicable

CUSTOMER INFORMATION		DETECTOR INFORMATION	
Customer Name: Philotechnics Ltd.		Manufacturer: NE Technology	
Address: 118 Mitchell Road Oak Ridge, TN 37830		Model: GP13A	Serial Number: 336
Contact Name: Tim Pratt		Calibration Method: Electronic and Source	
Contract Purchase Order Number: PO-0000366	Work Order Number: 2006-03556		

DETECTOR PARAMETER SETUPS

Parameter	As Found	As Left	Parameter	As Found	As Left	Comments	
0	3.6	4.5	8	unit CPM	unit CPM	DVM: TW12663	Cal Due: 03/30/06
1	Off	Off	A	Off	On	D-812: 2816	Cal Due: 04/19/06
3	980V	960V	b	Off	Off	Humidity: 958670	Cal Due: 03/22/06
4	3.00uA	3.00uA	c	Auto	Auto		
5	3uS	3uS	E	int	int	Temp: 26.0 °C	Pressure: 748mmHg
6	1.50V	1.50V	F	566	566	Humidity: 33%	
7	30s	60s	n	Off m	Off m		

INSTRUMENT INFORMATION

Model	Serial Number	Calibration Due Date
Electra 1B	4422	02/22/07

USED FOR EFFICIENCY DETERMINATION AND HV PLATEAUING

EFFICIENCY DETERMINATION FOR I^{129} #040202 at 95,682 DPM Certification Date: 04/13/99
EFFICIENCY DETERMINATION FOR C^{14} # at 260,460 DPM Certification Date: 12/14/99
EFFICIENCY DETERMINATION FOR Tc^{99} #119718 at 20,520DPM Certification Date: 10/14/97

Background (CPM)	Gross Source Counts (CPM)	Net Source Counts (CPM)	Efficiency in % (Determined on contact)
3,800	14,100	10,300	10.8% for I^{129}
3,800	20,400	16,600	6.4% for C^{14}
3,800	6,500	2,700	13.2% for Tc^{99}

****Gross source counts taken from a one minute count from the middle of detector****

STATEMENT OF CERTIFICATION

We Certify that the instrument listed above was calibrated and inspected prior to shipment and that it met all the Manufacturers published operating specifications. We further certify that our Calibration Measurements are traceable to the National Institute of Standards and Technology. (We are not responsible for damage incurred during shipment or use of this instrument).

Instrument Calibrated By: M. Pauli	Reviewed By: Robert Nordlund	Date: 2/22/06
Calibration Date: 02/22/06	Calibration Due: 02/22/07	

Duratek

CALIBRATION CERTIFICATE

Duratek Instrument Services
628 Gallaher Road
Kingston, TN 37763
Phone: (865) 376-8337
Fax: (865) 376-8331

This Certificate will be accompanied by Calibration Charts or Readings where applicable

CUSTOMER INFORMATION		INSTRUMENT INFORMATION	
Customer Name: Philotechnics Ltd.		Manufacturer: NE Technology	
Address: 118 Mitchell Road Oak Ridge, TN 37830		Model: Electra 1B	Serial Number: 3118
Contact Name: Tim Pratt		Probe: GP13A	Serial Number: 334
Contract Purchase Order Number: PO-0000366	Work Order Number: 2005-03432	Calibration Method: Electronic and Source	

INSTRUMENT CALIBRATION INFORMATION

Instrument Range (Auto Ranging)	Calibration Standard Value (cpm)	Instrument Response (cpm) Before Calibration	Instrument Response (cpm) After Calibration	Comments	
0-1K	200	200	200	Pulser: 101500	Cal Due: 09/28/06
0-1K	500	499	499	DVM: TW12663	Cal Due: 03/30/06
0-1K	800	798	798	D-812: 2816	Cal Due: 04/19/06
1K-10K	2,000	2,000	2,000	Humidity: 958670	Cal Due: 03/22/06
1K-10K	5,000	4,992	4,992		
1K-10K	8,000	7,970	7,970	Temp: 23.9 °C	Pressure: 741mmHg
10K-100K	20,000	20,000	20,000	Humidity: 32%	
10K-100K	50,000	50,000	50,000		
10K-100K	80,000	80,000	80,000	Audio: SAT	Backlight: SAT
100K-1M	200,000	202,000	202,000	Batt. Check: SAT	Overange: SAT
100K-1M	500,000	512,000	512,000		
100K-1M	800,000	829,000	829,000	Calibrated in accordance with OEM Technical Manual and Industry applicable standards	
All readings within ±10% of Standard Values					

METER CALIBRATION TESTS				COMMENTS
Test 1 – Software Version	15	Test 5,6,7 Dac Tests	SAT	See detector calibration sheet for detector specific information. Calibration performed with dead time off. Instrument left in "User Mode" with parameters unlocked per customer request.
Test 2 – Keypad Test	SAT	Test 8 – Calibrate HV	SAT	
Test 3 – Display Test	SAT	Test 9 – HV Error Check	SAT	
Test 4 – Option Switches	SAT			

STATEMENT OF CERTIFICATION

We Certify that the instrument listed above was calibrated and inspected prior to shipment and that it met all the Manufacturers published operating specifications. We further certify that our Calibration Measurements are traceable to the National Institute of Standards and Technology. (We are not responsible for damage incurred during shipment or use of this instrument).

Instrument		
Calibrated By: M. Paul	Reviewed By: Timon T. Pratt	Date: 1-5-06
Calibration Date: 01/04/06	Calibration Due: 01/04/07	

Duratek

CALIBRATION CERTIFICATE

Duratek Instrument Services
628 Gallaher Road
Kingston, TN 37763
Phone: (865) 376-8337
Fax: (865) 376-8331

This Certificate will be accompanied by Calibration Charts or Readings where applicable

CUSTOMER INFORMATION		DETECTOR INFORMATION	
Customer Name: Philotechnics Ltd.		Manufacturer: NE Technology	
Address: 118 Mitchell Road Oak Ridge, TN 37830		Model: GP13A	Serial Number: 334
Contact Name: Tim Pratt		Calibration Method: Electronic and Source	
Contract Purchase Order Number: PO-0000366	Work Order Number: 2005-03432		

DETECTOR PARAMETER SETUPS

Parameter	As Found	As Left	Parameter	As Found	As Left	Comments	
0	4.3	4.3	8	unit CPM	unit CPM	DVM: TW12663	Cal Due: 03/30/06
1	Off	Off	A	On	On	D-812: 2816	Cal Due: 04/19/06
3	800V	1140V	b	Off	Off	Humidity: 958670	Cal Due: 03/22/06
4	3.00uA	4.00uA	c	Auto	Auto		
5	3uS	3uS	E	int	int	Temp: 23.9 °C	Pressure: 741mmHg
6	1.50V	1.50V	F	566	566	Humidity: 32%	
7	60s	60s	n	Off m	Off m		

INSTRUMENT INFORMATION

Model	Serial Number	Calibration Due Date
Electra 1B	3118	01/04/07

USED FOR EFFICIENCY DETERMINATION AND HV PLATEAUING

EFFICIENCY DETERMINATION FOR I^{129} #040202 at 95,682 DPM Certification Date: 04/13/99

Background (CPM)	Gross Source Counts (CPM)	Net Source Counts (CPM)	Efficiency in % (Determined on contact)
3,400	14,400	11,000	11.5% for I^{129}

****Gross source counts taken from a one minute count from the middle of detector****

STATEMENT OF CERTIFICATION

We Certify that the instrument listed above was calibrated and inspected prior to shipment and that it met all the Manufacturers published operating specifications. We further certify that our Calibration Measurements are traceable to the National Institute of Standards and Technology. (We are not responsible for damage incurred during shipment or use of this instrument).

Instrument		
Calibrated By: M. Paul	Reviewed By: Glenn G. Hart	Date: 1-5-06
Calibration Date: 01/04/06		Calibration Due: 01/04/07

GRIFFIN INSTRUMENTS

CALIBRATION CERTIFICATE FOR 2221 SERIAL# 134537

01789

Owner: PHILOTECHNICS

DATE: 06/16/06 LOCATION: Griffin Inst

TECH: Joanne Glenn DATE LAST CAL EXPIRES: 06/15/06

Reason For Calibration: (•) Due For Calibration ( ) Repair (See Remarks)

( ) Other (See Remarks) ( ) Due and Repair (See Remarks)

NIST TRACEABLE EQUIPMENT USED DURING CALIBRATION

MODEL: M-500 SERIAL #: 114512 CAL. DUE: 11/14/06

MODEL: SERIAL #: CAL DUE:

☑ Fast/Slow Switch working properly ☑ Audio Response ☑ Geotropism CABLE LENGTH 6'

CONDITION: Sat AF MECHANICAL ZERO: 0 AL MECHANICAL ZERO: 0

NEW BATTERIES: ( ) Yes (•) No BATTERY CHECK: 5.3

HV	AS FOUND HV	AS LEFT HV
600 V:	583	A.F.
1200 V:	1200	A.F.
1800 V:	1769	A.F.

AF INPUT SENSITIVITY (mV): 10 AL INPUT SENSITIVITY (mV): 10

RATE METER / SCALER

SCALE	RATE CPM	AS FOUND	% ERROR	AS LEFT	% ERROR	AS FOUND	% ERROR	AS LEFT	% ERROR
x.1 or x1	100	100	0.0%	A.F.					
	250	250	0.0%	A.F.		250	0.0%	A.F.	
	400	400	0.0%	A.F.					
x1 or x10	1000	1000	0.0%	A.F.					
	2500	2500	0.0%	A.F.					
	4000	4000	0.0%	A.F.					
x10 or x100	10K	10 K	0.0%	A.F.					
	25K	25 K	0.0%	A.F.					
	40K	40 K	0.0%	A.F.					
x100 or x1000	100K	100 K	0.0%	A.F.					
	250K	250 K	0.0%	A.F.					
	400K	400 K	0.0%	A.F.					

Is the As Found Data Within 20% of the Set Point?: (•) Yes ( ) No

LOG SCALE

SCALE	RATE CPM	AS FOUND	% ERROR	AS LEFT	% ERROR
Log	200	200	0.0%	A.F.	
	2000	2000	0.0%	A.F.	
	20K	20 K	0.0%	A.F.	
	200K	200 K	0.0%	A.F.	

Is the As Found Data Within 20% of the Set Point?: (•) Yes ( ) No

GRIFFIN INSTRUMENTS

SERIAL # 134537

06/16/06

Audio Divide:	(•) Sat	( ) Unsat	Push Buttons:	(•) Sat	( ) Unsat
Lamp:	(•) Sat	( ) Unsat	Scaler/Digital:	(•) Sat	( ) Unsat

Remarks: Replaced broken meter bezel. Calibrated w/43-37 #PR148548.

Does Instrument Meet Final Acceptance Criteria?:	(•) Yes	( ) No
Calibration Sticker Attached?:	(•) Yes	( ) No
Date Instrument is Due For Next Calibration:	06/16/07	

Performed/Reviewed by: Joanne Glass Date: 6/16/2006 Entered by: _____ Initials

GRIFFIN INSTRUMENTS

CALIBRATION CERTIFICATE FOR 43-37 PROBE # PR148548

Owner: PHILOTECHNICS

DATE:	06/16/06	LOCATION:	Griffin Inst
TECH:	Joanne Glenn	DATE LAST CAL EXPIRES:	06/15/06

REASON FOR CALIBRATION:

(•) Due For Calibration ( ) Repair (See Remarks) ( ) Other (See Remarks) ( ) Due and Repair

CABLE LENGTH: 6' INPUT SENSITIVITY: dual

NIST TRACEABLE EQUIPMENT AND STANDARDS USED DURING CALIBRATION

MODEL:	2221	SERIAL #:	134537	CAL. DUE:	06/16/07
MODEL:		SERIAL #:		CAL. DUE:	

NIST TRACEABLE SOURCES USED

SOURCE #:	2695-00	SOURCE #:	D2-091
ISOTOPE:	Tc99	ISOTOPE:	C14
ACTIVITY(dpm):	18400	ACTIVITY:	45,600 dpm
ASSAY DATE:	03/01/00	ASSAY DATE:	04/01/06

Condition: (•) Sat ( ) Unsat Efficiency from last cal.: Pu: Tc Ni: Th: C-14:

	HV	Vernier
Setpoints from last cal.:	N/A	

Source	Alpha Response CPM	Beta Response CPM
Background:		
Pu-239:		A-B XTLK:
Tc-99 Ni:		B-A XTLK:
As Found Efficiencies Pu, Tc:		
Th-230 / C-14	/	/
Background:		
Pu-239:		A-B XTLK:
Tc-99 Ni:		B-A XTLK:
As Found Efficiencies Pu, Tc:		
Th-230 / C-14	/	/

Is as found efficiency within 20% of the efficiency from the last cal? ( ) Yes (•) No (See Remarks)

Note: If the as found data is within 10% of the last calibration and the B-A Xtalk is <1% and the A-B Xtalk is <10%, then the technician may N/A the plateau section and go directly to remarks.

GRIFFIN INSTRUMENTS

PROBE #: **PR148548**
Date: 06/16/06

PLATEAU AND SET POINT DATA

HV / Vernier:	Tc-99 Source Response (CPM):			Pu-239 Source Response (CPM):			Background (CPM):		Net A to B Xtalk: <10%	B to A Xtalk: <1%
	A ch.	B ch.	Net Eff.	A ch.	B ch.	Net Eff.	A ch.	B ch.		
1750		2625	13.1%	4945		25.9%	207	207		
1800		5738	28.7%	5113		25.5%	449	449		
1850							940	940		

Alpha / Beta Bkg (cpm) 678 678

HV / Vernier		Pu-239	Tc-99 Ni	Tc-99 SS	Th-230	C-14	Sr-90
1825	CPM:	5364	7153	9788	9744	4529	
	AL Efficiencies:	**25.61%**	**35.19%**	**24.42%**	**30.22%**	**8.45%**	

Th-230 Source #99TH470-1815 4/11/06 30,000 dpm Pu-239 Source #2696-00 3/1/00 18,300dpm
Tc-99 on Stainless Steel Source #99TC470-1814 8/3/99 37,300 dpm

Remarks: Replaced torn mylar. No previous plateau data. Calibrated w/2221 #134537.

Does Instrument Meet Final Acceptance Criteria?: (●) Yes ( ) No

Calibration Sticker Attached?: (●) Yes ( ) No

Date Instrument is Due For Next Calibration: **06/16/07**

Performed/Reviewed by: Jeanne Glenn **Date:** 6/16/2006 **Entered by:** ____ **Initials**

Calibrations performed to ANSI N323A-1997 standards.

APPENDIX C

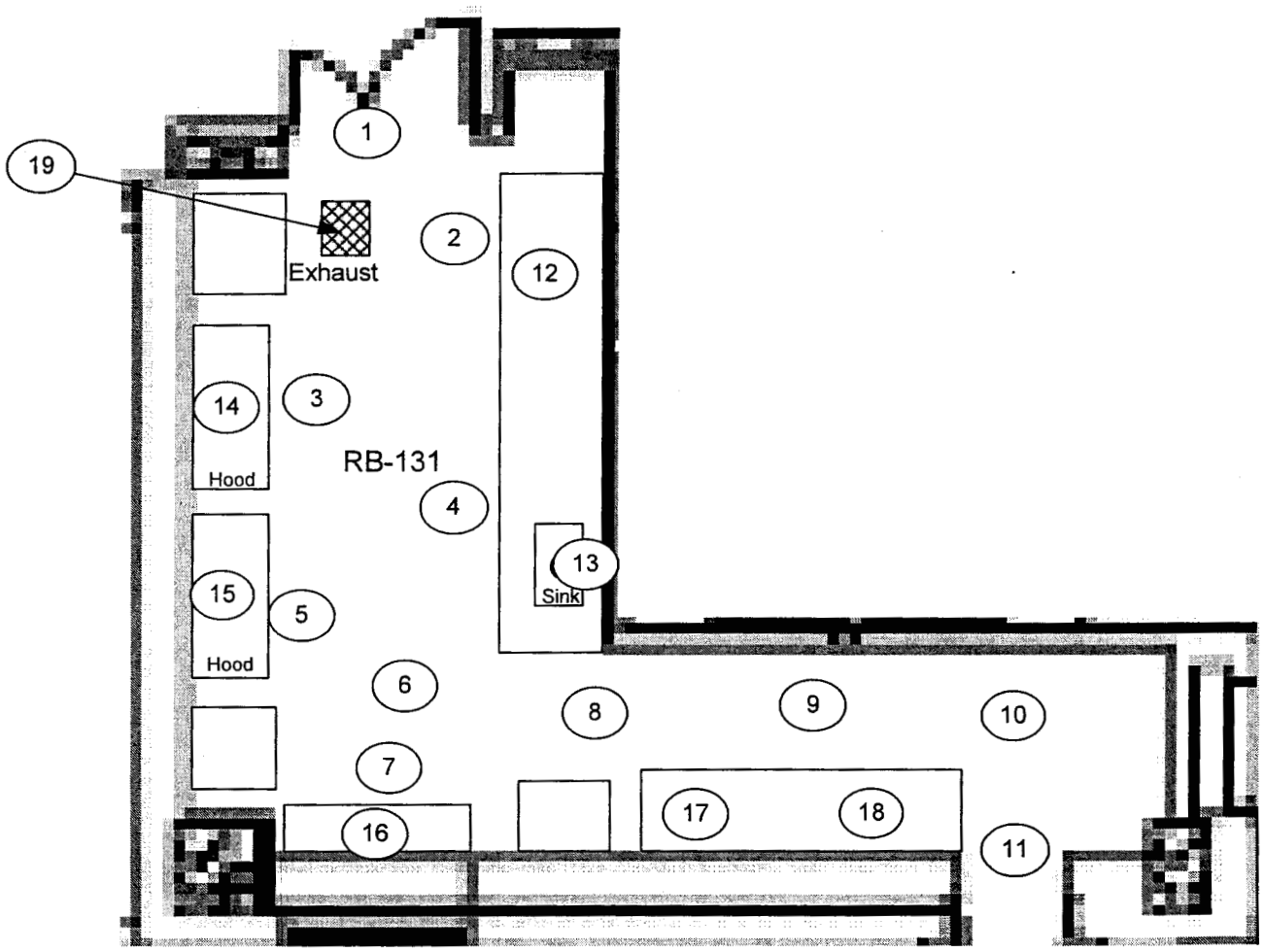
Laboratory Survey Maps

Bayer Pharmaceuticals
Radiation Contamination Survey Report

Building: B-24 Room: RB-131 Survey Unit: 1 Class: 3 Date: 7/24/2006

Instruments: Bicron Electra 1B (Ser. #4808), BP19DD Detector, Calibrated on 4/25/06
Bicron Electra 1B (Ser. #450), IBP19DD Detector, Calibrated on 5/16/06
Bicron Electra 1B (Ser. #4422), GP13A Detector, Calibrated on 2/22/06
Bicron Electra 1B (Ser. #3118), GP13A Detector, Calibrated on 1/5/06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



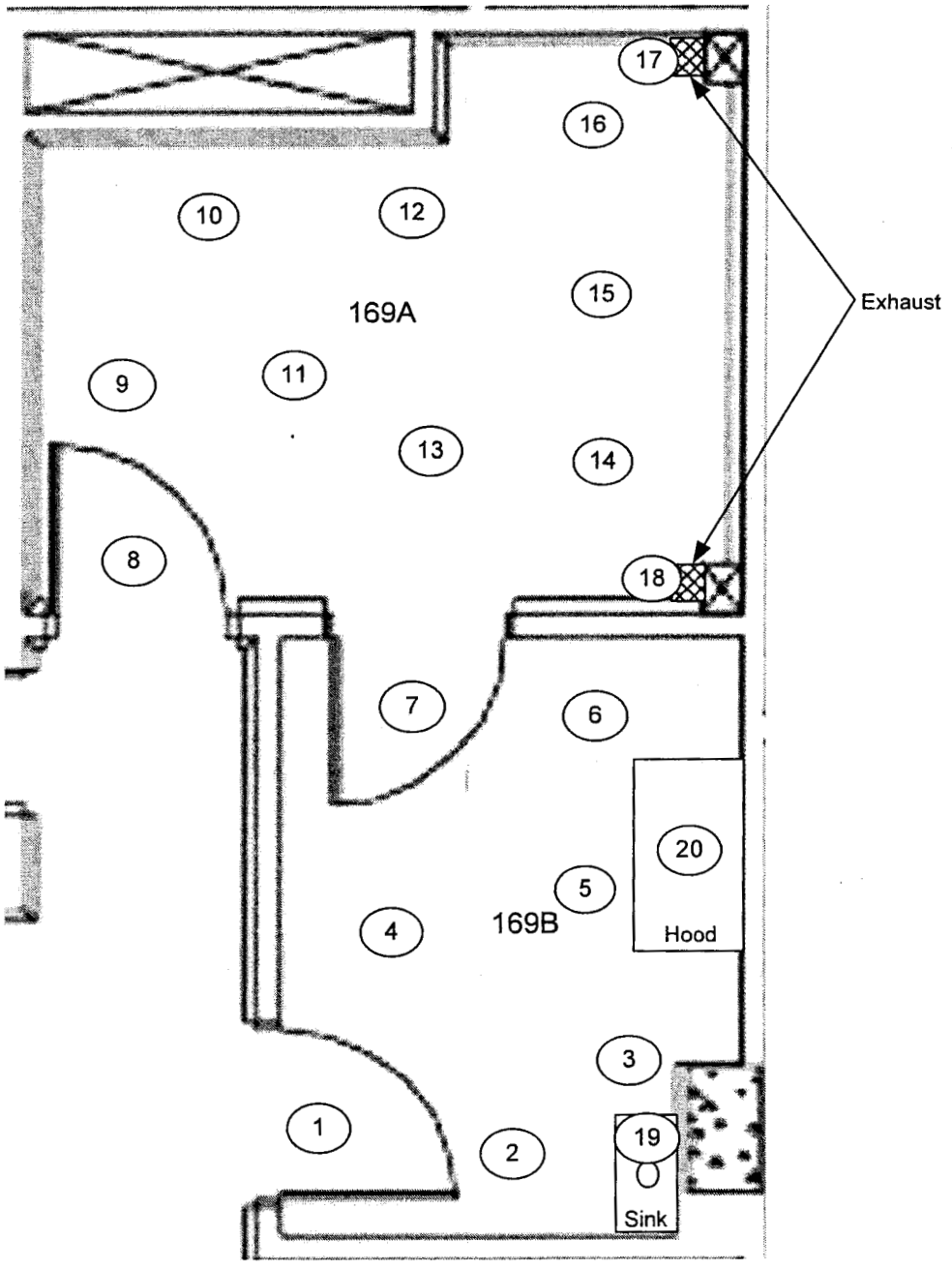
Wipe #'s 1 to 19

Bayer Pharmaceuticals
Radiation Contamination Survey Report

Building: B-24 Room: RB-169 A,B Survey Unit: 2 Class: 3 Date: 7/24/2006

Instruments: Bicron Electra 1B (Ser. #4808), BP19DD Detector, Calibrated on 4/25/06
Bicron Electra 1B (Ser. #450), IBP19DD Detector, Calibrated on 5/16/06
Bicron Electra 1B (Ser. #4422), GP13A Detector, Calibrated on 2/22/06
Bicron Electra 1B (Ser. #3118), GP13A Detector, Calibrated on 1/5/06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 20

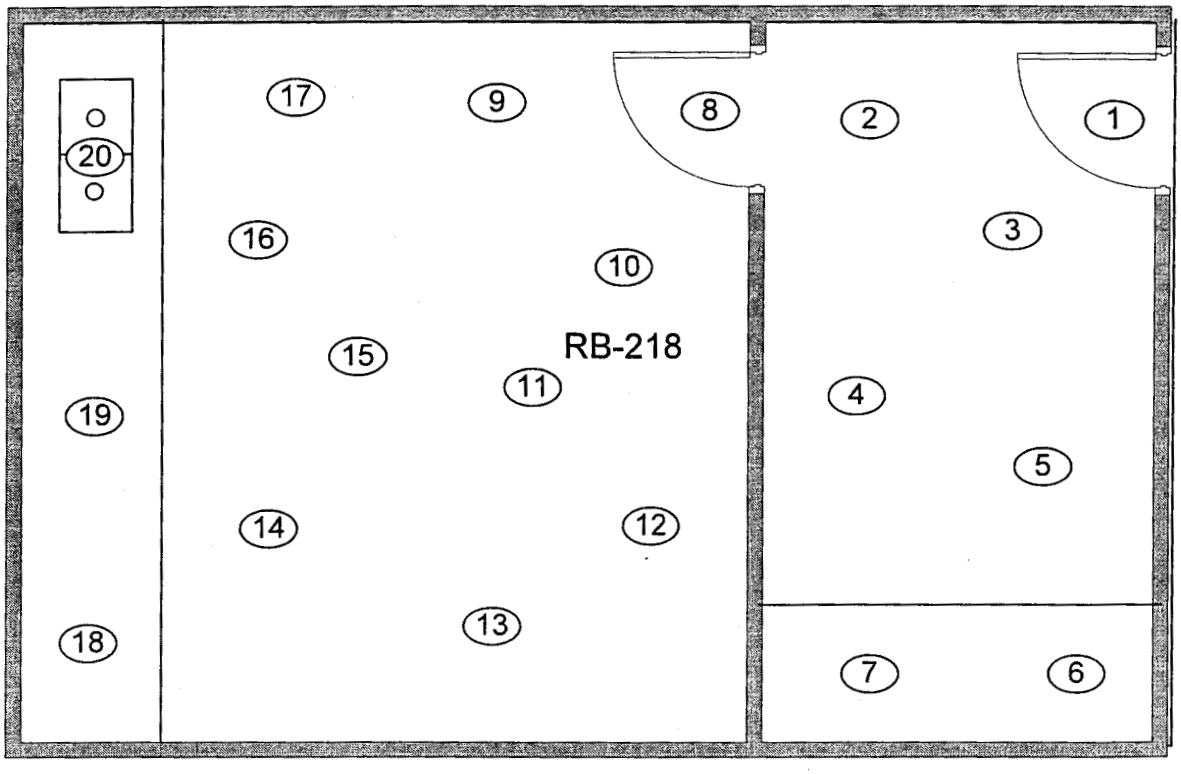
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-218 Survey Unit: 3 Class: 3 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



1/4" = 1.0 ft.

Wipe #'s 1 to 20

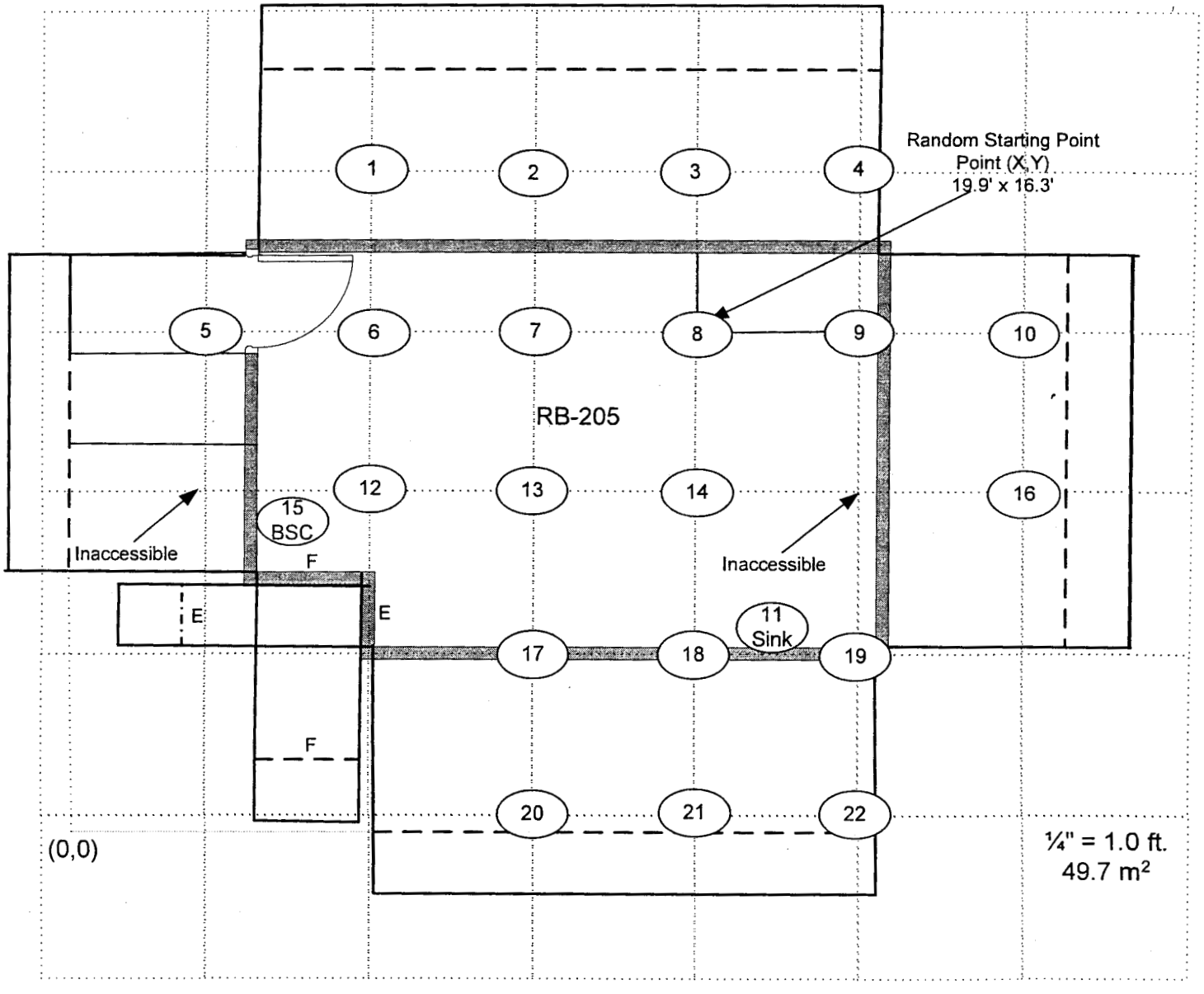
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-205 Survey Unit: 4 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1B (Ser. #4808), BP19DD Detector, Calibrated on 4/25/06
Bicron Electra 1B (Ser. #450), IBP19DD Detector, Calibrated on 5/16/06
Bicron Electra 1B (Ser. #4422), GP13A Detector, Calibrated on 2/22/06
Bicron Electra 1B (Ser. #3118), GP13A Detector, Calibrated on 1/5/06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 22

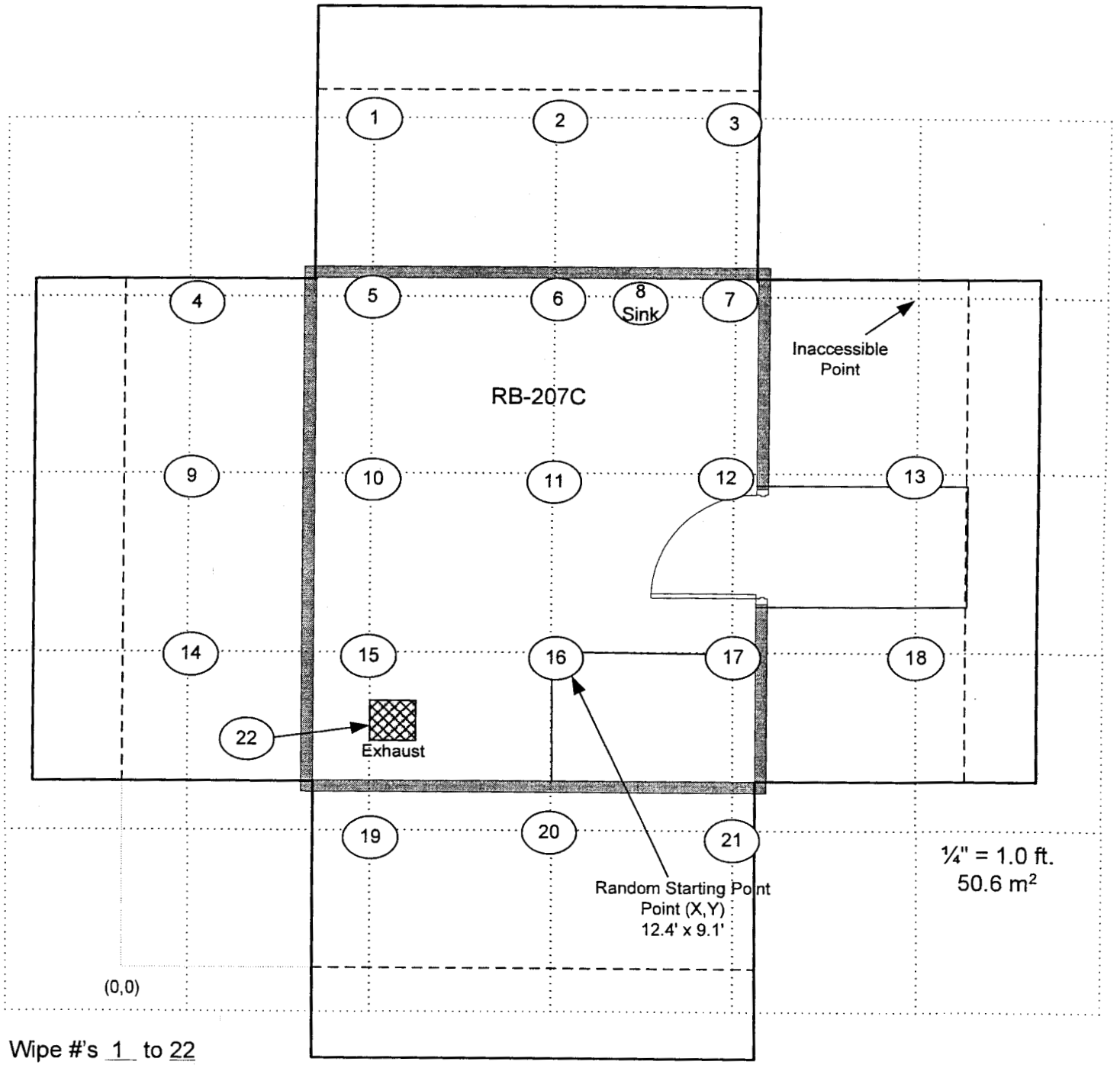
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-207C Survey Unit: 5 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1B (Ser. #4808), BP19DD Detector, Calibrated on 4/25/06
Bicron Electra 1B (Ser. #450), IBP19DD Detector, Calibrated on 5/16/06
Bicron Electra 1B (Ser. #4422), GP13A Detector, Calibrated on 2/22/06
Bicron Electra 1B (Ser. #3118), GP13A Detector, Calibrated on 1/5/06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 22

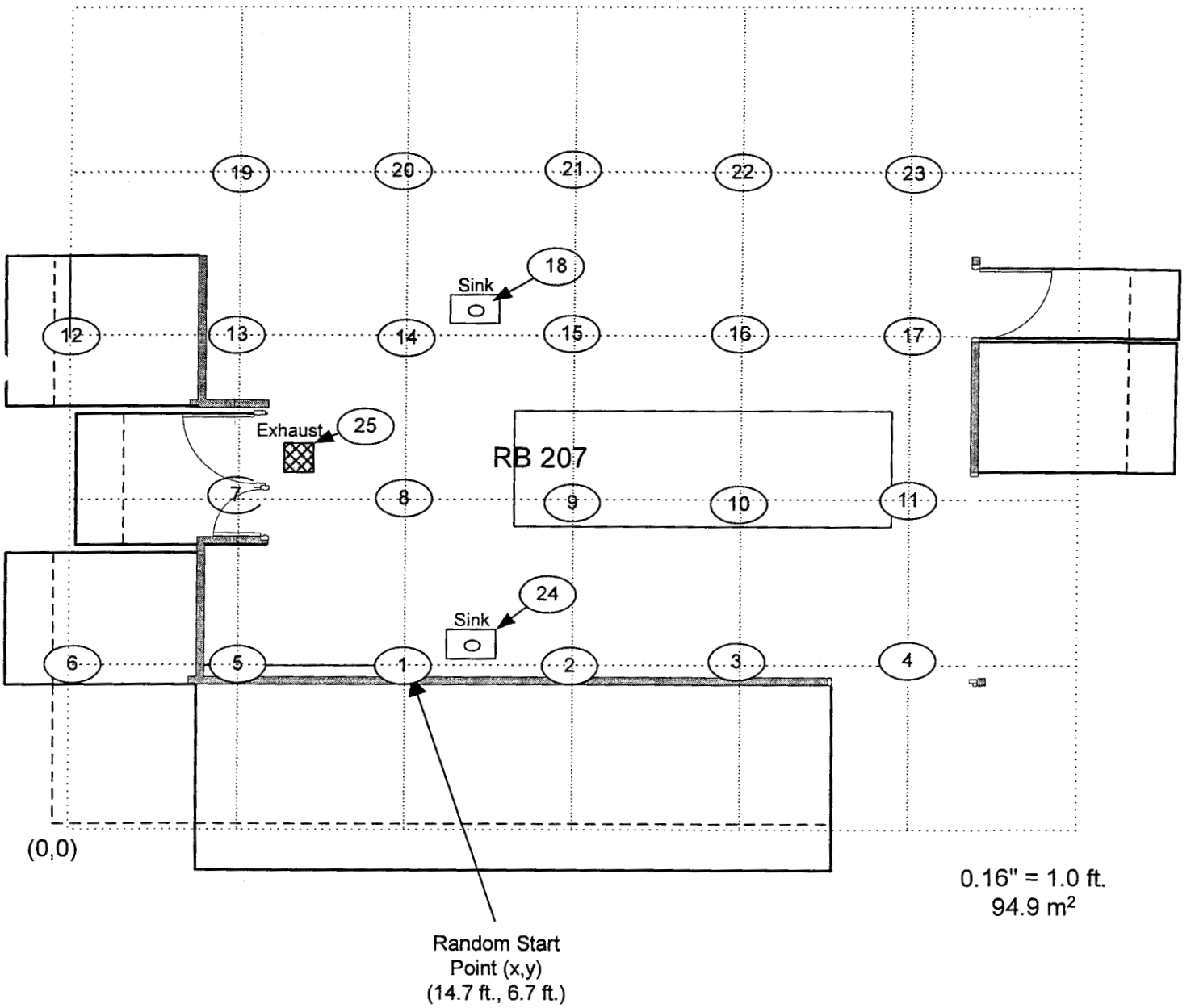
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-207 Survey Unit: 6 Class: 2 Date: 7/2 4/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



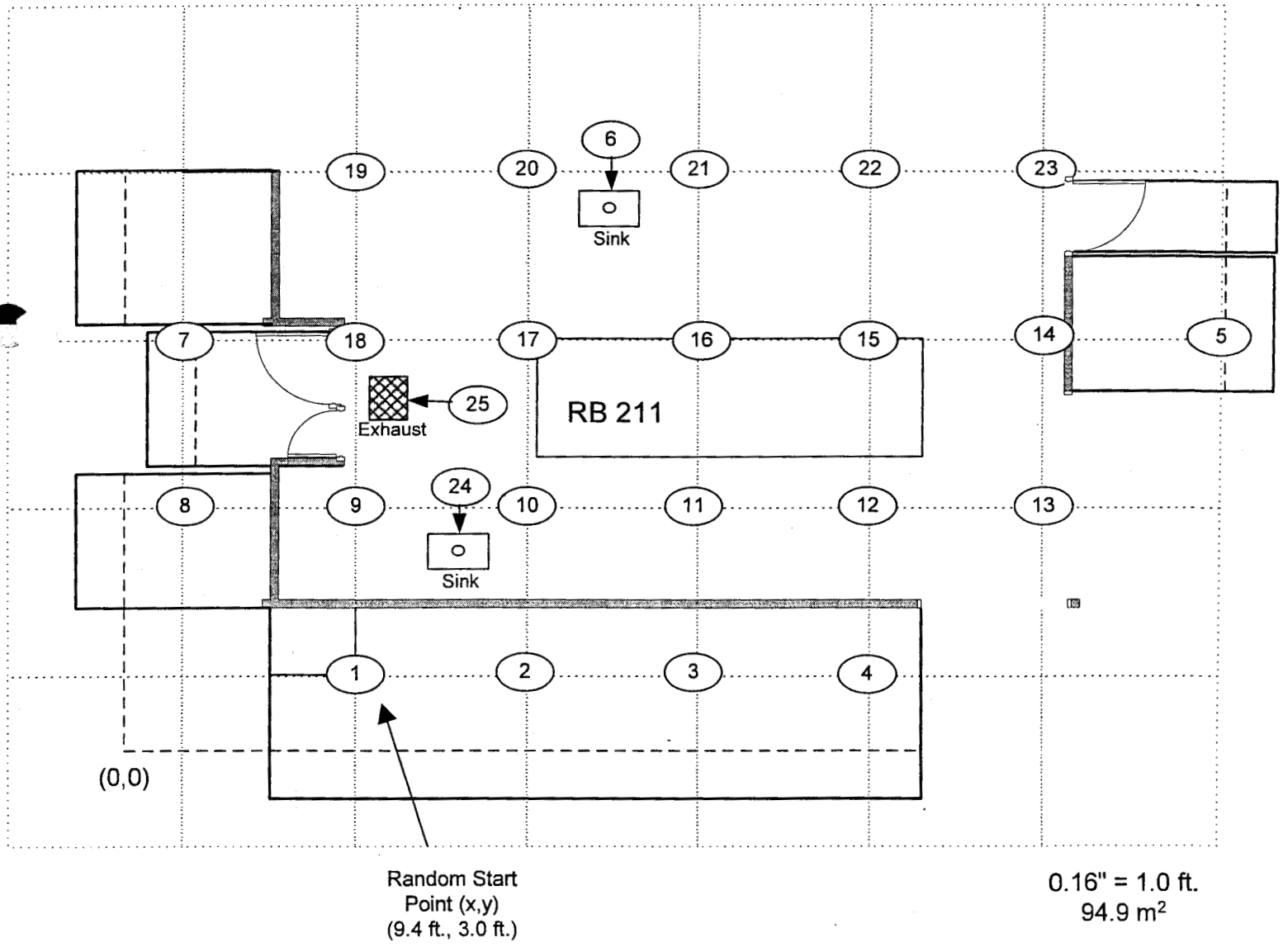
Wipe #'s 1 to 25

Bayer Pharmaceuticals
Radiation Contamination Survey Report

Building: B-24 Room: RB-211 Survey Unit: 7 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 25

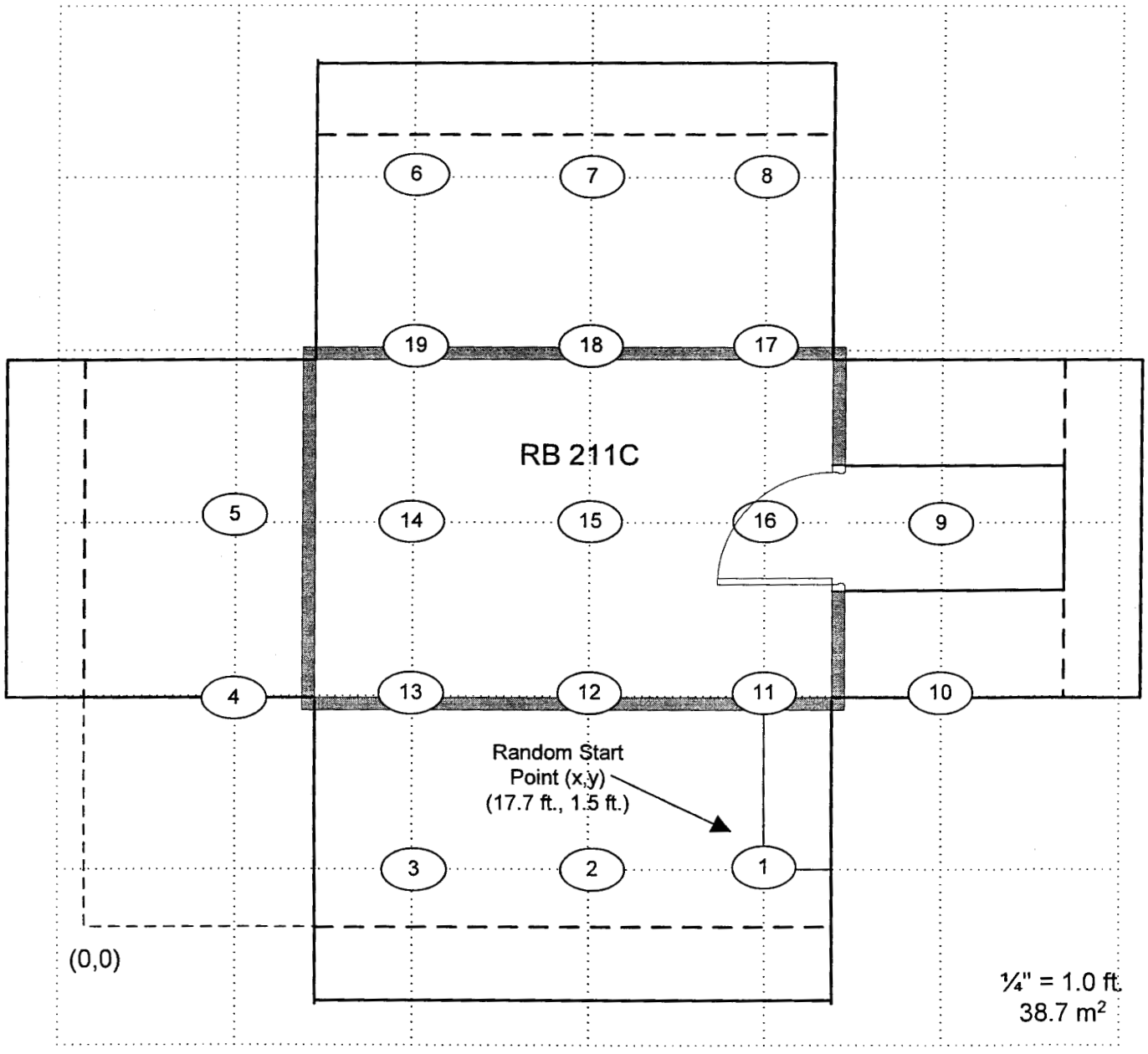
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-211C Survey Unit: 8 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 19

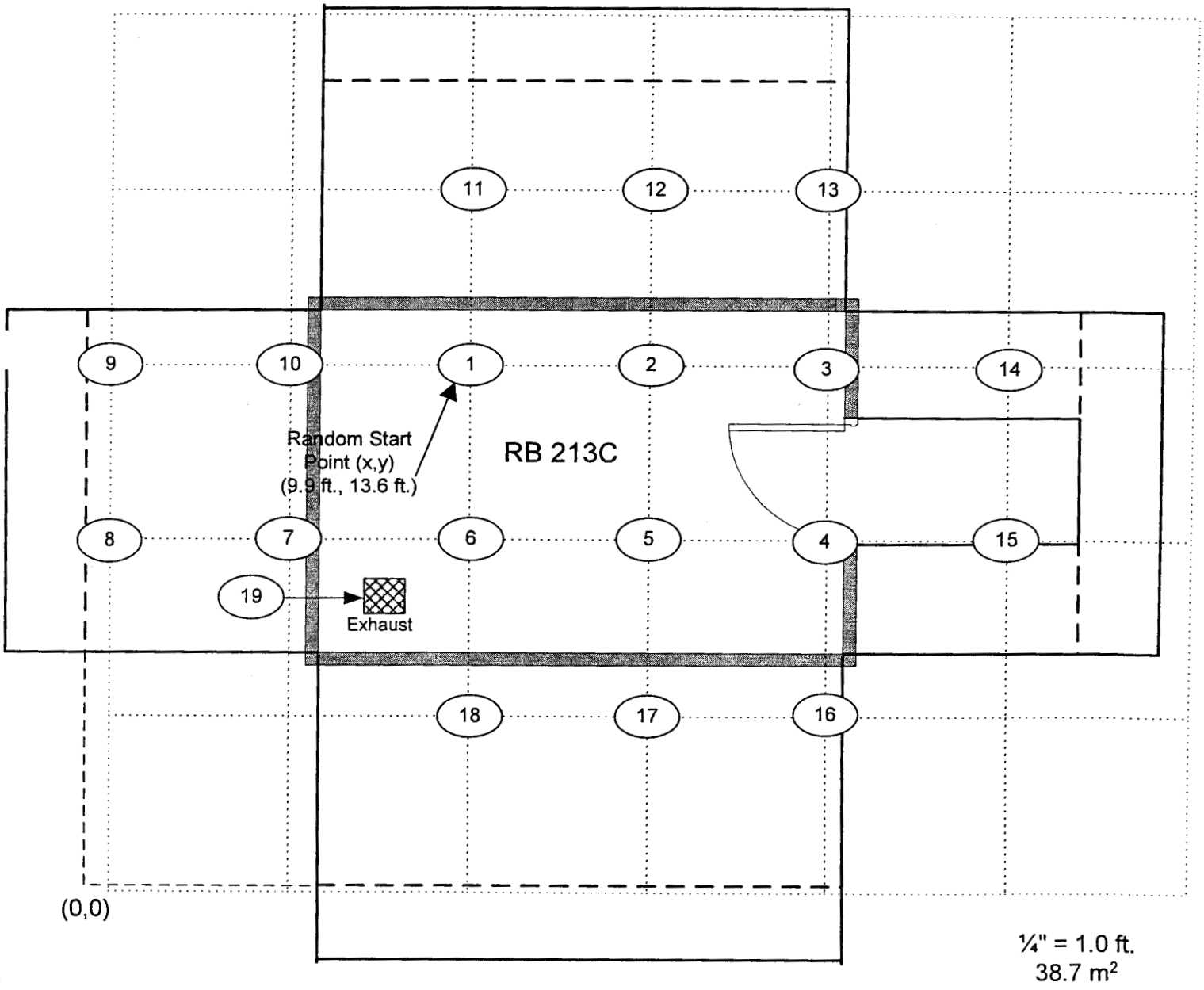
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-213C Survey Unit: 9 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 19

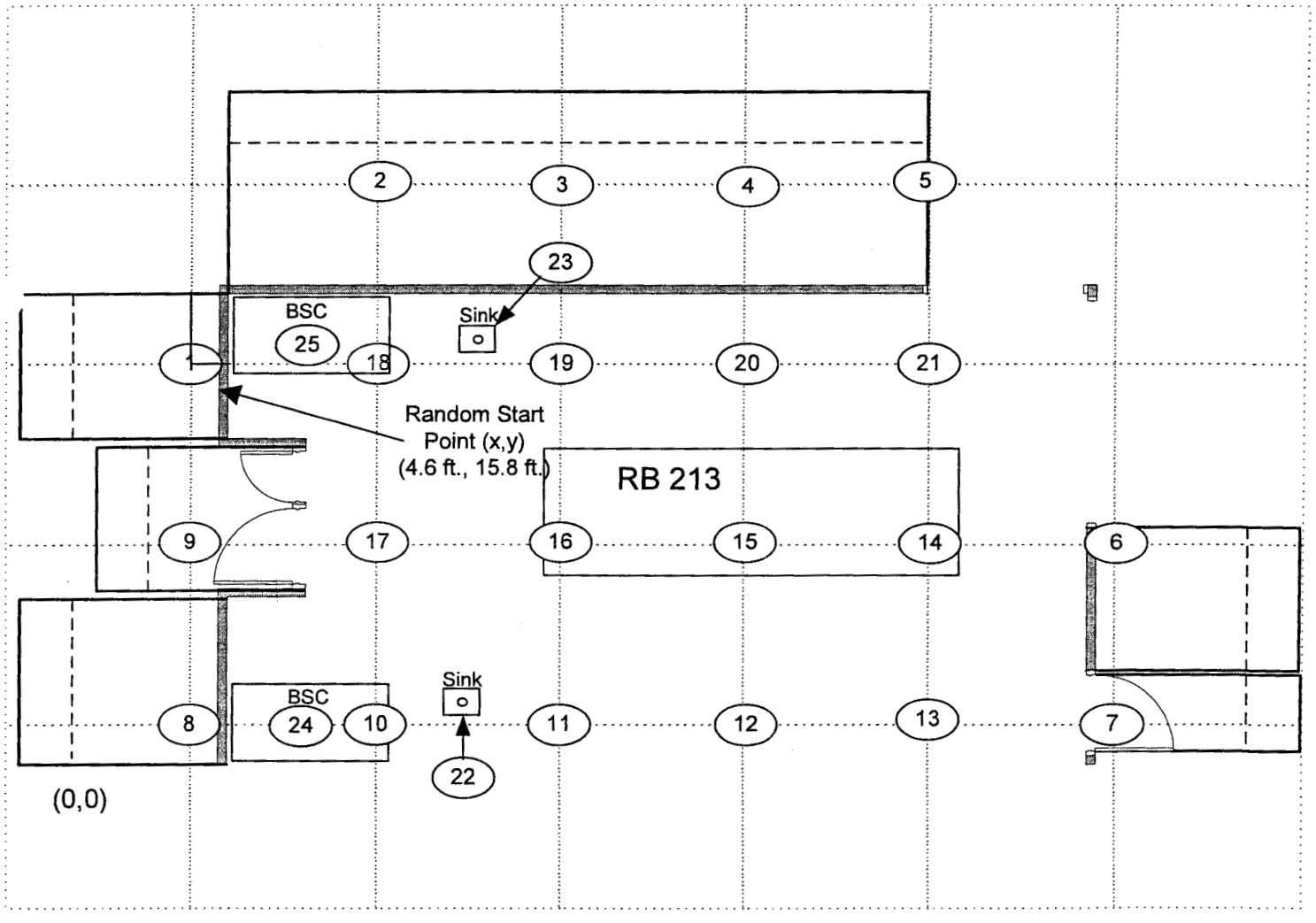
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-213 Survey Unit: 10 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



0.16" = 1.0 ft.
94.9 m²

Wipe #'s 1 to 25

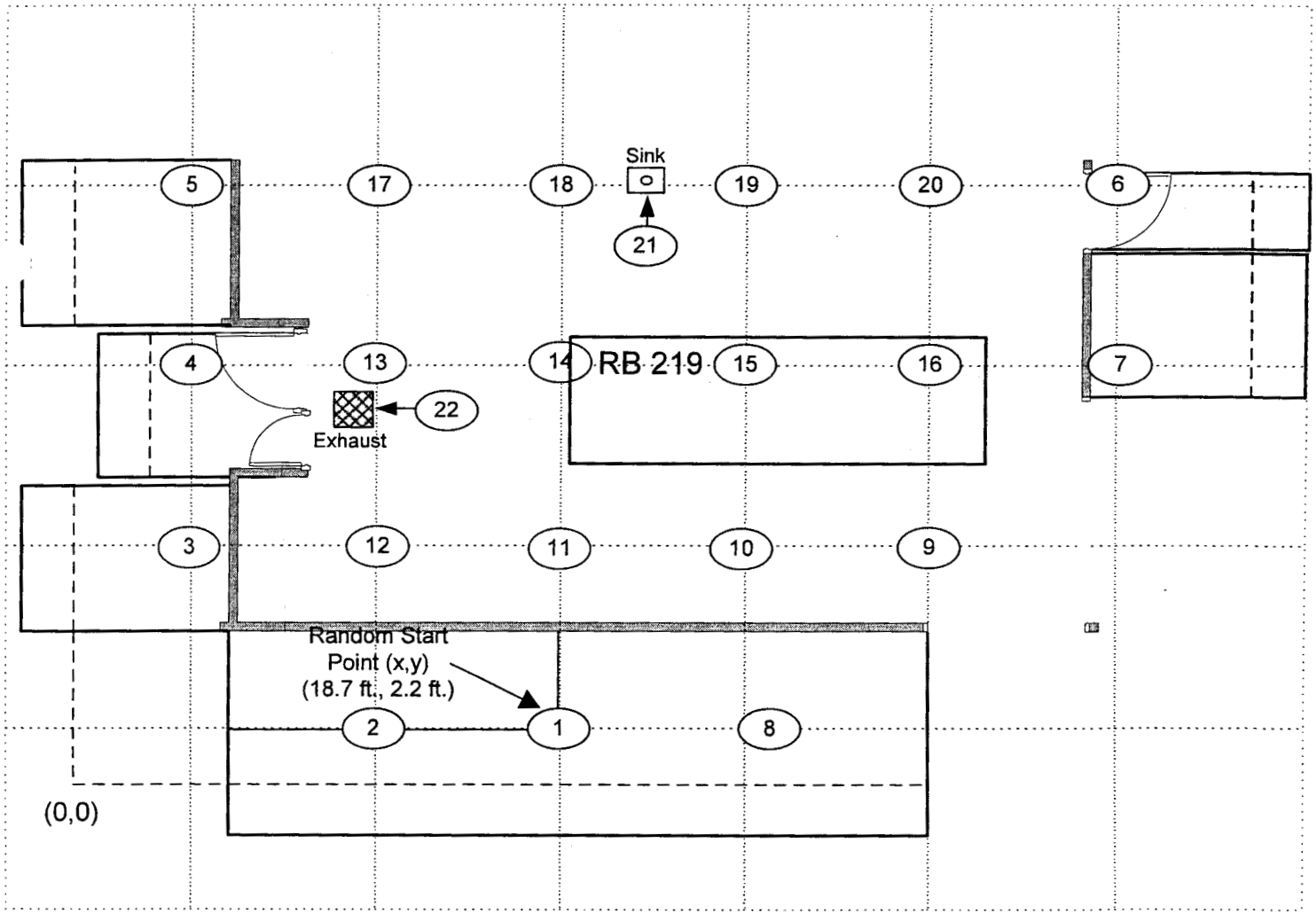
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-219 Survey Unit: 11 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



0.16" = 1.0 ft.
94.9 m²

Wipe #'s 1 to 22

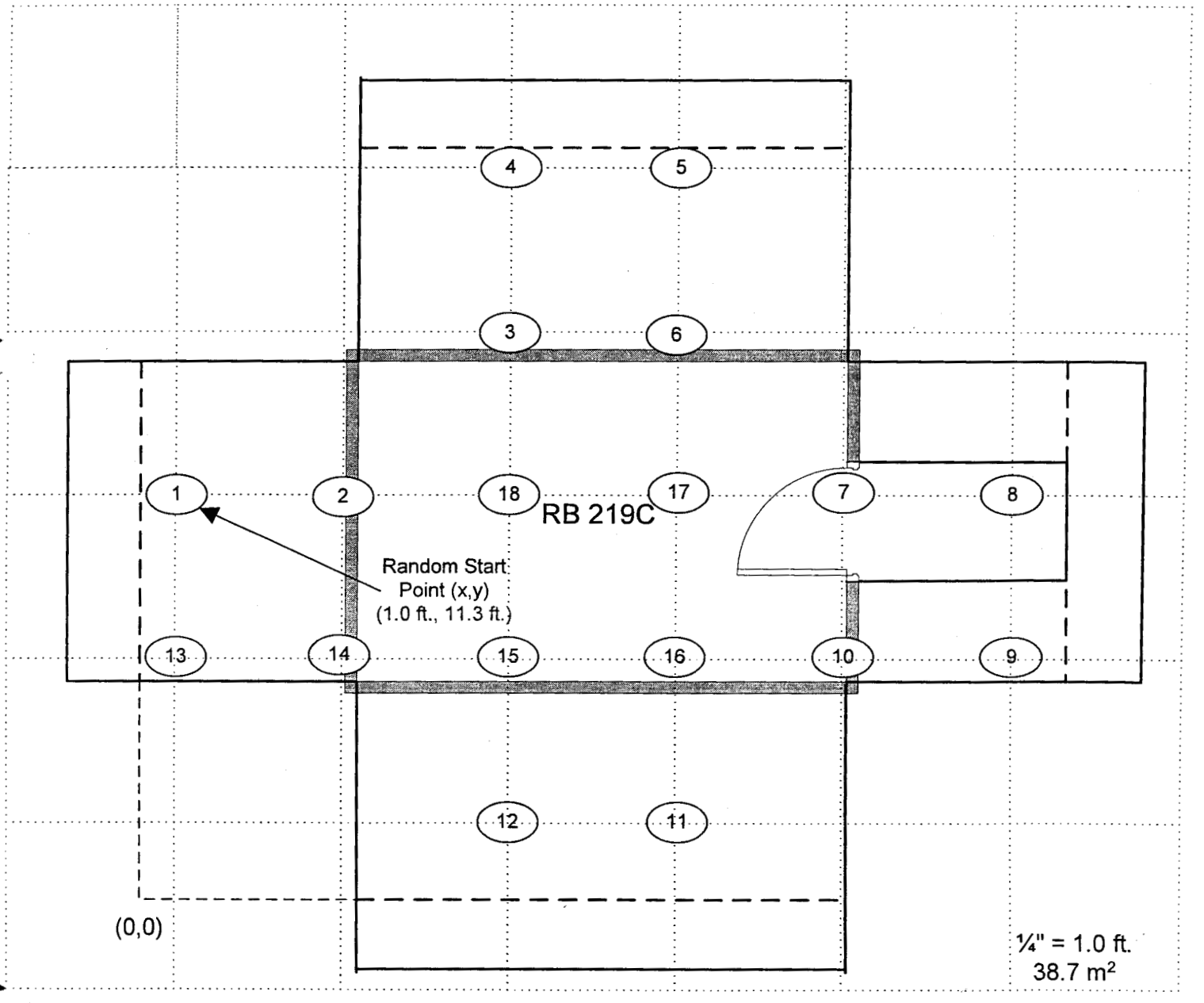
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-219C Survey Unit: 12 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 18

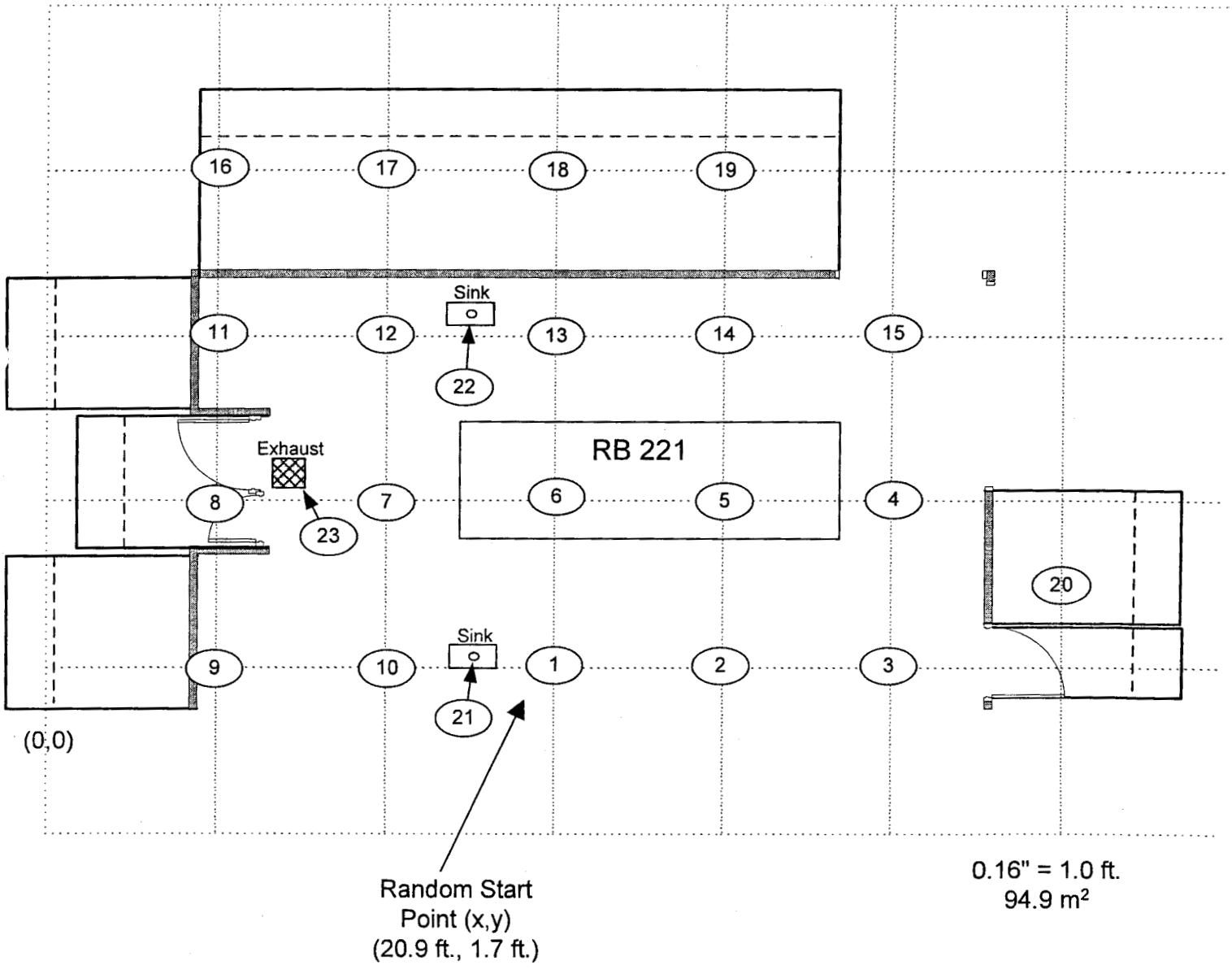
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-221 Survey Unit: 13 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 23

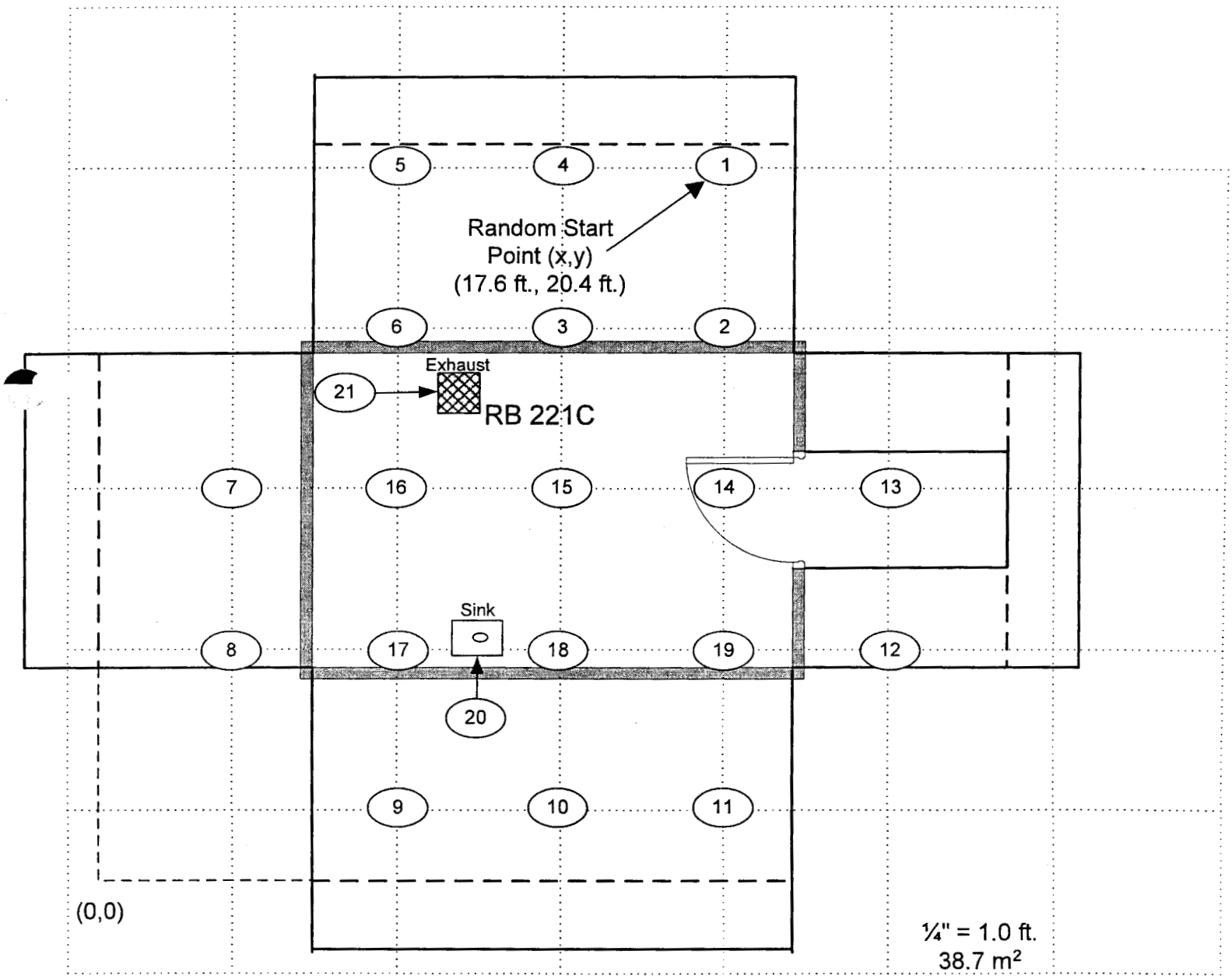
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-221C Survey Unit: 14 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 21

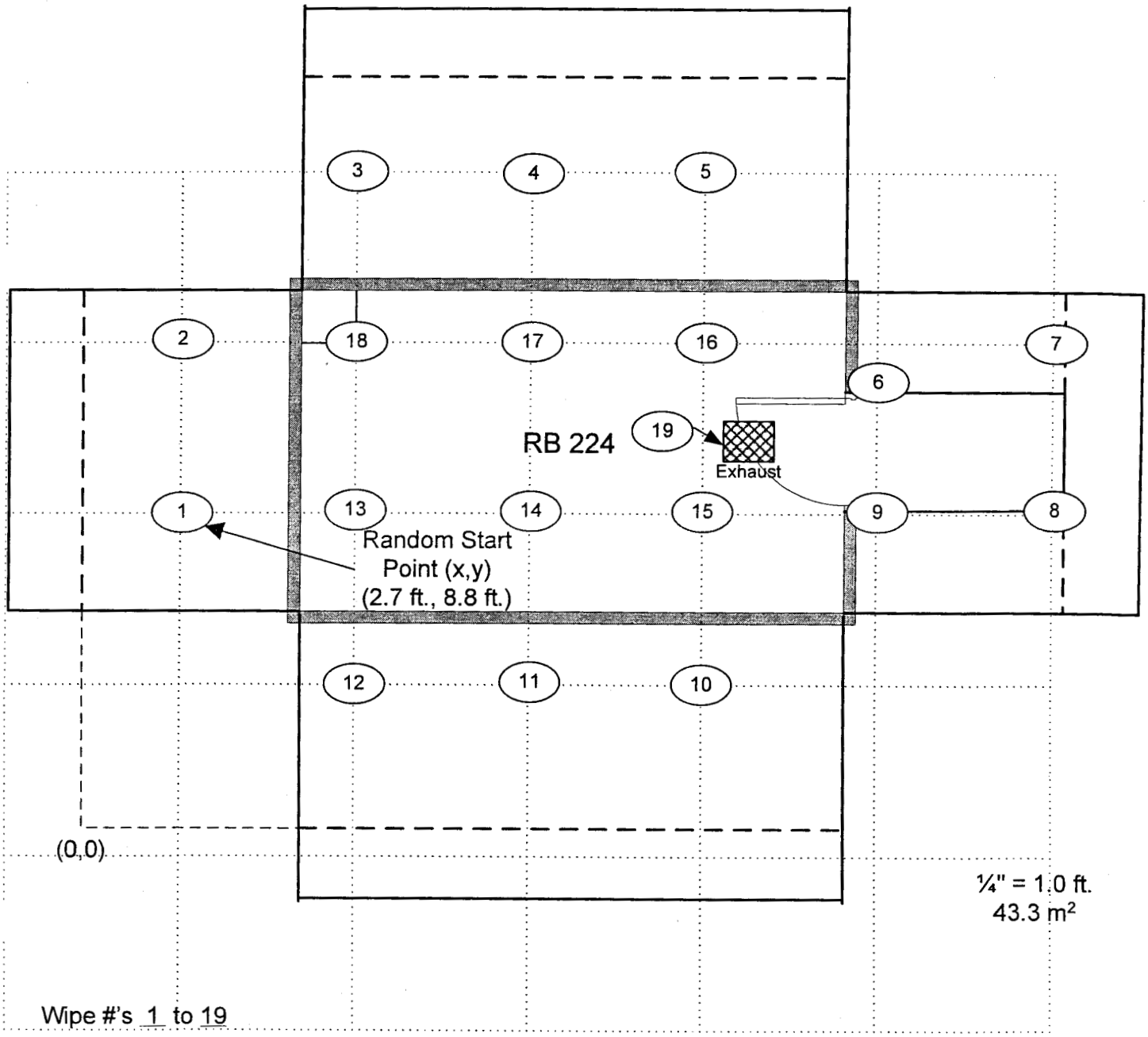
Bayer Pharmaceuticals

Radiation Contamination Survey Report

Building: B-24 Room: RB-224 Survey Unit: 15 Class: 2 Date: 7/24/2006

Instruments: Bicron Electra 1A (Ser. #450), BP19DD Detector, Calibrated on 5-16-06
Bicron Electra 1A (Ser. #4808), BP19DD Detector, Calibrated on 4-25-06
Bicron Selectra 1B (Ser. #4422), IGP13A Detector, Calibrated on 2-22-06
Bicron Electra 1A (Ser. #3118), GP13A Detector, Calibrated on 1-4-06

Surveyor: Frank Brown, Debra LePage, Ben Lumm



Wipe #'s 1 to 19

APPENDIX D

MARSSIM Analytical Calculation Sheets

Philotechnics
Analytical Worksheet

Minimum Detectable Concentration (MDC) Static Count Calculations for Liquid Scintillation Counter
(95% confidence level via MARSSIM method)

$$MDC\,(dpm/100cm^2) = \frac{3+3.29\sqrt{(R_b)(T_{s+b})(1+T_{s+b}/T_b)}}{(Eff.)(T_{s+b})} \qquad \text{(Eq. 1)}$$

Where:

Eff. = LSC total efficiency, Counter cpm/NIST Standard dpm
R_b = LSC background rate (cpm)
T_{s+b} = Sample count time (minutes)
T_b = Background count time (minutes)

Static Count MDC Calculations					
Isotope	**Eff.**	**R_b**	**T_{s+b}**	**T_b**	**MDC (Static)**
H-3	52.53%	14.60	1	1	39.55 dpm/100 cm^2
S-35* / C-14	64.60%	7.20	1	1	23.97 dpm/100 cm^2
Gross Beta	57.24%	26.80	1	1	47.32 dpm/100 cm^2
I-125*	60%	14.60	1	1	34.63 dpm/100 cm^2

*I-125 efficiency is estimated by I-129 and S-35 efficiency by C-14

Minimum Detectable Concentration (MDC) Static Count Calculations for Hand-Held Monitors
(95% confidence level via MARSSIM method)

$$MDC\,(dpm/100cm^2) = \frac{3+3.29\sqrt{(R_b)(T_{s+b})(1+T_{s+b}/T_b)}}{(Eff.)(T_{s+b})(probeareacm^2/100cm^2)} \qquad \text{(Eq. 2)}$$

Where:

Eff. = Probe efficiency (2π geometry)
R_b = Average background rate (cpm)
T_{s+b} = Sample count time (minutes)
T_b = Background count time (minutes)
P = Probe area (cm2)

Philotechnics
Analytical Worksheet

Static Count MDC Calculations							
Isotope	**Eff.**	**R_b**	**T_{s+b}**	**T_b**	**P**	**MDC (Static)**	
Probe: BP19DD #4808							
P-32*	22%	443.4	1	1	100	459.0 dpm/100 cm^2	Bench/Wall
C-14 / S-35*	6%	443.4	1	1	100	1682.9 dpm/100 cm^2	Bench/Wall
P-32	22%	510.8	1	1	100	491.6 dpm/100 cm^2	Flooring
C-14 / S-35	6%	510.8	1	1	100	1802.6 dpm/100 cm^2	Flooring
P-32	22%	430.2	1	1	100	452.3 dpm/100 cm^2	Stainless Steel
C-14 / S-35	6%	430.2	1	1	100	1658.4 dpm/100 cm^2	Stainless Steel
Probe: BP19DD #450							
P-32	22%	434.5	1	1	100	454.5 dpm/100 cm^2	Bench/Wall
C-14 / S-35	6%	434.5	1	1	100	1666.3 dpm/100 cm^2	Bench/Wall
P-32	22%	485.2	1	1	100	479.5 dpm/100 cm^2	Flooring
C-14 / S-35	6%	485.2	1	1	100	1758.1 dpm/100 cm^2	Flooring
P-32	22%	481.8	1	1	100	477.9 dpm/100 cm^2	Stainless Steel
C-14 / S-35	6%	481.8	1	1	100	1752.1 dpm/100 cm^2	Stainless Steel
Probe: GP13A #4422							
I-125	19%	2719.0	1	1	100	1292.7 dpm/100 cm^2	Bench/Wall
I-125	19%	3108.0	1	1	100	1381.0 dpm/100 cm^2	Flooring
I-125	19%	1556.0	1	1	100	981.8 dpm/100 cm^2	Stainless Steel
Probe: GP13A #3118							
I-125	19%	2350.0	1	1	100	1202.9 dpm/100 cm^2	Bench/Wall
I-125	19%	2479.0	1	1	100	1235.0 dpm/100 cm^2	Flooring
I-125	19%	1415.6	1	1	100	937.1 dpm/100 cm^2	Stainless Steel

* P-32 efficiency is estimated by Sr-90 efficiency and S-35 efficiency by C-14

Philotechnics
Analytical Worksheet

Scan Minimum Detectable Concentration (MDC)
Calculations for Hand-Held Monitors
(Scan MDA per MARSSIM/NUREG-1575, NUREG-1507 methodology)

$$Scan\,MDC = \frac{MDCR}{\sqrt{p}\,(\varepsilon_i)(\varepsilon_s)\left(\frac{A}{100cm^2}\right)} \qquad \text{(Eq. 3)}$$

Where:

p = surveyor efficiency, per MARISSIM (0.5)
ε_i = instrument efficiency (2π geometry)
ε_s = surface efficiency, 1 for gammas and high energy betas >1 Mev Emax (e.g. P-32, Cl-36, S/Y-90, etc.), 0.5 for low energy betas (e.g. C-14, P-33, S-35, Tc-99, Ca-45, etc.)
A = probe active area (cm^2)

And,

$$MDCR = S_i\,(60\,\text{sec}/\text{min})/i\,\text{sec} \qquad \text{(Eq. 4)}$$

Where:

MDCR = Minimum detectable count rate (cpm)
S_i = source counts in time interval, i.

And,

$$S_i = d'\sqrt{B_i} \qquad \text{(Eq. 5)}$$

Where:

d' = 1.38 for 95% true positive scan detection rate, per, MARRISM, Table 6.5
B_i = Background counts in interval, i

And,

$$B_i = (P_b)(i)(1\,\text{min}/60\,\text{sec}) \qquad \text{(Eq. 6)}$$

Where:

P_b = probe background count rate (cpm)
i = observation interval

Philotechnics
Analytical Worksheet

Scan Minimum Detectable Concentration (MDC)
Calculations for Hand-Held Monitors
(Scan MDA per MARSSIM/NUREG-1575, NUREG-1507 methodology)

Specific Scan MDC calculation results:

IBP19DD #4808	Bench/Wall	Flooring	Stainless
P_b =	443.4	510.8	430.2
i =	1	1	1
B_i =	7.39	8.51	7.17
d' =	1.38	1.38	1.38
S_i =	3.75	4.03	3.70
MDCR =	225.1	241.6	221.7

IBP19DD #450	Bench/Wall	Flooring	Stainless
P_b =	434.45	485.2	481.8
i =	1	1	1
B_i =	7.24	8.09	8.03
d' =	1.38	1.38	1.38
S_i =	3.71	3.92	3.91
MDCR =	222.8	235.5	234.6

IGP13A #4422	Bench/Wall	Flooring	Stainless
P_b =	2719.0	3108.0	1556.0
i =	1	1	1
B_i =	45.32	51.80	25.93
d' =	1.38	1.38	1.38
S_i =	9.29	9.93	7.03
MDCR =	557.4	595.9	421.7

IGP13A #3118	Bench/Wall	Flooring	Stainless
P_b =	2719.0	3108.0	1556.0
i =	1	1	1
B_i =	45.32	51.80	25.93
d' =	1.38	1.38	1.38
S_i =	9.29	9.93	7.03
MDCR =	557.4	595.9	421.7

Scan MDC Calculations					
Isotope	**ε_i**	**ε_s**	**A**	**MDC (Scan)**	
Probe: BP19DD #4808					
P-32*	22%	1.00	100	1446.9 dpm/100 cm^2	Bench/Wall
C-14 / S-35	6%	0.50	100	10610.8 dpm/100 cm^2	Bench/Wall
P-32*	22%	1.00	100	1553.0 dpm/100 cm^2	Flooring
C-14 / S-35	6%	0.50	100	11388.7 dpm/100 cm^2	Flooring
P-32*	22%	1.00	100	1425.2 dpm/100 cm^2	Stainless
C-14 / S-35	6%	0.50	100	10451.6 dpm/100 cm^2	Stainless
Probe: BP19DD #450					
P-32*	22%	1.00	100	1432.2 dpm/100 cm^2	Bench/Wall
C-14 / S-35	6%	0.50	100	10503.1 dpm/100 cm^2	Bench/Wall
P-32*	22%	1.00	100	1513.6 dpm/100 cm^2	Flooring
C-14 / S-35	6%	0.50	100	11099.6 dpm/100 cm^2	Flooring
P-32*	22%	1.00	100	1508.3 dpm/100 cm^2	Stainless
C-14 / S-35	6%	0.50	100	11060.7 dpm/100 cm^2	Stainless

Philotechnics
Analytical Worksheet

Scan MDC Calculations					
Probe: IGP13A					
I-125	19%	1.00	100	4148.8 dpm/100 cm^2	Bench/Wall
I-125	19%	1.00	100	4435.6 dpm/100 cm^2	Flooring
I-125	19%	1.00	100	3138.5 dpm/100 cm^2	Stainless
Probe: IGP13A					
I-125	19%	1.00	100	4148.8 dpm/100 cm^2	Bench/Wall
I-125	19%	1.00	100	4435.6 dpm/100 cm^2	Flooring
I-125	19%	1.00	100	3138.5 dpm/100 cm^2	Stainless

* P-32 efficiency is estimated by Sr-90 efficiency

APPENDIX E

Background Documentation

Philotechnics Analytical Worksheet

Background Documentation

Fail Levels

Ld, system detection limit is the net count having 95% probability of being detected when a survey sample point contains activity at Ld, which translates to a 5% probability of falsely interpreting sample activity as activity due to background (MARISSM Section 6.7.1)

$$L_d\,(cpm) = 3 + 4.65\sqrt{B} \qquad \text{(Eq. 7)}$$

Fail Level CPM = Bkg cpm + Ld cpm

Fail Level Calculations (Static) #4808				
Probe	**Surface**	**Bkg**	**Ld (cpm)**	**Fail Level (cpm)**
BP19DD	Bench/Wall	443.4	100.9	**544.3**
BP19DD	Flooring	510.8	108.1	**618.9**
BP19DD	Stainless Steel	430.2	99.4	**529.6**

Fail Level Calculations (Static) #450				
Probe	**Surface**	**Bkg**	**Ld (cpm)**	**Fail Level (cpm)**
IBP19DD	Bench/Wall	434.5	99.9	**534.4**
IBP19DD	Flooring	485.2	105.4	**590.6**
IBP19DD	Stainless Steel	481.8	105.1	**586.9**

Fail Level Calculations (Static) #4422				
Probe	**Surface**	**Bkg**	**Ld (cpm)**	**Fail Level (cpm)**
GP13A	Bench/Wall	2719.0	245.5	**2964.5**
GP13A	Flooring	3108.0	262.2	**3370.2**
GP13A	Stainless Steel	1556.0	186.4	**1742.4**

Fail Level Calculations (Static) #3118				
Probe	**Surface**	**Bkg**	**Ld (cpm)**	**Fail Level (cpm)**
GP13A	Bench/Wall	2350.0	228.4	**2578.4**
GP13A	Flooring	2479.0	234.5	**2713.5**
GP13A	Stainless Steel	1415.6	178.0	**1593.6**

Fail Level Calculations (Static) #2221 w/43-37				
Probe	**Surface**	**Bkg**	**Ld (cpm)**	**Fail Level (cpm)**
43-37	Sheet Vinyl	603.0	117.2	**720.2**

Philotechnics Analytical Worksheet

Background Data

Bicron Selectra 1A with IBP19DD probe #4808					
Surface	Counts (cpm)				
Bench/Wall	470	456	454	468	428
	426	460	480	450	472
	427	428	420	417	401
	432	423	461	478	417
	Average:	**443.4 cpm**			
Flooring	548	554	558	554	508
	510	540	478	524	526
	490	516	408	478	484
	508	472	524	520	516
	Average:	**510.8 cpm**			
Stainless Steel	436	435	411	436	399
	462	441	428	425	429
	Average:	**430.2 cpm**			

Background Data

Bicron Selectra 1A with IBP19DD probe #450					
Surface	Counts (cpm)				
Bench/Wall	461	473	437	474	483
	477	444	440	463	456
	424	396	420	404	411
	530	416	316	396	368
	Average:	**434.5 cpm**			
Flooring	485	476	479	456	500
	524	520	458	482	472
	Average:	**485.2 cpm**			
Stainless Steel	472	457	472	486	494
	486	506	493	485	467
	Average:	**481.8 cpm**			

Background Data

Bicron Electra 1B with a GP13A probe #4422					
Surface	Counts (cpm)				
Bench/Wall	2730	2740	2630	2670	2730
	2610	2510	2360	2230	2700
	2850	3050	2820	2770	2720
	2900	2770	2870	2870	2850
	Average:	**2719.0 cpm**			
Flooring	2990	3020	3160	3200	3160
	3050	3060	3050	3230	3160
	Average:	**3108.0 cpm**			
Stainless Steel	1610	1660	1550	1580	1590
	1630	1670	1350	1410	1510
	Average:	**1556.0 cpm**			

Ref. MARSSIM NUREG-1575
NUREG-1507

Philotechnics Analytical Worksheet

Background Data

Bicron Electra 1B with a GP13A probe #3118					
Surface	Counts (cpm)				
Bench/Wall	2160	2180	2070	2200	2120
	2210	2090	2190	2240	2250
	2560	2690	2610	2410	2620
	2590	2360	2520	2570	2360
	Average:	**2350.0 cpm**			
Flooring	2510	2550	2520	2390	2420
	2490	2380	2440	2440	2650
	Average:	**2479.0 cpm**			
Stainless Steel	1530	1380	1431	1367	1416
	1530	1432	1287	1426	1357
	Average:	**1415.6 cpm**			

Background Data

Ludlum 2221 w/ 43-37 probe					
Surface	Counts (cpm)				
Sheet Vinyl	612	586	617	587	620
	607	613	604	584	600
	Average:	**603.0 cpm**			

Scintillation Counter					
		Counts (cpm)			
Sample		Channel 1	Channel 2	Wide Open	
1		15.00	6.00	25.00	
2		12.00	12.00	29.00	
3		14.00	7.00	28.00	
4		18.00	5.00	30.00	
5		14.00	6.00	22.00	
	Average:	**14.60**	**7.20**	**26.80**	

APPENDIX F

Static Measurement Data Sheets and DPM Calculations

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	**Type**	**CPM**	**CPM**	**DPM / 100 cm2**				
		Bkg Values		**MDC Values**				
Bench/Wall	A	**443.4**	**2719.0**	**459.0**	**1682.9**	**1292.7**	From Bkg Documentation	
Flooring	B	**510.8**	**3108.0**	**491.6**	**1802.6**	**1381.0**		
Stainless	C	**430.2**	**1556.0**	**452.3**	**1658.4**	**981.8**		
RB-131								
Sample	**Type**	**Gross CPM**		**DPM / 100 cm2**				
1	B	505	1170	-26	-97	-10200	<MDC	<DCGL
2	B	548	1910	169	620	-6305	<MDC	<DCGL
3	B	567	2030	255	937	-5674	<MDC	<DCGL
4	B	575	1890	292	1070	-6411	<MDC	<DCGL
5	B	526	1910	69	253	-6305	<MDC	<DCGL
6	B	551	1920	183	670	-6253	<MDC	<DCGL
7	B	487	1950	-108	-397	-6095	<MDC	<DCGL
8	B	565	1890	246	903	-6411	<MDC	<DCGL
9	B	545	2020	155	570	-5726	<MDC	<DCGL
10	B	502	2000	-40	-147	-5832	<MDC	<DCGL
11	B	450	2090	-276	-1013	-5358	<MDC	<DCGL
12	B	509	882	-8	-30	-11716	<MDC	<DCGL
13	C	479	1154	222	813	-2116	<MDC	<DCGL
14	C	469	1034	176	647	-2747	<MDC	<DCGL
15	C	438	1023	35	130	-2805	<MDC	<DCGL
16	C	523	1276	422	1547	-1474	<MDC	<DCGL
17	C	480	1149	226	830	-2142	<MDC	<DCGL
18	C	428	942	-10	-37	-3232	<MDC	<DCGL
19	C	500	1313	317	1163	-1279	<MDC	<DCGL

RB-169 A,B								
Sample	**Type**	**Gross CPM**		**DPM / 100 cm2**				
1	B	396	NA	-522	-1913	NA	<MDC	<DCGL
2	B	440	NA	-322	-1180	NA	<MDC	<DCGL
3	B	403	NA	-490	-1797	NA	<MDC	<DCGL
4	B	458	NA	-240	-880	NA	<MDC	<DCGL
5	B	470	NA	-185	-680	NA	<MDC	<DCGL
6	B	440	NA	-322	-1180	NA	<MDC	<DCGL
7	B	497	NA	-63	-230	NA	<MDC	<DCGL
8	B	564	NA	242	887	NA	<MDC	<DCGL
9	B	665	NA	701	2570	NA	**>MDC**	<DCGL
10	B	457	NA	-245	-897	NA	<MDC	<DCGL
11	B	500	NA	-49	-180	NA	<MDC	<DCGL
12	B	445	NA	-299	-1097	NA	<MDC	<DCGL
13	B	620	NA	496	1820	NA	**>MDC**	<DCGL
14	B	705	NA	883	3237	NA	**>MDC**	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	Type	CPM	CPM	DPM / 100 cm2				
15	B	616	NA	478	1753	NA	<MDC	<DCGL
16	B	433	NA	-354	-1297	NA	<MDC	<DCGL
17	C	435	NA	22	80	NA	<MDC	<DCGL
18	C	343	NA	-396	-1453	NA	<MDC	<DCGL
19	C	392	NA	-174	-637	NA	<MDC	<DCGL
20	C	416	NA	-65	-237	NA	<MDC	<DCGL

RB-205

Sample	Type	Gross CPM		DPM / 100 cm2				
1	A	434	1910	-43	-157	-4258	<MDC	<DCGL
2	A	400	1560	-197	-723	-6100	<MDC	<DCGL
3	C	358	1160	-328	-1203	-2084	<MDC	<DCGL
4	C	342	1230	-401	-1470	-1716	<MDC	<DCGL
5	C	434	1920	17	63	1916	**>MDC**	<DCGL
6	B	608	2460	442	1620	-3411	<MDC	<DCGL
7	B	508	2340	-13	-47	-4042	<MDC	<DCGL
8	B	518	2150	33	120	-5042	<MDC	<DCGL
9	B	396	2190	-522	-1913	-4832	<MDC	<DCGL
10	A	384	1800	-270	-990	-4837	<MDC	<DCGL
11	A	498	1750	248	910	-5100	<MDC	<DCGL
12	B	404	1930	-485	-1780	-6200	<MDC	<DCGL
13	B	640	2290	587	2153	-4305	**>MDC**	<DCGL
14	B	516	2240	24	87	-4568	<MDC	<DCGL
15	C	420	1410	-46	-170	-768	<MDC	<DCGL
16	A	442	1810	-6	-23	-4784	<MDC	<DCGL
17	A	378	2030	-297	-1090	-3626	<MDC	<DCGL
18	A	494	2060	230	843	-3468	<MDC	<DCGL
19	B	490	2350	-95	-347	-3989	<MDC	<DCGL
20	A	344	2110	-452	-1657	-3205	<MDC	<DCGL
21	A	350	1970	-425	-1557	-3942	<MDC	<DCGL
22	A	342	1880	-461	-1690	-4416	<MDC	<DCGL

RB-207

Sample	Type	Gross CPM		DPM / 100 cm2				
1	B	460	1990	-231	-847	-5884	<MDC	<DCGL
2	B	380	2240	-595	-2180	-4568	<MDC	<DCGL
3	B	432	1950	-358	-1313	-6095	<MDC	<DCGL
4	B	456	2130	-249	-913	-5147	<MDC	<DCGL
5	A	480	1930	166	610	-4153	<MDC	<DCGL
6	A	410	2440	-152	-557	-1468	<MDC	<DCGL
7	C	354	1840	-346	-1270	1495	**>MDC**	<DCGL
8	B	458	2400	-240	-880	-3726	<MDC	<DCGL
9	B	374	2200	-622	-2280	-4779	<MDC	<DCGL
10	A	326	2150	-534	-1957	-2995	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	Type	CPM	CPM	DPM / 100 cm2				
11	A	432	2290	-52	-190	-2258	<MDC	<DCGL
12	A	390	2270	-243	-890	-2363	<MDC	<DCGL
13	B	404	2480	-485	-1780	-3305	<MDC	<DCGL
14	B	432	2310	-358	-1313	-4200	<MDC	<DCGL
15	B	420	2360	-413	-1513	-3937	<MDC	<DCGL
16	B	464	2350	-213	-780	-3989	<MDC	<DCGL
17	B	472	2330	-176	-647	-4095	<MDC	<DCGL
18	A	344	1860	-452	-1657	-4521	<MDC	<DCGL
19	A	368	2060	-343	-1257	-3468	<MDC	<DCGL
20	C	374	1830	-255	-937	1442	**>MDC**	<DCGL
21	A	388	1800	-252	-923	-4837	<MDC	<DCGL
22	A	402	1600	-188	-690	-5889	<MDC	<DCGL
23	A	334	2540	-497	-1823	-942	<MDC	<DCGL
24	A	400	1880	-197	-723	-4416	<MDC	<DCGL
25	A	435	2610	-38	-140	-574	<MDC	<DCGL

RB-207C

Sample	Type	Gross CPM		DPM / 100 cm2				
1	A	360	1760	-379	-1390	-5047	<MDC	<DCGL
2	A	430	2016	-61	-223	-3700	<MDC	<DCGL
3	A	354	1716	-406	-1490	-5279	<MDC	<DCGL
4	A	410	1678	-152	-557	-5479	<MDC	<DCGL
5	C	406	1758	-110	-403	1063	**>MDC**	<DCGL
6	C	334	1670	-437	-1603	600	<MDC	<DCGL
7	C	374	1986	-255	-937	2263	**>MDC**	<DCGL
8	A	450	2392	30	110	-1721	<MDC	<DCGL
9	A	456	1952	57	210	-4037	<MDC	<DCGL
10	B	488	2472	-104	-380	-3347	<MDC	<DCGL
11	B	470	2198	-185	-680	-4789	<MDC	<DCGL
12	B	438	2296	-331	-1213	-4274	<MDC	<DCGL
13	A	356	2146	-397	-1457	-3016	<MDC	<DCGL
14	A	428	1720	-70	-257	-5258	<MDC	<DCGL
15	B	472	2386	-176	-647	-3800	<MDC	<DCGL
16	B	596	2084	387	1420	-5389	<MDC	<DCGL
17	B	432	2042	-358	-1313	-5611	<MDC	<DCGL
18	A	350	1546	-425	-1557	-6174	<MDC	<DCGL
19	A	388	2300	-252	-923	-2205	<MDC	<DCGL
20	A	368	2166	-343	-1257	-2911	<MDC	<DCGL
21	A	356	2120	-397	-1457	-3153	<MDC	<DCGL
22	A	411	2470	-147	-540	-1311	<MDC	<DCGL

RB-211

Sample	Type	Gross CPM		DPM / 100 cm2				
1	A	361	2220	-375	-1373	-2626	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	Type	CPM	CPM	DPM / 100 cm2				
2	C	349	1390	-369	-1353	-874	<MDC	<DCGL
3	C	357	1690	-333	-1220	705	<MDC	<DCGL
4	C	333	1500	-442	-1620	-295	<MDC	<DCGL
5	A	385	2060	-265	-973	-3468	<MDC	<DCGL
6	A	452	1860	39	143	-4521	<MDC	<DCGL
7	A	488	2290	203	743	-2258	<MDC	<DCGL
8	A	405	2310	-175	-640	-2153	<MDC	<DCGL
9	B	436	2610	-340	-1247	-2621	<MDC	<DCGL
10	B	397	1940	-517	-1897	-6147	<MDC	<DCGL
11	B	461	2300	-226	-830	-4253	<MDC	<DCGL
12	B	435	2410	-345	-1263	-3674	<MDC	<DCGL
13	B	422	2380	-404	-1480	-3832	<MDC	<DCGL
14	B	443	3270	-308	-1130	853	<MDC	<DCGL
15	B	379	1840	-599	-2197	-6674	<MDC	<DCGL
16	B	508	2130	-13	-47	-5147	<MDC	<DCGL
17	B	516	2280	24	87	-4358	<MDC	<DCGL
18	B	509	2320	-8	-30	-4147	<MDC	<DCGL
19	A	382	2490	-279	-1023	-1205	<MDC	<DCGL
20	C	352	1520	-355	-1303	-189	<MDC	<DCGL
21	B	408	1950	-467	-1713	-6095	<MDC	<DCGL
22	B	433	2140	-354	-1297	-5095	<MDC	<DCGL
23	B	452	2150	-267	-980	-5042	<MDC	<DCGL
24	A	554	2080	503	1843	-3363	**>MDC**	<DCGL
25	A	444	3400	3	10	3584	**>MDC**	<DCGL

RB-211C

Sample	Type	Gross CPM		DPM / 100 cm2				
1	A	393	2150	-229	-840	-2995	<MDC	<DCGL
2	A	357	2340	-393	-1440	-1995	<MDC	<DCGL
3	A	363	1950	-365	-1340	-4047	<MDC	<DCGL
4	A	356	2180	-397	-1457	-2837	<MDC	<DCGL
5	A	322	2060	-552	-2023	-3468	<MDC	<DCGL
6	C	353	1770	-351	-1287	1126	**>MDC**	<DCGL
7	A	327	1860	-529	-1940	-4521	<MDC	<DCGL
8	C	352	2050	-355	-1303	2600	**>MDC**	<DCGL
9	A	360	2570	-379	-1390	-784	<MDC	<DCGL
10	A	353	2490	-411	-1507	-1205	<MDC	<DCGL
11	B	372	2670	-631	-2313	-2305	<MDC	<DCGL
12	B	422	2630	-404	-1480	-2516	<MDC	<DCGL
13	B	417	2500	-426	-1563	-3200	<MDC	<DCGL
14	B	372	2550	-631	-2313	-2937	<MDC	<DCGL
15	B	358	2580	-695	-2547	-2779	<MDC	<DCGL
16	B	459	2790	-235	-863	-1674	<MDC	<DCGL
17	C	356	2150	-337	-1237	3126	**>MDC**	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	Type	CPM	CPM	DPM / 100 cm2				
18	C	361	1730	-315	-1153	916	<MDC	<DCGL
19	C	371	1940	-269	-987	2021	**>MDC**	<DCGL

RB-213

Sample	Type	Gross CPM		DPM / 100 cm2				
1	A	405	2750	-175	-640	163	<MDC	<DCGL
2	A	385	2790	-265	-973	374	<MDC	<DCGL
3	A	397	2780	-211	-773	321	<MDC	<DCGL
4	A	369	2890	-338	-1240	900	<MDC	<DCGL
5	A	407	3000	-165	-607	1479	**>MDC**	<DCGL
6	B	428	2950	-376	-1380	-832	<MDC	<DCGL
7	B	421	3000	-408	-1497	-568	<MDC	<DCGL
8	A	383	2970	-275	-1007	1321	**>MDC**	<DCGL
9	A	399	2840	-202	-740	637	<MDC	<DCGL
10	B	408	2830	-467	-1713	-1463	<MDC	<DCGL
11	B	401	2930	-499	-1830	-937	<MDC	<DCGL
12	B	399	2970	-508	-1863	-726	<MDC	<DCGL
13	B	412	2850	-449	-1647	-1358	<MDC	<DCGL
14	A	370	2400	-334	-1223	-1679	<MDC	<DCGL
15	A	364	2810	-361	-1323	479	<MDC	<DCGL
16	A	376	2480	-306	-1123	-1258	<MDC	<DCGL
17	B	437	2840	-335	-1230	-1411	<MDC	<DCGL
18	B	411	2710	-454	-1663	-2095	<MDC	<DCGL
19	B	384	3010	-576	-2113	-516	<MDC	<DCGL
20	B	422	2900	-404	-1480	-1095	<MDC	<DCGL
21	B	386	2760	-567	-2080	-1832	<MDC	<DCGL
22	A	388	2510	-252	-923	-1100	<MDC	<DCGL
23	C	378	2180	-237	-870	3284	**>MDC**	<DCGL
24	C	384	1780	-210	-770	1179	**>MDC**	<DCGL
25	A	440	2530	-15	-57	-995	<MDC	<DCGL

RB-213C

Sample	Type	Gross CPM		DPM / 100 cm2				
1	B	544	2670	151	553	-2305	<MDC	<DCGL
2	A	426	1950	-79	-290	-4047	<MDC	<DCGL
3	B	470	2030	-185	-680	-5674	<MDC	<DCGL
4	B	465	2260	-208	-763	-4463	<MDC	<DCGL
5	B	591	2220	365	1337	-4674	<MDC	<DCGL
6	B	575	2270	292	1070	-4411	<MDC	<DCGL
7	A	375	2180	-311	-1140	-2837	<MDC	<DCGL
8	A	452	2040	39	143	-3574	<MDC	<DCGL
9	A	369	1990	-338	-1240	-3837	<MDC	<DCGL
10	A	377	1960	-302	-1107	-3995	<MDC	<DCGL
11	A	373	1860	-320	-1173	-4521	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	**Type**	**CPM**	**CPM**	**DPM / 100 cm2**				
12	A	465	1910	98	360	-4258	<MDC	<DCGL
13	A	335	1420	-493	-1807	-6837	<MDC	<DCGL
14	A	425	2100	-84	-307	-3258	<MDC	<DCGL
15	C	414	1540	-74	-270	-84	<MDC	<DCGL
16	C	378	1510	-237	-870	-242	<MDC	<DCGL
17	C	369	1610	-278	-1020	284	<MDC	<DCGL
18	C	362	1680	-310	-1137	653	<MDC	<DCGL
19	A	406	2380	-170	-623	-1784	<MDC	<DCGL

RB-218

Sample	**Type**	**Gross CPM**		**DPM / 100 cm2**				
1	B	457	2420	-245	-897	-3621	<MDC	<DCGL
2	B	463	2490	-217	-797	-3253	<MDC	<DCGL
3	B	464	2400	-213	-780	-3726	<MDC	<DCGL
4	B	441	2250	-317	-1163	-4516	<MDC	<DCGL
5	B	480	2320	-140	-513	-4147	<MDC	<DCGL
6	A	469	2020	116	427	-3679	<MDC	<DCGL
7	A	479	1840	162	593	-4626	<MDC	<DCGL
8	B	452	2350	-267	-980	-3989	<MDC	<DCGL
9	B	447	2340	-290	-1063	-4042	<MDC	<DCGL
10	B	429	2530	-372	-1363	-3042	<MDC	<DCGL
11	B	422	2590	-404	-1480	-2726	<MDC	<DCGL
12	B	378	2300	-604	-2213	-4253	<MDC	<DCGL
13	B	414	2280	-440	-1613	-4358	<MDC	<DCGL
14	B	476	2720	-158	-580	-2042	<MDC	<DCGL
15	B	463	2780	-217	-797	-1726	<MDC	<DCGL
16	B	453	3190	-263	-963	432	<MDC	<DCGL
17	B	432	2210	-358	-1313	-4726	<MDC	<DCGL
18	A	406	2480	-170	-623	-1258	<MDC	<DCGL
19	A	400	2400	-197	-723	-1679	<MDC	<DCGL
20	A	385	2040	-265	-973	-3574	<MDC	<DCGL
21	A	462	2670	85	310	-258	<MDC	<DCGL
RB-219								
Sample	**Type**	**Gross CPM**		**DPM / 100 cm2**				
1	A	460	1990	75	277	-3837	<MDC	<DCGL
2	A	355	1720	-402	-1473	-5258	<MDC	<DCGL
3	A	356	2230	-397	-1457	-2574	<MDC	<DCGL
4	C	431	1740	4	13	968	<MDC	<DCGL
5	C	384	1800	-210	-770	1284	**>MDC**	<DCGL
6	B	418	2485	-422	-1547	-3279	<MDC	<DCGL
7	B	501	2400	-45	-163	-3726	<MDC	<DCGL
8	A	362	1631	-370	-1357	-5726	<MDC	<DCGL
9	B	645	2193	610	2237	-4816	**>MDC**	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	Type	CPM	CPM	DPM / 100 cm2				
10	B	604	2067	424	1553	-5479	<MDC	<DCGL
11	B	591	2370	365	1337	-3884	<MDC	<DCGL
12	B	553	2442	192	703	-3505	<MDC	<DCGL
13	B	538	2326	124	453	-4116	<MDC	<DCGL
14	A	393	1420	-229	-840	-6837	<MDC	<DCGL
15	A	419	1693	-111	-407	-5400	<MDC	<DCGL
16	A	430	1802	-61	-223	-4826	<MDC	<DCGL
17	B	460	961	-231	-847	-11300	<MDC	<DCGL
18	B	544	2237	151	553	-4584	<MDC	<DCGL
19	B	603	2229	419	1537	-4626	<MDC	<DCGL
20	B	629	2181	537	1970	-4879	**>MDC**	<DCGL
21	A	456	1939	57	210	-4105	<MDC	<DCGL
22	A	505	2700	280	1027	-100	<MDC	<DCGL

RB-219C

Sample	Type	Gross CPM		DPM / 100 cm2				
1	A	392	2170	-234	-857	-2889	<MDC	<DCGL
2	A	372	2350	-325	-1190	-1942	<MDC	<DCGL
3	A	388	2520	-252	-923	-1047	<MDC	<DCGL
4	A	418	2900	-115	-423	953	<MDC	<DCGL
5	A	421	2720	-102	-373	5	<MDC	<DCGL
6	A	416	2680	-125	-457	-205	<MDC	<DCGL
7	B	409	2700	-463	-1697	-2147	<MDC	<DCGL
8	A	400	2510	-197	-723	-1100	<MDC	<DCGL
9	A	427	2480	-75	-273	-1258	<MDC	<DCGL
10	B	406	2880	-476	-1747	-1200	<MDC	<DCGL
11	A	386	2690	-261	-957	-153	<MDC	<DCGL
12	A	350	2770	-425	-1557	268	<MDC	<DCGL
13	A	377	2660	-302	-1107	-311	<MDC	<DCGL
14	A	410	2820	-152	-557	532	<MDC	<DCGL
15	B	390	2790	-549	-2013	-1674	<MDC	<DCGL
16	B	402	2780	-495	-1813	-1726	<MDC	<DCGL
17	B	386	2540	-567	-2080	-2989	<MDC	<DCGL
18	B	393	2430	-535	-1963	-3568	<MDC	<DCGL

RB-221

Sample	Type	Gross CPM		DPM / 100 cm2				
1	B	584	2223	333	1220	-4658	<MDC	<DCGL
2	B	606	2322	433	1587	-4137	<MDC	<DCGL
3	B	604	2476	424	1553	-3326	<MDC	<DCGL
4	A	418	1911	-115	-423	-4253	<MDC	<DCGL
5	A	462	1719	85	310	-5263	<MDC	<DCGL
6	A	354	1590	-406	-1490	-5942	<MDC	<DCGL
7	A	390	1640	-243	-890	-5679	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	Type	CPM	CPM	DPM / 100 cm2				
8	A	385	1820	-265	-973	-4732	<MDC	<DCGL
9	A	431	1930	-56	-207	-4153	<MDC	<DCGL
10	B	499	2100	-54	-197	-5305	<MDC	<DCGL
11	B	465	2450	-208	-763	-3463	<MDC	<DCGL
12	B	429	2280	-372	-1363	-4358	<MDC	<DCGL
13	B	410	2570	-458	-1680	-2832	<MDC	<DCGL
14	B	567	2330	255	937	-4095	<MDC	<DCGL
15	B	612	2460	460	1687	-3411	<MDC	<DCGL
16	A	415	1910	-129	-473	-4258	<MDC	<DCGL
17	A	368	1360	-343	-1257	-7153	<MDC	<DCGL
18	A	414	1850	-134	-490	-4574	<MDC	<DCGL
19	A	359	1630	-384	-1407	-5732	<MDC	<DCGL
20	B	504	2620	-31	-113	-2568	<MDC	<DCGL
21	A	639	2350	889	3260	-1942	**>MDC**	<DCGL
22	A	643	2260	907	3327	-2416	**>MDC**	<DCGL
23	A	507	2570	289	1060	-784	<MDC	<DCGL

RB-221C

Sample	Type	Gross CPM		DPM / 100 cm2				
1	A	355	1617	-402	-1473	-5800	<MDC	<DCGL
2	A	366	1914	-352	-1290	-4237	<MDC	<DCGL
3	A	394	1869	-225	-823	-4474	<MDC	<DCGL
4	A	342	1361	-461	-1690	-7147	<MDC	<DCGL
5	A	397	1436	-211	-773	-6753	<MDC	<DCGL
6	A	357	1531	-393	-1440	-6253	<MDC	<DCGL
7	A	376	1741	-306	-1123	-5147	<MDC	<DCGL
8	A	349	1225	-429	-1573	-7863	<MDC	<DCGL
9	A	352	1576	-415	-1523	-6016	<MDC	<DCGL
10	A	336	1850	-488	-1790	-4574	<MDC	<DCGL
11	A	356	1863	-397	-1457	-4505	<MDC	<DCGL
12	A	382	1762	-279	-1023	-5037	<MDC	<DCGL
13	A	369	1692	-338	-1240	-5405	<MDC	<DCGL
14	B	524	2393	60	220	-3763	<MDC	<DCGL
15	B	483	2178	-126	-463	-4895	<MDC	<DCGL
16	B	458	2170	-240	-880	-4937	<MDC	<DCGL
17	B	375	2187	-617	-2263	-4847	<MDC	<DCGL
18	B	424	2038	-395	-1447	-5632	<MDC	<DCGL
19	B	425	2320	-390	-1430	-4147	<MDC	<DCGL
20	A	370	1913	-334	-1223	-4242	<MDC	<DCGL
21	A	403	2140	-184	-673	-3047	<MDC	<DCGL

RB-224

Sample	Type	Gross CPM		DPM / 100 cm2				
1	A	390	2021	-243	-890	-3674	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Static Measurements
Laboratory Areas

		BP19DD	GP13A	Gross Beta	C-14 / S-35	I-125	Comment	
Sample	**Type**	**CPM**	**CPM**	**DPM / 100 cm2**				
2	A	373	1977	-320	-1173	-3905	<MDC	<DCGL
3	A	376	1811	-306	-1123	-4779	<MDC	<DCGL
4	A	432	432	-52	-190	-12037	<MDC	<DCGL
5	A	379	2477	-293	-1073	-1274	<MDC	<DCGL
6	A	420	2076	-106	-390	-3384	<MDC	<DCGL
7	A	401	2225	-193	-707	-2600	<MDC	<DCGL
8	A	376	1662	-306	-1123	-5563	<MDC	<DCGL
9	A	389	1860	-247	-907	-4521	<MDC	<DCGL
10	A	366	1660	-352	-1290	-5574	<MDC	<DCGL
11	A	335	1610	-493	-1807	-5837	<MDC	<DCGL
12	A	368	1490	-343	-1257	-6468	<MDC	<DCGL
13	B	529	2280	83	303	-4358	<MDC	<DCGL
14	B	445	2090	-299	-1097	-5358	<MDC	<DCGL
15	B	460	2010	-231	-847	-5779	<MDC	<DCGL
16	A	410	2400	-152	-557	-1679	<MDC	<DCGL
17	B	403	2330	-490	-1797	-4095	<MDC	<DCGL
18	B	422	2640	-404	-1480	-2463	<MDC	<DCGL
19	A	404	2340	-179	-657	-1995	<MDC	<DCGL

APPENDIX G

Wipe Survey Data Sheets and DPM Calculations

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Scintillation Counter
Laboratory Areas

			CPM	H-3	S-35	Gross Beta	I-125	Comment	
Sample	Chan A	Chan B	Chan C	DPM / 100 cm2					
MDC	Values			39.55	23.97	47.32	34.63	From Analytical Sheet	
Bkg	14.60	7.20	26.80					From Background Sheet	
RB-131									
1	7.00	9.00	25.00	-14	3	-3	-13	<MDC	<DCGL
2	13.00	9.00	31.00	-3	3	7	-3	<MDC	<DCGL
3	8.00	9.00	25.00	-13	3	-3	-11	<MDC	<DCGL
4	5.00	12.00	26.00	-18	7	-1	-16	<MDC	<DCGL
5	7.00	12.00	30.00	-14	7	6	-13	<MDC	<DCGL
6	9.00	5.00	28.00	-11	-3	2	-9	<MDC	<DCGL
7	4.00	4.00	19.00	-20	-5	-14	-18	<MDC	<DCGL
8	6.00	12.00	27.00	-16	7	0	-14	<MDC	<DCGL
9	2.00	13.00	26.00	-24	9	-1	-21	<MDC	<DCGL
10	2.00	10.00	20.00	-24	4	-12	-21	<MDC	<DCGL
11	1.00	5.00	14.00	-26	-3	-22	-23	<MDC	<DCGL
12	4.00	9.00	25.00	-20	3	-3	-18	<MDC	<DCGL
13	2.00	13.00	20.00	-24	9	-12	-21	<MDC	<DCGL
14	4.00	9.00	21.00	-20	3	-10	-18	<MDC	<DCGL
15	5.00	5.00	16.00	-18	-3	-19	-16	<MDC	<DCGL
16	5.00	13.00	28.00	-18	9	2	-16	<MDC	<DCGL
17	4.00	5.00	20.00	-20	-3	-12	-18	<MDC	<DCGL
18	2.00	4.00	16.00	-24	-5	-19	-21	<MDC	<DCGL
19	5.00	11.00	21.00	-18	6	-10	-16	<MDC	<DCGL
RB-169A,B									
1	5	7	22	-18	0	-8	-16	<MDC	<DCGL
2	7	7	20	-14	0	-12	-13	<MDC	<DCGL
3	11	8	23	-7	1	-7	-6	<MDC	<DCGL
4	5	9	22	-18	3	-8	-16	<MDC	<DCGL
5	11	14	36	-7	11	16	-6	<MDC	<DCGL
6	25	9	47	20	3	35	17	<MDC	<DCGL
7	14	8	27	-1	1	0	-1	<MDC	<DCGL
8	5	10	22	-18	4	-8	-16	<MDC	<DCGL
9	9	11	29	-11	6	4	-9	<MDC	<DCGL
10	4	7	20	-20	0	-12	-18	<MDC	<DCGL
11	11	6	30	-7	-2	6	-6	<MDC	<DCGL
12	2	7	23	-24	0	-7	-21	<MDC	<DCGL
13	4	11	20	-20	6	-12	-18	<MDC	<DCGL
14	7	8	22	-14	1	-8	-13	<MDC	<DCGL
15	3	10	22	-22	4	-8	-19	<MDC	<DCGL
16	2	12	23	-24	7	-7	-21	<MDC	<DCGL
17	4	8	20	-20	1	-12	-18	<MDC	<DCGL
18	3	5	22	-22	-3	-8	-19	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Scintillation Counter
Laboratory Areas

			CPM	H-3	S-35	Gross Beta	I-125	Comment	
Sample	**Chan A**	**Chan B**	**Chan C**	**DPM / 100 cm2**					
19	7	12	33	-14	7	11	-13	<MDC	<DCGL
20	11	10	36	-7	4	16	-6	<MDC	<DCGL
RB-205									
1	8.00	9.00	26.00	-13	3	-1	-11	<MDC	<DCGL
2	5.00	10.00	23.00	-18	4	-7	-16	<MDC	<DCGL
3	4.00	10.00	27.00	-20	4	0	-18	<MDC	<DCGL
4	7.00	7.00	21.00	-14	0	-10	-13	<MDC	<DCGL
5	7.00	13.00	27.00	-14	9	0	-13	<MDC	<DCGL
6	2.00	10.00	21.00	-24	4	-10	-21	<MDC	<DCGL
7	5.00	10.00	25.00	-18	4	-3	-16	<MDC	<DCGL
8	10.00	13.00	33.00	-9	9	11	-8	<MDC	<DCGL
9	6.00	8.00	22.00	-16	1	-8	-14	<MDC	<DCGL
10	7.00	11.00	26.00	-14	6	-1	-13	<MDC	<DCGL
11	1.00	6.00	19.00	-26	-2	-14	-23	<MDC	<DCGL
12	2.00	8.00	19.00	-24	1	-14	-21	<MDC	<DCGL
13	7.00	6.00	21.00	-14	-2	-10	-13	<MDC	<DCGL
14	4.00	13.00	23.00	-20	9	-7	-18	<MDC	<DCGL
15	3.00	7.00	19.00	-22	0	-14	-19	<MDC	<DCGL
16	5.00	7.00	17.00	-18	0	-17	-16	<MDC	<DCGL
17	4.00	9.00	18.00	-20	3	-15	-18	<MDC	<DCGL
18	4.00	5.00	15.00	-20	-3	-21	-18	<MDC	<DCGL
19	5.00	9.00	24.00	-18	3	-5	-16	<MDC	<DCGL
20	1.00	6.00	20.00	-26	-2	-12	-23	<MDC	<DCGL
21	3.00	12.00	23.00	-22	7	-7	-19	<MDC	<DCGL
22	2.00	12.00	24.00	-24	7	-5	-21	<MDC	<DCGL
23	6.00	7.00	24.00	-16	0	-5	-14	<MDC	<DCGL
24	5.00	6.00	22.00	-18	-2	-8	-16	<MDC	<DCGL
RB-207									
1	14.00	4.00	29.00	-1	-5	4	-1	<MDC	<DCGL
2	12.00	5.00	26.00	-5	-3	-1	-4	<MDC	<DCGL
3	14.00	4.00	25.00	-1	-5	-3	-1	<MDC	<DCGL
4	15.00	7.00	30.00	1	0	6	1	<MDC	<DCGL
5	11.00	7.00	22.00	-7	0	-8	-6	<MDC	<DCGL
6	12.00	5.00	26.00	-5	-3	-1	-4	<MDC	<DCGL
7	6.00	4.00	13.00	-16	-5	-24	-14	<MDC	<DCGL
8	13.00	9.00	23.00	-3	3	-7	-3	<MDC	<DCGL
9	14.00	6.00	32.00	-1	-2	9	-1	<MDC	<DCGL
10	8.00	7.00	22.00	-13	0	-8	-11	<MDC	<DCGL
11	12.00	12.00	30.00	-5	7	6	-4	<MDC	<DCGL
12	10.00	9.00	27.00	-9	3	0	-8	<MDC	<DCGL
13	17.00	6.00	31.00	5	-2	7	4	<MDC	<DCGL
14	12.00	10.00	30.00	-5	4	6	-4	<MDC	<DCGL
15	18.00	9.00	33.00	6	3	11	6	<MDC	<DCGL
16	13.00	7.00	27.00	-3	0	0	-3	<MDC	<DCGL
17	12.00	6.00	23.00	-5	-2	-7	-4	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Scintillation Counter
Laboratory Areas

			CPM	H-3	S-35	Gross Beta	I-125	Comment	
Sample	**Chan A**	**Chan B**	**Chan C**	**DPM / 100 cm2**					
18	11.00	9.00	24.00	-7	3	-5	-6	<MDC	<DCGL
19	9.00	7.00	30.00	-11	0	6	-9	<MDC	<DCGL
20	10.00	11.00	28.00	-9	6	2	-8	<MDC	<DCGL
21	7.00	7.00	22.00	-14	0	-8	-13	<MDC	<DCGL
22	7.00	9.00	30.00	-14	3	6	-13	<MDC	<DCGL
23	5.00	7.00	14.00	-18	0	-22	-16	<MDC	<DCGL
24	13.00	0.00	23.00	-3	-11	-7	-3	<MDC	<DCGL
25	5.00	7.00	21.00	-18	0	-10	-16	<MDC	<DCGL
RB-207C									
1	9.00	6.00	20.00	-11	-2	-12	-9	<MDC	<DCGL
2	10.00	6.00	27.00	-9	-2	0	-8	<MDC	<DCGL
3	10.00	6.00	27.00	-9	-2	0	-8	<MDC	<DCGL
4	7.00	4.00	19.00	-14	-5	-14	-13	<MDC	<DCGL
5	9.00	3.00	24.00	-11	-7	-5	-9	<MDC	<DCGL
6	13.00	8.00	28.00	-3	1	2	-3	<MDC	<DCGL
7	10.00	9.00	25.00	-9	3	-3	-8	<MDC	<DCGL
8	18.00	12.00	37.00	6	7	18	6	<MDC	<DCGL
9	11.00	6.00	26.00	-7	-2	-1	-6	<MDC	<DCGL
10	9.00	6.00	21.00	-11	-2	-10	-9	<MDC	<DCGL
11	16.00	6.00	27.00	3	-2	0	2	<MDC	<DCGL
12	14.00	1.00	24.00	-1	-10	-5	-1	<MDC	<DCGL
13	10.00	8.00	28.00	-9	1	2	-8	<MDC	<DCGL
14	18.00	5.00	28.00	6	-3	2	6	<MDC	<DCGL
15	12.00	7.00	28.00	-5	0	2	-4	<MDC	<DCGL
16	117.00	57.00	180.00	195	77	268	171	**>MDC**	<DCGL
17	9.00	9.00	29.00	-11	3	4	-9	<MDC	<DCGL
18	12.00	10.00	26.00	-5	4	-1	-4	<MDC	<DCGL
19	9.00	8.00	25.00	-11	1	-3	-9	<MDC	<DCGL
20	13.00	4.00	24.00	-3	-5	-5	-3	<MDC	<DCGL
21	20.00	3.00	36.00	10	-7	16	9	<MDC	<DCGL
22	6.00	11.00	22.00	-16	6	-8	-14	<MDC	<DCGL
RB-211									
1	21.00	4.00	31.00	12	-5	7	11	<MDC	<DCGL
2	13.00	4.00	22.00	-3	-5	-8	-3	<MDC	<DCGL
3	9.00	6.00	24.00	-11	-2	-5	-9	<MDC	<DCGL
4	18.00	6.00	30.00	6	-2	6	6	<MDC	<DCGL
5	18.00	9.00	34.00	6	3	13	6	<MDC	<DCGL
6	15.00	11.00	35.00	1	6	14	1	<MDC	<DCGL
7	8.00	11.00	28.00	-13	6	2	-11	<MDC	<DCGL
8	17.00	5.00	25.00	5	-3	-3	4	<MDC	<DCGL
9	8.00	9.00	23.00	-13	3	-7	-11	<MDC	<DCGL
10	16.00	11.00	31.00	3	6	7	2	<MDC	<DCGL
11	12.00	7.00	23.00	-5	0	-7	-4	<MDC	<DCGL
12	12.00	6.00	24.00	-5	-2	-5	-4	<MDC	<DCGL
13	9.00	10.00	26.00	-11	4	-1	-9	<MDC	<DCGL
14	15.00	2.00	22.00	1	-8	-8	1	<MDC	<DCGL

Ref. MARSSIM NUREG-1575
NUREG-1507

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Scintillation Counter
Laboratory Areas

			CPM	H-3	S-35	Gross Beta	I-125	Comment	
Sample	Chan A	Chan B	Chan C	DPM / 100 cm2					
15	15.00	10.00	32.00	1	4	9	1	<MDC	<DCGL
16	11.00	9.00	25.00	-7	3	-3	-6	<MDC	<DCGL
17	15.00	14.00	36.00	1	11	16	1	<MDC	<DCGL
18	11.00	5.00	26.00	-7	-3	-1	-6	<MDC	<DCGL
19	13.00	12.00	30.00	-3	7	6	-3	<MDC	<DCGL
20	10.00	4.00	26.00	-9	-5	-1	-8	<MDC	<DCGL
21	14.00	6.00	31.00	-1	-2	7	-1	<MDC	<DCGL
22	12.00	5.00	30.00	-5	-3	6	-4	<MDC	<DCGL
23	19.00	3.00	33.00	8	-7	11	7	<MDC	<DCGL
24	17.00	7.00	33.00	5	0	11	4	<MDC	<DCGL
25	6.00	12.00	31.00	-16	7	7	-14	<MDC	<DCGL
RB-211C									
1	11.00	3.00	20.00	-7	-7	-12	-6	<MDC	<DCGL
2	15.00	5.00	30.00	1	-3	6	1	<MDC	<DCGL
3	13.00	4.00	30.00	-3	-5	6	-3	<MDC	<DCGL
4	19.00	8.00	33.00	8	1	11	7	<MDC	<DCGL
5	7.00	6.00	22.00	-14	-2	-8	-13	<MDC	<DCGL
6	18.00	4.00	33.00	6	-5	11	6	<MDC	<DCGL
7	9.00	12.00	28.00	-11	7	2	-9	<MDC	<DCGL
8	12.00	3.00	22.00	-5	-7	-8	-4	<MDC	<DCGL
9	11.00	11.00	28.00	-7	6	2	-6	<MDC	<DCGL
10	10.00	3.00	21.00	-9	-7	-10	-8	<MDC	<DCGL
11	10.00	9.00	26.00	-9	3	-1	-8	<MDC	<DCGL
12	7.00	14.00	27.00	-14	11	0	-13	<MDC	<DCGL
13	10.00	6.00	19.00	-9	-2	-14	-8	<MDC	<DCGL
14	11.00	11.00	26.00	-7	6	-1	-6	<MDC	<DCGL
15	9.00	8.00	24.00	-11	1	-5	-9	<MDC	<DCGL
16	18.00	6.00	35.00	6	-2	14	6	<MDC	<DCGL
17	7.00	7.00	21.00	-14	0	-10	-13	<MDC	<DCGL
18	18.00	4.00	34.00	6	-5	13	6	<MDC	<DCGL
19	17.00	7.00	29.00	5	0	4	4	<MDC	<DCGL
RB-213									
1	19.00	12.00	39.00	8	7	21	7	<MDC	<DCGL
2	17.00	5.00	28.00	5	-3	2	4	<MDC	<DCGL
3	8.00	12.00	36.00	-13	7	16	-11	<MDC	<DCGL *
4	9.00	7.00	27.00	-11	0	0	-9	<MDC	<DCGL
5	12.00	7.00	27.00	-5	0	0	-4	<MDC	<DCGL
6	14.00	6.00	28.00	-1	-2	2	-1	<MDC	<DCGL
7	7.00	8.00	22.00	-14	1	-8	-13	<MDC	<DCGL
8	21.00	5.00	33.00	12	-3	11	11	<MDC	<DCGL
9	7.00	10.00	22.00	-14	4	-8	-13	<MDC	<DCGL
10	9.00	6.00	24.00	-11	-2	-5	-9	<MDC	<DCGL
11	15.00	12.00	37.00	1	7	18	1	<MDC	<DCGL
12	14.00	5.00	27.00	-1	-3	0	-1	<MDC	<DCGL
13	10.00	3.00	19.00	-9	-7	-14	-8	<MDC	<DCGL
14	16.00	1.00	21.00	3	-10	-10	2	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Scintillation Counter
Laboratory Areas

			CPM	H-3	S-35	Gross Beta	I-125	Comment	
Sample	Chan A	Chan B	Chan C	DPM / 100 cm2					
15	8.00	8.00	23.00	-13	1	-7	-11	<MDC	<DCGL
16	22.00	11.00	42.00	14	6	27	12	<MDC	<DCGL
17	12.00	7.00	27.00	-5	0	0	-4	<MDC	<DCGL
18	16.00	6.00	25.00	3	-2	-3	2	<MDC	<DCGL
19	14.00	7.00	35.00	-1	0	14	-1	<MDC	<DCGL
20	14.00	4.00	24.00	-1	-5	-5	-1	<MDC	<DCGL
21	15.00	8.00	27.00	1	1	0	1	<MDC	<DCGL
22	14.00	9.00	24.00	-1	3	-5	-1	<MDC	<DCGL
23	8.00	11.00	34.00	-13	6	13	-11	<MDC	<DCGL
24	9.00	12.00	26.00	-11	7	-1	-9	<MDC	<DCGL
25	5.00	19.00	40.00	-18	18	23	-16	<MDC	<DCGL
RB-213C									
1	19.00	6.00	32.00	8	-2	9	7	<MDC	<DCGL
2	7.00	11.00	23.00	-14	6	-7	-13	<MDC	<DCGL
3	12.00	9.00	30.00	-5	3	6	-4	<MDC	<DCGL
4	13.00	4.00	30.00	-3	-5	6	-3	<MDC	<DCGL
5	10.00	8.00	30.00	-9	1	6	-8	<MDC	<DCGL
6	15.00	10.00	34.00	1	4	13	1	<MDC	<DCGL
7	15.00	9.00	39.00	1	3	21	1	<MDC	<DCGL
8	11.00	4.00	22.00	-7	-5	-8	-6	<MDC	<DCGL
9	15.00	4.00	27.00	1	-5	0	1	<MDC	<DCGL
10	16.00	4.00	31.00	3	-5	7	2	<MDC	<DCGL
11	10.00	10.00	28.00	-9	4	2	-8	<MDC	<DCGL
12	9.00	7.00	23.00	-11	0	-7	-9	<MDC	<DCGL
13	14.00	5.00	27.00	-1	-3	0	-1	<MDC	<DCGL
14	12.00	5.00	28.00	-5	-3	2	-4	<MDC	<DCGL
15	15.00	6.00	29.00	1	-2	4	1	<MDC	<DCGL
16	14.00	12.00	38.00	-1	7	20	-1	<MDC	<DCGL
17	9.00	7.00	21.00	-11	0	-10	-9	<MDC	<DCGL
18	13.00	4.00	27.00	-3	-5	0	-3	<MDC	<DCGL
19	12.00	17.00	39.00	-5	15	21	-4	<MDC	<DCGL
RB-218									
1	3.00	13.00	23.00	-22	9	-7	-19	<MDC	<DCGL
2	5.00	8.00	28.00	-18	1	2	-16	<MDC	<DCGL
3	4.00	6.00	19.00	-20	-2	-14	-18	<MDC	<DCGL
4	4.00	9.00	24.00	-20	3	-5	-18	<MDC	<DCGL
5	5.00	13.00	29.00	-18	9	4	-16	<MDC	<DCGL
6	5.00	6.00	19.00	-18	-2	-14	-16	<MDC	<DCGL
7	6.00	10.00	22.00	-16	4	-8	-14	<MDC	<DCGL
8	5.00	5.00	14.00	-18	-3	-22	-16	<MDC	<DCGL
9	5.00	5.00	15.00	-18	-3	-21	-16	<MDC	<DCGL
10	8.00	9.00	27.00	-13	3	0	-11	<MDC	<DCGL
11	5.00	14.00	31.00	-18	11	7	-16	<MDC	<DCGL
12	12.00	10.00	38.00	-5	4	20	-4	<MDC	<DCGL
13	6.00	7.00	20.00	-16	0	-12	-14	<MDC	<DCGL
14	4.00	8.00	24.00	-20	1	-5	-18	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Scintillation Counter
Laboratory Areas

			CPM	H-3	S-35	Gross Beta	I-125	Comment	
Sample	**Chan A**	**Chan B**	**Chan C**	**DPM / 100 cm2**					
15	8.00	3.00	17.00	-13	-7	-17	-11	<MDC	<DCGL
16	8.00	8.00	23.00	-13	1	-7	-11	<MDC	<DCGL
17	5.00	11.00	29.00	-18	6	4	-16	<MDC	<DCGL
18	3.00	9.00	19.00	-22	3	-14	-19	<MDC	<DCGL
19	5.00	14.00	29.00	-18	11	4	-16	<MDC	<DCGL
20	8.00	6.00	25.00	-13	-2	-3	-11	<MDC	<DCGL
21	8.00	14.00	37.00	-13	11	18	-11	<MDC	<DCGL
RB-219									
1	8.00	7.00	26.00	-13	0	-1	-11	<MDC	<DCGL
2	14.00	4.00	26.00	-1	-5	-1	-1	<MDC	<DCGL
3	14.00	3.00	27.00	-1	-7	0	-1	<MDC	<DCGL
4	19.00	11.00	39.00	8	6	21	7	<MDC	<DCGL
5	17.00	7.00	28.00	5	0	2	4	<MDC	<DCGL
6	8.00	9.00	25.00	-13	3	-3	-11	<MDC	<DCGL
7	16.00	5.00	31.00	3	-3	7	2	<MDC	<DCGL
8	17.00	6.00	31.00	5	-2	7	4	<MDC	<DCGL
9	15.00	3.00	21.00	1	-7	-10	1	<MDC	<DCGL
10	11.00	7.00	24.00	-7	0	-5	-6	<MDC	<DCGL
11	20.00	3.00	31.00	10	-7	7	9	<MDC	<DCGL
12	10.00	7.00	25.00	-9	0	-3	-8	<MDC	<DCGL
13	18.00	12.00	37.00	6	7	18	6	<MDC	<DCGL
14	14.00	5.00	25.00	-1	-3	-3	-1	<MDC	<DCGL
15	12.00	9.00	25.00	-5	3	-3	-4	<MDC	<DCGL
16	10.00	8.00	21.00	-9	1	-10	-8	<MDC	<DCGL
17	9.00	8.00	20.00	-11	1	-12	-9	<MDC	<DCGL
18	18.00	3.00	27.00	6	-7	0	6	<MDC	<DCGL
19	14.00	2.00	22.00	-1	-8	-8	-1	<MDC	<DCGL
20	12.00	6.00	28.00	-5	-2	2	-4	<MDC	<DCGL
21	14.00	7.00	29.00	-1	0	4	-1	<MDC	<DCGL
22	7.00	11.00	27.00	-14	6	0	-13	<MDC	<DCGL
RB-219C									
1	13.00	0.00	18.00	-3	-11	-15	-3	<MDC	<DCGL
2	16.00	7.00	33.00	3	0	11	2	<MDC	<DCGL
3	20.00	3.00	31.00	10	-7	7	9	<MDC	<DCGL
4	16.00	6.00	31.00	3	-2	7	2	<MDC	<DCGL
5	14.00	7.00	30.00	-1	0	6	-1	<MDC	<DCGL
6	8.00	6.00	26.00	-13	-2	-1	-11	<MDC	<DCGL
7	15.00	7.00	32.00	1	0	9	1	<MDC	<DCGL
8	19.00	4.00	29.00	8	-5	4	7	<MDC	<DCGL
9	13.00	6.00	22.00	-3	-2	-8	-3	<MDC	<DCGL
10	8.00	6.00	20.00	-13	-2	-12	-11	<MDC	<DCGL
11	13.00	4.00	26.00	-3	-5	-1	-3	<MDC	<DCGL
12	18.00	9.00	35.00	6	3	14	6	<MDC	<DCGL
13	12.00	6.00	24.00	-5	-2	-5	-4	<MDC	<DCGL
14	9.00	4.00	18.00	-11	-5	-15	-9	<MDC	<DCGL
15	9.00	10.00	28.00	-11	4	2	-9	<MDC	<DCGL

Ref. MARSSIM NUREG-1575
NUREG-1507

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Scintillation Counter
Laboratory Areas

			CPM	H-3	S-35	Gross Beta	I-125	Comment	
Sample	Chan A	Chan B	Chan C	DPM / 100 cm2					
16	10.00	7.00	28.00	-9	0	2	-8	<MDC	<DCGL
17	9.00	1.00	13.00	-11	-10	-24	-9	<MDC	<DCGL
18	8.00	4.00	22.00	-13	-5	-8	-11	<MDC	<DCGL
RB-221									
1	9.00	5.00	22.00	-11	-3	-8	-9	<MDC	<DCGL
2	12.00	9.00	28.00	-5	3	2	-4	<MDC	<DCGL
3	11.00	5.00	25.00	-7	-3	-3	-6	<MDC	<DCGL
4	7.00	8.00	25.00	-14	1	-3	-13	<MDC	<DCGL
5	12.00	6.00	23.00	-5	-2	-7	-4	<MDC	<DCGL
6	15.00	5.00	29.00	1	-3	4	1	<MDC	<DCGL
7	17.00	7.00	32.00	5	0	9	4	<MDC	<DCGL
8	10.00	7.00	22.00	-9	0	-8	-8	<MDC	<DCGL
9	8.00	6.00	22.00	-13	-2	-8	-11	<MDC	<DCGL
10	11.00	8.00	26.00	-7	1	-1	-6	<MDC	<DCGL
11	9.00	9.00	29.00	-11	3	4	-9	<MDC	<DCGL
12	12.00	11.00	32.00	-5	6	9	-4	<MDC	<DCGL
13	7.00	7.00	19.00	-14	0	-14	-13	<MDC	<DCGL
14	14.00	7.00	30.00	-1	0	6	-1	<MDC	<DCGL
15	8.00	7.00	21.00	-13	0	-10	-11	<MDC	<DCGL
16	16.00	9.00	33.00	3	3	11	2	<MDC	<DCGL
17	13.00	7.00	32.00	-3	0	9	-3	<MDC	<DCGL
18	40.00	14.00	62.00	48	11	61	42	**>MDC**	<DCGL
19	11.00	3.00	20.00	-7	-7	-12	-6	<MDC	<DCGL
20	9.00	6.00	24.00	-11	-2	-5	-9	<MDC	<DCGL
21	19.00	21.00	43.00	8	21	28	7	<MDC	<DCGL
22	13.00	9.00	30.00	-3	3	6	-3	<MDC	<DCGL
23	6.00	16.00	28.00	-16	14	2	-14	<MDC	<DCGL
RB-221C									
1	17.00	4.00	35.00	5	-5	14	4	<MDC	<DCGL
2	7.00	9.00	26.00	-14	3	-1	-13	<MDC	<DCGL
3	7.00	10.00	22.00	-14	4	-8	-13	<MDC	<DCGL
4	12.00	236.00	449.00	-5	354	738	-4	**>MDC**	<DCGL
5	5.00	10.00	19.00	-18	4	-14	-16	<MDC	<DCGL
6	5.00	8.00	19.00	-18	1	-14	-16	<MDC	<DCGL
7	5.00	9.00	32.00	-18	3	9	-16	<MDC	<DCGL
8	5.00	5.00	24.00	-18	-3	-5	-16	<MDC	<DCGL
9	4.00	4.00	18.00	-20	-5	-15	-18	<MDC	<DCGL
10	8.00	7.00	26.00	-13	0	-1	-11	<MDC	<DCGL
11	8.00	7.00	23.00	-13	0	-7	-11	<MDC	<DCGL
12	4.00	10.00	19.00	-20	4	-14	-18	<MDC	<DCGL
13	4.00	8.00	18.00	-20	1	-15	-18	<MDC	<DCGL
14	8.00	8.00	27.00	-13	1	0	-11	<MDC	<DCGL
15	9.00	3.00	23.00	-11	-7	-7	-9	<MDC	<DCGL
16	5.00	7.00	25.00	-18	0	-3	-16	<MDC	<DCGL
17	8.00	15.00	31.00	-13	12	7	-11	<MDC	<DCGL
18	5.00	4.00	20.00	-18	-5	-12	-16	<MDC	<DCGL

Philotechnics Analytical Worksheet

Bayer Pharmaceuticals
400 Morgan Lane

Scintillation Counter
Laboratory Areas

			CPM	H-3	S-35	Gross Beta	I-125	Comment	
Sample	Chan A	Chan B	Chan C	DPM / 100 cm2					
19	2.00	5.00	11.00	-24	-3	-28	-21	<MDC	<DCGL
20	4.00	8.00	24.00	-20	1	-5	-18	<MDC	<DCGL
21	4.00	13.00	26.00	-20	9	-1	-18	<MDC	<DCGL
RB-224									
1	4.00	13.00	28.00	-20	9	2	-18	<MDC	<DCGL
2	2.00	6.00	15.00	-24	-2	-21	-21	<MDC	<DCGL
3	4.00	13.00	25.00	-20	9	-3	-18	<MDC	<DCGL
4	7.00	8.00	32.00	-14	1	9	-13	<MDC	<DCGL
5	7.00	6.00	25.00	-14	-2	-3	-13	<MDC	<DCGL
6	1.00	13.00	23.00	-26	9	-7	-23	<MDC	<DCGL
7	6.00	5.00	16.00	-16	-3	-19	-14	<MDC	<DCGL
8	6.00	10.00	23.00	-16	4	-7	-14	<MDC	<DCGL
9	5.00	9.00	25.00	-18	3	-3	-16	<MDC	<DCGL
10	6.00	8.00	24.00	-16	1	-5	-14	<MDC	<DCGL
11	7.00	10.00	25.00	-14	4	-3	-13	<MDC	<DCGL
12	6.00	11.00	25.00	-16	6	-3	-14	<MDC	<DCGL
13	16.00	11.00	24.00	3	6	-5	2	<MDC	<DCGL
14	3.00	6.00	22.00	-22	-2	-8	-19	<MDC	<DCGL
15	2.00	9.00	21.00	-24	3	-10	-21	<MDC	<DCGL
16	5.00	8.00	23.00	-18	1	-7	-16	<MDC	<DCGL
17	8.00	7.00	24.00	-13	0	-5	-11	<MDC	<DCGL
18	15.00	8.00	31.00	1	1	7	1	<MDC	<DCGL
19	17.00	13.00	40.00	5	9	23	4	<MDC	<DCGL

APPENDIX H

DandD Code Dose Calculations

DandD Building Occupancy Scenario

DandD Version: 2.1.0
Run Date/Time: 8/9/2006 10:53:03 AM
Site Name: Bayer
Description: B-24 Building
FileName:C:\Documents and Settings\Owner\My Documents\Philo\Client Info\Bayer\400 Morgan Lane.mcd

Options:

Implicit progeny doses NOT included with explicit parent doses
Nuclide concentrations are distributed among all progeny
Number of simulations: 100
Seed for Random Generation: 8718721
Averages used for behavioral type parameters

External Pathway is ON
Inhalation Pathway is ON
Secondary Ingestion Pathway is ON

Initial Activities:

Nuclide	Area of Contamination (m^2)	Distribution
14C	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Max Static DPM Value		Value 3.33E+03
3H	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Max LSC Value		Value 1.95E+02
33P	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Max Static DPM Value		Value 3.33E+03
125I	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Max Static DPM Value		Value 3.58E+03

Site Specific Parameters:

General Parameters:

None

Correlation Coefficients:

None

Summary Results:

90.00% **of the** 100 **calculated TEDE values are <** 1.55E-01 **mrem/year .**
The 95 % Confidence Interval for the 0.9 **quantile value of TEDE is** 1.48E-01 **to** 1.63E-01 **mrem/year**

Bayer HealthCare
Pharmaceuticals

Docket No. 03030292

Control No. 140429

Bayer Pharmaceuticals Request for License Termination

Additional Information

Response documentation for Items 6-12

Survey Documentation

Response to Item #6

Bayer

Pharmaceutical Division

Internal Memorandum

Date: September 8, 1999

To: Alan Miller

From: June Tamkin JMT

Subject: LLRW Decay-in-Storage Decommissioning Project Update

As per your request, the following information is being provided for your formal files. We received a report from Mr. Paul R. Steinmeyer, Radiation Safety Associates, Inc. indicating that the radiological survey results of RB014X (Decay-in-Storage area) were found to be free of radioactive contamination. Therefore, based upon their findings, the area is eligible for unrestricted release to the general public. This is to formally notify you that the contractors may begin their work in this area. In addition, a copy of the report from Radiation Safey Associates is also being forwarded to you for inclusion in your formal file. This information will also be permanently kept on file with the Radiation Safety Officer's records and with the Nuclear Regulatory Commission's License Amendment Approval which was granted on August 19, 1999. Please let us know if you have any questions or concerns. We will be happy to help to facilitate this project. As always, your support and cooperation are very much appreciated.

cc: B. Ford
G. Toczylowski
G. Wilson

Radiation Safety Associates, Inc.
19 Pendleton Drive, P.O. Box 107 • Hebron, CT 06248

September 8, 1999

June Tamkin
Radiation Safety Officer
Bayer Corporation
400 Morgan Lane
West Haven, Connecticut 06516

Dear Ms. Tamkin;

This letter is to inform you in writing results from the radiological survey of RB 014X (the decay-in-storage area). All surfaces have been assessed via direct measurements of total surface contamination and by wipe sample assessment of removable contamination. Areas assessed included floors, walls, and the ventilation system ducting (interior and exterior). No detectable activity was found by direct measurement or wipe sample assessment. While the final report has yet to be issued, all data generated during the survey has been assessed and evaluated. It is my conclusion, based on this data, that there is no detectable radiological contamination in this area, and that the area is eligible for unrestricted release.

As always, if you have further questions or would like more information, please do not hesitate to contact me. I hope to have the final report to you within a few days.

Sincerely,

Paul R. Steinmeyer
Health Physicist

Phone (860) 228-0487 • FAX (860) 228-4402

BAYER CORPORATION

RADIATION SAFETY RELEASE FORM

On 7/29, the following Lab - RB 111
(Date) (Laboratory or equipment, etc.)

was surveyed by the Radiation Safety Department. At the time of the survey, no radioactive contamination or sources were detected. The Radiation Safety Department has released this lab or equipment, to the Building Maintenance, Sanitary Maintenance, or Warehouse Personnel for maintenance, cleaning or moving and handling.

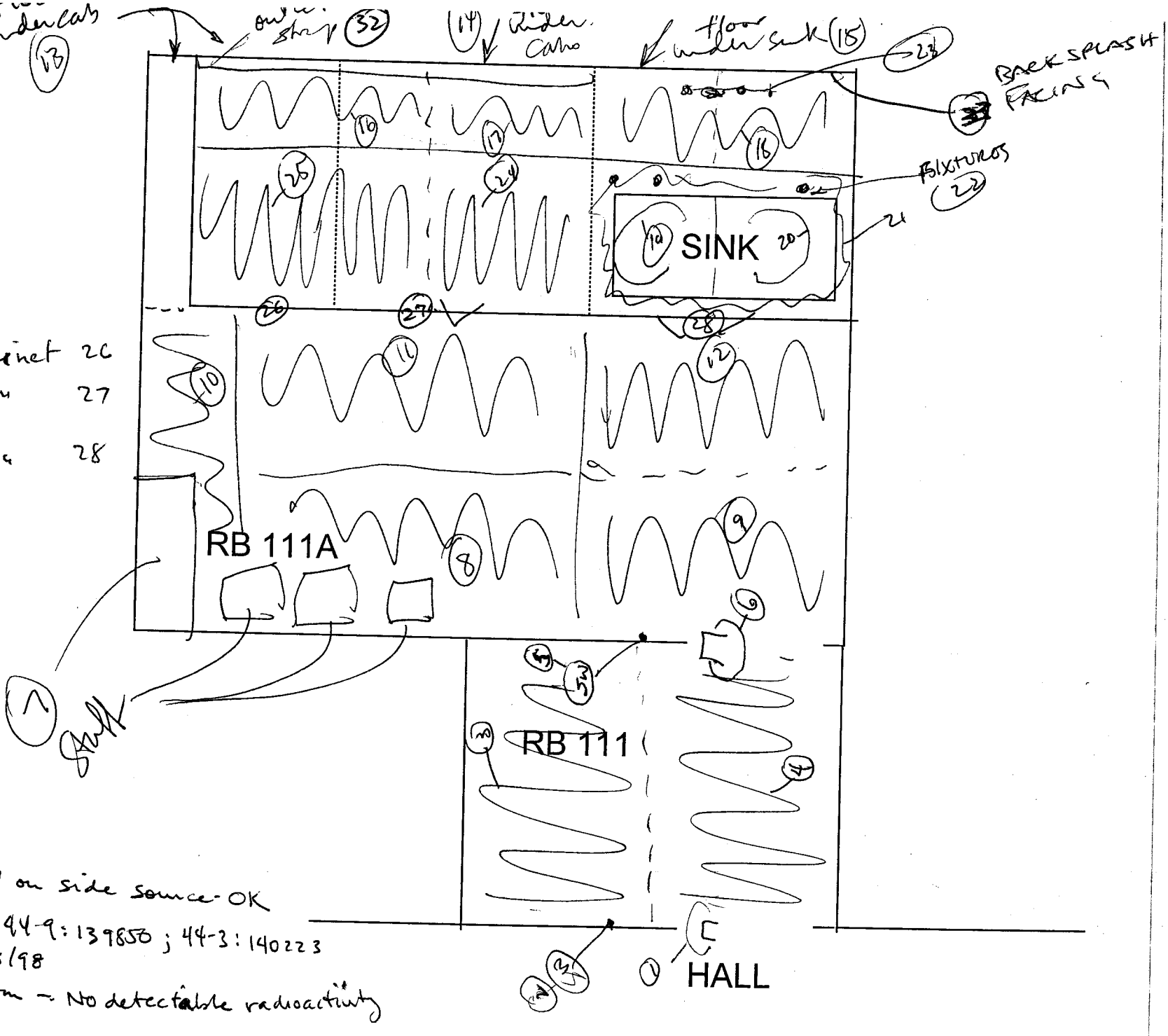
Ronald J Wallace
Radiation Safety Department

7/29/98
Date

FORMS/RELEASE.WPD 10/3/97

7/28/98

29 Inside cabinet 26
30 " " 27
31 " " 28
34 GLVS



Meter Survey

check 44-3 & 44-7 on side source - OK

Meter : 137147; 44-9: 139850 ; 44-3: 140223

Calib. date : 3/18/98

G.M Survey of room - No detectable radioactivity

RB 111 & 111A

ID=WIPE TEST 29 JUL 1998 09:04

USER: 1 COMMENT:GREAT INSTRUMENT

PRESET TIME : 1.00

DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	ID#	: NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	AQC	: NO	CYCLE REPEATS :	1	DISK	: STD
SCINTILLATOR:	LIQUID	LUMEX	: NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
1	**-1	1.00	63.6	29.00	37.14	41.00	31.23	65.00	24.81	1.14	1.53
2	**-2	1.00	64.4	21.00	43.64	38.00	32.44	59.00	26.04	1.23	3.05
3	**-3	1.00	91.3	31.00	35.92	39.00	32.03	58.00	26.26	1.49	4.61
4	**-4	1.00	81.2	23.00	41.70	38.00	32.44	60.00	25.82	1.37	6.15
5	**-5	1.00	65.7	28.00	37.80	44.00	30.15	58.00	26.26	1.32	7.69
6	**-6	1.00	65.2	26.00	39.22	41.00	31.23	62.00	25.40	1.18	9.22
7	**-7	1.00	80.0	26.00	39.22	42.00	30.86	56.00	26.73	1.32	10.76
8	**-8	1.00	78.4	23.00	41.70	35.00	33.81	56.00	26.73	1.37	12.29
9	**-9	1.00	81.5	29.00	37.14	42.00	30.86	64.00	25.00	1.66	13.84
10	**-10	1.00	73.6	23.00	41.70	34.00	34.30	50.00	28.28	1.62	15.37
11	**-11	1.00	82.0	27.00	38.49	40.00	31.62	60.00	25.82	1.49	16.94
12	**-12	1.00	73.6	18.00	47.14	26.00	39.22	44.00	30.15	[illegible]	[illegible]
13	**-1	1.00	67.4	33.00	34.82	44.00	[illegible]	73.00	23.41	1.03	20.17
14	**-2	1.00	75.7	21.00	43.64	31.00	35.92	58.00	26.26	1.20	21.72
15	**-3	1.00	66.7	25.00	40.00	40.00	31.62	65.00	24.81	1.17	23.27
16	**-4	1.00	83.5	22.00	42.64	43.00	30.50	62.00	25.40	1.10	24.82
17	**-5	1.00	75.5	24.00	40.82	33.00	34.82	59.00	26.04	1.26	26.39
18	**-6	1.00	94.2	28.00	37.80	42.00	30.86	60.00	25.82	1.42	27.93
19	**-7	1.00	100.9	25.00	40.00	38.00	32.44	55.00	26.97	1.75	29.49
20	**-8	1.00	98.6	26.00	39.22	39.00	32.03	68.00	24.25	1.36	31.04
21	**-9	1.00	111.1	18.00	47.14	32.00	35.36	51.00	28.01	2.71	32.59
22	**-10	1.00	80.0	26.00	39.22	38.00	32.44	58.00	26.26	2.20	34.15
23	**-11	1.00	85.2	20.00	44.72	35.00	33.81	52.00	27.74	1.64	35.70
24	**-12	1.00	79.0	27.00	38.49	36.00	33.33	44.00	30.15	1.95	37.24
25	**-1	1.00	74.6	23.00	41.70	34.00	34.30	47.00	29.17	1.62	38.90
26	**-2	1.00	72.2	24.00	40.82	39.00	32.03	54.00	27.22	1.89	40.42
27	**-3	1.00	84.6	16.00	50.00	25.00	40.00	50.00	28.28	1.83	42.01
28	**-4	1.00	83.3	19.00	45.88	41.00	31.23	64.00	25.00	1.52	43.55
29	**-5	1.00	73.5	23.00	41.70	32.00	35.36	57.00	26.49	1.54	45.09
30	**-6	1.00	86.6	25.00	40.00	40.00	31.62	55.00	26.97	2.22	46.63
31	**-7	1.00	77.2	30.00	36.51	37.00	32.98	57.00	26.49	1.31	48.19
32	**-8	1.00	85.3	20.00	44.72	35.00	33.81	66.00	24.62	2.22	49.73
33	**-9	1.00	85.7	21.00	43.64	40.00	31.62	54.00	27.22	2.20	51.30
34	**-10	1.00	67.3	26.00	39.22	41.00	31.23	56.00	26.73	1.49	52.86

3/4 E	38	**-2	1.00	69.0	26.00	39.22	44.00	30.15	63.00	25.20	1.09	56.06
	MISSING SAMPLE											
3H	40	**-4	1.00	61.0	79776.00	0.71	79789.00	0.71	79810.00	0.71	0.00	57.67
14C	41	**-5	1.00	62.0	59118.00	0.82	148871.0	0.52	148895.0	0.52	0.00	59.27
36C	42	**-6	1.00	71.2	10445.00	1.96	111585.0	0.60	224748.0	0.42	0.00	60.92
12C	43	**-7	1.00	75.6	8753.00	2.14	9946.00	2.01	9964.00	2.00	0.00	62.47
BLANK	44	**-8	1.00	66.2	30.00	36.51	44.00	30.15	62.00	25.40	1.05	64.03

Laboratory Survey Calculations Lab: RB 111 Survey Date: 7/29/98

LSC: Beckman in RB 012B
Printout: BKM 7/29/1998;9:04

	channel A	channel B	channel C
CC (cpm)	39	59	81
MDA (dpm)	26	17	19
EFF 15jul98	0.47	0.93	0.99
BKG (cpm)	27	44	63

(✓)yes ( )no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

If no, only the highest count in each column that is above critical count will be evaluated below:

EVALUATIONS OF HIGH COUNTS:

A. The highest Channel A count is NA cpm / 100 cm^2.

(NA cpm - 27 cpm) / 0.47 = #VALUE! dpm / 100cm^2

_____ less than NRC action level of 220 dpm / 100 cm^2.
_____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

B. The highest Channel B count is NA cpm / 100 cm^2.

(NA cpm - 44 cpm) / 0.93 = #VALUE! dpm / 100cm^2

_____ less than NRC action level of 220 dpm / 100 cm^2.
_____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

C. The highest Channel C count is NA cpm / 100 cm^2.

(NA cpm - 63 cpm) / 0.99 = #VALUE! dpm / 100cm^2

_____ less than NRC action level of 220 dpm / 100 cm^2.
_____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

Signed: Ronald G. Wallace Date: 7/29/98

Note: As a conservative practice, the NRC action level of 220 dpm / 100cm^2 is chosen for all isotopes.

RADIATION SAFETY SURVEY CHECKLIST

AUTHORIZED P.I. : BILL GALDENZI ROBERT ROACH

INSTITUTE: HES

SURVEYED LABS: RA-105F&G

DATE SURVEYED: 6-23-03

SURVEYOR: RR

YES	NO	N/A	CORRECTIVE ACTION REQUIRED	CORRECTIVE ACTION TAKEN	
✓					*Proper signage posted on laboratory doors,equipment, etc.?*
✓					*NRC form 3 available?*
	✓				*Evidence of eating, smoking, or drinking?* Decommission
		✓			*Authorized sink disposals documented?*
	✓				*Radioactive waste found in regular trash ?*
✓					*Monthly laboratory surveys performed and documented?* *Survey records not available for:* _____
✓					*Protective garments worn in laboratory?*
✓					*Radiation dosimeters worn?*
✓					*Individuals present during survey properly trained to work with radioisotopes? If not, names of individuals requiring training:* _____
✓					*Contact person:* Lab Safety
		✓			*Operational meter available? Make:* _____ *Model:* _____ *Serial #:* _____ *Cal Date:* _____
					Radioactive contamination found? *Name of person informed:* _____ *Date:* _____

Authorized isotopes in Laboratory: 3-H, 14-C, 32-P, 33-P, 35-S, 125-I

Isotopes currently being used: _____

Comments: If corrective actions are required as checked above, inform the Principal Investigator to complete the corrective actions and return the results to the Laboratory Safety Department within two weeks.

_____

_____

_____

GM meter survey performed of areas where radionuclides are used and/or stored. Only above background readings are shown in CPM on the attatched diagram. Instrument background readings ranged between 50-75 CPM (probe 44-9) and 500 CPM (probe 44-3).

Radiation safety instrument used: *Make:* Ludlum *Model:* 3 *Serial #:* 118728

No Readings Above Background Detected

Probe: 44-3 *Serial #:* 102690

Probe: 44-9 *Serial #:* 119193

Calibration date: 12 mar 04

☐ *Random wipe tests were performed on areas including door handles, benches, sink handles, floors, lab equipment, etc., that would be suspect of radioactive contamination. Positive results are recorded in DPM/100cm2 below. The numbers indicated on the scintillation counter printout correspond to numbers on the diagram.*

Total # of wipe tests: 37

If radioactive contamination was found:

Number of wipe tests greater than NRC action level of 220 dpm/100cm^2 0

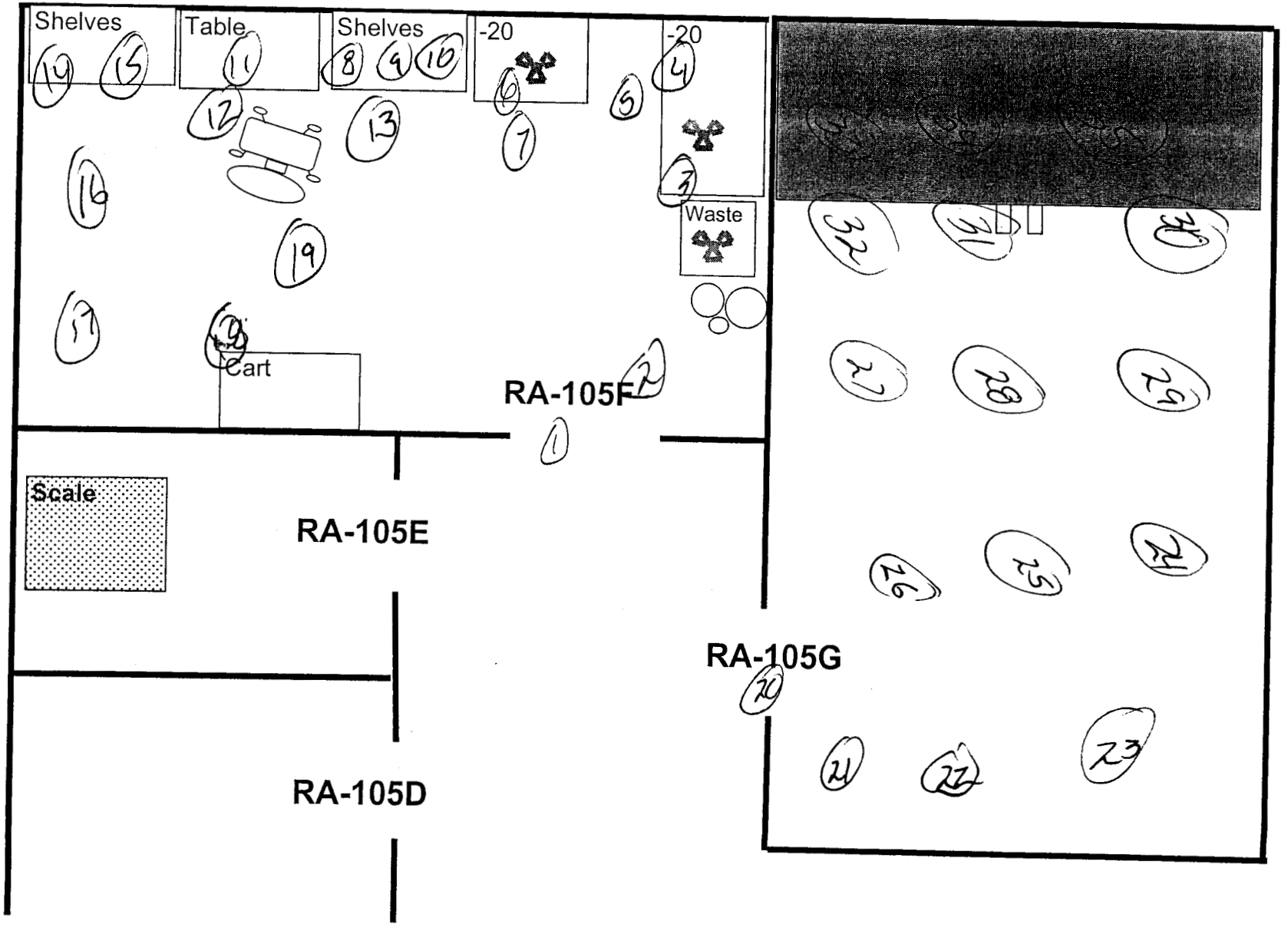
Number of wipe tests less than NRC action level of 220 dpm/100cm^2 37

☒ *Follow-up survey completed.* *Date:* NA

(Contamination above 220 dpm/100cm^2 requires a follow up survey by Laboratory Safety.)

Comments: Decomissioned

Date_____



36 + 37 Tray for Defrosting Freezers

Protocol #:15 Name:Wipe Test - DPM 23-Jun-2003 09:58
Region A: LL-UL= 0.0-30.0 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL=30.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0- 0.0 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Tin = 1.00 QIP = tSIE/AEC ES Terminator = Count
Conventional DPM
Nuclide 1 = 136505 Nuclide 2 = 160017
Warning: User program changes may have invalidated DPM calculation

S#	TIME	DPM1	DPM2	tSIE
1	1.00	37.31	9.61	410.
2	1.00	20.44	7.74	399.
(1 missing vial)				
4	1.00	34.59	12.49	552.
5	1.00	21.17	5.39	532.
6	1.00	40.56	7.18	530.
7	1.00	34.10	7.28	500.
8	1.00	13.54	10.81	525.
9	1.00	22.55	7.23	516.
10	1.00	31.06	3.59	524.
11	1.00	26.96	5.41	517.
12	1.00	30.26	1.79	521.
13	1.00	24.40	5.42	513.
14	1.00	30.36	1.80	519.
15	1.00	24.33	10.83	519.
16	1.00	18.99	10.83	518.
17	1.00	23.00	8.98	533.
18	1.00	8.03	5.39	533.
19	1.00	53.94	5.51	483.
20	1.00	37.13	7.30	495.
21	1.00	24.11	5.40	522.
22	1.00	14.50	7.23	515.
23	1.00	11.98	7.28	503.
24	1.00	32.21	5.41	519.
25	1.00	17.81	7.54	488.
26	1.00	26.99	14.63	493.
27	1.00	10.21	9.13	497.
28	1.00	24.16	14.62	495.
29	1.00	18.33	9.08	506.
30	1.00	38.83	7.44	467.
31	1.00	0.00	14.64	494.
32	1.00	23.33	5.59	465.
33	1.00	39.24	7.25	506.
34	1.00	14.76	12.72	504.
35	1.00	30.89	1.80	508.
36	1.00	29.40	9.09	502.
37	1.00	19.79	12.61	524.
38	1.00	18.10	9.04	516.
39	1.00	27.31	10.87	510.
40	1.00	42.06	7.46	463.
(2 missing vials)				
53	1.00	135952.	0.00	927. 3H
54	1.00	0.00	78555.0	915. 14C

3 BKG

3 STD'S

RA-105 F&G Decommissioning Survey

ALL COUNTS ARE < 100 dpm/100cm²

RB-232 Decommissioning Wipe Test Sample Locations

9/2/1999 16:05 RB-232 - Hoods

1. North Hood - Sample 1
2. " - Sample 2
3. " - Sample 3
4. " - Sample 4
5. " - Sample 5
6. " - Sample 6
7. " - Sample 7
8. " - Sample 8
9. " - Sample 9
10. " - Sample 10
11. " - Sample 11
12. " - Sample 12
13. " - Sample 13

1. South Hood - Sample 1
2. " - Sample 2
3. " - Sample 3
4. " - Sample 4
5. " - Sample 5
6. " - Sample 6
7. " - Sample 7
8. " - Sample 8
9. " - Sample 9
10. " - Sample 10
11. " - Sample 11

10/15/1999 9:40 RB-232 - Floor) See Attached Diagram

1. Location -1
2. Location -2
3. Location -3
4. Location -4
5. Location -5
6. Location -6
7. **Location -7**
8. Location -8

10/15/1999 11:47 RB-232 Room amd Equipment

1. Bench top - on right near door
2. Eppendorf Centrifuge - Exterior
3. Eppendorf Centrifuge - Interior
4. Scotlab tray
5. Gilson Fractionator
6. Water bath Cover
7. Water bath
8. Water bath remote control
9. **Tube racks**
10. Plexiglass boxes
11. Large Plexiglass - interior
12. Large Plexiglass - exterior
13. gradient Maker
14. Lead Pigs
15. Plexiglass # 1
16. Plexiglass # 2
17. **Plexiglass # 3**
18. Bench top - on right near door
19. Beckman Centrifuge - Exterior
20. Beckman Centrifuge - Inside Lid
21. Beckman Centrifuge - Interior
22. Nalgene Bucket - Exterior
23. Nalgene Bucket - Interior
24. Plexiglass # 4
25. **Waterbath**
26. **Plexiglass # 5**
27. Shaker Holder
28. **Ring Stand # 1**
29. **Beaker**
30. **Stainless Steel Bench left of window**
31. Water bath cord
32. Bench in front of window
33. Lead Foil
34. Racks
35. Nalgene Container
36. Water Sample From Water bath

10/15/1999 13:14 Recounts

1. Sample - 9
2. **Sample - 16**
3. Sample - 25
4. Sample - 26
5. Sample - 28
6. Sample - 29

10/28/1999 15:40 RB-232 Hood amd Equipment

1. In Hood Work area
2. " Left Side
3. " Right side
4. " back
5. " sash
6. Lead Piece # 1
7. " # 2
8. " # 3
9. " # 4
10. " # 5
11. " # 6
12. " # 7
13. " # 8
14. Cup sink
15. Tubing
16. Cabinet under hood - Interior
17. Air Sampling Pump
18. Lead Piece # 9
19. " # 10
20. " # 11
21. " # 12
22. Hood Filter Holder
23. Hood vacuum Lines
24. Lead Piece # 13
25. Styrofoam boxes
26. Hood - Exterior
27. Exterior cabinets under hood
28. Plexiglass box 3 - post decon - Exterior
29. **Plexiglass box 3 - post decon - Interior**
30. Plexiglass box 5 - post decon - Exterior
31. Plexiglass box 5 - post decon - Interior
32. **Miscellaneous items in box**

10/29/1999 11:46 RB-232 Room amd Equipment

1. Drawers-Right side of lab In Top L
2. Drawers-Right side of lab In 2nd L
3. Drawers-Right side of lab In 3rd L
4. Drawers-Right side of lab In Bot L
5. Drawers-Right side of lab In Top R
6. **Drawers-Right side of lab In 2nd R**
7. Drawers-Right side of lab In 3rd R
8. Drawers-Right side of lab In Bot R
9. Drawers-Right side of lab Ext Left
10. Drawers-Right side of lab Ext Right
11. Bench top Close to door
12. Bench top Over Drawers
13. **Corning Tubes**
14. Vial Shields and forceps
15. Gloves and Pipettor
16. Cell scrapers, microtubes, bio bags
17. Box of miscellaneous items
18. tank clamp
19. Plexiglass box # 6
20. recorder and filters
21. Incubator shelves
22. large piece of leaded plexiglass
23. Scotlab box interior
24. **Scotlab box exterior**
25. pump and external tubes
26. Pump - internal tubes

11/2/1999 13:30 RB-232 Room amd Equipment

1. Drawers - Left side of lab In Top L
2. Drawers - Left side of lab In 2nd L
3. Drawers - Left side of lab In 3rd L
4. Drawers - Left side of lab In Bot L
5. Drawers - Left side of lab In Top R
6. Drawers - Left side of lab In 2nd R
7. Drawers - Left side of lab In 3rd R
8. Drawers - Left side of lab In Bot R
9. Drawers - Left side of lab Ext Left
10. Drawers - Left side of lab Ext Right
11. Interior of Cabinets above drawers
12. Exterior of cabinets ablve drawers
13. Regulator Box and Saran wrap
14. Interior of rotor
15. **Beckman Microfuge - Interior**
16. Beckman Microfuge - Exterior
17. Vacuum Pump
18. Stirrer
19. Pipette tips
20. Bag of pipette tips
21. Corning Hot Plate
22. Line Filter
23. Gell Apparatus
24. Interior of HPLC 1040A
25. Exterior of HPLC 1040A
26. Lift Away bottle
27. NaOH tank clamp
28. Sink area around basin
29. **Sink area basin sides**
30. **Sink area basin bottom**
31. Sink area faucet and handles
32. splashguard
33. Vac Pump oil, Test tube rack, flasks
34. **Sink Drain**
35. Blue test tube racks

11/3/1999 12:43 RB-232 Equipment

1. Big Empty box
2. Barnstead thermolyne Box
3. Box of Miscellaneous items
4. Box of Sleeve Covers
5. Box of new Chromotography Equip.
6. Nitrogen Regulator
7. Mouse pad and paper
8. Control Station
9. Unopened pipette packages
10. thermometer and box of caps
11. Thin Bie lead box
12. regulator
13. Lead piece # 1
14. Lead piece # 2
15. Plexiglass Tube rack
16. Small Scotlab box
17. Needle Racks

11/5/1999 13:04 RB-232 Equipment

1. **Large Waste Plexiglass Box**
2. regulator
3. Tank Head cap
4. Radiation Sign
5. test Tube Racks
6. Plastic Dome
7. Tube Rotator
8. Tube Holder
9. Grey Chair
10. Large Carboy - Exterior
11. Large Carboy - Interior

11/9/1999 9:14 RB-232 Room amd Equipment

1. Bench top by sink
2. Bench By Door
3. Exerior of air pumps and hoses
4. Hood sink
5. Filter Holder
6. Interior of cabinet below hood
7. Dissassembled hood piece
8. Interior of filter holder hose
9. Interior of hose inside hood
10. Exterior of refrigerator

11/9/1999 RB-232 - Recounts 9:53

1. Sample 2
2. Sample 5
3. Sample 7
4. Ron's Meter

11/9/1999 12:44 RB-232 Items

1. Tubes in Biological Waste Container
2. **Rack full of snap caps**
3. Outside of rack
4. Plate

11/9/1999 15:08 RB-232 Items

1. I-125 Stock Vial
2. **Plexiglass Boxes 7-9**
3. " 10-12
4. " 13-15
5. Plexiglass Box 1 & Lead Box 1
6. Lead Box 2
7. Ice trays
8. **Lead Box # 3**
9. lead sheet
10. White tube rack
11. Ring Stand # 1 - Post Decon.
12. **Ring Stand 2**
13. Bottle 1
14. Tubing 1
15. Bottle 2
16. **Bottle 3**
17. Pipette man
18. Bottle 4
19. Tubing 2
20. Styrofoam box
21. Thermometer and stopper
22. Bottle 5
23. **Beaker 1**
24. Bottle 6
25. Beaker 2
26. Tubing w/ stopper and pipette
27. Bottle 7
28. Plexiglass box 1
29. Hose and top of lead pig
30. Plastic rack 1
31. Plastic rack 2
32. **Bottle 9**
33. **Bottle 10**
34. Bottle 8
35. Plexiglass box # 16
36. Plexiglass box # 17
37. Plexiglass box # 18
38. Glass beakers and flask
39. Plate and tubing
40. **Plastic beakers**
41. Cylindrical plexiglass container

11/10/1999 14:29 RB-232 Items and equipment

1. Hose Clamps
2. Plexiglass box 7 - Post Decon
3. **Plexiglass box 8 - Post Decon**
4. **Plexiglass box 9 - Post Decon**
5. Hood Interior - work Surface
6. Hood Interior - Sides and back
7. Hood Interior - Sash
8. Hood Exterior
9. Exterior of Cabinet under hood
10. Interior of Cabinet under hood
11. Lead under hood
12. Box "A"
13. Exterior surface of refrigerator
14. Interior of refrigerator door
15. Box "B"
16. Interior surface of refrigerator
17. Box "C"
18. Interior of "big" refrigerator Door
19. Interior of "big" refrigerator
20. Exterior of right cabinets
21. Interior of left Cabinet
22. Interior of right Cabinet
23. MIPP lead
24. **Stopper**
25. **Large Plexiglass box # 19**
26. Ice bucket
27. Scotlab box - Post Decontamination
28. Exterior of beckman 1
29. Exterior of beckman 2
30. **Beckman Microfuge - Post Decon**
31. Interior Beckman 1
32. Exterior of waterbath
33. Interior of waterbath
34. interior of waterbath lid
35. Ice 1
36. Ice 2

11/10/1999 15:40 RECOUNTS

1. Recount Sample 2
2. Recount Sample 3
3. Recount Sample 4
4. Recount Sample 5
5. Recount Sample 12
6. Recount Sample 24
7. Recount Sample 25
8. Recount Sample 27
9. Recount Sample 30

11/11/1999 18:02 RB-232 Items and equipment

1. Tall Chair
2. Short Chair
3. Beaker - Post Decon.
4. Hood Piece
5. Biological waste cover
6. Oil
7. **Plexiglass box # 8 - post docon**
8. Plexi box # 9 Int - post docon 2
9. Plexi box # 9 Ext - post docon 2
10. **Plexiglass Box # 20**
11. **Top # 1**
12. Bottom of Rainer box
13. Top # 2
14. Large plexiglass box - Exterior
15. **Large plexi box 19 - Post Decon**
16. Centrifuge - Interior
17. **Centrifuge - Rotor and well**
18. **Centrifuge - Tubes**
19. Tank Holder
20. Big Shield

11/16/1999 10:55 RB-232 Room and Equipment Set 1

1. Box
2. Miscellaneous items
3. Syringe
4. Microfuge
5. Phone
6. **Stand**
7. **Clamp 1**
8. **Clamp 2**
9. **Wrench**
10. **Clamp 3**
11. **Clamp 4**
12. **Stopper**
13. **Clamp 5**
14. Area around Beckman Microfuge
15. Beckman Microfuge sides
16. Splash Guard
17. **Basin**
18. **Faucet Handles**
19. Foot Pedals
20. Sink - Front, Left , and legs
21. **Rotor for Beckman Microfuge**
22. Rotor Cord and outlet box
23. Tube holder for Beckman Microfuge

11/16/1999 14:46 RB-232 Roon and Equipment Set 2

1. faucet Handles
2. Sink drain
3. Top # 1 - Post Decon
4. Plexi box # 20 Int bot - post decon
5. Plexi box # 20 Int front - post decon
6. Plexi box # 20 Int back - post decon
7. Plexi box # 20 Int Left - post decon
8. Plexi box # 20 Int right - post decon

11/16/1999 15:51 RB-232

1. Door
2. 1st Bench on right
3. 2nd Bench on right
4. 3rd Bench on right
5. 4th Bench on right
6. Right Wall
7. Left abench and sink handles
8. Floor under benches center
9. Floor under benches Left
10. Floor by window (Right)
11. Floor by back hood
12. floor by front hood
13. floor by left bench
14. Floor in front of sink
15. Floor in front of refrigerator
16. Floor by door
17. Door Knob
18. Threshold
19. I-125 Vial
20. Interior if Vial
21. Recount Set 2 sample 3
22. Recount Set 2 sample 6

11/18/1999 7:42 RB-232 Duct

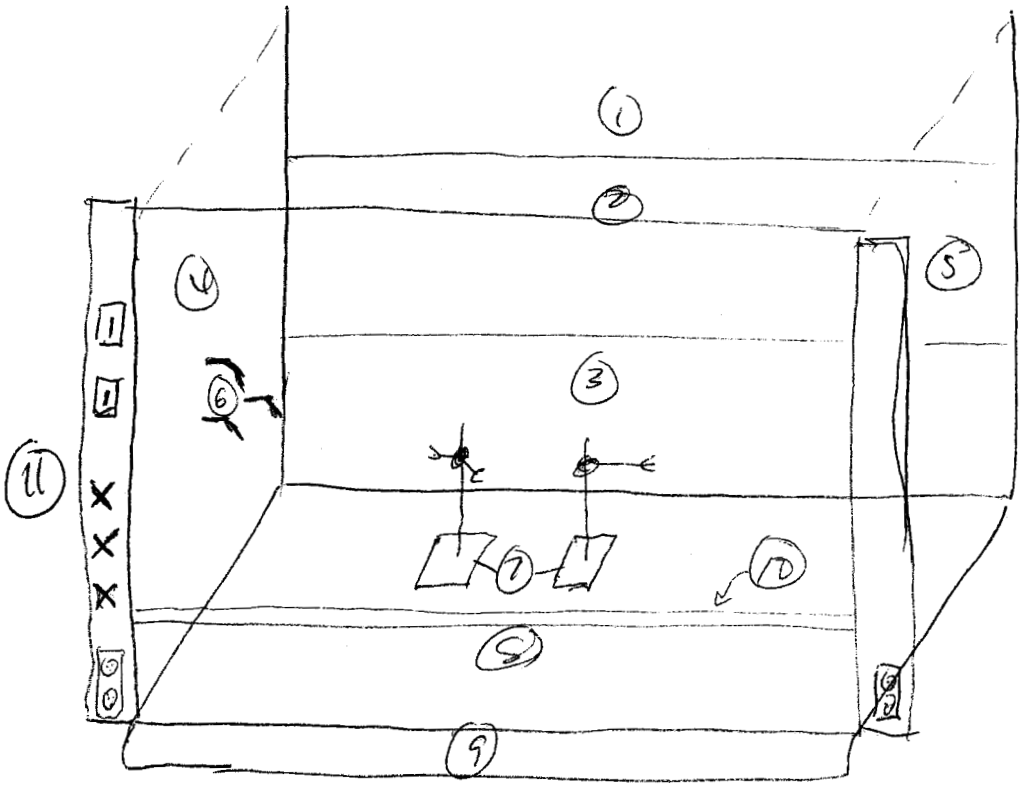
1. RB-232 Iodination Hood Duct

11/18/2006 11:42 RB-232 Drain

1. Water Sample (0.4 ml)
2. Swab of drain interior

9/2/99

RB 232
Hood # South



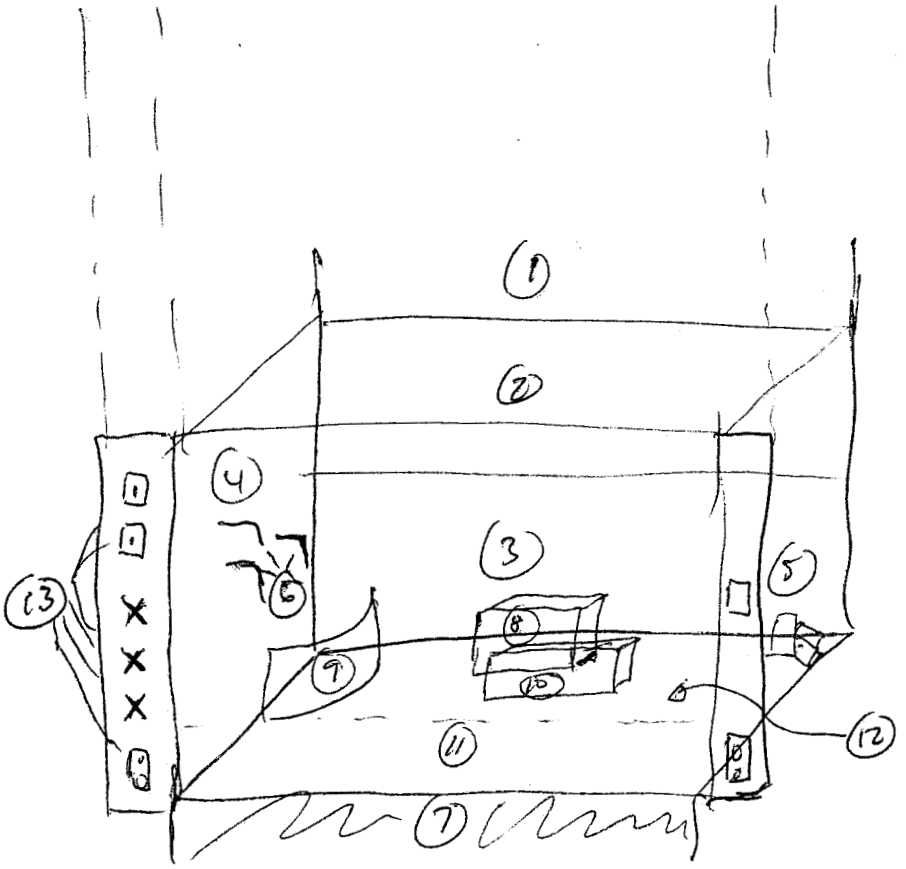
No readings
above background

Model 3 s/n 136592
cal 06 Jul 99
44-9 s/n 139874

wipe	location
1	top back
2	mid back
3	low back
4	lt sidewall
5	rt side wall
6	nozzles
7	ring stands
8	bottom
9	bottom lip
10	sash
11	Knobs & switches

9/2/99

RB 232
HOOD # N



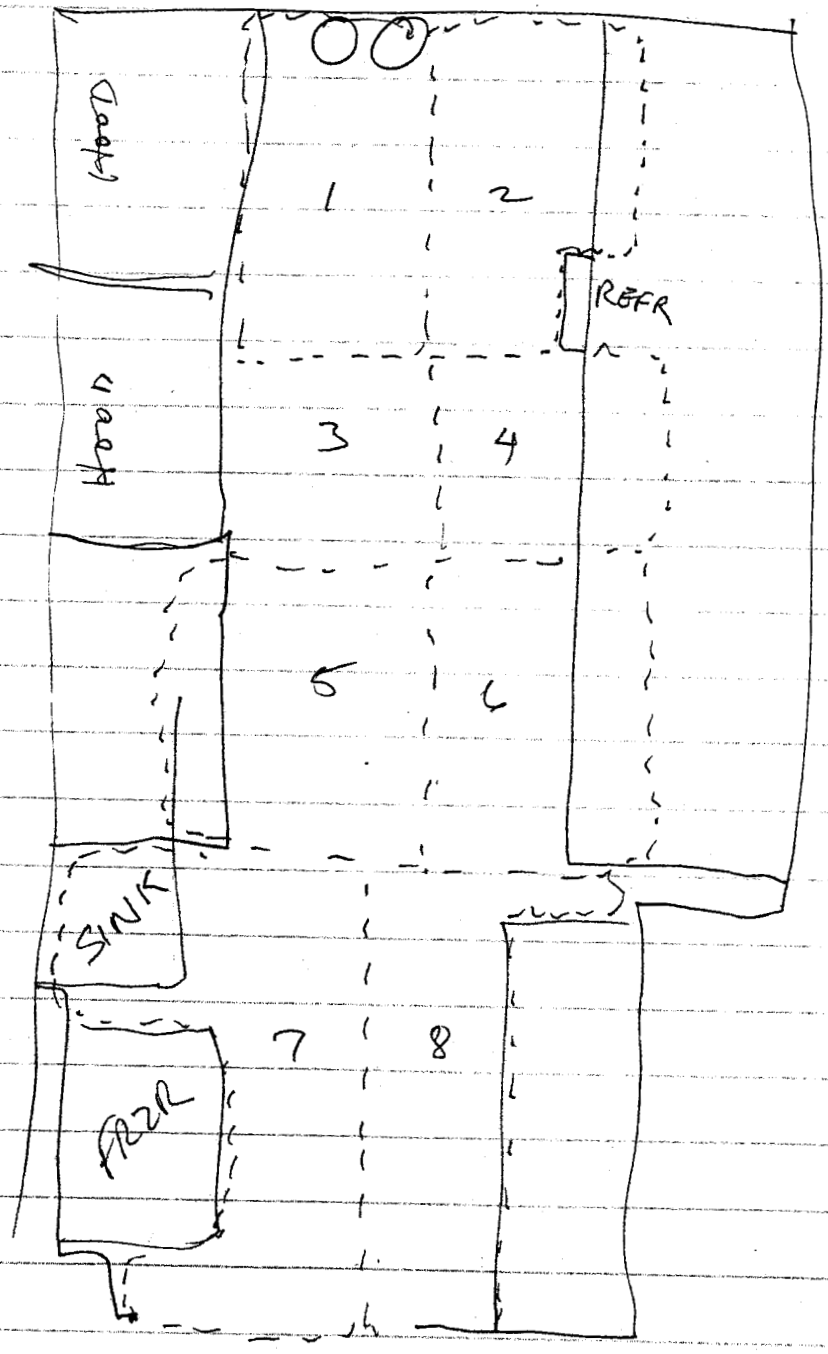
wipe	location
1	top back
2	mid back
3	low back
4	lt sidewa
5	rt sidewal
6	Nozzles
7	bot lip
8	Sharps box
9	Orange shie
10	leaded plexi
11	bottom
12	Sash.
13	Knobs + Switches

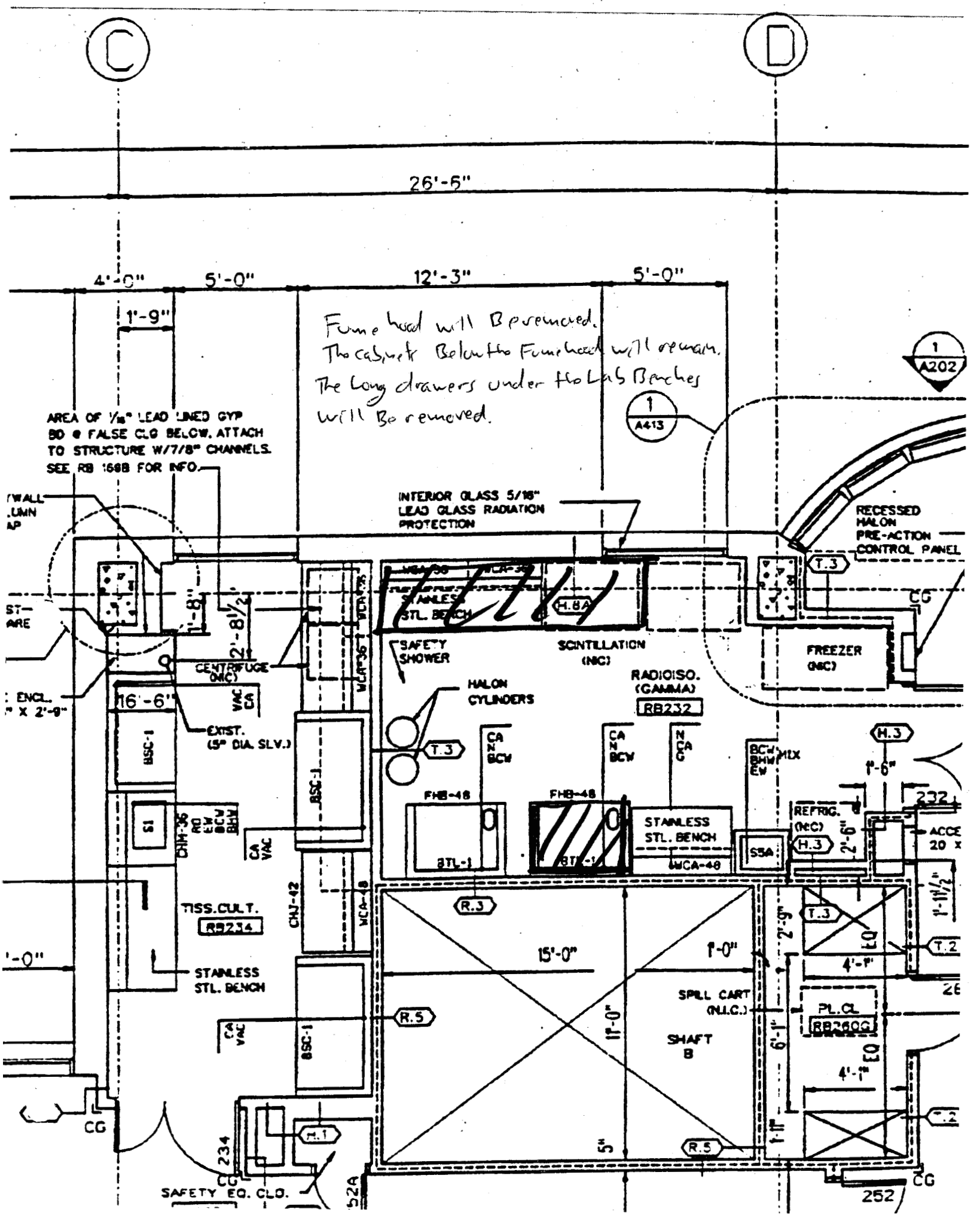
No readings above background

Model 3 S/N 136692 Cal 16 Jul 99
44-9 S/N 139874

RB 232 Floor wxjes

10/15/99




C
D
26'-5"
4'-0"
5'-0"
12'-3"
5'-0"
1'-9"
Fume hood will Be removed.
The cabinets Below the Fume hood will remain.
The Long drawers under the Lab Benches
will Be removed.
1
A202
1
A413
AREA OF 1/16" LEAD LINED GYP BD @ FALSE CLG BELOW. ATTACH TO STRUCTURE W/7/8" CHANNELS. SEE RB 1688 FOR INFO.
INTERIOR GLASS 5/16" LEAD GLASS RADIATION PROTECTION
RECESSED HALON PRE-ACTION CONTROL PANEL
T.3
CG
STAINLESS STL. BENCH
H.8A
SAFETY SHOWER
SCINTILLATION (NIC)
FREEZER (NIC)
CENTRIFUGE (NIC)
HALON CYLINDERS
RADIOISO. (GAMMA)
RB232
16'-6"
EXIST. (5" DIA. SLV.)
BSC-1
S1
CA VAC
T.3
CA N BCW
CA N BCW
N CA G
BCW BHW EW
MIX
H.3
1'-6"
232
FHB-48
FHB-48
STL-1
STL-1
STAINLESS STL. BENCH
WCA-48
S5A
REFRIG. (NIC)
H.3
2'-6"
ACCE 20 x
TISS.CULT.
RB234
CHJ-42
WCA-48
R.3
15'-0"
1'-0"
T.3
2'-9"
4'-1"
T.2
STAINLESS STL. BENCH
SPILL CART (N.I.C.)
PL.CL.
RB260G
R.5
11'-0"
SHAFT B
6'-1"
4'-1"
CA VAC
BSC-1
H.1
234
CG
SAFETY EQ. CLO.
52A
5"
R.5
1'-11"
CG
252

RB-232 Decommissioning Wipe Test Sample Results

A release criteria for all area and items was set at our site policy of 100 dpm / 100 cm²

9/2/1999 16:05 RB-232 - Hoods

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	1.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
2.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	2.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
3.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	3.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
4.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	4.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
5.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	5.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
6.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	6.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
7.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	7.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
8.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	8.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
9.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	9.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
10.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	10.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
11.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm	11.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm
12.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm				
13.	< MDA of 26 dpm	< MDA of 44 dpm	< MDA of 21 dpm				

10/15/1999 9:40 RB-232 - Floor See Attached Diagram

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	5.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
2.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	6.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
3.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	* 7.	**111 dpm**	**41 dpm**	**34 dpm**
4.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	8.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm

* Area 7 Decontaminated - Additional floor survey performed on 11/16/99

10/15/1999 11:47 RB-232 Room amd Equipment

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	19.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
2.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	20.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
3.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	21.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
4.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	22.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
5.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	23.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
6.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	24.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
7.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	* 25.	**257 dpm**	**112 dpm**	**89 dpm**
8.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	* 26.	**73 dpm**	**31 dpm**	**34 dpm**
* 9.	**177 dpm**	**313 dpm**	**290 dpm**	27.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
10.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	* 28.	**7855 dpm**	**3212 dpm**	**3485 dpm**
11.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	* 29.	**105 dpm**	**37 dpm**	**38 dpm**
12.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	30.	**39 dpm**	< MDA of 17 dpm	< MDA of 21 dpm
13.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	31.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
14.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	32.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
15.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	33.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
16.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	34.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
17.	**32 dpm**	< MDA of 17 dpm	< MDA of 21 dpm	35.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm
18.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm	36.	< MDA of 22 dpm	< MDA of 17 dpm	< MDA of 21 dpm

* 9 & 29 -tube Racks and beaker - Disposed as radioactive waste
* 25, 26 & 28 - Waterbath, Plexiglass box & ringstand decontaminated and resurveyed later during decommissioning

10/28/1999 15:40 RB-232 Hood amd Equipment

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	19.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
2.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	20.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
3.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	19.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
4.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	20.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
5.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	21.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
6.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	22.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
7.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	23.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
8.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	24.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
9.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	25.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
10.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	26.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
11.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	27.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
12.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	28.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
13.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	29.	**30 dpm**	**45 dpm**	**42 dpm**
14.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	30.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
15.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	31.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm
16.	< MDA of 24 dpm	< MDA of 17 dpm	< MDA of 21 dpm	32.	**43 dpm**	**23 dpm**	**11 dpm**

10/29/1999 11:46 RB-232 Room amd Equipment

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	14.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
2.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	15.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
3.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	16.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
4.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	17.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
5.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	18.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
6.	**27 dpm**	< MDA of 17 dpm	< MDA of 22 dpm	19.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
7.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	20.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
8.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	21.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
9.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	22.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
10.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	23.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
11.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	24.	**32 dpm**	**40 dpm**	**25 dpm**
12.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm	25.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm
13.	**39 dpm**	**22 dpm**	< MDA of 22 dpm	26.	< MDA of 27 dpm	< MDA of 17 dpm	< MDA of 22 dpm

11/2/1999 13:30 RB-232 Room amd Equipment

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	21.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
2.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	22.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
3.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	23.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
4.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	24.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
5.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	25.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
6.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	26.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
7.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	27.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
8.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	28.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
9.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	29.	< MDA of 27 dpm	**33 dpm**	**41 dpm**
10.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	* 30.	**675 dpm**	**481 dpm**	**466 dpm**
11.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	31.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
12.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	32.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
13.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	33.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
14.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	* 34.	**1561 dpm**	**881 dpm**	**832 dpm**
* 15.	**139 dpm**	**70 dpm**	**58 dpm**	35.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
16.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm				
17.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm				
18.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm				
19.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm				
20.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm				

* 15 - Beckman Microfuge - Decontaminated and re-surveyed 11/10/99
* 30 & 34 - Sink Area - Decontaminated and re-surveyed 11/16/99

11/3/1999 12:43 RB-232 Equipment

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm	11.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm
2.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm	12.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm
3.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm	13.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm
4.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm	14.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm
5.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm	15.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm
6.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm	16.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm
7.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm	17.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm
8.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm				
9.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm				
10.	< MDA of 23 dpm	< MDA of 14 dpm	< MDA of 16 dpm				

11/5/1999 13:04 RB-232 Equipment

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	**36 dpm**	**59 dpm**	**65 dpm**	7.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
2.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	8.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
3.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	9.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
4.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	10.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
5.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm	11.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm
6.	< MDA of 27 dpm	< MDA of 16 dpm	< MDA of 20 dpm				

11/9/1999 9:14 RB-232 Room amd Equipment

	CHANNEL		
	A	B	C
1.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
2.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
3.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
4.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
5.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
6.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
7.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
8.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
9.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm
10.	< MDA of 29 dpm	< MDA of 19 dpm	< MDA of 20 dpm

11/9/1999 12:44 RB-232 Items

	CHANNEL		
	A	B	C
1.	< MDA of 18 dpm	< MDA of 13 dpm	< MDA of 15 dpm
* 2.	**804 dpm**	**1101 dpm**	**1033 dpm**
3.	< MDA of 18 dpm	< MDA of 13 dpm	< MDA of 15 dpm
4.	< MDA of 18 dpm	< MDA of 13 dpm	< MDA of 15 dpm

* 2 - Rack of caps - Disposed of as radioactive waste

11/9/1999 15:08 RB-232 Items

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	22.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
* 2.	**2684 dpm**	**3335 dpm**	**3116 dpm**	23.	< MDA of 24 dpm	**22 dpm**	< MDA of 22 dpm
3.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	24.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
4.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	25.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
5.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	26.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
6.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	27.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
7.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	28.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
8.	< MDA of 24 dpm	**30 dpm**	**21 dpm**	29.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
9.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	30.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
10.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	31.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
11.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	* 32.	**117441 dpm**	**78548 dpm**	**73777 dpm**
12.	< MDA of 24 dpm	**17 dpm**	< MDA of 22 dpm	* 33.	**1080 dpm**	**1029 dpm**	**949 dpm**
13.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	34.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
14.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	35.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
15.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	36.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
16.	< MDA of 24 dpm	**20 dpm**	< MDA of 22 dpm	37.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
17.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	38.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
18.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	39.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
19.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	40.	< MDA of 24 dpm	**19 dpm**	**13 dpm**
20.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm	41.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm
21.	< MDA of 24 dpm	< MDA of 16 dpm	< MDA of 22 dpm				

* 2 - Plexiglass boxes - Decontaminated and re-surveyed 11/10/99

* 32 & 33 - Bottles - Disposed of as radioactive waste

11/10/1999 14:29 RB-232 Items and equipment

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	19.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
2.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	20.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
* 3.	**19723 dpm**	**15865 dpm**	**14919 dpm**	21.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
4.	**30 dpm**	**47 dpm**	**39 dpm**	22.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
5.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	23.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
6.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	* 24.	**482 dpm**	**235 dpm**	**219 dpm**
7.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	25.	**80 dpm**	**35 dpm**	**26 dpm**
8.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	26.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
9.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	27.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
10.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	28.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
11.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	29.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
12.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	* 30.	**136 dpm**	**61 dpm**	**57 dpm**
13.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	31.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
14.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	32.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
15.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	33.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
16.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	34.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
17.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	35.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm
18.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm	36.	< MDA of 28 dpm	< MDA of 19 dpm	< MDA of 23 dpm

* 3 - Plexiglass box # 8 - Additional decontamination - re-surveyed 11/11/99
* 24 - Stopper - Disposed of as radioactive waste
* 30 - Beckman Microfuge - Additional decontamination - re-surveyed 11/16/99

11/11/1999 18:02 RB-232 Items and equipment

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm	* 11.	**5041 dpm**	**7795 dpm**	**7328 dpm**
2.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm	12.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm
3.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm	13.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm
4.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm	14.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm
5.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm	15.	< MDA of 27 dpm	**47 dpm**	**49 dpm**
6.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm	16.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm
7.	< MDA of 27 dpm	**34 dpm**	**34 dpm**	17.	**64 dpm**	**33 dpm**	**29 dpm**
8.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm	18.	< MDA of 27 dpm	**24 dpm**	< MDA of 22 dpm
9.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm	19.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm
* 10.	**286 dpm**	**251 dpm**	**239 dpm**	20.	< MDA of 27 dpm	< MDA of 18 dpm	< MDA of 22 dpm

* 10 - Plexiglass boxes - Decontaminated and re-surveyed 11/16/99
* 11 - Box Top - Decontaminated and re-surveyed 11/16/99

11/16/1999 10:55 RB-232 Room and Equipment Set 1

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm	13.	**90 dpm**	**49 dpm**	**51 dpm**
2.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm	14.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm
3.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm	15.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm
4.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm	16.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm
5.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm	17.	**35 dpm**	**22 dpm**	**24 dpm**
* 6.	**1240 dpm**	**646 dpm**	**605 dpm**	18.	**21 dpm**	**16 dpm**	< MDA of 15 dpm
* 7.	**3852 dpm**	**1985 dpm**	**1860 dpm**	19.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm
* 8.	**21894 dpm**	**11304 dpm**	**10624 dpm**	20.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm
* 9.	**258 dpm**	**133 dpm**	**118 dpm**	21.	**329 dpm**	**174 dpm**	**164 dpm**
* 10.	**163 dpm**	**86 dpm**	**77 dpm**	22.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm
* 11.	**121 dpm**	**60 dpm**	**54 dpm**	23.	< MDA of 20 dpm	< MDA of 13 dpm	< MDA of 15 dpm
* 12.	**296 dpm**	**154 dpm**	**141 dpm**				

* 6-13 Placed in radioactive waste ("decay-in-storage")
* 21 - Rotor transferred to radiation safety lab for additional decontamination

11/16/1999 14:46 RB-232 Roon and Equipment Set 2

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 21 dpm	< MDA of 15 dpm	< MDA of 16 dpm	5.	< MDA of 21 dpm	< MDA of 15 dpm	< MDA of 16 dpm
2.	< MDA of 21 dpm	< MDA of 15 dpm	< MDA of 16 dpm	6.	< MDA of 21 dpm	< MDA of 15 dpm	< MDA of 16 dpm
3.	< MDA of 21 dpm	< MDA of 15 dpm	< MDA of 16 dpm	7.	< MDA of 21 dpm	< MDA of 15 dpm	< MDA of 16 dpm
4.	< MDA of 21 dpm	< MDA of 15 dpm	< MDA of 16 dpm	8.	< MDA of 21 dpm	< MDA of 15 dpm	< MDA of 16 dpm

11/16/1999 15:51 RB-232

	CHANNEL				CHANNEL		
	A	B	C		A	B	C
1.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	12.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
2.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	13.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
3.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	14.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
4.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	15.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
5.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	16.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
6.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	17.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
7.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	18.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
8.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	19.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
9.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	20.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
10.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	21.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm
11.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm	22.	< MDA of 21 dpm	< MDA of 14 dpm	< MDA of 16 dpm

11/18/1999 7:42 RB-232 Duct

	CHANNEL		
	A	B	C
1.	< MDA of 21 dpm	< MDA of 12 dpm	< MDA of 14 dpm

11/18/2006 11:42 RB-232 Drain

	CHANNEL		
	A	B	C
1.	< MDA of 17 dpm	< MDA of 12 dpm	< MDA of 14 dpm
2.	< MDA of 17 dpm	< MDA of 12 dpm	< MDA of 14 dpm

A Meter Survey was conducted with a Ludlun 3 survey Meter with 44-9 pancake and 44-3 sodium iodide probes.

Meter Information

Serial Numbers:

Meter	136692
44-3 Probe	140228
44-9 Probe	139874

Calibration Date:

7/16/1999

No readings above background were detected

Special Survey Calculations Date: **9/2/99**

Item: RB232 Hoods
Contact: June Tamkin
Where: RB 015
Printout: Bkmn 9/2/99; 16:05

	channel A	channel B	channel C
CC (cpm)	38	59	104
MDA (dpm)	27	17	21
EFF30jun99	0.44	0.92	0.99
BKG (cpm)	26	44	83

yes	no	
(X)	( )	All wipes are below critical counts, and therefore are 0 uCi/ 100 cm^2. (If no, please look below.)
(X)	( )	All wipes are below NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

Signed: [signature]
Date: 9/3/99

2 HOODS IN RB 232

ID:WIPE TEST 2 SEP 1999 16:05
USER: 1 COMMENT:GREAT INSTRUMENT
PRESET TIME : 1.00
DATA CALC : CPM H# :YES SAMPLE REPEATS: 1 PRINTER : STD
COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : OFF
TWO PHASE : NO ADC : NO CYCLE REPEATS : 1 DISK : STD
SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0
LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

DATA BUFFER IS FULL. DATA WILL GO TO PRINTER ONLY.

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

	SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %		ELAPSED TIME
STDS	1	**-1	1.00	8.6	71309.00	0.75	71515.00	0.75	71529.00	0.75	0.00	3H	1.50
	2	**-2	1.00	7.1	37074.00	1.04	147827.0	0.52	147878.0	0.52	0.00	14C	3.09
	3	**-3	1.00	18.5	6730.00	2.44	68214.00	0.77	225925.0	0.42	0.00	36Cl	4.72
	4	**-4	1.00	33.1	83862.00	0.69	130248.0	0.55	130267.0	0.55	0.00	125I	6.31
	5	**-5	1.00	15.2	20.00	44.72	30.00	36.51	50.00	28.28	1.93	BLANK	7.84
	MISSING SAMPLE												
BKG	8	**-8	1.00	16.6	26.00	39.22	44.00	30.15	72.00	23.57	0.94		9.40
	9	**-9	1.00	16.8	19.00	45.88	44.00	30.15	83.00	21.95	0.91		10.94
	MISSING SAMPLE												
HOOD #1	1	13 **-1	1.00	16.7	22.00	42.64	39.00	32.03	71.00	23.74	1.50		12.62
	2	14 **-2	1.00	19.7	25.00	40.00	44.00	30.15	73.00	23.41	1.00		14.17
	3	15 **-3	1.00	23.3	28.00	37.80	46.00	29.49	66.00	24.62	1.00		15.70
	4	16 **-4	1.00	19.8	22.00	42.64	37.00	32.88	68.00	24.25	0.95		17.26
	5	17 **-5	1.00	20.6	31.00	35.92	52.00	27.74	77.00	22.79	0.88		18.80
	6	18 **-6	1.00	24.4	22.00	42.64	37.00	32.88	63.00	25.20	0.88		20.35
	7	19 **-7	1.00	19.0	15.00	51.64	34.00	34.30	58.00	26.26	0.92		21.91
	8	20 **-8	1.00	15.1	20.00	44.72	41.00	31.23	62.00	25.40	0.79		23.46
	9	21 **-9	1.00	27.4	26.00	39.22	40.00	31.62	59.00	26.04	0.66		25.01
	10	22 **-10	1.00	20.8	19.00	45.88	28.00	37.80	55.00	26.97	0.71		26.55
	11	23 **-11	1.00	23.4	25.00	40.00	37.00	32.88	62.00	25.40	0.71		28.09
	12	24 **-12	1.00	28.3	22.00	42.64	37.00	32.88	66.00	24.62	0.82		29.66
	13	25 **-1	1.00	18.3	24.00	40.82	42.00	30.86	78.00	22.65	0.54		31.31
	MISSING SAMPLE												
HOOD SOUTH	1	28 **-4	1.00	21.1	17.00	48.51	28.00	37.80	57.00	26.49	0.89		32.90
	2	29 **-5	1.00	19.8	19.00	45.88	34.00	34.30	68.00	24.25	0.62		34.44
	3	30 **-6	1.00	18.7	20.00	44.72	35.00	33.81	75.00	23.09	0.61		35.99
	4	31 **-7	1.00	18.5	13.00	55.47	26.00	39.22	47.00	29.17	0.87		37.54
	5	32 **-8	1.00	19.8	25.00	40.00	40.00	31.62	67.00	24.43	0.65		39.10
	6	33 **-9	1.00	23.1	23.00	41.70	38.00	32.44	56.00	26.73	0.70		40.62
	7	34 **-10	1.00	27.7	29.00	37.14	53.00	27.47	83.00	21.95	0.50		42.17
	8	35 **-11	1.00	19.8	21.00	43.64	40.00	31.62	66.00	24.62	0.57		43.72
	9	36 **-12	1.00	20.0	18.00	47.14	33.00	34.82	61.00	25.61	1.54		45.28
	10	37 **-1	1.00	31.0	24.00	40.82	46.00	29.49	75.00	23.09	0.68		46.94
	11	38 **-2	1.00	18.2	28.00	37.80	42.00	30.86	68.00	24.25	0.60		48.50

Special Survey Calculations Date: 10/15/99

Item: Floor
Contact: Ron Wallace
Where: RB 232
Printout: BKM: 10/15/99;9:40

	channel A	channel B	channel C
CC (cpm)	28	62	105
MDA (dpm)	22	17	21
EFF21sep99	0.44	0.93	0.99
BKG (cpm)	18	46	84

yes no RGW

(✓) All wipes are below critical counts, and (If no, please look below.)
are 0 uCi/ 100 cm^2.

(✓) ( ) All wipes are below NRC action level (220 dpm/ 100 cm^2).
(For calculations, please look below.)

Signed: Ronald G Wallace
Date: 10/15/99

Area #7

Ch 1 67 - 18 = 49/.44 = 111 dpm/100 cm²

Ch 2 84 - 46 = 38/.93 = 41 dpm/100 cm²

Ch 3 118 - 84 = 34/.99 = 34 dpm/100 cm²

NB 232 floor + #7 Recount

ID: RADSAFETY 1A 15 OCT 1999 09:40
USER: 5 COMMENT: .2
PRESET TIME : 1.00
DATA CALC : CPM HH :YES SAMPLE REPEATS: 1 PRINTER : STD
COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : OFF
TWO PHASE : NO ADC : NO CYCLE REPEATS : 1 DISK : OFF
SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0
LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	HH	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME	
1	**-1	1.00	25.9	26.00	39.22	47.00	29.17	75.00	23.09	1.24	1.45	
2	**-2	1.00	26.9	15.00	51.64	35.00	33.81	60.00	25.82	1.29	2.97	
3	**-3	1.00	25.7	13.00	55.47	34.00	34.30	77.00	22.79	0.94	4.50	
4	**-4	1.00	63.0	21.00	43.64	32.00	35.36	53.00	27.47	4.26	6.02	
5	**-5	1.00	25.6	19.00	45.88	30.00	36.51	49.00	28.57	1.65	7.54	
6	**-6	1.00	38.7	20.00	44.72	40.00	31.62	68.00	24.25	1.36	9.06	
7	**-7	1.00	39.2	67.00	24.43	84.00	21.82	118.00	18.41	0.70	10.59	
8	**-8	1.00	34.4	20.00	44.72	44.00	30.15	70.00	23.90	1.48	12.10	
MISSING SAMPLE												
10	**-10	1.00	63.1	17.00	48.51	46.00	29.49	84.00	21.82	0.94	13.65	Blk
11	**-11	1.00	20.2	18.00	47.14	38.00	32.44	74.00	23.25	1.22	15.18	
MISSING SAMPLE												
13	**-1	1.00	6.9	70479.00	0.75	70656.00	0.75	70678.00	0.75	0.00	16.85	3H
14	**-2	1.00	6.4	37160.00	1.04	147973.0	0.52	148021.0	0.52	0.00	18.44	MK
15	**-3	1.00	17.2	6664.00	2.45	68572.00	0.76	226050.0	0.42	0.00	20.08	36Cl
16	**-4	1.00	30.8	49913.00	0.90	79652.00	0.71	79683.00	0.71	0.00	21.62	125I
17	**-5	1.00	16.6	33.00	34.82	54.00	27.22	81.00	22.22	0.78	23.17	BLANK
MISSING SAMPLE												
21	**-9	1.00	40.0	17.00	48.51	26.00	39.22	64.00	25.00	1.08	24.73	

SOS

Special Survey Calculations Lab: RB 232 Survey Date: 10/15/99

Description: Decommission RB 323 for work

LSC: Beckman in RB 012B Contact: Roberta Bianca, Ron Wallace

Printout: BKM;10/15/99;11:47 Comments:

	channel A	channel B	channel C
CC (cpm)	27	61	98
MDA (dpm)	22	17	21
EFF 21sep99	0.44	0.93	0.99
BKG (cpm)	17	45	78

( )yes (✓)no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample 9 Channel A count is 95 cpm / 100 cm^2.
(95 cpm - 17 cpm) / 0.44 = 177 dpm / 100cm^2

Sample 9 Channel B count is 336 cpm / 100 cm^2.
(336 cpm - 45 cpm) / 0.93 = 313 dpm / 100cm^2

Sample 9 Channel C count is 365 cpm / 100 cm^2.
(365 cpm - 78 cpm) / 0.99 = 290 dpm / 100cm^2

Sample 16 Channel A count is 87 cpm / 100 cm^2.
(87 cpm - 17 cpm) / 0.44 = 159 dpm / 100cm^2

Sample 16 Channel B count is 107 cpm / 100 cm^2.
(107 cpm - 45 cpm) / 0.93 = 67 dpm / 100cm^2

Sample 16 Channel C count is 127 cpm / 100 cm^2.
(127 cpm - 78 cpm) / 0.99 = 49 dpm / 100cm^2

Sample 17 Channel A count is 31 cpm / 100 cm^2.
(31 cpm - 17 cpm) / 0.44 = 32 dpm / 100cm^2

Sample 17 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 45 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 17 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 78 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Signature Ronald G. Wallace Date 10/15/99

Special Survey Calculations Lab: RB 232 Survey Date: 10/15/99

Printout: BKM;10/15/99;11:47

Sample	25	Channel A count is		130		cpm / 100 cm^2.					
(	130	cpm	-	17	cpm)	/	0.44	=		257	dpm / 100cm^2
Sample	25	Channel B count is		149		cpm / 100 cm^2.					
(	149	cpm	-	45	cpm)	/	0.93	=		112	dpm / 100cm^2
Sample	25	Channel C count is		166		cpm / 100 cm^2.					
(	166	cpm	-	78	cpm)	/	0.99	=		89	dpm / 100cm^2
Sample	26	Channel A count is		49		cpm / 100 cm^2.					
(	49	cpm	-	17	cpm)	/	0.44	=		73	dpm / 100cm^2
Sample	26	Channel B count is		74		cpm / 100 cm^2.					
(	74	cpm	-	45	cpm)	/	0.93	=		31	dpm / 100cm^2
Sample	26	Channel C count is		112		cpm / 100 cm^2.					
(	112	cpm	-	78	cpm)	/	0.99	=		34	dpm / 100cm^2
Sample	28	Channel A count is		3473		cpm / 100 cm^2.					
(	3473	cpm	-	17	cpm)	/	0.44	=		7855	dpm / 100cm^2
Sample	28	Channel B count is		3497		cpm / 100 cm^2.					
(	3497	cpm	-	45	cpm)	/	0.93	=		3712	dpm / 100cm^2
Sample	28	Channel C count is		3528		cpm / 100 cm^2.					
(	3528	cpm	-	78	cpm)	/	0.99	=		3485	dpm / 100cm^2
Sample	29	Channel A count is		63		cpm / 100 cm^2.					
(	63	cpm	-	17	cpm)	/	0.44	=		105	dpm / 100cm^2
Sample	29	Channel B count is		79		cpm / 100 cm^2.					
(	79	cpm	-	45	cpm)	/	0.93	=		37	dpm / 100cm^2
Sample	29	Channel C count is		116		cpm / 100 cm^2.					
(	116	cpm	-	78	cpm)	/	0.99	=		38	dpm / 100cm^2

Ronald G. Wallace 10/15/99

Special Survey Calculations Lab: RB 232 Survey Date: 10/15/99
Printout: BKM;10/15/99;11:47

Sample 30 Channel A count is 34 cpm / 100 cm^2.
(34 cpm - 17 cpm) / 0.44 = 39 dpm / 100cm^2

Sample 30 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 45 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 30 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 78 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Sample 0 Channel A count is NA cpm / 100 cm^2.
(NA cpm - 17 cpm) / 0.44 = #VALUE! dpm / 100cm^2

Sample 0 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 45 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 0 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 78 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Sample 0 Channel A count is NA cpm / 100 cm^2.
(NA cpm - 17 cpm) / 0.44 = #VALUE! dpm / 100cm^2

Sample 0 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 45 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 0 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 78 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Sample 0 Channel A count is NA cpm / 100 cm^2.
(NA cpm - 17 cpm) / 0.44 = #VALUE! dpm / 100cm^2

Sample 0 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 45 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 0 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 78 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Signature Ronald J Wallace Date 10/15/99

RB 232 DECON M

ID: RADSAFETY 1A 15 OCT 1999 11:47
USER: 5 COMMENT: .2
PRESET TIME : 1.00
DATA CALC : CPM H# :YES SAMPLE REPEATS: 1 PRINTER : STD
COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : OFF
TWO PHASE : NO AOC : NO CYCLE REPEATS : 1 DISK : OFF
SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0
LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
1	**-1	1.00	6.4	70984.00	0.75	71212.00	0.75	71253.00	0.75	0.00	1.47
2	**-2	1.00	7.6	36764.00	1.04	148312.0	0.52	148382.0	0.52	0.00	3.03
3	**-3	1.00	17.4	6680.00	2.45	67571.00	0.77	225729.0	0.42	0.00	4.66
4	**-4	1.00	30.2	49668.00	0.90	79621.00	0.71	79643.00	0.71	0.00	6.20
5	**-5	1.00	15.2	25.00	40.00	36.00	33.33	62.00	25.40	1.01	7.73
MISSING SAMPLE											
7	**-7	1.00	61.5	17.00	48.51	45.00	29.81	78.00	22.65	1.15	9.27
8	**-8	1.00	16.9	16.00	50.00	34.00	34.30	70.00	23.90	1.44	10.79
MISSING SAMPLE											
10	**-10 1	1.00	22.4	26.00	39.22	41.00	31.23	65.00	24.81	1.24	12.33
11	**-11 2	1.00	10.0	26.00	39.22	41.00	31.23	63.00	25.20	1.33	13.87
12	**-12 3	1.00	4.6	22.00	42.64	43.00	30.50	70.00	23.90	0.57	15.39
13	**-1 4	1.00	17.9	20.00	44.72	37.00	32.88	60.00	25.82	2.16	17.03
14	**-2 5	1.00	10.4	15.00	51.64	37.00	32.88	68.00	24.25	0.75	18.56
15	**-3 6	1.00	12.1	23.00	41.70	36.00	33.33	75.00	23.09	0.98	20.12
16	**-4 7	1.00	8.8	21.00	43.64	35.00	33.81	69.00	24.08	0.79	21.65
17	**-5 8	1.00	7.9	22.00	42.64	38.00	32.44	71.00	23.74	0.57	23.19
18	**-6 9	-1.00	7.4	-95.00	20.52	-336.00	10.91	-365.00	10.47	0.14	24.71
19	**-7 10	1.00	9.8	23.00	41.70	37.00	32.88	65.00	24.81	0.62	26.25
20	**-8 11	1.00	39.4	19.00	45.88	38.00	32.44	60.00	25.82	2.67	27.79
21	**-9 12	1.00	41.4	22.00	42.64	39.00	32.03	61.00	25.61	2.90	29.33
22	**-10 13	1.00	9.5	20.00	44.72	32.00	35.36	58.00	26.26	0.62	30.85
23	**-11 14	1.00	8.5	16.00	50.00	35.00	33.81	77.00	22.79	0.43	32.39
24	**-12 15	1.00	16.9	20.00	44.72	38.00	32.44	65.00	24.81	0.89	33.91
25	**-1 16	-1.00	16.3	-87.00	21.44	-107.00	19.33	-127.00	17.75	0.36	35.57
26	**-2 17	-1.00	14.5	-31.00	35.92	50.00	28.28	85.00	21.69	0.54	37.09
27	**-3 18	1.00	13.6	17.00	48.51	31.00	35.92	61.00	25.61	1.66	38.63
28	**-4 19	1.00	26.8	18.00	47.14	37.00	32.88	62.00	25.40	1.06	40.16
29	**-5 20	1.00	11.4	10.00	63.25	33.00	34.82	56.00	26.73	0.70	41.71
30	**-6 21	1.00	13.0	21.00	43.64	42.00	30.86	77.00	22.79	0.56	43.24
31	**-7 22	1.00	12.0	18.00	47.14	34.00	34.30	69.00	24.08	0.64	44.78
32	**-8 23	1.00	7.9	22.00	42.64	39.00	32.03	69.00	24.08	0.59	46.31
33	**-9 24	1.00	24.2	18.00	47.14	33.00	34.82	60.00	25.82	0.95	47.84
34	**-10 25	-1.00	32.4	-130.00	17.54	-149.00	16.38	-166.00	15.52	0.38	49.39
35	**-11 26	-1.00	17.9	-49.00	28.57	-74.00	23.25	-112.00	18.90	0.49	50.94
~~36~~	~~**-12 27~~	~~1.00~~	~~5.8~~	~~24.00~~	~~40.82~~	~~51.00~~	~~28.01~~	~~73.00~~	~~23.41~~	~~0.64~~	~~52.47~~
37	**-1 28	-1.00	14.7	-3473.00	3.39	-3497.00	3.38	-3528.00	3.37	0.01	54.09

39	**-3 30	1.00	7.5	34.00	[illegible]	48.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
40	**-4 31	1.00	11.0	22.00	42.64	37.00	32.88	71.00	23.74	1.07	58.70
41	**-5 32	1.00	9.3	19.00	45.88	41.00	31.23	67.00	24.43	1.45	60.34
42	**-6 33	1.00	12.6	18.00	47.14	36.00	33.33	69.00	24.08	0.58	61.77
43	**-7 34	1.00	9.6	19.00	45.88	34.00	34.30	58.00	26.26	0.60	63.32
44	**-8 35	1.00	16.4	24.00	40.82	47.00	29.17	69.00	24.08	0.59	64.85

SAM NO	POS	TIME MIN	HH	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
45	**-9 36	1.00	28.2	17.00	48.51	40.00	31.62	69.00	24.08	0.82	66.42

Special Survey Calculations Date: 10/15/99

Item: Decommission Recounts
Contact: Ron Wallace
Where: RB 232
Printout: BKM: 10/15/99;13:14

	channel A	channel B	channel C
CC (cpm)	41	59	86
MDA (dpm)	28	17	19
EFF21sep99	0.44	0.93	0.99
BKG (cpm)	29	44	67

yes	no	
(✓)	( )	All wipes are below critical counts, and (If no, please look below.) are 0 uCi/ 100 cm^2.
(✓)	( )	All wipes are below NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

for #16 only

Signed: Ronald G Wallace
Date: 10/15/99

RB 232 Records

ID: RADSAFETY 1A 15 OCT 1999 13:14
USER: 5 COMMENT: .2
PRESET TIME : 1.00
DATA CALC : CPM HI# :YES SAMPLE REPEATS: 1 PRINTER : STD
COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : OFF
TWO PHASE : NO ADC : NO CYCLE REPEATS : 1 DISK : OFF
SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0
LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	HI#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
1	**-1	1.00	7.1	70373.00	0.75	70606.00	0.75	70637.00	0.75	0.00	1.46
2	**-2	1.00	6.5	36651.00	1.04	148279.0	0.52	148349.0	0.52	0.00	3.04
3	**-3	1.00	17.7	6387.00	2.50	66706.00	0.77	225360.0	0.42	0.00	4.68
4	**-4	1.00	29.7	49773.00	0.90	79994.00	0.71	80025.00	0.71	0.00	6.21
5	**-5	1.00	15.5	16.00	50.00	28.00	37.80	59.00	26.04	1.37	7.75
MISSING SAMPLE											
7	**-7	1.00	61.2	17.00	48.51	43.00	30.50	67.00	24.43	1.38	9.27
8	**-8	1.00	16.2	29.00	37.14	44.00	30.15	61.00	25.61	1.76	10.83
MISSING SAMPLE											
13	**-1 9	1.00	8.4	-102.00	19.80	-344.00	10.78	-372.00	10.37	0.14	12.52
14	**-2 16	1.00	18.7	39.00	32.03	52.00	27.74	76.00	22.94	0.61	14.05
15	**-3 25	1.00	34.8	-139.00	16.96	-152.00	16.22	-180.00	14.91	0.33	15.57
16	**-4 26	1.00	18.2	-46.00	29.49	-71.00	23.74	-91.00	20.97	0.63	17.12
17	**-5 28	1.00	15.5	-3891.00	3.21	-3990.00	3.17	-4021.00	3.15	0.01	18.65
18	**-6 29	1.00	6.2	-56.00	26.73	-70.00	23.90	-94.00	20.63	0.45	20.20

Special Survey Calculations Lab: RB 232 Survey Date: 10/28/99

Description: Decommission RB 232 for work

LSC: Beckman in RB 012B Contact: Roberta Bianca, Ron Wallace

Printout: BKM;10/28/99;15:40 Comments:

	channel A	channel B	channel C
CC (cpm)	32	62	104
MDA (dpm)	24	17	21
EFF 21sep99	0.44	0.93	0.99
BKG (cpm)	21	46	83

( )yes (✓)no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample 29 Channel A count is 34 cpm / 100 cm^2.
(34 cpm - 21 cpm) / 0.44 = 30 dpm / 100cm^2

Sample 29 Channel B count is 88 cpm / 100 cm^2.
(88 cpm - 46 cpm) / 0.93 = 45 dpm / 100cm^2

Sample 29 Channel C count is 125 cpm / 100 cm^2.
(125 cpm - 83 cpm) / 0.99 = 42 dpm / 100cm^2

Sample 32 Channel A count is 40 cpm / 100 cm^2.
(40 cpm - 21 cpm) / 0.44 = 43 dpm / 100cm^2

Sample 32 Channel B count is 67 cpm / 100 cm^2.
(67 cpm - 46 cpm) / 0.93 = 23 dpm / 100cm^2

Sample 32 Channel C count is 94 cpm / 100 cm^2.
(94 cpm - 83 cpm) / 0.99 = 11 dpm / 100cm^2

~~Sample 0 Channel A count is NA cpm / 100 cm^2.~~
~~(NA cpm - 21 cpm) / 0.44 = #VALUE! dpm / 100cm^2~~

~~Sample 0 Channel B count is NA cpm / 100 cm^2.~~
~~(NA cpm - 46 cpm) / 0.93 = #VALUE! dpm / 100cm^2~~

~~Sample 0 Channel C count is NA cpm / 100 cm^2.~~
~~(NA cpm - 83 cpm) / 0.99 = #VALUE! dpm / 100cm^2~~

Signature Ronald G. Wallace Date 10/29/99

ID: WIPE TEST 28 OCT 1999 15:40

USER: 1 COMMENT: GREAT INSTRUMENT

PRESET TIME :	1.00						
DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	AGC	: NO	CYCLE REPEATS :	1	DISK	: STD
SCINTILLATOR:	LIQUID	LUMEX	: NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

DATA BUFFER IS FULL. DATA WILL GO TO PRINTER ONLY.

KEV :	0.0 - 18.6	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 156.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 2000.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %		ELAPSED TIME
MISSING SAMPLE												
3	**-3	1.00	6.5	70276.00	0.75	70460.00	0.75	70487.00	0.75	0.00	3H	1.51
4	**-4	1.00	6.1	36948.00	1.04	147921.0	0.52	147987.0	0.52	0.00	MC	3.08
5	**-5	1.00	15.0	6736.00	2.44	67387.00	0.77	226163.0	0.42	0.00	3Cl	4.71
6	**-6	1.00	30.1	42675.00	0.97	68591.00	0.76	68617.00	0.76	0.00	I	6.26
7	**-7	1.00	15.9	20.00	44.72	55.00	26.97	80.00	22.36	1.24	BLANK	7.81
MISSING SAMPLE												
10	**-10	1.00	15.4	21.00	43.64	46.00	29.49	83.00	21.95	1.56		9.37
11	**-11	1.00	12.4	16.00	50.00	39.00	32.03	68.00	24.25	1.86		10.92
MISSING SAMPLE												
13	**-1	1.00	21.7	21.00	43.64	44.00	30.15	76.00	22.94	1.85		12.57
14	**-2	1.00	24.7	20.00	44.72	46.00	29.49	89.00	21.20	1.38		14.14
15	**-3	1.00	14.0	23.00	41.70	38.00	32.44	66.00	24.62	1.45		15.66
16	**-4	1.00	19.3	17.00	48.51	36.00	33.33	66.00	24.62	0.80		17.22
17	**-5	1.00	13.6	29.00	37.14	44.00	30.15	81.00	22.22	0.51		18.75
18	**-6	1.00	18.6	23.00	41.70	43.00	30.50	66.00	24.62	0.76		20.31
19	**-7	1.00	15.1	24.00	40.82	45.00	29.81	75.00	23.09	0.53		21.84
20	**-8	1.00	13.3	26.00	39.22	39.00	32.03	77.00	22.79	0.66		23.40
21	**-9	1.00	21.8	19.00	45.88	42.00	30.86	69.00	24.08	0.99		24.95
22	**-10	1.00	46.1	20.00	44.72	44.00	30.15	74.00	23.25	0.81		26.50
23	**-11	1.00	14.5	15.00	51.64	32.00	35.36	78.00	22.65	0.62		28.05
24	**-12	1.00	12.9	21.00	43.64	38.00	32.44	67.00	24.43	0.77		29.59
25	**-13	1.00	18.1	16.00	50.00	31.00	35.92	68.00	24.25	0.69		31.22
26	**-2 14	1.00	19.7	23.00	41.70	45.00	29.81	75.00	23.09	0.75		32.77
27	**-3 15	1.00	20.2	19.00	45.88	41.00	31.23	66.00	24.62	0.72		34.31
28	**-4 16	1.00	19.1	20.00	44.72	45.00	29.81	82.00	22.09	0.61		35.87
29	**-5 17	1.00	9.2	27.00	38.49	39.00	32.03	76.00	22.94	0.60		37.40
30	**-6 18	1.00	21.5	23.00	41.70	56.00	26.73	91.00	20.97	0.55		38.97
31	**-7 19	1.00	25.0	25.00	40.00	43.00	30.50	78.00	22.65	0.51		40.50
32	**-8 20	1.00	25.3	23.00	41.70	39.00	32.03	82.00	22.09	0.54		42.05
33	**-9 21	1.00	24.7	17.00	48.51	38.00	32.44	75.00	23.09	0.53		43.61
34	**-10 22	1.00	10.1	17.00	48.51	28.00	37.80	69.00	24.08	0.72		45.16
35	**-11 23	1.00	19.2	17.00	48.51	34.00	34.30	66.00	24.62	0.69		46.71
36	**-12 24	1.00	13.2	27.00	38.49	44.00	30.15	78.00	22.65	0.83		48.26
37	**-1 25	1.00	18.6	25.00	40.00	46.00	29.49	78.00	22.65	1.98		49.90
38	**-2 26	1.00	19.0	20.00	44.72	31.00	35.92	63.00	25.20	1.81		51.47
39	**-3 27	1.00	11.7	31.00	35.92	47.00	29.17	78.00	22.65	0.88		53.02
40	**-4 28	1.00	26.3	24.00	40.82	52.00	27.74	80.00	22.36	0.72		54.59
41	**-5 29	1.00	11.7	34.00	34.30	88.00	21.32	125.00	17.89	0.41		56.12
42	**-6 30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

4G STDs

BKG

43	##-7	31	1.00	10.6	25.00	40.00	48.00	28.87	80.00	22.36	0.79	59.22
44	##-8	32	1.00	43.0	40.00	31.62	67.00	24.43	94.00	20.63	1.90	60.78

SAM NO	POS	TIME MIN	##	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME

cc = 104

ID = WIPE TEST 29 OCT 1999 07:12
USER: 1 COMMENT: GREAT INSTRUMENT
PRESET TIME : 1.00

DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	ADC	: NO	CYCLE REPEATS :	1	DISK	: STD
SCINTILLATOR:	LIQUID	LUMEX	: NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

DATA BUFFER IS FULL. DATA WILL GO TO PRINTER ONLY.

KEV : 0.0 - 18.6	%ERROR: 0.00	FACTOR: 1.000000	BKG. SUB: 0		
KEV : 0.0 - 156.0	%ERROR: 0.00	FACTOR: 1.000000	BKG. SUB: 0		
KEV : 0.0 - 2000.0	%ERROR: 0.00	FACTOR: 1.000000	BKG. SUB: 0		

	SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME	
	MISSING SAMPLE												
	3	**-3	1.00	7.0	70407.00	0.75	70618.00	0.75	70657.00	0.75	0.00	1.55	3H
.4 TDs	4	**-4	1.00	6.4	36541.00	1.05	147412.0	0.52	147485.0	0.52	0.00	3.13	MC
	5	**-5	1.00	16.5	6660.00	2.45	67775.00	0.77	225740.0	0.42	0.00	4.77	36Cl
	6	**-6	1.00	30.5	42581.00	0.97	67933.00	0.77	67964.00	0.77	0.00	6.31	125I
	7	**-7	1.00	16.1	23.00	41.70	41.00	31.23	66.00	24.62	1.25	8.87	BLANK
	MISSING SAMPLE												
SK4	10	**-10	1.00	16.2	27.00	38.49	48.00	28.87	86.00	21.57	1.22	9.42	
	11	**-11	1.00	12.4	22.00	42.64	42.00	30.86	70.00	23.90	1.53	10.97	
	MISSING SAMPLE												
29	13	**-1	1.00	11.3	33.00	34.82	78.00	22.65	115.00	18.65	0.64	12.64	
	MISSING SAMPLE												
30	15	**-3	1.00	41.9	39.00	32.03	85.00	21.69	118.00	18.41	0.96	14.20	

Recounts of high ~~[illegible]~~ samples

Special Survey Calculations Lab: RB 232 Survey Date: 10/29/99

Description: Decommission RB 232 for work

LSC: Beckman in RB 012B Contact: Roberta Bianca, Ron Wallace

Printout: BKM;10/29/99;11:46 Comments:

	channel A	channel B	channel C
CC (cpm)	39	63	114
MDA (dpm)	27	17	22
EFF 29oct99	0.44	0.93	0.99
BKG (cpm)	27	47	92

( )yes (✓)no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample 6 Channel A count is 39 cpm / 100 cm^2.
(39 cpm - 27 cpm) / 0.44 = 27 dpm / 100cm^2

Sample 6 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 47 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 6 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 92 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Sample 13 Channel A count is 44 cpm / 100 cm^2.
(44 cpm - 27 cpm) / 0.44 = 39 dpm / 100cm^2

Sample 13 Channel B count is 67 cpm / 100 cm^2.
(67 cpm - 47 cpm) / 0.93 = 22 dpm / 100cm^2

Sample 13 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 92 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Sample 24 Channel A count is 41 cpm / 100 cm^2.
(41 cpm - 27 cpm) / 0.44 = 32 dpm / 100cm^2

Sample 24 Channel B count is 84 cpm / 100 cm^2.
(84 cpm - 47 cpm) / 0.93 = 40 dpm / 100cm^2

Sample 24 Channel C count is 117 cpm / 100 cm^2.
(117 cpm - 92 cpm) / 0.99 = 25 dpm / 100cm^2

All wipes are < NRC action level (220 dpm/100cm²).

Signature Ronald G. Wallace Date 11/1/99

ID: RADSAFETY 1A
USER: 5 COMMENT: .2 29 OCT 1999 11:46

PRESET TIME : 1.00
DATA CALC : CPM
COUNT BLANK : NO
TWO PHASE : NO
SCINTILLATOR: LIQUID
LOW LEVEL : NO

HH : YES
IC# : NO
AGC : NO
LUMEX: NO
HALF LIFE CORRECTION DATE: none

SAMPLE REPEATS: 1
REPLICATES : 1
CYCLE REPEATS : 1
LOW SAMPLE REJ: 0

PRINTER : STD
RS232 : OFF
DISK : OFF

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	HH	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
MISSING SAMPLE											
7	**-7	1.00	6.5	70510.00	0.75	70705.00	0.75	70738.00	0.75	0.00	1.54
8	**-8	1.00	7.0	36780.00	1.04	148298.0	0.52	148373.0	0.52	0.00	3.10
9	**-9	1.00	17.7	6430.00	2.49	68007.00	0.77	226190.0	0.42	0.00	4.72
10	**-10	1.00	31.3	42700.00	0.97	67784.00	0.77	67803.00	0.77	0.00	6.26
11	**-11	1.00	16.3	29.00	37.14	59.00	26.04	86.00	21.57	0.95	7.80
MISSING SAMPLE											
13	**-1	1.00	24.3	23.00	41.70	48.00	28.87	66.00	24.62	1.10	9.44
14	**-2	1.00	25.9	35.00	33.81	58.00	26.26	85.00	21.69	0.87	10.99
15	**-3	1.00	15.7	27.00	38.49	48.00	28.87	80.00	22.36	0.62	12.50
16	**-4	1.00	26.5	24.00	40.82	48.00	28.87	76.00	22.94	0.80	14.04
17	**-5	1.00	21.9	18.00	47.14	30.00	36.51	66.00	24.62	0.82	15.57
18	**-6	1.00	28.3	39.00	32.03	58.00	26.26	91.00	20.97	14.08	17.13
19	**-7	1.00	42.9	26.00	39.22	48.00	28.87	79.00	22.50	1.10	18.64
20	**-8	1.00	32.1	19.00	45.88	45.00	29.81	76.00	22.94	0.78	20.18
21	**-9	1.00	16.3	28.00	37.80	44.00	30.15	80.00	22.36	0.71	21.72
22	**-10	1.00	12.4	26.00	39.22	45.00	29.81	82.00	22.09	0.69	23.27
23	**-11	1.00	12.1	26.00	39.22	42.00	30.86	84.00	21.82	0.54	24.79
24	**-12	1.00	26.1	19.00	45.88	47.00	29.17	72.00	23.57	1.81	26.36
25	**-1 3	1.00	18.2	44.00	30.15	67.00	24.43	97.00	20.31	0.67	27.98
26	**-2 14	1.00	12.0	23.00	41.70	48.00	28.87	82.00	22.09	0.63	29.52
27	**-3 15	1.00	16.4	29.00	37.14	46.00	29.49	89.00	21.20	1.76	31.05
28	**-4 16	1.00	16.0	13.00	55.47	27.00	38.49	59.00	26.04	1.14	32.60
29	**-5 17	1.00	15.5	26.00	39.22	40.00	31.62	73.00	23.41	0.71	34.13
30	**-6 18	1.00	27.4	23.00	41.70	46.00	29.49	84.00	21.82	0.66	35.69
31	**-7 19	1.00	12.1	20.00	44.72	43.00	30.50	76.00	22.94	0.56	37.21
32	**-8 20	1.00	64.6	25.00	40.00	52.00	27.74	87.00	21.44	2.09	38.76
33	**-9 21	1.00	13.6	30.00	36.51	43.00	30.50	76.00	22.94	0.87	40.28
34	**-10 22	1.00	19.6	27.00	38.49	57.00	26.49	101.00	19.90	0.66	41.83
35	**-11 23	1.00	12.6	31.00	35.92	53.00	27.47	103.00	19.71	0.50	43.35
36	**-12 24	1.00	18.5	41.00	31.23	84.00	21.82	117.00	18.49	0.59	44.90
37	**-1 25	1.00	40.3	16.00	50.00	41.00	31.23	80.00	22.36	2.10	46.54
38	**-2 26	1.00	18.7	24.00	40.82	41.00	31.23	76.00	22.94	0.69	48.08
MISSING SAMPLE											
41	**-5	1.00	15.7	20.00	44.72	41.00	31.23	70.00	23.90	1.66	49.64
42	**-6	1.00	13.1	27.00	38.49	47.00	29.17	92.00	20.85	1.32	51.19

UG
STDs
BKG

Special Survey Calculations Lab: RB232 Survey Date: 11/2/1999

Description: Decommission

LSC: Beckman in RB 012B Contact: Roberta Bianca, Ron Wallace

Printout: BKM;11/2/99;13:30 Comments:

	channel A	channel B	channel C
CC (cpm)	38	58	94
MDA (dpm)	27	16	20
EFF 29oct99	0.44	0.93	0.99
BKG (cpm)	26	43	74

( )yes ( )no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample	15	Channel A count is			87	cpm / 100 cm^2.				
(	87	cpm	-	26	cpm)	/	0.44	=	139	dpm / 100cm^2
Sample	15	Channel B count is			108	cpm / 100 cm^2.				
(	108	cpm	-	43	cpm)	/	0.93	=	70	dpm / 100cm^2
Sample	15	Channel C count is			131	cpm / 100 cm^2.				
(	131	cpm	-	74	cpm)	/	0.99	=	58	dpm / 100cm^2
Sample	29	Channel A count is			NA	cpm / 100 cm^2.				
(	NA	cpm	-	26	cpm)	/	0.44	=	#VALUE!	dpm / 100cm^2
Sample	29	Channel B count is			74	cpm / 100 cm^2.				
(	74	cpm	-	43	cpm)	/	0.93	=	33	dpm / 100cm^2
Sample	29	Channel C count is			115	cpm / 100 cm^2.				
(	115	cpm	-	74	cpm)	/	0.99	=	41	dpm / 100cm^2
Sample	30	Channel A count is			323	cpm / 100 cm^2.				
(	323	cpm	-	26	cpm)	/	0.44	=	675	dpm / 100cm^2
Sample	30	Channel B count is			490	cpm / 100 cm^2.				
(	490	cpm	-	43	cpm)	/	0.93	=	481	dpm / 100cm^2
Sample	30	Channel C count is			535	cpm / 100 cm^2.				
(	535	cpm	-	74	cpm)	/	0.99	=	466	dpm / 100cm^2

Signature_____ Date _____

Special Survey Calculations Lab: RB232 Survey Date: 11/2/1999
Printout: BKM;11/2/99;13:30

Sample 34 Channel A count is 713 cpm / 100 cm^2.
(713 cpm - 26 cpm) / 0.44 = 1561 dpm / 100cm^2

Sample 34 Channel B count is 862 cpm / 100 cm^2.
(862 cpm - 43 cpm) / 0.93 = 881 dpm / 100cm^2

Sample 34 Channel C count is 898 cpm / 100 cm^2.
(898 cpm - 74 cpm) / 0.99 = 832 dpm / 100cm^2

Sample 0 Channel A count is NA cpm / 100 cm^2.
(NA cpm - 26 cpm) / 0.44 = #VALUE! dpm / 100cm^2

Sample 0 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 43 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 0 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 74 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Sample 0 Channel A count is NA cpm / 100 cm^2.
(NA cpm - 26 cpm) / 0.44 = #VALUE! dpm / 100cm^2

Sample 0 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 43 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 0 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 74 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Sample 0 Channel A count is NA cpm / 100 cm^2.
(NA cpm - 26 cpm) / 0.44 = #VALUE! dpm / 100cm^2

Sample 0 Channel B count is NA cpm / 100 cm^2.
(NA cpm - 43 cpm) / 0.93 = #VALUE! dpm / 100cm^2

Sample 0 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 74 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Signature________________________________ Date ________________

ID : RADSAFETY 1A 2 NOV 1999 13:30
USER: 5 COMMENT: .2

PRESET TIME :	1.00						
TA CALC :	CPM	HH	:YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	ACC	: NO	CYCLE REPEATS :	1	DISK	: OFF
SCINTILLATOR:	LIQUID	LUMEX	: NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

KEV :	0.0 - 18.6	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 156.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 2000.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0

SAM NO	POS	TIME MIN	HH	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
1	**-1	1.00	9.1	70125.00	0.76	70321.00	0.75	70351.00	0.75	0.00	1.46 3H
2	**-2	1.00	9.1	37508.00	1.03	148342.0	0.52	148396.0	0.52	0.00	3.04 14C
3	**-3	1.00	18.8	6835.00	2.42	69044.00	0.76	225755.0	0.42	0.00	4.67 36Cl
4	**-4	1.00	32.6	40746.00	0.99	64498.00	0.79	64526.00	0.79	0.00	6.21 125I
5	**-5	1.00	18.9	25.00	40.00	53.00	27.47	79.00	22.50	1.00	7.75 blank
MISSING SAMPLE											
8	**-8	1.00	18.2	22.00	42.64	39.00	32.03	64.00	25.00	1.42	9.30 } blank
9	**-9	1.00	13.8	26.00	39.22	43.00	30.50	74.00	23.25	1.15	10.83
MISSING SAMPLE											
13	**-1	1.00	25.4	28.00	37.80	49.00	28.57	73.00	23.41	0.86	12.49
14	**-2	1.00	30.0	12.00	57.74	37.00	32.88	66.00	24.62	1.12	14.04
15	**-3	1.00	31.0	19.00	45.88	47.00	29.17	66.00	24.62	1.09	15.57
[illegible]	**-4	1.00	21.3	30.00	36.51	48.00	28.87	77.00	22.79	0.77	17.12
[illegible]	**-5	1.00	35.0	22.00	42.64	44.00	30.15	74.00	23.25	1.01	18.63
18	**-6	1.00	33.5	22.00	42.64	37.00	32.88	84.00	21.82	0.94	20.19
19	**-7	1.00	38.7	19.00	45.88	39.00	32.03	71.00	23.74	1.21	21.72
20	**-8	1.00	32.2	21.00	43.64	44.00	30.15	80.00	22.36	1.06	23.26
21	**-9	1.00	12.0	21.00	43.64	41.00	31.23	71.00	23.74	0.97	24.80
22	**-10	1.00	13.3	20.00	44.72	42.00	30.86	82.00	22.09	0.86	26.36
23	**-11	1.00	20.5	18.00	47.14	39.00	32.03	76.00	22.94	0.81	27.89
24	**-12	1.00	18.8	18.00	47.14	38.00	32.44	71.00	23.74	1.63	29.44
25	**-13	1.00	19.0	22.00	42.64	53.00	27.47	89.00	21.20	0.81	31.07
26	**-2 14	1.00	18.7	25.00	40.00	46.00	29.49	82.00	22.09	0.52	32.62
27	**-3 15	1.00	26.5	-87.00	21.44	-108.00	19.25	-131.00	17.47	0.43	34.14
28	**-4 16	1.00	21.1	16.00	50.00	33.00	34.82	70.00	23.90	0.92	35.68
29	**-5 17	1.00	20.2	25.00	40.00	46.00	29.49	80.00	22.36	0.81	37.21
30	**-6 18	1.00	27.8	22.00	42.64	46.00	29.49	81.00	22.22	1.15	38.75
31	**-7 19	1.00	17.5	18.00	47.14	40.00	31.62	84.00	21.82	0.70	40.29
32	**-8 20	1.00	15.1	21.00	43.64	46.00	29.49	72.00	23.57	0.84	41.83
33	**-9 21	1.00	20.2	17.00	48.51	35.00	33.81	77.00	22.79	0.63	43.36
34	**-10 22	1.00	21.2	19.00	45.88	33.00	34.92	69.00	24.08	0.71	44.89
35	**-11 23	1.00	28.1	17.00	48.51	46.00	29.49	86.00	21.57	0.65	46.41
36	**-12 24	1.00	30.3	21.00	43.64	38.00	32.44	65.00	24.81	0.88	47.95
37	**-1 25	1.00	32.9	16.00	50.00	38.00	32.44	72.00	23.57	2.42	49.57
38	**-2 26	1.00	12.6	20.00	44.72	40.00	31.62	73.00	23.41	0.83	51.12
39	**-3 27	1.00	14.3	32.00	35.36	57.00	26.49	92.00	20.85	0.55	52.64
40	**-4 28	1.00	22.2	34.00	34.30	54.00	27.22	82.00	22.09	1.21	54.18
41	**-5 29	1.00	13.9	37.00	32.88	-74.00	23.25	-115.00	18.65	0.58	55.71
42	**-6 30	1.00	37.2	-323.00	11.13	-490.00	9.04	-535.00	8.65	0.26	57.26
43	**-7 31	1.00	11.0	20.00	44.72	42.00	30.86	78.00	22.65	0.53	58.78
44	**-8 32	1.00	14.5	21.00	43.64	46.00	29.49	80.00	22.36	0.82	60.33
45	**-9 33	1.00	46.2	27.00	38.49	45.00	29.81	76.00	22.94	1.35	61.85
46	**-10 34	1.00	27.7	-713.00	7.49	-862.00	6.81	-898.00	6.67	0.05	63.39
47	**-11 35	1.00	38.5	25.00	40.00	43.00	30.86	73.00	23.41	0.63	64.92

RECOUNTS OF RB 232

ID: RADSAFETY 1A 2 NOV 1999 16:10
USER: 5 COMMENT: .2
PRESET TIME : 1.00
DATA CALC : CPM HH :YES SAMPLE REPEATS: 1 PRINTER : STD
COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : OFF
TWO PHASE : NO AQC : NO CYCLE REPEATS : 1 DISK : OFF
SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0
LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

	SAM NO	POS	TIME MIN	HH	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
#15	1	**-1	1.00	28.0	129.00	17.61	154.00	16.12	192.00	14.43	0.41	1.43
#29	2	**-2	1.00	13.0	28.00	37.80	70.00	23.90	108.00	19.25	0.69	2.94
#30	3	**-3	1.00	36.9	378.00	10.29	549.00	8.54	579.00	8.31	0.20	4.42
#34	4	**-4	1.00	25.2	692.00	7.60	856.00	6.84	886.00	6.72	0.07	5.99
	MISSING SAMPLE											
	6	**-6	1.00	16.5	21.00	43.64	45.00	29.81	72.00	23.57	1.30	7.55
	7	**-7	1.00	12.6	20.00	44.72	38.00	32.44	76.00	22.94	1.21	9.07
	8	**-8	1.00	7.2	70026.00	0.76	70212.00	0.75	70255.00	0.75	0.00	10.65
	9	**-9	1.00	6.6	37068.00	1.04	148360.0	0.52	148419.0	0.52	0.00	12.22
	10	**-10	1.00	18.3	6723.00	2.44	68712.00	0.76	226806.0	0.42	0.00	13.85
	11	**-11	1.00	31.0	40195.00	1.00	64267.00	0.79	64304.00	0.79	0.00	15.40
	12	**-12	1.00	17.7	15.00	51.64	39.00	32.03	74.00	23.25	1.01	16.95

ory Survey Calculations Lab: RB232 Survey Date: 11/3/1999

LSC: Packard in RB 012B
Printout:

	channel A	channel B	channel C
CC (cpm)	34	43	62
MDA (dpm)	23	14	16
EFF1nov99	0.48	0.93	0.99
BKG (cpm)	23	30	46

(✓)yes ( )no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

If no, only the highest count in each column that is above critical count will be evaluated below:

EVALUATIONS OF HIGH COUNTS:

A. The highest Channel A count is NA cpm / 100 cm^2.

(NA cpm - 23 cpm) / 0.48 = ###### dpm / 100cm^2

____ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

B. The highest Channel B count is NA cpm / 100 cm^2.

(NA cpm - 30 cpm) / 0.93 = ###### dpm / 100cm^2

____ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

C. The highest Channel C count is NA cpm / 100 cm^2.

(NA cpm - 46 cpm) / 0.99 = ###### dpm / 100cm^2

____ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

Signed: Robert Branca Date: 11/4/99

Note: As a conservative practice, the NRC action level of 220 dpm / 100cm^2 is chosen for all isotopes.

ory Survey Calculations Lab: RB222c Survey Date: 11/3/1999

LSC: Packard in RB 012B
Printout:

	channel A	channel B	channel C
:C (cpm)	34	43	62
1DA (dpm)	23	14	16
:FF1nov99	0.48	0.93	0.99
3KG (cpm)	23	30	46

)yes (✓)no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

f no, only the highest count in each column that is above critical count will be evaluated
elow:

EVALUATIONS OF HIGH COUNTS:

A. The highest Channel A count is 49 cpm / 100 cm^2.

(49 cpm - 23 cpm) / 0.48 = 54 dpm / 100cm^2

✓ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

B. The highest Channel B count is 62 cpm / 100 cm^2.

(62 cpm - 30 cpm) / 0.93 = 34 dpm / 100cm^2

✓ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

C. The highest Channel C count is 75 cpm / 100 cm^2.

(75 cpm - 46 cpm) / 0.99 = 29 dpm / 100cm^2

✓ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

Signed: Robert Banca Date: 11/4/99

Note: As a conservative practice, the NRC action level of 220 dpm / 100cm^2 is chosen for all isotopes.

ory Survey Calculations Lab: RB222c Recount Survey Date: 11/3/1999

LSC: Packard in RB 012B
Printout:

	channel A	channel B	channel C
:C (cpm)	37	51	64
IDA (dpm)	24	15	16
FF1nov99	0.48	0.93	0.99
KG (cpm)	25	37	48

✓)yes ( )no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

no, only the highest count in each column that is above critical count will be evaluated low:

/ALUATIONS OF HIGH COUNTS:

The highest Channel A count is 44 cpm / 100 cm^2.

(44 cpm - 25 cpm) / 0.48 = 40 dpm / 100cm^2

✓ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

The highest Channel B count is 55 cpm / 100 cm^2.

(55 cpm - 37 cpm) / 0.93 = 19 dpm / 100cm^2

✓ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

The highest Channel C count is 71 cpm / 100 cm^2.

(71 cpm - 48 cpm) / 0.99 = 23 dpm / 100cm^2

✓ less than NRC action level of 220 dpm / 100 cm^2.
____ greater than NRC action level of 220 dpm / 100 cm^2.
action and follow up required? ( )yes ( )no

Signed Deborah Garcia Date: 11/4/99

Note: As a conservative practice, the NRC action level of 220 dpm / 100cm^2 is chosen for all isotopes.

#: 1 Name:RAD SAFETY 1 03-Nov-99 12:43

A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
1.00 QIP = tSIE ES Terminator = Count
escence Correction On

	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	
1	1.00	19.00	31.00	44.00	C	552.	
2	1.00	13.00	28.00	39.00	C	537.	
3	1.00	15.00	26.00	44.00	C	530.	
4	1.00	22.00	35.00	47.00	C	574.	
5	1.00	18.00	25.00	39.00	C	580.	
6	1.00	13.00	22.00	42.00	C	601.	
7	1.00	11.00	22.00	32.00	C	610.	
8	1.00	17.00	28.00	41.00	C	639.	
9	1.00	22.00	36.00	45.00	C	584.	2B232
10	1.00	13.00	22.00	32.00	C	629.	
11	1.00	12.00	25.00	43.00	C	585.	
12	1.00	22.00	29.00	43.00	C	623.	
13	1.00	16.00	25.00	40.00	C	542.	
14	1.00	14.00	29.00	40.00	C	573.	
15	1.00	15.00	29.00	57.00	C	607.	
16	1.00	9.00	24.00	37.00	C	634.	
17	1.00	12.00	27.00	37.00	C	549.	
2 missing vials)							
20	1.00	77246.0	77274.0	77291.0	C	641.	H-3
21	1.00	48778.0	149193.	149211.	C	640.	C-14
22	1.00	8556.00	89397.0	225090.	C	610.	Cl-36
23	1.00	54229.0	67408.0	67425.0	C	526.	I-125
24	1.00	17.00	27.00	39.00	C	570.	Blank
2 missing vials)							
27	1.00	13.00	25.00	41.00	C	594.	BKG
28	1.00	23.00	30.00	46.00	C	613.	
1 missing vial)							
~~31~~ 1	1.00	14.00	19.00	36.00	C	633.	
~~32~~ 2	1.00	20.00	30.00	39.00	C	637.	
~~33~~ 3	1.00	17.00	28.00	46.00	C	609.	2B222C
~~34~~ 4	1.00	49.00	62.00	75.00	C	541.	
~~35~~ 5	1.00	17.00	34.00	44.00	C	620.	

Special Survey Calculations

Lab: RB232 Survey Date: 11/5/1999

Description: Decommission

LSC: Beckman in RB 012B

Contact: Roberta Bianca, Ron Wallace

Printout: BKM;11/5/99;13:04

Comments:

	channel A	channel B	channel C
CC (cpm)	38	58	94
MDA (dpm)	27	16	20
EFF 29oct99	0.44	0.93	0.99
BKG (cpm)	26	43	74

( )yes ( )no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample	1	Channel A count is		42	cpm / 100 cm^2.						
(	42	cpm	-	26	cpm)	/	0.44	=		36	dpm / 100cm^2
Sample	1	Channel B count is		98	cpm / 100 cm^2.						
(	98	cpm	-	43	cpm)	/	0.93	=		59	dpm / 100cm^2
Sample	1	Channel C count is		138	cpm / 100 cm^2.						
(	138	cpm	-	74	cpm)	/	0.99	=		65	dpm / 100cm^2
Sample	0	Channel A count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	26	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel B count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	43	cpm)	/	0.93	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel C count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	74	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel A count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	26	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel B count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	43	cpm)	/	0.93	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel C count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	74	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2

Signature_____ Date _____

RB 232

ID: RADSAFETY 1A 5 NOV 1999 13:04
USER: 5 COMMENT: .2
PRESET TIME : 1.00

DATA CALC :	CPM	H# :	YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	IC# :	NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	AOC :	NO	CYCLE REPEATS :	1	DISK	: OFF
SCINTILLATOR:	LIQUID	LUMEX:	NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
MISSING SAMPLE											
4	**-4	1.00	7.1	69869.00	0.76	70077.00	0.76	70111.00	0.76	0.00	1.51
5	**-5	1.00	5.6	36845.00	1.04	148002.0	0.52	148073.0	0.52	0.00	3.06
6	**-6	1.00	16.1	6590.00	2.46	67796.00	0.77	226462.0	0.42	0.00	4.69
7	**-7	1.00	30.2	39853.00	1.01	62237.00	0.80	62263.00	0.80	0.00	6.23
8	**-8	1.00	16.8	24.00	40.82	46.00	29.49	75.00	23.09	0.91	7.76
MISSING SAMPLE											
10	**-10	1.00	15.9	17.00	48.51	39.00	32.03	85.00	21.69	0.86	9.28
11	**-11	1.00	12.3	36.00	33.33	57.00	26.49	99.00	20.10	0.79	10.81
MISSING SAMPLE											
13	**-1	1.00	26.2	42.00	30.86	98.00	20.20	138.00	17.03	0.75	12.45
14	**-2	1.00	13.7	22.00	42.64	39.00	32.03	73.00	23.41	0.78	14.01
15	**-3	1.00	23.0	16.00	50.00	41.00	31.23	83.00	21.95	0.79	15.53
16	**-4	1.00	12.2	23.00	41.70	33.00	34.82	77.00	22.79	0.98	17.08
17	**-5	1.00	16.3	24.00	40.82	50.00	28.28	81.00	22.22	0.88	18.62
18	**-6	1.00	22.1	23.00	41.70	42.00	30.86	82.00	22.09	0.94	20.16
19	**-7	1.00	17.0	22.00	42.64	37.00	32.88	78.00	22.65	1.18	21.68
20	**-8	1.00	37.6	28.00	37.80	54.00	27.22	88.00	21.32	1.55	23.23
21	**-9	1.00	28.5	26.00	39.22	49.00	28.57	86.00	21.57	1.31	24.76
22	**-10	1.00	19.7	31.00	35.92	57.00	26.49	90.00	21.08	2.80	26.30
23	**-11	1.00	12.1	18.00	47.14	42.00	30.86	72.00	23.57	0.70	27.84

UG STDS

BKG

Special Survey Calculations Date: 11/8/1999

Item: Decommission
Contact: R Wallace
Where: RB 232
Printout: BKM: 11/9/99;09:14

	channel A	channel B	channel C
CC (cpm)	43	72	94
MDA (dpm)	29	19	20
EFF29oct99	0.44	0.93	0.99
BKG (cpm)	30	55	74

yes	no	
( )	(✓)	All wipes are below critical counts, and (If no, please look below.) are 0 uCi/ 100 cm^2.
(✓)	( )	All wipes are below NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

Signed: Ronald G Wallace
Date: 11/9/99

See Records

RB 232

ID : RADSAFETY 1A 9 NOV 1999 09:14
USER: 5 COMMENT: .2
PRESET TIME : 1.00

DATA CALC :	CPM	HH :	YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	ID# :	NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	ADC :	NO	CYCLE REPEATS :	1	DISK	: OFF
SCINTILLATOR:	LIQUID	LUMEX:	NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

KEV :	0.0 - 18.6	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 156.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 2000.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0

SAM NO	POS	TIME MIN	HH	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
1	**-1	1.00	5.6	70129.00	0.76	70351.00	0.75	70385.00	0.75	0.00	1.47
2	**-2	1.00	5.6	36705.00	1.04	148172.0	0.52	148242.0	0.52	0.00	3.04
3	**-3	1.00	15.8	6590.00	2.46	67470.00	0.77	226219.0	0.42	0.00	4.66
4	**-4	1.00	29.5	37056.00	1.04	59854.00	0.82	59885.00	0.82	0.00	6.20
5	**-5	1.00	15.9	23.00	41.70	39.00	32.03	66.00	24.62	0.96	7.73
MISSING SAMPLE											
9	**-9	1.00	16.9	30.00	36.51	55.00	26.97	103.00	19.71	0.66	9.30
10	**-10	1.00	13.1	15.00	51.64	38.00	32.44	74.00	23.23	0.92	10.84
MISSING SAMPLE											
11	**-1	1.00	41.6	24.00	40.82	55.00	26.97	83.00	21.95	2.05	12.48
12	**-2	1.00	16.6	30.00	36.51	50.00	28.28	94.00	20.63	1.87	14.04
13	**-3	1.00	21.1	20.00	44.72	49.00	28.57	88.00	21.32	1.81	15.56
14	**-4	1.00	24.8	32.00	35.36	57.00	26.49	88.00	21.32	1.80	17.12
15	**-5	1.00	12.5	28.00	37.80	58.00	26.26	96.00	20.41	1.91	18.66
16	**-6	1.00	84.0	18.00	47.14	51.00	28.01	82.00	22.09	2.51	20.20
17	**-7	1.00	56.0	33.00	34.82	61.00	25.61	91.00	20.97	1.46	21.74
18	**-8	1.00	27.1	29.00	37.14	53.00	27.47	88.00	21.32	1.65	23.28
19	**-9	1.00	20.3	23.00	41.70	46.00	29.49	81.00	22.22	1.87	24.81
20	**-10	1.00	43.3	20.00	44.72	50.00	28.28	77.00	22.79	1.96	26.35
MISSING SAMPLE											
25	**-1	1.00	13.4	36.00	33.33	56.00	26.73	106.00	19.43	2.52	28.03
26	**-2	1.00	13.3	24.00	40.82	50.00	28.28	94.00	20.63	1.23	29.57
27	**-3	1.00	14.9	18.00	47.14	44.00	30.15	71.00	23.74	1.53	31.11
28	**-4	1.00	16.4	20.00	44.72	44.00	30.15	89.00	21.20	1.44	32.66

STDS

3H
CM
C136
2 125
BLANK

Blen

Lon's
Ricks
Rob's
135

Special Survey Calculations Date: 11/8/1999

Item: Decommission- recounts
Contact: R Wallace
Where: RB 232
Printout: BKM: 11/9/99;09:53

	channel A	channel B	channel C
CC (cpm)	35	69	110
MDA (dpm)	26	18	22
EFF29oct99	0.44	0.93	0.99
BKG (cpm)	24	52	88

yes no
(✓) ( ) All wipes are below critical counts, and (If no, please look below.)
are 0 uCi/ 100 cm^2.
(✓) ( ) All wipes are below NRC action level (220 dpm/ 100 cm^2).
(For calculations, please look below.)

Signed: Ronald G Wallace
Date: 11/9/99

ID: RADSAFETY 1A 9 NOV 1999 09:53
USER: 5 COMMENT: .2

PRESET TIME :	1.00						
DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	AGC	: NO	CYCLE REPEATS :	1	DISK	: OFF
SCINTILLATOR:	LIQUID	LUMEX	: NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

KEV :	0.0 - 18.6	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 156.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 3000.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0

SAM NO	POS	TIME MIN	H#	WIND01 CPM	WIND01 %ERROR	WIND02 CPM	WIND02 %ERROR	WIND03 CPM	WIND03 %ERROR	LUMEX %	ELAPSED TIME
1	**-1	1.00	5.0	69809.00	0.76	70023.00	0.76	70067.00	0.76	0.00	1.51
2	**-2	1.00	6.5	36463.00	1.05	148317.0	0.52	148402.0	0.52	0.00	3.08
3	**-3	1.00	16.9	6492.00	2.48	67045.00	0.77	224948.0	0.42	0.00	4.71
4	**-4	1.00	29.6	37188.00	1.04	59638.00	0.82	59675.00	0.82	0.00	6.25
5	**-5	1.00	16.5	28.00	37.80	56.00	26.73	96.00	20.41	0.59	7.79
MISSING SAMPLE											
8	**-8	1.00	17.1	24.00	40.82	52.00	27.74	88.00	21.32	0.77	9.33
9	**-9	1.00	12.5	22.00	42.64	43.00	30.50	78.00	22.65	0.81	10.87
MISSING SAMPLE											
11	**-11	1.00	14.1	33.00	34.82	60.00	25.82	96.00	20.41	2.72	12.41
MISSING SAMPLE											
14	**-2	1.00	16.5	24.00	40.82	48.00	28.87	89.00	21.20	1.87	14.11
MISSING SAMPLE											
17	**-5	1.00	12.4	34.00	34.30	61.00	25.61	102.00	19.80	1.93	15.66
MISSING SAMPLE											
19	**-7	1.00	59.6	26.00	39.22	51.00	28.01	94.00	20.63	1.55	17.21

BKG

7 - 2

Rad's meter

Recounts

Special Survey Calculations 11/9/1999

Item: Decommission
Contact: R. Bianca, R. Wallace
Where: RB232 Recounts
Printout: PKD: 11/9/99;12:44

	channel A	channel B	channel C
CC (cpm)	23	41	55
MDA (dpm)	18	13	15
EFF1nov99	0.48	0.93	0.99
BKG (cpm)	14	29	40

yes	no	
( )	(✓)	All wipes are below critical counts, and therefore are 0 uCi/ 100 cm^2. (If no, please look below.)
( )	(✓)	All wipes are below NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

Ronald J. Wallace

#2

Ch 1 400 - 14 = 386/.48 = 804 DPM/100cm²

Ch 2 1053 - 29 = /.93 = 1101 "

Ch 3 1063 - 40 = 1023/.99 = 1033 "

These contam. items put in waste.

Protocol #: 1 Name:RAD SAFETY 1 09-Nov-99 12:44
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Time = 1.00 QIP = tSIE ES Terminator = Count

Lus#ness	TIME	CoCPMation	CPMB	CPMC	FLAG	tSIE
1	1.00	17.00	33.00	50.00	C	565.
2	1.00	-400.00	1053.00	1063.00	C	565.
3	1.00	21.00	40.00	54.00	C	559.
4	1.00	15.00	22.00	43.00	C	569.
8 missing vials)						
13	1.00	14.00	28.00	40.00	C	448.
14	1.00	9.00	29.00	39.00	C	472.
2 missing vials)						
17	1.00	72440.0	72461.0	72473.0	C	633.
18	1.00	49137.0	148977.	148991.	C	632.
19	1.00	8158.00	90768.0	225231.	C	595.
20	1.00	48630.0	60377.0	60394.0	C	519.
21	1.00	18.00	24.00	44.00	C	562.

1,2,3,4 11/8

Special Survey Calculations Lab: RB232 Survey Date: 11/9/1999

Description: Decommission

LSC: Beckman in RB 012B Contact: Roberta Bianca, Ron Wallace

Printout: BKM;11/9/99;15:08 Comments:

	channel A	channel B	channel C
CC (cpm)	32	57	113
MDA (dpm)	24	16	22
EFF 29oct99	0.44	0.93	0.99
BKG (cpm)	21	42	91

( )yes (✓)no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample 2 Channel A count is 1202 cpm / 100 cm^2.
(1202 cpm - 21 cpm) / 0.44 = 2684 dpm / 100cm^2

Sample 2 Channel B count is 3144 cpm / 100 cm^2.
(3144 cpm - 42 cpm) / 0.93 = 3335 dpm / 100cm^2

Sample 2 Channel C count is 3176 cpm / 100 cm^2.
(3176 cpm - 91 cpm) / 0.99 = 3116 dpm / 100cm^2

Sample 8 Channel A count is NA cpm / 100 cm^2.
(NA cpm - 21 cpm) / 0.44 = #VALUE! dpm / 100cm^2

Sample 8 Channel B count is 70 cpm / 100 cm^2.
(70 cpm - 42 cpm) / 0.93 = 30 dpm / 100cm^2

Sample 8 Channel C count is 112 cpm / 100 cm^2.
(112 cpm - 91 cpm) / 0.99 = 21 dpm / 100cm^2

Sample 12 Channel A count is NA cpm / 100 cm^2.
(NA cpm - 21 cpm) / 0.44 = #VALUE! dpm / 100cm^2

Sample 12 Channel B count is 58 cpm / 100 cm^2.
(58 cpm - 42 cpm) / 0.93 = 17 dpm / 100cm^2

Sample 12 Channel C count is NA cpm / 100 cm^2.
(NA cpm - 91 cpm) / 0.99 = #VALUE! dpm / 100cm^2

Signature Ronald G Wallace Date 11/17/99

Special Survey Calculations Lab: RB232 Survey Date: 11/9/1999

Printout: BKM;11/9/99;15:08

Sample	16	Channel A count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	21	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	16	Channel B count is			61			cpm / 100 cm^2.			
(	61	cpm	-	42	cpm)	/	0.93	=		20	dpm / 100cm^2
Sample	16	Channel C count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	91	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2
Sample	23	Channel A count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	21	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	23	Channel B count is			62			cpm / 100 cm^2.			
(	62	cpm	-	42	cpm)	/	0.93	=		22	dpm / 100cm^2
Sample	23	Channel C count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	91	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2
Sample	32	Channel A count is			51695			cpm / 100 cm^2.			
(	51695	cpm	-	21	cpm)	/	0.44	=		117441	dpm / 100cm^2
Sample	32	Channel B count is			73092			cpm / 100 cm^2.			
(	73092	cpm	-	42	cpm)	/	0.93	=		78548	dpm / 100cm^2
Sample	32	Channel C count is			73130			cpm / 100 cm^2.			
(	73130	cpm	-	91	cpm)	/	0.99	=		73777	dpm / 100cm^2
Sample	33	Channel A count is			496			cpm / 100 cm^2.			
(	496	cpm	-	21	cpm)	/	0.44	=		1080	dpm / 100cm^2
Sample	33	Channel B count is			999			cpm / 100 cm^2.			
(	999	cpm	-	42	cpm)	/	0.93	=		1029	dpm / 100cm^2
Sample	33	Channel C count is			1031			cpm / 100 cm^2.			
(	1031	cpm	-	91	cpm)	/	0.99	=		949	dpm / 100cm^2

Ronald G Wallace 11/17/99

Special Survey Calculations Lab: RB232 Survey Date: 11/9/1999

Printout: BKM;11/9/99;15:08

Sample	40	Channel A count is			NA		cpm / 100 cm^2.				
(	NA	cpm	-	21	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	40	Channel B count is			60		cpm / 100 cm^2.				
(	60	cpm	-	42	cpm)	/	0.93	=		19	dpm / 100cm^2
Sample	40	Channel C count is			104		cpm / 100 cm^2.				
(	104	cpm	-	91	cpm)	/	0.99	=		13	dpm / 100cm^2
Sample	0	Channel A count is			NA		cpm / 100 cm^2.				
(	NA	cpm	-	21	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel B count is			NA		cpm / 100 cm^2.				
(	NA	cpm		42	cpm)	/	0.93	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel C count is			NA		cpm / 100 cm^2.				
(	NA	cpm	-	91	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel A count is			NA		cpm / 100 cm^2.				
(	NA	cpm	-	21	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel B count is			NA		cpm / 100 cm^2.				
(	NA	cpm	-	42	cpm)	/	0.93	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel C count is			NA		cpm / 100 cm^2				
(	NA	cpm	-	91	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel A count is			NA		cpm / 100 cm^2.				
(	NA	cpm	-	21	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel B count is			NA		cpm / 100 cm^2.				
(	NA	cpm	-	42	cpm)	/	0.93	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel C count is			NA		cpm / 100 cm^2.				
(	NA	cpm	-	91	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2

Ronald J. Wallace 11/17/99

<B232

ID#:WIPE TEST 9 NOV 1999 15:08
USER: 1 COMMENT:GREAT INSTRUMENT
PRESET TIME : 1.00
DATA CALC : CPM H# :YES SAMPLE REPEATS: 1 PRINTER : STD
COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : OFF
TWO PHASE : NO ADC : NO CYCLE REPEATS : 1 DISK : STD
SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0
LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

DATA BUFFER IS FULL. DATA WILL GO TO PRINTER ONLY.

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME	
1	**-1	1.00	6.6	70250.00	0.75	70452.00	0.75	70495.00	0.75	0.00	1.47	3H
2	**-2	1.00	7.7	37397.00	1.03	148261.0	0.52	148323.0	0.52	0.00	3.07	14C
3	**-3	1.00	18.1	6444.00	2.49	67429.00	0.77	224403.0	0.42	0.00	4.70	36Cl
4	**-4	1.00	30.8	37086.00	1.04	59329.00	0.82	59357.00	0.82	0.00	6.23	126I
MISSING SAMPLE												
6	**-6	1.00	17.7	24.00	40.82	41.00	31.23	78.00	22.65	0.87	7.78	
MISSING SAMPLE												
8	**-8	1.00	17.2	21.00	43.64	42.00	30.86	82.00	22.09	1.15	9.33	
9	**-9	1.00	13.7	22.00	42.64	39.00	32.03	91.00	20.97	0.87	10.87	
MISSING SAMPLE												
13	**-1	1.00	16.1	25.00	40.00	51.00	28.01	86.00	21.57	0.49	12.55	
14	**-2	1.00	22.6	1202.00	5.77	3144.00	3.57	3176.00	3.55	0.01	14.11	.38
15	**-3	1.00	21.7	18.00	47.14	51.00	28.01	78.00	22.65	0.58	15.62	
16	**-4	1.00	23.4	17.00	48.51	42.00	30.86	85.00	21.69	0.48	17.19	
17	**-5	1.00	18.7	20.00	44.72	38.00	32.44	79.00	22.50	0.69	18.74	
18	**-6	1.00	21.0	28.00	37.80	48.00	28.87	87.00	21.44	0.49	20.29	
19	**-7	1.00	23.2	28.00	37.80	55.00	26.97	88.00	21.32	0.41	21.83	
20	**-8	1.00	19.4	25.00	40.00	70.00	23.90	112.00	18.90	0.39	23.38	
21	**-9	1.00	20.2	19.00	45.88	41.00	31.23	78.00	22.65	0.51	24.91	
22	**-10	1.00	17.6	22.00	42.64	61.00	25.61	96.00	20.41	0.38	26.46	
23	**-11	1.00	23.9	26.00	39.22	60.00	25.82	91.00	20.97	0.46	27.99	
24	**-12	1.00	21.7	23.00	41.70	58.00	26.26	99.00	20.10	0.39	29.55	
25	**-13	1.00	22.2	16.00	50.00	43.00	30.50	83.00	21.95	0.57	31.21	
26	**-2 14	1.00	19.5	20.00	44.72	55.00	26.97	93.00	20.74	0.47	32.77	
27	**-3 15	1.00	21.8	23.00	41.70	51.00	28.01	92.00	20.85	0.75	34.29	
28	**-4 16	1.00	26.7	24.00	40.82	61.00	25.61	96.00	20.41	0.48	35.85	
29	**-5 17	1.00	20.2	20.00	44.72	37.00	32.88	78.00	22.65	0.57	37.41	
30	**-6 18	1.00	21.6	25.00	40.00	50.00	28.28	87.00	21.44	0.53	38.96	
31	**-7 19	1.00	19.7	13.00	55.47	44.00	30.15	87.00	21.44	0.60	40.50	
32	**-8 20	1.00	20.1	22.00	42.64	38.00	32.44	78.00	22.65	1.92	42.05	
33	**-9 21	1.00	22.1	28.00	37.80	50.00	28.28	88.00	21.32	0.48	43.60	
34	**-10 22	1.00	23.5	23.00	41.70	42.00	30.86	79.00	22.50	0.54	45.17	
35	**-11 23	1.00	22.6	23.00	41.70	62.00	25.40	93.00	20.74	0.53	46.71	
36	**-12 24	1.00	21.9	29.00	37.14	53.00	27.47	88.00	21.32	0.62	48.27	
37	**-1 25	1.00	23.3	22.00	42.64	51.00	28.01	85.00	21.69	0.52	49.91	
38	**-2 26	1.00	18.6	24.00	40.82	50.00	28.28	77.00	22.79	0.66	51.46	
39	**-3 27	1.00	21.1	14.00	53.45	40.00	31.62	73.00	23.41	1.58	53.00	
40	**-4 28	1.00	22.6	30.00	36.51	52.00	27.74	99.00	20.10	0.92	54.57	
41	**-5 29	1.00	25.4	17.00	48.51	45.00	29.81	82.00	22.09	0.53	56.11	
42	**-6 30	1.00	25.2	17.00	48.51	41.00	31.23	76.00	22.94	0.65	57.66	
43	**-7 31	1.00	23.1	16.00	50.00	44.00	30.15	85.00	21.69	0.56	59.20	
44	**-8 32	1.00	21.1	51695.00	0.38	73092.00	0.74	73130.00	0.74	0.00	60.78	.7

0 BKG
BLK
BKG

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
45	**-9 33	1.00	22.3	- 496.00	8.98	999.00	6.33	- 1031.00	6.23	0.12	62.34
46	**-10 34	1.00	23.7	23.00	41.70	49.00	28.57	89.00	21.20	0.68	63.91
47	**-11 35	1.00	20.2	18.00	47.14	45.00	29.81	76.00	22.94	0.63	65.44
48	**-12 36	1.00	19.9	26.00	39.22	53.00	27.47	87.00	21.44	0.50	67.00
49	**-1 37	1.00	22.9	21.00	43.64	38.00	32.44	88.00	21.32	0.48	68.64
50	**-2 38	1.00	22.9	19.00	45.88	47.00	29.17	75.00	23.09	0.73	70.20
51	**-3 39	1.00	21.9	20.00	44.72	49.00	28.57	93.00	20.74	0.49	71.74
52	**-4 40	1.00	22.8	26.00	39.22	- 60.00	25.82	- 104.00	19.61	0.56	73.29
53	**-5 41	1.00	23.5	31.00	35.92	54.00	27.22	85.00	21.69	0.61	74.83
				33		57		>100			

Recount 2, 8, 12, 16, 23, 32, 33, 40

Special Survey Calculations Lab: RB232 Survey Date: 11/10/1999

Description: Decommission

LSC: Beckman in RB 012B Contact: Roberta Bianca, Ron Wallace

Printout: BKM;11/10/99;14:29 Comments:

	channel A	channel B	channel C
CC (cpm)	41	73	116
MDA (dpm)	28	19	23
EFF 29oct99	0.44	0.93	0.99
BKG (cpm)	29	56	94

CONTAMINATED ITEMS REMOVED FOR DECONTAMINATION / DECAY

( )yes (✓)no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample 3 Channel A count is 8707 cpm / 100 cm^2.
(8707 cpm - 29 cpm) / 0.44 = 19723 dpm / 100cm^2

Sample 3 Channel B count is 14814 cpm / 100 cm^2.
(14814 cpm - 56 cpm) / 0.93 = 15869 dpm / 100cm^2

Sample 3 Channel C count is 14864 cpm / 100 cm^2.
(14864 cpm - 94 cpm) / 0.99 = 14919 dpm / 100cm^2

Sample 4 Channel A count is 42 cpm / 100 cm^2.
(42 cpm - 29 cpm) / 0.44 = 30 dpm / 100cm^2

Sample 4 Channel B count is 100 cpm / 100 cm^2.
(100 cpm - 56 cpm) / 0.93 = 47 dpm / 100cm^2

Sample 4 Channel C count is 133 cpm / 100 cm^2.
(133 cpm - 94 cpm) / 0.99 = 39 dpm / 100cm^2

Sample 24 Channel A count is 241 cpm / 100 cm^2.
(241 cpm - 29 cpm) / 0.44 = 482 dpm / 100cm^2

Sample 24 Channel B count is 275 cpm / 100 cm^2.
(275 cpm - 56 cpm) / 0.93 = 235 dpm / 100cm^2

Sample 24 Channel C count is 311 cpm / 100 cm^2.
(311 cpm - 94 cpm) / 0.99 = 219 dpm / 100cm^2

Signature Ronald G. Wallace Date 11/16/99

Special Survey Calculations Lab: RB232 Survey Date: 11/10/1999

Printout: BKM;11/10/99;14:29

Sample	25	Channel A count is		64	cpm / 100 cm^2.						
(	64	cpm	-	29	cpm)	/	0.44	=	80	dpm / 100cm^2	
Sample	25	Channel B count is		89	cpm / 100 cm^2.						
(	89	cpm	-	56	cpm)	/	0.93	=	35	dpm / 100cm^2	
Sample	25	Channel C count is		120	cpm / 100 cm^2.						
(	120	cpm	-	94	cpm)	/	0.99	=	26	dpm / 100cm^2	
Sample	30	Channel A count is		89	cpm / 100 cm^2.						
(	89	cpm	-	29	cpm)	/	0.44	=	136	dpm / 100cm^2	
Sample	30	Channel B count is		113	cpm / 100 cm^2.						
(	113	cpm	-	56	cpm)	/	0.93	=	61	dpm / 100cm^2	
Sample	30	Channel C count is		150	cpm / 100 cm^2.						
(	150	cpm	-	94	cpm)	/	0.99	=	57	dpm / 100cm^2	
Sample	0	Channel A count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	29	cpm)	/	0.44	=	#VALUE!	dpm / 100cm^2	
Sample	0	Channel B count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	56	cpm)	/	0.93	=	#VALUE!	dpm / 100cm^2	
Sample	0	Channel C count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	94	cpm)	/	0.99	=	#VALUE!	dpm / 100cm^2	
Sample	0	Channel A count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	29	cpm)	/	0.44	=	#VALUE!	dpm / 100cm^2	
Sample	0	Channel B count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	56	cpm)	/	0.93	=	#VALUE!	dpm / 100cm^2	
Sample	0	Channel C count is		NA	cpm / 100 cm^2.						
(	NA	cpm	-	94	cpm)	/	0.99	=	#VALUE!	dpm / 100cm^2	

Ronald G Wallace 11/16/99

ID:WIPE TEST 10 NOV 1999 14:29
USER: 1 COMMENT:GREAT INSTRUMENT
PRESET TIME : 1.00

DATA CALC :	CPM	H# :YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	IC# : NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	ACC : NO	CYCLE REPEATS :	1	DISK	: STD
SCINTILLATOR:	LIQUID	LUMEX: NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:			none	

DATA BUFFER IS FULL. DATA WILL GO TO PRINTER ONLY.

KEV : 0.0 - 18.6 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 156.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0
KEV : 0.0 - 2000.0 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME	
1	**-1	1.00	25.6	15.00	51.64	36.00	33.33	79.00	22.50	1.12	1.47	
• 2	**-2	1.00	20.4	32.00	35.36	67.00	24.43	104.00	19.61	0.82	2.98	
• 3	**-3	1.00	20.7	-8707.00	2.14	-14814.00	1.64	-14864.00	1.64	0.01	4.54	
• 4	**-4	1.00	22.2	-42.00	30.86	-100.00	20.00	-133.00	17.34	0.62	6.07	
• 5	**-5	1.00	18.7	31.00	35.92	67.00	24.43	110.00	19.07	1.22	7.62	
6	**-6	1.00	25.0	17.00	48.51	45.00	29.81	84.00	21.82	1.16	9.15	
7	**-7	1.00	24.0	20.00	44.72	39.00	32.03	76.00	22.94	1.26	10.70	
8	**-8	1.00	13.9	20.00	44.72	42.00	30.86	89.00	21.20	0.97	12.24	
9	**-9	1.00	16.9	17.00	48.51	44.00	30.15	87.00	21.44	1.13	13.80	
10	**-10	1.00	30.3	23.00	41.70	47.00	29.17	90.00	21.08	0.80	15.33	
11	**-11	1.00	22.3	22.00	42.64	43.00	30.50	82.00	22.09	0.51	16.89	
• 12	**-12	1.00	24.6	37.00	32.88	67.00	24.43	110.00	19.07	1.50	18.43	
13	**-1	1.00	25.1	24.00	40.82	49.00	28.57	77.00	22.79	0.79	20.08	
14	**-2	1.00	15.7	23.00	41.70	50.00	28.28	94.00	20.63	0.53	21.62	
15	**-3	1.00	21.5	25.00	40.00	56.00	26.73	98.00	20.20	0.64	23.19	
16	**-4	1.00	19.9	25.00	40.00	53.00	27.47	89.00	21.20	1.43	24.71	
17	**-5	1.00	20.2	22.00	42.64	50.00	28.28	87.00	21.44	0.80	26.28	
18	**-6	1.00	30.9	23.00	41.70	45.00	29.81	72.00	23.57	0.89	27.82	
19	**-7	1.00	33.6	22.00	42.64	50.00	28.28	85.00	21.69	1.07	29.38	
20	**-8	1.00	16.5	22.00	42.64	46.00	29.49	88.00	21.32	0.60	30.92	
21	**-9	1.00	20.3	26.00	39.22	49.00	28.57	79.00	22.50	0.65	32.47	
22	**-10	1.00	20.5	20.00	44.72	47.00	29.17	92.00	20.85	0.56	34.01	
23	**-11	1.00	19.5	26.00	39.22	43.00	30.50	81.00	22.22	0.43	35.57	
• 24	**-12	1.00	45.7	-241.00	12.88	-275.00	12.06	-311.00	11.34	0.19	37.12	
• 25	**-1	1.00	18.3	-64.00	25.00	-89.00	21.20	-120.00	18.26	0.41	38.77	
26	**-2	1.00	21.9	20.00	44.72	46.00	29.49	83.00	21.95	0.57	40.31	
• 27	**-3	1.00	15.7	25.00	40.00	56.00	26.73	104.00	19.61	0.53	41.87	
28	**-4	1.00	11.9	29.00	37.14	48.00	28.87	85.00	21.69	0.48	43.42	
29	**-5	1.00	28.1	26.00	39.22	47.00	29.17	84.00	21.82	0.64	44.98	
• 30	**-6	1.00	20.3	-89.00	21.20	-113.00	19.81	-150.00	16.33	0.36	46.52	
31	**-7	1.00	28.1	16.00	50.00	47.00	29.17	90.00	21.08	0.61	48.07	
32	**-8	1.00	26.2	18.00	47.14	42.00	30.86	79.00	22.50	0.91	49.61	
33	**-9	1.00	26.5	28.00	37.80	45.00	29.81	75.00	23.09	0.76	51.16	
34	**-10	1.00	22.5	13.00	55.47	48.00	28.87	83.00	21.95	0.79	52.70	
35	**-11	1.00	34.1	31.00	35.92	52.00	27.74	83.00	21.95	0.61	54.24	
36	**-12	1.00	34.1	29.00	37.14	52.00	27.74	89.00	21.20	0.61	55.78	IC
37	**-1	1.00	18.3	29.00	37.14	56.00	26.73	88.00	21.32	1.17	57.45	
38	**-2	1.00	14.6	23.00	41.70	46.00	29.49	94.00	20.63	1.21	58.97	BK
MISSING SAMPLE												
40	**-4	1.00	7.0	70226.00	0.75	70430.00	0.75	70467.00	0.75	0.00	60.57	H-3
41	**-5	1.00	7.2	37614.00	1.03	148561.0	0.52	148637.0	0.52	0.00	62.17	C-14
42	**-6	1.00	17.0	6532.00	2.47	67602.00	0.77	223720.0	0.42	0.00	63.81	Cl-36

SAM NO	POS	TIME MIN	HH	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSE TIME
43	**-7	1.00	32.0	37190.00	1.04	58833.00	0.82	58870.00	0.82	0.00	65.3
44	**-8	1.00	18.5	21.00	43.64	51.00	28.01	89.00	21.20	0.86	66.9

Recounted: 2, 3, 4, 5, 12, 24, 25, 27, 30

DATA CALC

Recounts

ID:WIPE TEST

10 NOV 1999 15:40

USER: 1

COMMENT:GREAT INSTRUMENT

F SET TIME :	1.00						
DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	: STD
COUNT BLANK :	NO	ID#	: NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	ADC	: NO	CYCLE REPEATS :	1	DISK	: STD
SCINTILLATOR:	LIQUID	LUMEX	: NO	LOW SAMPLE REJ:	0		
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

KEV :	0.0 - 18.6	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 156.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 2000.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0

SAM NO	POS	TIME MIN	H#	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
2	**-1	1.00	23.4	16.00	50.00	39.00	32.03	80.00	22.36	1.34	1.46
3	**-2	1.00	23.3	-7924.00	2.25	-16154.00	1.57	-16199.00	1.57	0.01	3.03
4	**-3	1.00	22.9	-53.00	27.47	-109.00	19.16	-155.00	16.06	0.60	4.56
5	**-4	1.00	21.8	23.00	41.70	44.00	30.15	77.00	22.79	1.82	6.10
12	**-5	1.00	24.1	23.00	41.70	41.00	31.23	85.00	21.69	2.25	7.64
14	**-6	1.00	43.7	-238.00	12.96	-259.00	12.43	-290.00	11.74	0.27	9.20
15	**-7	1.00	19.2	-64.00	25.00	-89.00	21.20	-132.00	17.41	0.50	10.73
17	**-8	1.00	15.0	35.00	33.81	-69.00	24.08	106.00	19.43	0.67	12.28
20	**-9	1.00	19.8	-99.00	20.10	-141.00	16.84	-180.00	14.91	0.39	13.81
MISSING SAMPLE											
13	**-1	1.00	19.9	22.00	42.64	44.00	30.15	89.00	21.20	1.18	15.50
14	**-2	1.00	13.6	25.00	40.00	50.00	28.28	87.00	21.44	1.27	17.04

3 Bkg

Special Survey Calculations Lab: RB232 Survey Date: 11/11/1999

Description: Decommission

LSC: Beckman in RB 012B Contact: Roberta Bianca, June Tamkin

Printout: BKM;11/11/99;18:02 Comments:

	channel A	channel B	channel C
CC (cpm)	38	68	109
MDA (dpm)	27	18	22
EFF 29oct99	0.44	0.93	0.99
BKG (cpm)	26	51	87

( )yes (✓)no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample	7	Channel A	count is	NA	cpm / 100 cm^2.						
(	NA	cpm	-	26	cpm)	/	0.44	=	#VALUE!	dpm / 100cm^2	
Sample	7	Channel B	count is	83	cpm / 100 cm^2.						
(	83	cpm	-	51	cpm)	/	0.93	=	34	dpm / 100cm^2	
Sample	7	Channel C	count is	121	cpm / 100 cm^2.						
(	121	cpm	-	87	cpm)	/	0.99	=	34	dpm / 100cm^2	
Sample	10	Channel A	count is	152	cpm / 100 cm^2.						
(	152	cpm	-	26	cpm)	/	0.44	=	286	dpm / 100cm^2	
Sample	10	Channel B	count is	284	cpm / 100 cm^2.						
(	284	cpm	-	51	cpm)	/	0.93	=	251	dpm / 100cm^2	
Sample	10	Channel C	count is	324	cpm / 100 cm^2.						
(	324	cpm	-	87	cpm)	/	0.99	=	239	dpm / 100cm^2	
Sample	11	Channel A	count is	2244	cpm / 100 cm^2.						
(	2244	cpm	-	26	cpm)	/	0.44	=	5041	dpm / 100cm^2	
Sample	11	Channel B	count is	7300	cpm / 100 cm^2.						
(	7300	cpm	-	51	cpm)	/	0.93	=	7795	dpm / 100cm^2	
Sample	11	Channel C	count is	7342	cpm / 100 cm^2.						
(	7342	cpm	-	87	cpm)	/	0.99	=	7328	dpm / 100cm^2	

Signature Ronald G Wallace Date 11/15/99

ecial Survey Calculations Lab: RB232 Survey Date: 11/11/1999

Printout: BKM;11/11/99;18:02

Sample	15	Channel A count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	26	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	15	Channel B count is			95			cpm / 100 cm^2.			
(	95	cpm	-	51	cpm)	/	0.93	=		47	dpm / 100cm^2
Sample	15	Channel C count is			136			cpm / 100 cm^2.			
(	136	cpm	-	87	cpm)	/	0.99	=		49	dpm / 100cm^2
Sample	17	Channel A count is			54			cpm / 100 cm^2.			
(	54	cpm	-	26	cpm)	/	0.44	=		64	dpm / 100cm^2
Sample	17	Channel B count is			82			cpm / 100 cm^2.			
(	82	cpm	-	51	cpm)	/	0.93	=		33	dpm / 100cm^2
Sample	17	Channel C count is			116			cpm / 100 cm^2.			
(	116	cpm	-	87	cpm)	/	0.99	=		29	dpm / 100cm^2
Sample	18	Channel A count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	26	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	18	Channel B count is			73			cpm / 100 cm^2.			
(	73	cpm	-	51	cpm)	/	0.93	=		24	dpm / 100cm^2
Sample	18	Channel C count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	87	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel A count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	26	cpm)	/	0.44	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel B count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	51	cpm)	/	0.93	=		#VALUE!	dpm / 100cm^2
Sample	0	Channel C count is			NA			cpm / 100 cm^2.			
(	NA	cpm	-	87	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2

Signature Ronald G Wallace Date 11/15/99

RB 232

P = WIPE TEST 11 NOV 1999 18:02

ER: 1 COMMENT:GREAT INSTRUMENT

ASSET TIME : 1.00

DATA CALC	:	CPM	HH	:YES	SAMPLE REPEATS:	1	PRINTER	:	STD
COUNT BLANK	:	NO	ICH	: NO	REPLICATES :	1	RS232	:	OFF
TWO PHASE	:	NO	ADC	: NO	CYCLE REPEATS :	1	DISK	:	STD
SCINTILLATOR:		LIQUID	LUMEX	: NO	LOW SAMPLE REJ:	0			
LOW LEVEL	:	NO	HALF LIFE CORRECTION DATE:				none		

DATA BUFFER IS FULL. DATA WILL GO TO PRINTER ONLY.

KEV :	0.0 - 18.6	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 156.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
KEV :	0.0 - 2000.0	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0

SAM NO	POS	TIME MIN	HH	WIND1 CPM	WIND1 %ERROR	WIND2 CPM	WIND2 %ERROR	WIND3 CPM	WIND3 %ERROR	LUMEX %	ELAPSED TIME
1	**-1	1.00	33.3	25.00	40.00	55.00	26.97	95.00	20.52	1.20	1.47
2	**-2	1.00	34.7	19.00	45.68	54.00	27.22	98.00	20.20	2.66	3.01
3	**-3	1.00	13.1	23.00	41.70	56.00	26.73	96.00	20.41	0.68	4.55
4	**-4	1.00	36.4	33.00	34.82	55.00	26.97	99.00	20.10	0.92	6.08
5	**-5	1.00	34.2	18.00	47.14	35.00	33.81	76.00	22.94	1.02	7.63
6	**-6	1.00	34.4	26.00	39.22	59.00	26.04	93.00	20.74	0.89	9.16
7	**-7	1.00	14.8	43.00	30.50	-83.00	21.95	-121.00	18.18	0.51	10.72
8	**-8	1.00	13.1	22.00	42.64	47.00	29.17	90.00	21.08	0.81	12.25
9	**-9	1.00	21.4	29.00	37.14	52.00	27.74	96.00	20.41	0.75	13.81
10	**-10	1.00	23.1	-152.00	16.22	-284.00	11.87	-324.00	11.11	0.32	15.35
11	**-11	1.00	11.3	-2244.00	4.22	-7300.00	2.34	-7342.00	2.33	0.01	16.90
12	**-12	1.00	19.0	29.00	37.14	67.00	24.43	102.00	19.80	1.06	18.46
13	**-13	1.00	11.6	18.00	47.14	46.00	29.49	90.00	21.08	0.67	20.13
14	**-2 14	1.00	36.4	28.00	37.80	62.00	25.40	102.00	19.80	0.91	21.67
15	**-3 15	1.00	12.4	38.00	32.44	-95.00	20.52	-136.00	17.15	0.44	23.24
16	**-4 16	1.00	24.4	26.00	39.22	59.00	26.04	100.00	20.00	0.43	24.77
17	**-5 17	1.00	20.4	-54.00	27.22	-82.00	22.09	-116.00	18.57	0.33	26.34
18	**-6 18	1.00	18.6	40.00	31.62	-73.00	23.41	104.00	19.61	0.28	27.87
19	**-7 19	1.00	60.0	16.00	50.00	42.00	30.86	77.00	22.79	1.04	29.44
20	**-8 20	1.00	20.2	38.00	32.44	56.00	26.73	104.00	19.61	0.67	30.99
MISSING SAMPLE											
27	**-3	1.00	19.2	17.00	48.51	39.00	32.03	80.00	22.36	1.09	32.72
28	**-4	1.00	14.2	36.00	33.33	62.00	25.40	94.00	20.63	1.02	34.26
MISSING SAMPLE											
32	**-8	1.00	4.7	70030.00	0.76	70225.00	0.75	70262.00	0.75	0.00	35.89
33	**-9	1.00	8.9	37335.00	1.04	148200.0	0.52	148264.0	0.52	0.00	37.49
34	**-10	1.00	18.1	6737.00	2.44	69169.00	0.76	225728.0	0.42	0.00	39.14
35	**-11	1.00	31.4	36395.00	1.05	57619.00	0.83	57661.00	0.83	0.00	40.69
36	**-12	1.00	18.5	21.00	43.64	47.00	29.17	81.00	22.22	0.89	42.25

Special Survey Calculations Lab: RB 232 Survey Date: 11/16/1999

Description: Decommission

LSC: Packard in RB 012B Contact: R. Bianca and R Wallace

Printout: PKD;11/16/99;10:55 Comments:

	channel A	channel B	channel C
CC (cpm)	27	38	56
MDA (dpm)	20	13	15
EFF 1nov99	0.48	0.93	0.99
BKG (cpm)	17	26	41

( )yes (✓)no All wipes are below critical count (CC) and, therefore, are 0 dpm / 100 cm^2.

Sample	6	Channel A count is		612	cpm / 100 cm^2.					
(	612	cpm	-	17	cpm)	/	0.48	=	1240	dpm / 100cm^2
Sample	6	Channel B count is		627	cpm / 100 cm^2.					
(	627	cpm	-	26	cpm)	/	0.93	=	646	dpm / 100cm^2
Sample	6	Channel C count is		640	cpm / 100 cm^2.					
(	640	cpm	-	41	cpm)	/	0.99	=	605	dpm / 100cm^2
Sample	7	Channel A count is		1866	cpm / 100 cm^2.					
(	1866	cpm	-	17	cpm)	/	0.48	=	3852	dpm / 100cm^2
Sample	7	Channel B count is		1872	cpm / 100 cm^2.					
(	1872	cpm	-	26	cpm)	/	0.93	=	1985	dpm / 100cm^2
Sample	7	Channel C count is		1882	cpm / 100 cm^2.					
(	1882	cpm	-	41	cpm)	/	0.99	=	1860	dpm / 100cm^2
Sample	8	Channel A count is		10526	cpm / 100 cm^2.					
(	10526	cpm	-	17	cpm)	/	0.48	=	21894	dpm / 100cm^2
Sample	8	Channel B count is		10539	cpm / 100 cm^2.					
(	10539	cpm	-	26	cpm)	/	0.93	=	11304	dpm / 100cm^2
Sample	8	Channel C count is		10559	cpm / 100 cm^2.					
(	10559	cpm	-	41	cpm)	/	0.99	=	10624	dpm / 100cm^2

Signature Ronald J Wallace Date 11/17/99

Special Survey Calculations Lab: RB 232 Survey Date: 11/16/1999

Printout: PKD;11/16/99;10:55

Sample	9	Channel A count is		141	cpm / 100 cm^2.						
(	141	cpm	-	17	cpm)	/	0.48	=	258	dpm / 100cm^2	
Sample	9	Channel B count is		150	cpm / 100 cm^2.						
(	150	cpm	-	26	cpm)	/	0.93	=	133	dpm / 100cm^2	
Sample	9	Channel C count is		158	cpm / 100 cm^2.						
(	158	cpm	-	41	cpm)	/	0.99	=	118	dpm / 100cm^2	
Sample	10	Channel A count is		95	cpm / 100 cm^2.						
(	95	cpm	-	17	cpm)	/	0.48	=	163	dpm / 100cm^2	
Sample	10	Channel B count is		106	cpm / 100 cm^2.						
(	106	cpm	-	26	cpm)	/	0.93	=	86	dpm / 100cm^2	
Sample	10	Channel C count is		117	cpm / 100 cm^2.						
(	117	cpm	-	41	cpm)	/	0.99	=	77	dpm / 100cm^2	
Sample	11	Channel A count is		75	cpm / 100 cm^2.						
(	75	cpm	-	17	cpm)	/	0.48	=	121	dpm / 100cm^2	
Sample	11	Channel B count is		82	cpm / 100 cm^2.						
(	82	cpm	-	26	cpm)	/	0.93	=	60	dpm / 100cm^2	
Sample	11	Channel C count is		94	cpm / 100 cm^2.						
(	94	cpm	-	41	cpm)	/	0.99	=	54	dpm / 100cm^2	
Sample	12	Channel A count is		159	cpm / 100 cm^2.						
(	159	cpm	-	17	cpm)	/	0.48	=	296	dpm / 100cm^2	
Sample	12	Channel B count is		169	cpm / 100 cm^2.						
(	169	cpm	-	26	cpm)	/	0.93	=	154	dpm / 100cm^2	
Sample	12	Channel C count is		181	cpm / 100 cm^2.						
(	181	cpm	-	41	cpm)	/	0.99	=	141	dpm / 100cm^2	

Signature Donald G Wallace Date 11/17/99

Special Survey Calculations Lab: RB 232 Survey Date: 11/16/1999

Printout: PKD;11/16/99;10:55

Sample	13	Channel A count is		60		cpm / 100 cm^2.					
(	60	cpm	-	17	cpm)	/	0.48	=		90	dpm / 100cm^2
Sample	13	Channel B count is		72		cpm / 100 cm^2.					
(	72	cpm	-	26	cpm)	/	0.93	=		49	dpm / 100cm^2
Sample	13	Channel C count is		91		cpm / 100 cm^2.					
(	91	cpm	-	41	cpm)	/	0.99	=		51	dpm / 100cm^2
Sample	17	Channel A count is		34		cpm / 100 cm^2.					
(	34	cpm	-	17	cpm)	/	0.48	=		35	dpm / 100cm^2
Sample	17	Channel B count is		46		cpm / 100 cm^2.					
(	46	cpm	-	26	cpm)	/	0.93	=		22	dpm / 100cm^2
Sample	17	Channel C count is		65		cpm / 100 cm^2.					
(	65	cpm	-	41	cpm)	/	0.99	=		24	dpm / 100cm^2
Sample	18	Channel A count is		27		cpm / 100 cm^2.					
(	27	cpm	-	17	cpm)	/	0.48	=		21	dpm / 100cm^2
Sample	18	Channel B count is		41		cpm / 100 cm^2.					
(	41	cpm	-	26	cpm)	/	0.93	=		16	dpm / 100cm^2
Sample	18	Channel C count is		NA		cpm / 100 cm^2.					
(	NA	cpm	-	41	cpm)	/	0.99	=		#VALUE!	dpm / 100cm^2
Sample	21	Channel A count is		175		cpm / 100 cm^2.					
(	175	cpm	-	17	cpm)	/	0.48	=		329	dpm / 100cm^2
Sample	21	Channel B count is		188		cpm / 100 cm^2.					
(	188	cpm	-	26	cpm)	/	0.93	=		174	dpm / 100cm^2
Sample	21	Channel C count is		203		cpm / 100 cm^2.					
(	203	cpm	-	41	cpm)	/	0.99	=		164	dpm / 100cm^2

Signature Ronald J. Wallace Date 11/17/99

DB232

Protocol #: 5 Name:RAD SAFETY 1A 16-Nov-99 10:55
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec

S#	TIME	CPMA (27)	CPMB (38)	CPMC (56)	FLAG	tSIE
1	1.00	17.00	23.00	35.00		569.
2	1.00	17.00	34.00	47.00		566.
3	1.00	19.00	31.00	48.00		609.
4	1.00	22.00	35.00	50.00		524.
5	1.00	15.00	26.00	40.00		575.
6	1.00	-612.00	-627.00	-640.00		573.
7	1.00	-1866.00	-1872.00	-1882.00		595.
8	1.00	-10526.0	-10539.0	-10552.0		593.
9	1.00	-141.00	-150.00	-158.00		579.
10	1.00	-95.00	-106.00	-117.00		588.
11	1.00	-75.00	-82.00	-94.00		589.

12	1.00	-159.00	-169.00	-191.00	538.	
13	1.00	- 60.00	- 72.00	- 91.00	567.	
14	1.00	21.00	27.00	44.00	581.	
15	1.00	16.00	35.00	49.00	598.	
16	1.00	12.00	22.00	33.00	604.	
17	1.00	- 34.00	- 46.00	- 65.00	602.	
18	1.00	- 27.00	- 41.00	54.00	598.	
19	1.00	15.00	25.00	40.00	590.	
20	1.00	20.00	24.00	35.00	558.	
21	1.00	-175.00	-188.00	- 203.00	568.	
22	1.00	22.00	33.00	54.00	526.	
23	1.00	13.00	28.00	33.00	531.	
(missing vial)						
25	1.00	12.00	19.00	37.00	574.	BKG
26	1.00	17.00	26.00	41.00	595.	
1 missing vial)						
28	1.00	72441.0	72471.0	72485.0	631.	H-3
29	1.00	49022.0	148276.	148290.	631.	C-14
30	1.00	8230.00	91733.0	224840.	589.	Cl-36
31	1.00	44709.0	55420.0	55436.0	515.	I-125
32	1.00	13.00	26.00	36.00	560.	Blank

ocol #: 5 Name:RAD SAFETY 1A 16-Nov-99 11:49
gion A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
egion B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
egi C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
.me 1.00 QIP = tSIE ES Terminator = 10 sec

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE
missing vials)						
4	1.00	71766.0	71795.0	71807.0		628.
5	1.00	49170.0	148101.	148112.		625.
6	1.00	8457.00	91469.0	225535.		591.
7	1.00	45171.0	55878.0	55894.0		515.
8	1.00	21.00	30.00	43.00		559.
missing vials) 28			44	59		
11	1.00	18.00	31.00	44.00		571.
12	1.00	12.00	22.00	37.00		593.
missing vials)						
18 6	1.00	-659.00	-664.00	-681.00		564.
19 7	1.00	-2017.00	-2031.00	-2047.00		587.
20 8	1.00	-10463.0	-10472.0	-10489.0		576.
21 9	1.00	-142.00	-158.00	-169.00		574.
22 10	1.00	-74.00	-86.00	-100.00		582.
23 11	1.00	-63.00	-72.00	-84.00		580.
24 12	1.00	-177.00	-190.00	-202.00		525.
25 13	1.00	-56.00	-76.00	-91.00		561.
missing vials)						
29 17	1.00	-39.00	-53.00	-78.00		592.
30 18	1.00	27.00	42.00	55.00		597.
missing vials)						
33	1.00	-196.00	-212.00	-229.00		566.

#18 < CC on recount

RECOUNTS

Special Survey Calculations 11/16/1999

Item: Decommission
Contact: R. Bianca, R. Wallace
Where: RB232
Printout: PKD: 11/16/99;14:46

	channel A	channel B	channel C
CC (cpm)	28	48	62
MDA (dpm)	21	15	16
EFF1nov99	0.48	0.93	0.99
BKG (cpm)	18	34	46

yes	no	
( )	(✓)	All wipes are below critical counts, and therefore are 0 uCi/ 100 cm^2. (If no, please look below.)
(✓)	( )	All wipes are below NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

Ronald G. Wallace 11/17/99

Samples 3 and 6 are below critical

Count on recount 11/16/99: 15:51

col #: 1 Name:RAD SAFETY 1 16-Nov-99 14:46
on A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
gion B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
egion C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Tim = 1.00 QIP = tSIE ES Terminator = Count
um. escence Correction On

second set

S#	TIME	CPMA (28)	CPMB (48)	CPMC (62)	FLAG	tSIE	
1	1.00	18.00	25.00	34.00	C	621.	
2	1.00	15.00	28.00	43.00	C	616.	
3	1.00	-31.00	-57.00	-68.00	C	591.	
4	1.00	18.00	31.00	54.00	C	587.	
5	1.00	15.00	32.00	46.00	C	598.	
6	1.00	-34.00	-53.00	-68.00	C	584.	
7	1.00	14.00	28.00	41.00	C	589.	
8	1.00	9.00	19.00	30.00	C	588.	
(1 missing vial)							
10	1.00	18.00	34.00	46.00	C	566.	3 BKG
11	1.00	16.00	21.00	28.00	C	586.	
(1 missing vial)							
13	1.00	72020.0	72045.0	72060.0	C	627.	3H
14	1.00	49304.0	148321.	148335.	C	626.	14C
15	1.00	8433.00	91785.0	224996.	C	590.	36Cl
16	1.00	45317.0	56017.0	56029.0	C	516.	125I
17	1.00	16.00	30.00	39.00	C	554.	Blank

Protocol #: 1 Name:RAD SAFETY 1 16-Nov-99 15:51
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
T = 1.00 QIP = tSIE ES Terminator = Count
Luminescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE
(1 missing vial)						
2	1.00	18.00	27.00	44.00	C	570. BKG
3	1.00	18.00	31.00	42.00	C	593. BKG
(1 missing vial)						
5	1.00	72448.0	72470.0	72484.0	C	630.
6	1.00	49160.0	148716.	148733.	C	629.
7	1.00	8327.00	92050.0	225955.	C	589. STDS
8	1.00	44902.0	55485.0	55498.0	C	514.
9	1.00	15.00	24.00	37.00	C	558.
(3 missing vials)						
13 1	1.00	11.00	21.00	43.00	C	538.
14 2	1.00	19.00	30.00	37.00	C	574.
15 3	1.00	14.00	25.00	40.00	C	576.
16 4	1.00	16.00	29.00	47.00	C	580.
17 5	1.00	13.00	21.00	33.00	C	568.
18 6	1.00	18.00	26.00	48.00	C	566.
19 7	1.00	27.00	40.00	50.00	C	557.
20 8	1.00	13.00	22.00	36.00	C	533.
21 9	1.00	21.00	38.00	54.00	C	390.
22 10	1.00	11.00	23.00	39.00	C	552.
23 11	1.00	18.00	26.00	42.00	C	531.
24 12	1.00	14.00	27.00	47.00	C	529.
25 13	1.00	17.00	24.00	35.00	C	500.
26 14	1.00	20.00	25.00	36.00	C	542.
27 15	1.00	8.00	16.00	21.00	C	519.
28 16	1.00	20.00	30.00	50.00	C	470.
29 17	1.00	24.00	35.00	49.00	C	582.
30 18	1.00	14.00	28.00	40.00	C	485.
31 19	1.00	14.00	26.00	45.00	C	540.
32 20	1.00	21.00	34.00	51.00	C	521.
(1 missing vial)						
34 3	1.00	21.00	41.00	56.00	C	596.
35 6	1.00	24.00	37.00	48.00	C	595.
(1 missing vial)						

RB232

RB232

Recounts #3 & 6 FROM 11/16/99 13:16 & 14 ...

Special Survey Calculations 11/16/1999

Item: Decommission
Contact: R. Bianca, R. Wallace
Where: RB232
Printout: PKD: 11/16/99;15:51

	channel A	channel B	channel C
CC (cpm)	28	44	59
MDA (dpm)	21	14	16
EFF1nov99	0.48	0.93	0.99
BKG (cpm)	18	31	44

yes	no	
(✓)	( )	All wipes are below critical counts, and therefore are 0 uCi/ 100 cm^2. (If no, please look below.)
(✓)	( )	All wipes are below NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

Ronald G Wallace
11/17/99

Protocol #: 1 Name:RAD SAFETY 1 16-Nov-99 15:51

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 1.00 QIP = tSIE ES Terminator = Count
Luminescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	
(1 missing vial)							
2	1.00	18.00	27.00	44.00	C	570.	BKG
3	1.00	18.00	31.00	42.00	C	593.	BKG
(1 missing vial)							
5	1.00	72448.0	72470.0	72484.0	C	630.	STDS
6	1.00	49160.0	148716.	148733.	C	629.	STDS
7	1.00	8327.00	92050.0	225955.	C	589.	STDS
8	1.00	44902.0	55485.0	55498.0	C	516.	STDS
9	1.00	15.00	24.00	37.00	C	558.	STDS
(3 missing vials)							
13 1	1.00	11.00	21.00	43.00	C	538.	RB232
14 2	1.00	19.00	30.00	37.00	C	574.	RB232
15 3	1.00	14.00	25.00	40.00	C	576.	RB232
16 4	1.00	16.00	29.00	47.00	C	580.	RB232
17 5	1.00	13.00	21.00	33.00	C	568.	RB232
18 6	1.00	18.00	26.00	48.00	C	566.	RB232
19 7	1.00	27.00	40.00	50.00	C	557.	RB232
20 8	1.00	13.00	22.00	36.00	C	533.	RB232
21 9	1.00	21.00	39.00	54.00	C	390.	RB232
22 10	1.00	11.00	23.00	39.00	C	552.	RB232
23 11	1.00	18.00	26.00	42.00	C	531.	RB232
24 12	1.00	14.00	27.00	47.00	C	529.	RB232
25 13	1.00	17.00	24.00	35.00	C	500.	RB232
26 14	1.00	20.00	25.00	36.00	C	542.	RB232
27 15	1.00	8.00	16.00	21.00	C	519.	RB232
28 16	1.00	20.00	30.00	50.00	C	470.	RB232
29 17	1.00	24.00	35.00	49.00	C	582.	RB232
3 2	1.00	14.00	28.00	40.00	C	485.	RB232
31 19	1.00	14.00	26.00	45.00	C	540.	RB232
32 20	1.00	21.00	34.00	51.00	C	521.	RB232
(1 missing vial)							
34 3	1.00	21.00	41.00	56.00	C	596.	Recounts #3 & 6
35 6	1.00	24.00	37.00	48.00	C	575.	Recounts #3 & 6
(1 missing vial)							

FROM 11/16/99; 13:16 & 14:48

RB232

Special Survey Calculations 11/18/1999

Item: Decommission
Contact: Roberta Bianca, Ron Wallace
Where: RB232 - Hood duct
Printout: PKD: 11/18/99;7:42

	channel A	channel B	channel C
CC (cpm)	29	37	52
MDA (dpm)	21	12	14
EFF1nov99	0.48	0.93	0.99
BKG (cpm)	19	25	38

yes	no	
(✓)	( )	All wipes are below critical counts, and therefore are 0 uCi/ 100 cm^2. (If no, please look below.)
( )	( )	All wipes are below NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

Protocol #: 1 Name:RAD SAFETY 1 18-Nov-99 07:42
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 1.00 QIP = tSIE ES Terminator = Count
Lum. escence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	
1	1.00	16.00	29.00	37.00	C	542.	-Duct -RB232 Hood Iod.
(1 missing vial)							
3	1.00	13.00	17.00	38.00	C	380.	BKG
4	1.00	19.00	25.00	35.00	C	347.	
(2 missing vials)							
7	1.00	72227.0	72250.0	72270.0	C	634.	H-3
8	1.00	48743.0	148735.	148754.	C	631.	C-14
9	1.00	8567.00	91837.0	225080.	C	596.	Cl-36
10	1.00	45593.0	56162.0	56172.0	C	518.	I-125
11	1.00	14.00	26.00	37.00	C	561.	Blank
(1 missing vial)							
13	1.00	18.00	30.00	42.00	C	629.	
14	1.00	12.00	19.00	29.00	C	571.	
15	1.00	21.00	35.00	44.00	C	544.	
16	1.00	17.00	31.00	47.00	C	541.	
17	1.00	18.00	30.00	37.00	C	612.	
18	1.00	18.00	29.00	40.00	C	553.	
19	1.00	25.00	31.00	40.00	C	568.	
20	1.00	14.00	23.00	36.00	C	549.	
21	1.00	18.00	25.00	41.00	C	551.	
22	1.00	20.00	31.00	43.00	C	544.	
23	1.00	9.00	22.00	32.00	C	550.	
2[illegible]	1.00	16.00	30.00	43.00	C	553.	
2[illegible]	1.00	14.00	21.00	3[illegible].00	C	545.	
26	1.00	17.00	33.00	44.00	C	548.	
27	1.00	25.00	38.00	46.00	C	553.	
28	1.00	24.00	37.00	44.00	C	550.	
29	1.00	11.00	22.00	31.00	C	544.	
30	1.00	13.00	26.00	40.00	C	510.	

Robertus
RB232
Duct
Swab

Special Survey Calculations 11/18/1999

Item: Decommission
Contact: Roberta Bianca, Ron Wallace
Where: RB232
Printout: PKD: 11/18/99;11:42

	channel A	channel B	channel C
CC (cpm)	20	33	50
MDA (dpm)	17	12	14
EFF1nov99	0.48	0.93	0.99
BKG (cpm)	12	22	36

yes	no	
(✓)	( )	All wipes are below critical counts, and therefore are 0 uCi/ 100 cm^2. (If no, please look below.)
(✓)	( )	All wipes are below NRC action level (220 dpm/ 100 cm^2). (For calculations, please look below.)

Ronald G. Wallace
11/18/99

Protocol #: 5 Name:RAD SAFETY 1A 18-Nov-99 11:42

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Tim = 1.00 DIP = tSIE ES Terminator = 10 sec

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	
1	1.00	18.00	34.00	46.00		537.	H_2O (0.4 ml)
2	1.00	18.00	28.00	39.00		535.	Swab of Inst of drain
(2 missing vials)							
5	1.00	12.00	21.00	36.00		570.	BKG
6	1.00	12.00	22.00	34.00		592.	
(1 missing vial)							
8	1.00	72354.0	72378.0	72387.0		632.	UG Stds
9	1.00	49070.0	148368.	148379.		630.	
10	1.00	8423.00	91904.0	225498.		597.	
11	1.00	43833.0	54415.0	54429.0		517.	
12	1.00	15.00	27.00	40.00		559.	

Survey Documentation

Response to Item #9

Jim Fomenko
Andrés Sinisterra
Health Physics Consultants

Health Physics Consulting Services

Institute of Dementia Research
Decommissioning Project

Final Report

September 12, 1997

Prepared for Bayer, Incorporated

1. Description of the Project

Nine radioactive use laboratories ceased research operations when the Institute of Dementia Research (IDR) closed and moved its operations to Germany. Bayer, Incorporated contracted with us to conduct decommissioning surveys on those laboratories and certify them so that they could be released for general unrestricted use. There was no research activity in any of these laboratories at the time the project was undertaken. The Research Safety Department and the Radiation Safety Officer oversaw progress of the project.

2. Facility Conditions

All of the research laboratories are located on the ground floor of a main building. All of the laboratories are located within close proximity to each other at the Bayer, West Haven, Connecticut facility (see attached site map). Laboratory equipment and supplies were still present in the laboratories at the time of the decommissioning surveys. The areas designated as "radioactive use" were marked accordingly with radiation warning signs and labels.

3. Decommissioning Protocol

Site diagrams were drawn up and all areas of interest were identified. A swipe survey for removable surface contamination of all accessible areas was conducted. This survey concentrated on those areas that were identified as radionuclide use areas. The swipe surveys were conducted using wetted cotton tip applicators. Each swipe sample was averaged over an area of 100 cm^2. Existing equipment that was labeled with radiation warning labels was surveyed individually. Hallways outside the restricted areas were also swipe surveyed to determine if any radioactive material had been tracked outside the use areas. All swipe samples were analyzed on-site using a liquid scintillation counter. A survey for fixed/removable surface contamination of all accessible surface areas was also conducted. A thin-end window Geiger-Müller (GM) detector probe was used to detect the presence of any beta/gamma emitting radionuclides and a low energy NaI scintillator probe was used to detect the presence of any gamma emitting radionuclides.

The same criterion was also applied to all floor areas, benches and hoods. A telescoping pancake GM probe was used in close proximity to the floor and at a slow rate to compensate for instrument response. The insides of all sink traps were sampled for radioactive content. Special care was taken to identify and sample those traps that were under sinks labeled as "radioactive disposal sinks".

Each swipe sample was first analyzed for significance of radioactive content by applying critical count criteria. Any count found above the critical level was deemed significant and a

calculated disintegration per minute (dpm) value was determined. Any swipe sample above 100 cpm was considered to be contaminated with radioactive material. Once the contaminant isotope was identified, a counting efficiency was applied to the identified radionuclide determine a dpm value. These items or areas were subsequently decontaminated to less than 100 dpm prior to release for unrestricted use. The following formulas were used:

$$\textbf{Critical Count} = BKG + (2.32\sqrt{BKG})$$

$$\textbf{Minimum Detectable Activity (MDA)} = \frac{(2.32\sqrt{BKG})}{\textbf{Efficiency}}$$

All decommissioning was conducted following the Nuclear Regulatory Commission's guidelines for the release of facilities for unrestricted use. All surveys were conducted with meticulous detail so as not to overlook radioactive contamination or radioactive materials left behind by the previous occupants of these areas. Items that were found to be contaminated or were suspect of having contamination close to the release criteria were removed and placed in room D-130. This room was used as a staging area for the project. These items were then decontaminated to background levels (< 100 dpm/100 cm^2) and released for unrestricted use. Items that could not be decontaminated were declared radioactive waste and disposed of accordingly. After the rooms were cleared, all reference to radioactive materials was removed. All radiation-warning signs were either removed or defaced.

Instrument Type	Manufacturer	Model
Liquid Scintillation	Packard Corporation	2000CA
GM * Pancake Probe NaI Scintillator Probe	Ludlum Instruments	Model 9 SN 137147 44-9 PR139850 44-3 PR140223
GM * Pancake probe Pancake probe NaI Scintillator Probe	Ludlum Instruments	Model 3 SN 136692 44-9 PR139853 ASM7 44-3 PR140228

* Calibration certificates are on file in the Radiation Safety Office

4. Summary

The decommissioning project was concluded without a major decontamination effort. No dismantling or demolition was required since most of the laboratories were in relatively good condition from a radioactive contamination standpoint. A cell harvester (^{3}H) located in D-130 and two refrigerated centrifuges (^{35}S) could not be decontaminated below the release criteria. These items were covered and placed in room D-130 for subsequent removal along with the radioactive waste that was generated during the decommissioning process. Room D-130 proved to be an ideal facility to conduct all decontamination efforts since it has been set up for the safe management of radioactive materials.

In conclusion, the following laboratories in the IDR facility are hereby certified to be free of radioactive material contamination and can therefore be released for general and unrestricted use:

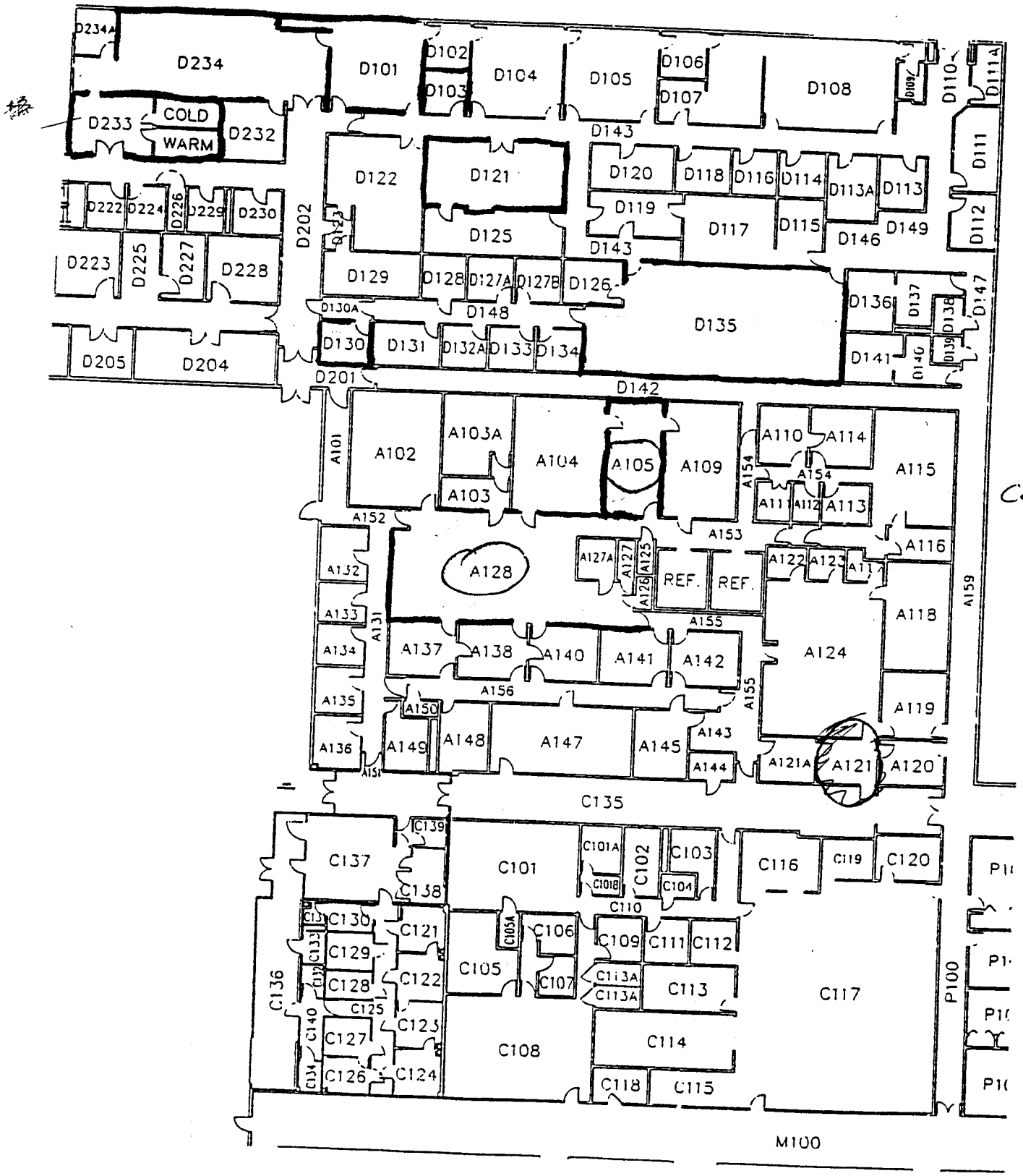
A-105, A-128, D-101, D-103, D-121, D-130, D-135, D-233, D-234 and adjacent darkroom.

All pertinent supporting decommissioning documentation is attached.

Jim Fomenko, Health Physics Consultant

Andrés Sinisterra, Health Physics Consultant

Bayer_d1.doc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D233
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WARM
D232
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D103
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D111A
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C117
C136
C128
C122
C125
C140
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C134
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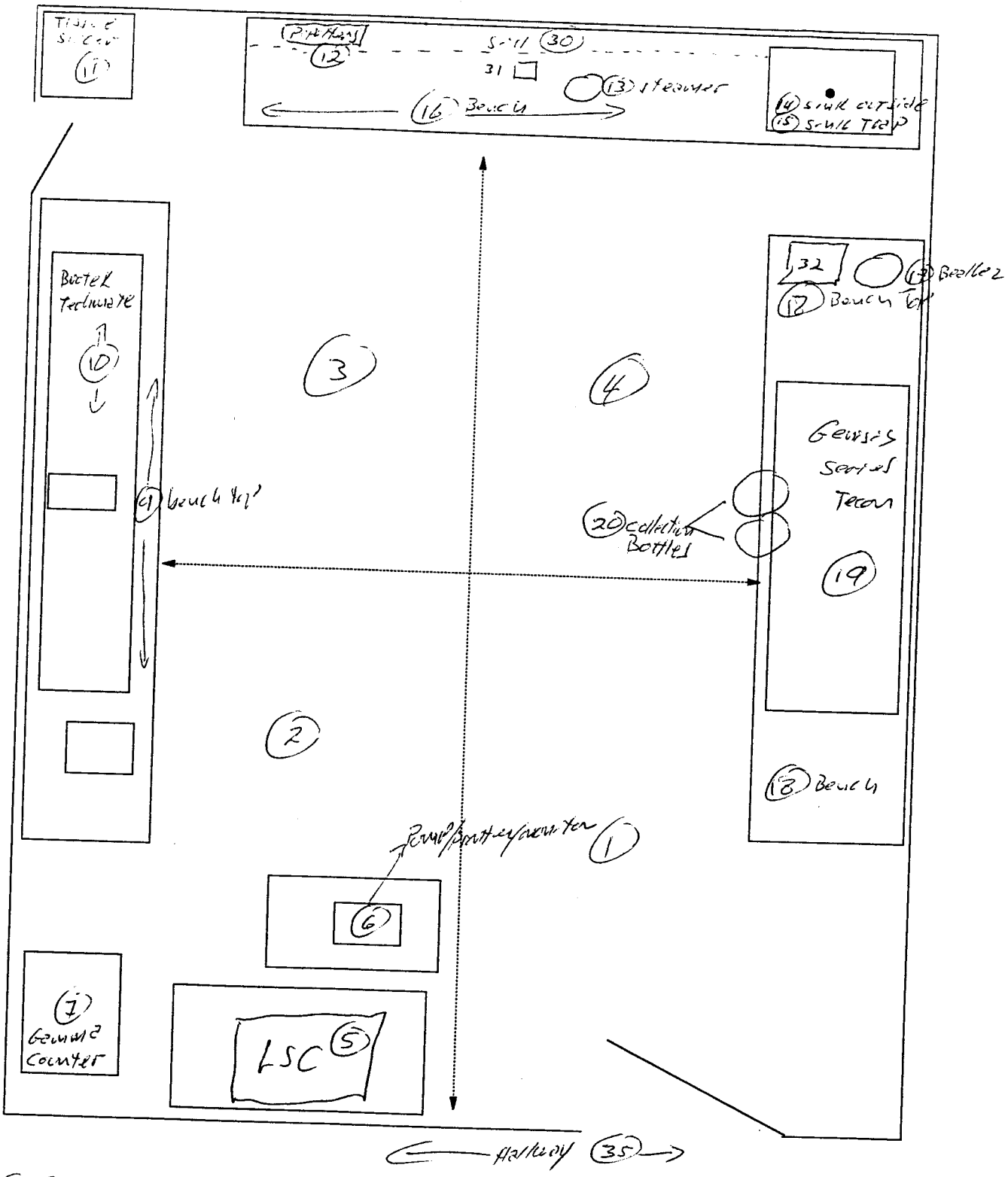
C124
C118
C115
P100
M100

Survey Data
Room A-105
IDR Facility



21 fatigue mats
22 walls
23 ceilings
24 handles/knobs/light switches/phone
25 outside drawers
26 inside drawers
27 other equipment/items on floor
28 other equipment/items on bench top
29 LSC bench top/counter table (walker)
30 sill and supplies on sill
31 Genie vortex
32 Computer/printer etc. (dimension)
33 computer
34 items under sink
35 hallway

Protocol #: Name:SECOM. SURVEY 1 26-Jul-87 13:58

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00

Time = 1.00 QIP = tSIE ES Terminator = 10 sec

Quinescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	16.00	23.00	36.00	C	512.	13	
2	1.00	17.00	22.00	33.00	C	531.	23	
3	1.00	12.00	21.00	33.00	C	482.	19	
4	1.00	22.00	35.00	44.00	C	453.	3	
5	1.00	21.00	31.00	40.00	C	530.	10	
6	1.00	23.00	32.00	47.00	C	511.	6	Power/Printer/Interrupt
7	1.00	17.00	25.00	38.00	C	519.	28	
8	1.00	17.00	27.00	38.00	C	523.	19	
9	1.00	16.00	26.00	44.00	C	531.	8	
10	1.00	25.00	33.00	55.00	C	527.	21	
11	1.00	23.00	30.00	47.00	C	480.	17	
12	1.00	22.00	29.00	49.00	C	524.	3	
13	1.00	24.00	33.00	49.00	C	534.	12	
14	1.00	25.00	39.00	49.00	C	527.	3	
-15	1.00	31.00	50.00	62.00	C	539.	8	
16	1.00	19.00	28.00	49.00	C	545.	21	
17	1.00	17.00	31.00	46.00	C	540.	19	
18	1.00	29.00	40.00	54.00	C	472.	10	
19	1.00	26.00	37.00	51.00	C	499.	11	
20	1.00	20.00	33.00	38.00	C	549.	9	
21	1.00	18.00	32.00	48.00	C	401.	9	
22	1.00	28.00	39.00	54.00	C	518.	10	
23	1.00	19.00	33.00	51.00	C	463.	15	
24	1.00	19.00	27.00	36.00	C	551.	15	
25	1.00	24.00	38.00	60.00	C	545.	8	
26	1.00	19.00	33.00	51.00	C	484.	12	
27	1.00	23.00	41.00	52.00	C	506.	17	
28	1.00	24.00	33.00	47.00	C	529.	6	
29	1.00	11.00	20.00	32.00	C	486.	20	
30	1.00	18.00	25.00	43.00	C	533.	12	
31	1.00	19.00	30.00	46.00	C	553.	13	
32	1.00	27.00	39.00	56.00	C	532.	21	
33	1.00	20.00	30.00	47.00	C	545.	20	
34	1.00	20.00	32.00	49.00	C	522.	3	
35	1.00	22.00	30.00	39.00	C	480.	10	~~BKG~~
36	1.00	18.00	30.00	37.00	C	509.	0	BKG #3
37	1.00	16.00	30.00	50.00	C	518.	23	BKG 4
38	0.07	158614.	159257.	159257.	C	991.	0	3H/ std 267800 dpm 22NOV95
39	0.09	24055.6	120389.	120889.	C	1007	0	14C std 122400 dpm 22NOV95

Critical Count = A (Chg) = 27

B = 43

C = 59

Sample #15 < 100 dpm/100 cm²

All other Samples < Critical Count

Survey Data
Room A-128
IDR Facility

Protocol #:10 Name:DECOM. SURVEY 2 27-Jul-97 08:46

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00

Time = 1.00 QIP = tSIE ES Terminator = 10 sec

ninescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	14.00	24.00	41.00	C	558.	13	
2	1.00	17.00	28.00	45.00	C	540.	4	
3	1.00	26.00	40.00	54.00	C	525.	2	
4	1.00	18.00	30.00	41.00	C	514.	3	
5	1.00	22.00	26.00	43.00	C	539.	8	
6	1.00	16.00	27.00	36.00	C	524.	7	
7	1.00	19.00	28.00	42.00	C	499.	7	
8	1.00	23.00	32.00	46.00	C	504.	16	
9	1.00	19.00	36.00	45.00	C	481.	3	
10	1.00	21.00	29.00	43.00	C	442.	10	desk/bench/computer station
11	1.00	11.00	20.00	32.00	C	508.	5	
12	1.00	11.00	20.00	30.00	C	525.	10	
13	1.00	22.00	30.00	46.00	C	560.	0	
14	1.00	16.00	23.00	33.00	C	517.	13	
15	1.00	22.00	32.00	49.00	C	542.	13	
16	1.00	24.00	34.00	51.00	C	524.	6	
17	1.00	21.00	30.00	51.00	C	547.	7	
18	1.00	19.00	30.00	42.00	C	551.	3	
19	1.00	30.00	44.00	54.00	C	539.	9	
20	1.00	18.00	25.00	34.00	C	546.	20	
21	1.00	17.00	24.00	43.00	C	502.	8	
22	1.00	14.00	22.00	34.00	C	543.	9	
23	1.00	17.00	25.00	39.00	C	499.	16	
24	1.00	23.00	32.00	43.00	C	538.	6	
25	1.00	29.00	43.00	55.00	C	530.	12	
26	1.00	17.00	28.00	44.00	C	510.	7	
27	1.00	21.00	30.00	42.00	C	519.	10	
28	1.00	21.00	37.00	54.00	C	476.	5	
29	1.00	13.00	22.00	38.00	C	448.	23	
30	1.00	24.00	34.00	47.00	C	496.	6	
31	1.00	22.00	29.00	40.00	C	508.	10	
32	1.00	17.00	28.00	42.00	C	534.	21	
33	1.00	20.00	32.00	43.00	C	471.	9	
34	1.00	30.00	42.00	56.00	C	526.	10	
35	1.00	16.00	31.00	44.00	C	543.	6	
36	1.00	27.00	42.00	54.00	C	514.	5	
37	1.00	14.00	26.00	36.00	C	549.	4	
38	1.00	21.00	32.00	50.00	C	493.	9	
39	1.00	19.00	31.00	52.00	C	513.	0	
40	1.00	24.00	34.00	48.00	C	527.	18	
41	1.00	13.00	22.00	33.00	C	519.	9	
42	1.00	24.00	33.00	48.00	C	542.	9	
43	1.00	23.00	33.00	47.00	C	492.	21	
44	1.00	13.00	26.00	44.00	C	471.	12	
45	1.00	25.00	31.00	45.00	C	531.	6	
46	1.00	17.00	27.00	41.00	C	539.	11	
47	1.00	30.00	42.00	55.00	C	475.	12	
48	1.00	19.00	32.00	40.00	C	497.	0	
49	1.00	17.00	30.00	49.00	C	491.	0	

	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
[illegible]	[illegible]	18.00	24.00	38.00	C	528.	21	
51	1.00	17.00	32.00	50.00	C	549.	6	
52	1.00	18.00	28.00	42.00	C	479.	29	
53	1.00	19.00	34.00	47.00	C	515.	6	
54	1.00	20.00	30.00	47.00	C	520.	7	
55	1.00	22.00	32.00	46.00	C	511.	3	
56	1.00	20.00	33.00	43.00	C	469.	18	
57	1.00	23.00	35.00	51.00	C	517.	14	
58	1.00	16.00	30.00	44.00	C	509.	10	
59	1.00	15.00	27.00	45.00	C	519.	7	
60	1.00	18.00	27.00	35.00	C	480.	11	
61	1.00	20.00	28.00	40.00	C	518.	7	
62	1.00	10.00	22.00	30.00	C	514.	5	
63	1.00	22.00	33.00	48.00	C	490.	9	
64	1.00	12.00	22.00	35.00	C	519.	14	
65	1.00	13.00	22.00	39.00	C	519.	9	
66	1.00	17.00	27.00	39.00	C	467.	19	
67	1.00	22.00	37.00	47.00	C	499.	19	
68	1.00	13.00	19.00	29.00	C	521.	32	
69	1.00	17.00	32.00	42.00	C	514.	16	
70	1.00	22.00	32.00	44.00	C	511.	3	
71	1.00	12.00	23.00	37.00	C	538.	26	
72	1.00	19.00	31.00	41.00	C	513.	13	
73	1.00	20.00	31.00	40.00	C	534.	6	
74	1.00	21.00	33.00	51.00	C	514.	3	
75	1.00	19.00	28.00	47.00	C	513.	14	
76	1.00	13.00	28.00	37.00	C	536.	7	
77	1.00	30.00	44.00	66.00	C	524.	7	
78	1.00	24.00	35.00	45.00	C	408.	6	
79	1.00	25.00	40.00	51.00	C	485.	7	
80	1.00	19.00	29.00	37.00	C	382.	7	
81	1.00	20.00	29.00	38.00	C	479.	24	
82	1.00	55.00	64.00	77.00	C	449.	39	
83	1.00	22.00	30.00	46.00	C	498.	13	
84	1.00	19.00	27.00	42.00	C	541.	11	
85	1.00	15.00	28.00	43.00	C	539.	7	
86	1.00	10.00	23.00	30.00	C	454.	4	BKG 1
87	1.00	21.00	33.00	51.00	C	494.	9	BKG 2
88	0.11	93545.5	93572.7	93581.8	C	637.	13	H std 198500 DPM 4 Dec 95
89	0.07	48314.3	152129.	152157.	C	639.	0	18 std 160150 DPM 4 Dec 95
90	0.05	8020.00	87340.0	225420.	C	604.	0	3 Eu std 226800 DPM 13 Dec 93

Critical count cha A = 25

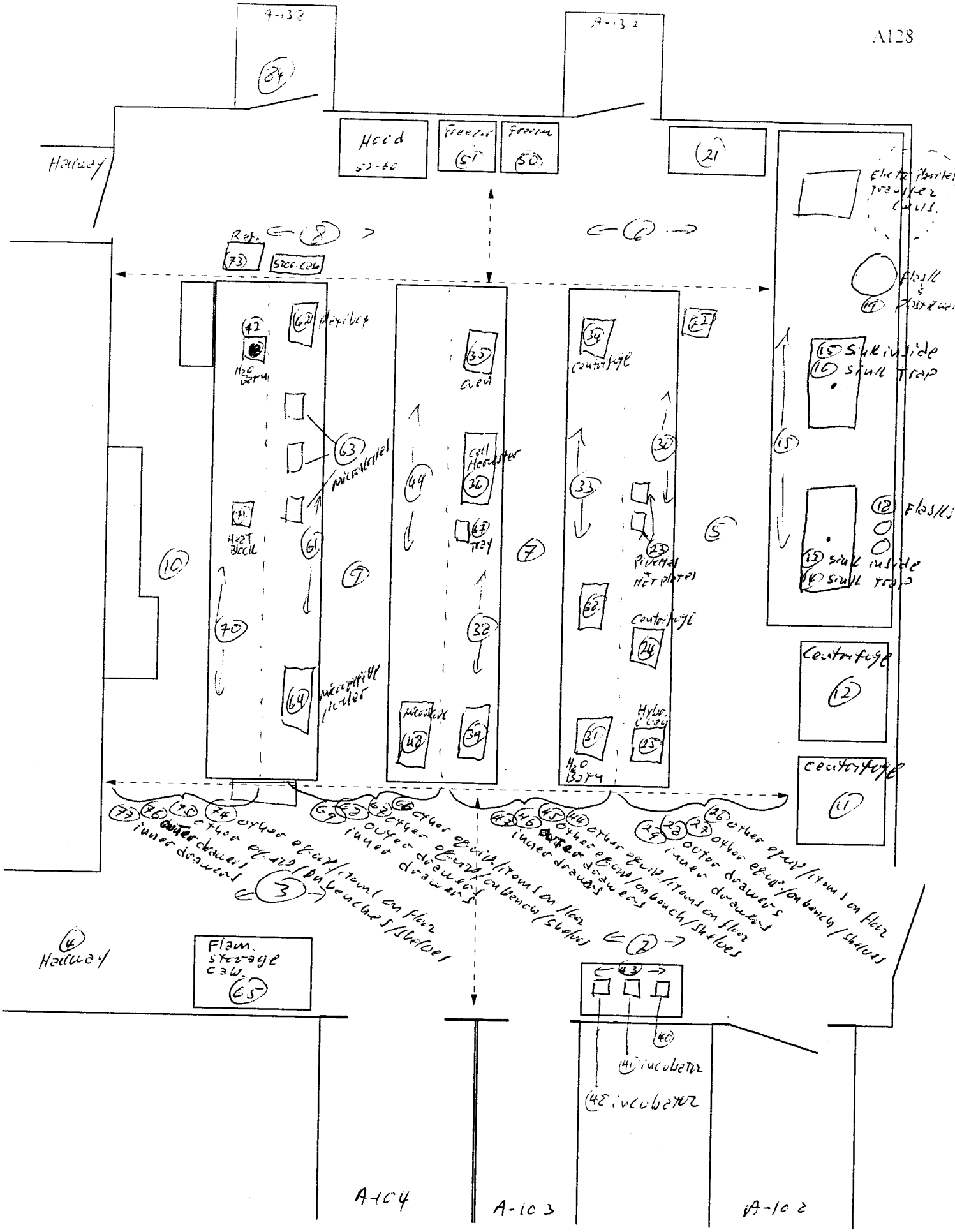
cha B = 40

cha C = 56

sample #'s 19 and 24 < 100 dpm/100cm2

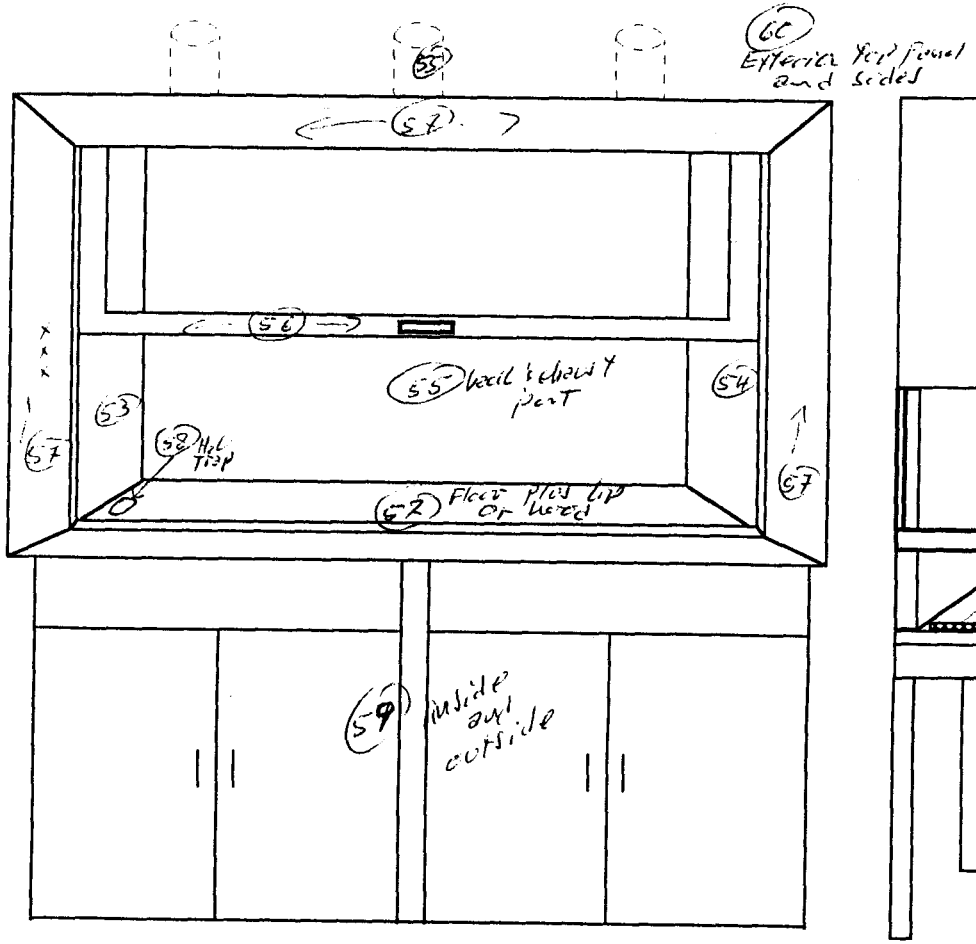
Sample #'s 77 and 82 < 100 dpm/100cm2

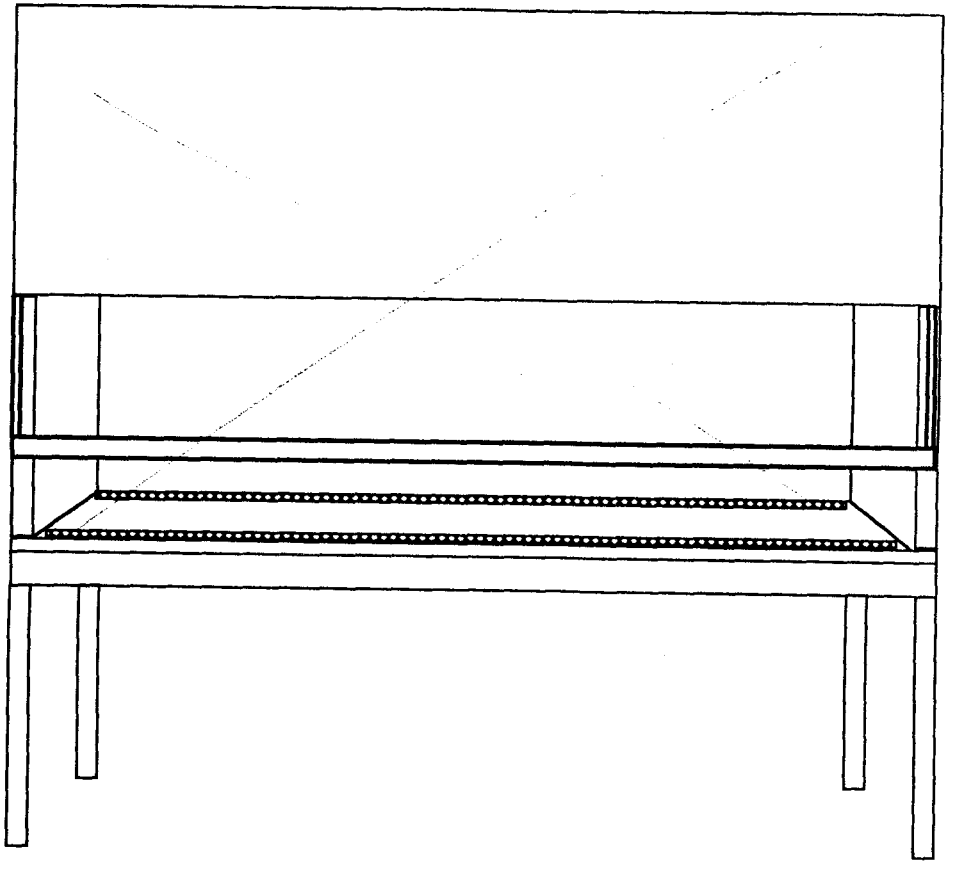
All other Samples < critical count


A-132
A-132
Hood
Freezer
Freezer
Hallway
Ref.
Stor. cab.
Centrifuge
Centrifuge
Centrifuge
Centrifuge
Sink inside
Sink Trap
Sink inside
Sink Trap
Flask
Flask
Oven
Cell Harvester
Tray
Microscope
Hydro. Cabs
Flam. storage cab.
Hallway
incubator
incubator
A-104
A-103
A-102

Fume Hood #_____

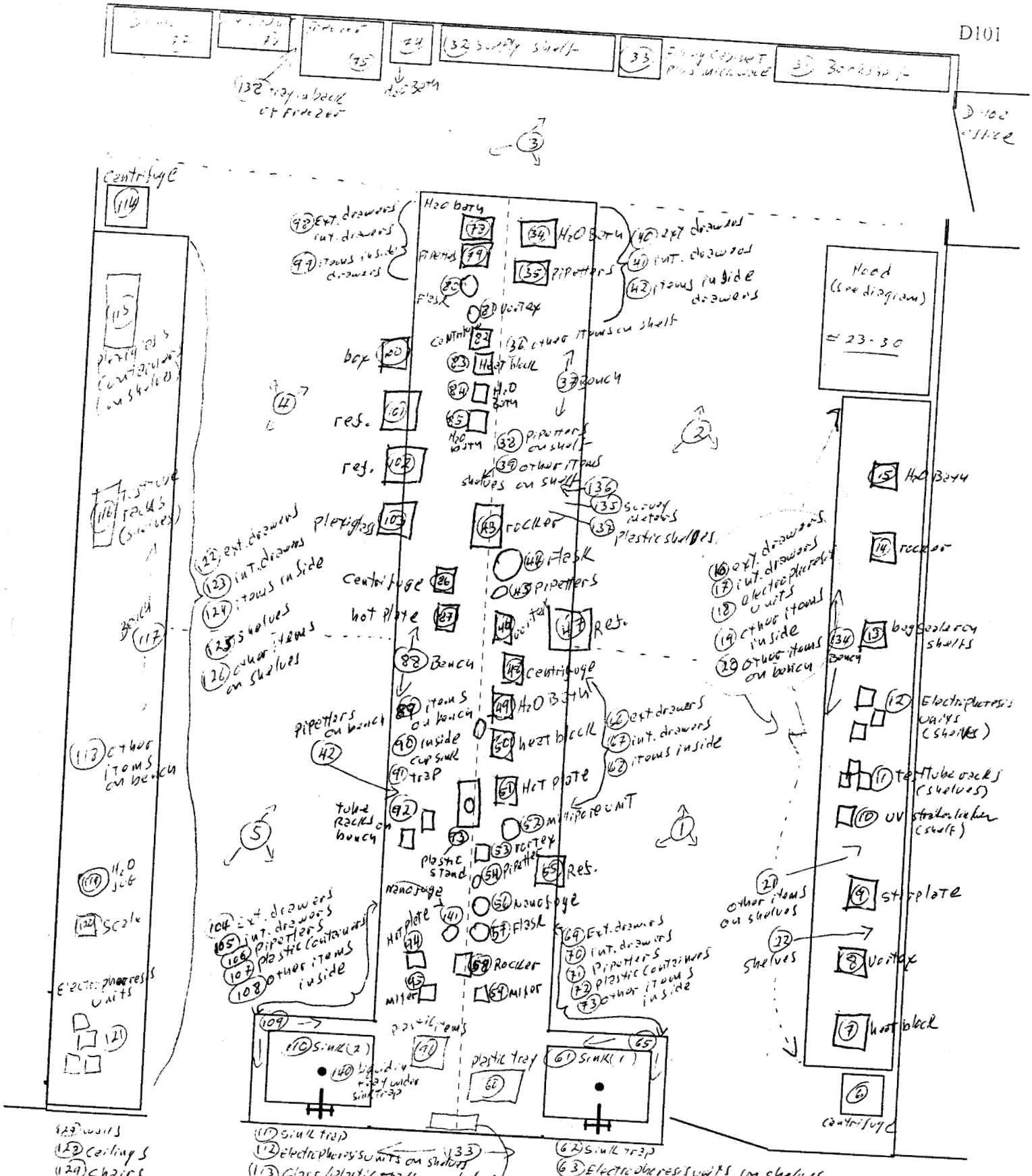
Biological Safety Cabinet #_____





Room Number	Notes only one hood in room. No Bio. safety cab.
A-128	sample #s 52-60

Survey Data
Room D-101
IDR Facility


132 tray in back of freezer
H2O bath
132 supply shelf
33
Bookshelf
D-100 office
centrifuge
114
115
plastic containers on shelves
116 racks (shelves)
117
118 other items on bench
119 H2O jug
122 scale
electrophoresis units
121
98 ext. drawers
int. drawers
97 items inside drawers
H2O bath
73
74
79
flasks
80
35 pipettors
40 ext. drawers
41 int. drawers
42 items inside drawers
81 vortex
36 other items on shelf
82 centrifuge
83 Heat block
84 H2O bath
85 H2O bath
37 bench
38 pipettors on shelf
39 other items on shelf
box 100
res. 101
res. 102
plexiglass 103
43 rocker
44 flask
45 pipettors
46 vortex
47 Rest.
136
135 supply cutters
137 plastic shelves
22 ext. drawers
123 int. drawers
124 items inside
125 shelves
126 other items on shelves
Centrifuge 86
hot plate 87
88 Bench
48 centrifuge
89 items on bench
49 H2O bath
90 inside cup sink
91 trap
50 heat block
51 Hot plate
52 mixer
53 vortex
54 pipettes
55 Rest.
56 nanodrop
57 flask
58 Rocker
59 mixer
pipettors on bench 42
tube racks on bench 92
93
plastic stand
nanodrop
Hot plate 94
mixer 95
104 ext. drawers
105 int. drawers
106 pipettors
107 plastic containers
108 other items inside
109
110 sink (2)
140 liquid in tray under sink trap
plastic items 91
plastic tray 66
61 sink (1)
65
62 ext. drawers
167 int. drawers
168 items inside
69 ext. drawers
70 int. drawers
71 pipettors
72 plastic containers
73 other items inside
Hood (see diagram) # 23-30
15 H2O bath
14 rocker
16 ext. drawers
17 int. drawers
18 electrophoresis units
19 other items inside
20 other items on bench
134 bench
13 bag sealer on shelves
12 Electrophoresis units (shelves)
11 test tube racks (shelves)
10 UV strata linker (shelf)
21 other items on shelves
9 stir plate
22 shelves
8 vortex
7 heat block
6 centrifuge
129 walls
128 ceilings
129 chairs
130 trash cans
131 other items on floor
132 handles/knobs/light switches
133 floor drain
117 sink trap
112 electrophoresis units on shelves
113 Glass/plastic trays on shelves
133
97 ext. cabinet
62 sink trap
63 Electrophoresis units on shelves
64 Glass/plastic trays on shelves
139 step stools
143 shelves and other items
144 container # 114 (condensation trays)
141 pipettors
142 RAM waste flask

Protocol: 1:10 Name: DESOM. SURVEY 2 06-Aug-87 15:37

Region A: LL-UL= 0.0-12.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00

Time = 1.00 DIP = tSIE ES Terminator = 10 sec

Luminescence Correction On

(initial survey) (original)

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	42.00	58.00	75.00	C	366.	60	
2	1.00	20.00	43.00	57.00	C	381.	5	
3	1.00	27.00	43.00	57.00	C	359.	5	
4	1.00	17.00	26.00	35.00	C	277.	12	
5	1.00	20.00	34.00	47.00	C	379.	6	
6	1.00	243.00	319.00	331.00	C	409.	0	refrigerated microcentrifuge [Gomy (MRX-152)] 343 dpm
7	1.00	35.00	51.00	62.00	C	478.	2	
8	1.00	50.00	74.00	89.00	C	455.	4	Removed from lab assumed work contamination
9	1.00	27.00	44.00	63.00	C	470.	5	20 dpm
10	1.00	14.00	30.00	50.00	C	492.	7	
11	1.00	22.00	35.00	46.00	C	477.	6	
12	1.00	29.00	39.00	53.00	C	478.	15	
13	1.00	20.00	29.00	39.00	C	467.	14	
14	1.00	19.00	35.00	46.00	C	464.	14	
15	1.00	23.00	34.00	46.00	C	459.	12	
16	1.00	17.00	30.00	50.00	C	499.	17	
17	1.00	16.00	24.00	39.00	C	404.	8	
18	1.00	23.00	29.00	40.00	C	492.	3	
19	1.00	20.00	37.00	54.00	C	470.	5	
20	1.00	19.00	33.00	49.00	C	481.	6	
21	1.00	14.00	19.00	28.00	C	454.	21	
22	1.00	22.00	40.00	48.00	C	377.	10	
23	1.00	32.00	43.00	60.00	C	441.	21	
24	1.00	16.00	29.00	40.00	C	481.	17	
25	1.00	29.00	45.00	63.00	C	355.	7	
26	1.00	26.00	37.00	45.00	C	433.	14	
27	1.00	19.00	33.00	42.00	C	404.	12	
28	1.00	25.00	34.00	51.00	C	465.	15	
29	1.00	18.00	33.00	53.00	C	472.	9	
30	1.00	20.00	34.00	47.00	C	419.	21	
31	1.00	23.00	33.00	42.00	C	415.	9	
32	1.00	24.00	35.00	46.00	C	408.	9	
33	1.00	19.00	26.00	39.00	C	480.	19	
34	1.00	16.00	31.00	49.00	C	465.	3	
35	1.00	30.00	39.00	52.00	C	485.	8	
36	1.00	13.00	31.00	41.00	C	454.	13	
37	1.00	26.00	39.00	48.00	C	465.	5	
38	1.00	16.00	37.00	51.00	C	484.	0	
39	1.00	15.00	28.00	33.00	C	249.	25	
40	1.00	22.00	36.00	49.00	C	503.	8	
41	1.00	22.00	36.00	51.00	C	517.	8	
42	1.00	22.00	35.00	46.00	C	525.	9	
43	1.00	20.00	32.00	42.00	C	481.	9	
44	1.00	17.00	29.00	40.00	C	481.	3	
45	1.00	18.00	31.00	45.00	C	461.	13	
46	1.00	32.00	51.00	72.00	C	489.	12	
47	1.00	19.00	33.00	45.00	C	485.	6	
48	1.00	4638.00	6113.00	6123.00	C	463.	0	Removed to D-130 (6,573 dpm) 35 s
49	1.00	22.00	31.00	48.00	C	479.	6	microcentrifuge

#	TIME	CPMA	CPMB	CPMC	FLAG	[illegible]	[illegible]	
50	1.00	34.00	62.00	93.00	C	451.	1	
51	1.00	18.00	32.00	49.00	C	429.	5	
52	1.00	926.00	1173.00	1179.00	C	483.	0	removed to D-120 (1,[illegible] dpm) [illegible]
53	1.00	28.00	43.00	56.00	C	467.	2	
54	1.00	19.00	34.00	50.00	C	487.	6	
55	1.00	63.00	77.00	86.00	C	471.	4	
56	1.00	80.00	128.00	138.00	C	485.	2	Nanofige 138 dpm
57	0.07	110857.	145214.	145214.	C	488.	0	waste #3 flask removed to D-130 for [illegible] 156,144 dpm
58	1.00	20.00	28.00	42.00	C	486.	4	
59	1.00	21.00	31.00	42.00	C	496.	10	
60	1.00	32.00	45.00	58.00	C	512.	7	
61	1.00	70.00	93.00	108.00	C	463.	6	sink D rinse (100 dpm)
62	1.00	61.00	83.00	99.00	C	412.	1	sink trap D (90 dpm)
63	1.00	26.00	35.00	46.00	C	489.	3	
64	1.00	35.00	52.00	64.00	C	479.	8	
65	1.00	48.00	68.00	82.00	C	454.	6	
66	1.00	27.00	38.00	49.00	C	505.	11	
67	1.00	18.00	27.00	36.00	C	453.	19	
68	1.00	40.00	58.00	67.00	C	477.	9	
69	1.00	20.00	32.00	45.00	C	456.	28	
70	1.00	36.00	52.00	68.00	C	449.	12	
71	1.00	74.00	117.00	128.00	C	478.	3	removed to D-101 (126 dpm) (126 dpm)
72	1.00	70.00	97.00	105.00	C	499.	6	104 dpm
73	1.00	21.00	42.00	60.00	C	470.	17	
74	1.00	21.00	37.00	46.00	C	461.	11	
75	1.00	25.00	31.00	47.00	C	490.	16	
76	1.00	29.00	41.00	52.00	C	490.	2	
77	1.00	28.00	38.00	49.00	C	494.	8	
78	1.00	14.00	26.00	36.00	C	477.	15	
79	1.00	18.00	29.00	41.00	C	489.	7	
80	1.00	25.00	40.00	53.00	C	490.	13	
81	1.00	24.00	32.00	46.00	C	478.	3	
82	1.00	45.00	74.00	91.00	C	460.	5	
83	1.00	15.00	25.00	31.00	C	476.	20	
84	1.00	30.00	46.00	53.00	C	479.	7	
85	1.00	16.00	27.00	37.00	C	487.	19	
86	1.00	20.00	30.00	41.00	C	475.	10	
87	1.00	26.00	36.00	52.00	C	469.	8	
88	1.00	21.00	35.00	51.00	C	460.	9	
89	1.00	16.00	28.00	35.00	C	443.	14	
90	1.00	28.00	40.00	49.00	C	418.	5	
91	1.00	28.00	39.00	49.00	C	468.	5	
92	1.00	24.00	42.00	57.00	C	499.	12	
93	1.00	31.00	41.00	48.00	C	492.	5	
94	1.00	23.00	33.00	55.00	C	475.	18	
95	1.00	17.00	25.00	36.00	C	483.	24	
96	1.00	14.00	26.00	37.00	C	481.	8	
97	1.00	18.00	35.00	52.00	C	465.	0	
98	1.00	21.00	36.00	44.00	C	495.	17	
99	1.00	92.00	140.00	152.00	C	394.	2	151 dpm
100	1.00	23.00	28.00	40.00	C	489.	18	
101	1.00	16.00	25.00	39.00	C	482.	24	
102	1.00	21.00	32.00	49.00	C	470.	6	
103	1.00	22.00	35.00	49.00	C	382.	6	
104	1.00	18.00	26.00	39.00	C	459.	12	
105	1.00	19.00	31.00	42.00	C	494.	10	

[illegible]	[illegible]	[illegible]	CPMB	CPMC	FLAG	tSIS	LUM	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	C	506.	3	
107	1.00	13.00	29.00	47.00	C	485.	24	
108	1.00	21.00	25.00	41.00	C	471.	20	
109	1.00	32.00	44.00	56.00	C	475.	9	
110	1.00	22.00	28.00	44.00	C	476.	18	
111	1.00	28.00	38.00	50.00	C	463.	13	
112	1.00	21.00	35.00	48.00	C	457.	9	
113	1.00	18.00	27.00	44.00	C	483.	7	
114	1.00	96.00	132.00	147.00	C	487.	3	142 dpm
115	1.00	18.00	34.00	37.00	C	441.	12	
116	1.00	42.00	48.00	62.00	C	474.	8	
117	1.00	17.00	26.00	43.00	C	472.	4	
118	1.00	19.00	26.00	38.00	C	483.	12	
119	1.00	22.00	30.00	50.00	C	500.	3	
120	1.00	11.00	28.00	37.00	C	501.	25	
121	1.00	23.00	45.00	63.00	C	489.	9	
122	1.00	24.00	32.00	49.00	C	461.	16	
123	1.00	14.00	25.00	39.00	C	474.	16	
124	1.00	16.00	27.00	39.00	C	488.	15	
125	1.00	19.00	29.00	40.00	C	470.	7	
126	1.00	21.00	38.00	53.00	C	475.	13	
127	1.00	28.00	37.00	52.00	C	471.	24	
128	1.00	15.00	31.00	46.00	C	350.	19	
129	1.00	15.00	32.00	44.00	C	442.	13	
130	1.00	12.00	24.00	41.00	C	404.	8	
131	1.00	17.00	28.00	42.00	C	432.	11	
132	1.00	31.00	57.00	67.00	C	400.	5	
133	1.00	21.00	31.00	49.00	C	500.	10	
134	1.00	19.00	29.00	51.00	C	490.	24	
135	1.00	31.00	42.00	51.00	C	459.	17	
136	1.00	23.00	34.00	45.00	C	453.	12	
137	1.00	20.00	32.00	47.00	C	461.	9	
138	1.00	12.00	27.00	42.00	C	444.	15	
139	1.00	20.00	30.00	42.00	C	462.	7	
140	1.00	16.00	32.00	46.00	C	487.	13	
141	1.00	16.00	29.00	36.00	C	486.	3	
142	1.00	20.00	32.00	40.00	C	477.	3	
143	1.00	19.00	30.00	41.00	C	470.	17	
144	1.00	2122.00	2923.00	2940.00	C	400.	0	removed to D-130 (3,143 dpm)
145	1.00	10.00	22.00	34.00	C	482.	9	
146	1.00	45.00	73.00	90.00	C	480.	7	waste ^{35}S flask removed to D-130 for disposal
(10 missing vials)								
157	1.00	16.00	30.00	42.00	C	494.	17	
158	1.00	18.00	26.00	48.00	C	492.	8	
159	1.00	21.00	36.00	54.00	C	485.	11	
160	1.00	21.00	32.00	47.00	C	475.	3	
161	1.00	21.00	33.00	41.00	C	458.	15	
162	1.00	26.00	42.00	52.00	C	456.	12	
163	1.00	22.00	31.00	51.00	C	480.	10	
164	1.00	26.00	38.00	46.00	C	410.	18	
165	1.00	21.00	34.00	49.00	C	459.	3	
166	1.00	19.00	40.00	55.00	C	489.	15	
167	1.00	14.00	27.00	41.00	C	493.	7	
168	1.00	28.00	42.00	62.00	C	488.	12	
169	1.00	21.00	34.00	53.00	C	474.	9	
170	1.00	19.00	35.00	54.00	C	433.	9	

#	TIME	CPMA	CPMB	CPMC	FLAG	BSIE	LLM	
171	1.00	21.00	31.00	43.00	C	514.	2	
172	1.00	19.00	31.00	42.00	C	511.	6	
173	1.00	18.00	28.00	41.00	C	489.	11	
174	1.00	46.00	58.00	66.00	C	465.	45	
175	1.00	18.00	32.00	42.00	C	503.	13	
176	1.00	19.00	33.00	42.00	C	472.	15	
177	1.00	31.00	41.00	53.00	C	411.	10	
178	1.00	21.00	36.00	57.00	C	462.	8	
179	1.00	25.00	38.00	49.00	C	485.	8	
180	1.00	15.00	27.00	42.00	C	465.	11	
181	1.00	21.00	33.00	51.00	C	388.	18	
182	1.00	19.00	29.00	47.00	C	409.	14	
(1 missing vial)								
184	1.00	24.00	35.00	47.00	C	424.	9	Blank 1
185	1.00	14.00	31.00	50.00	C	485.	10	Blk 2
(2 missing vials)			Ave 33					
188	1.00	19.00	29.00	42.00	C	601.	3	DNA optimized
189	0.11	93709.1	93718.2	93736.4	C	633.	1	^{3}H
190	0.07	48628.6	147814.	147843.	C	639.	0	^{14}C
191	0.05	8160.00	87580.0	222500.	C	605.	0	^{36}Cl

critical count ch A = 29

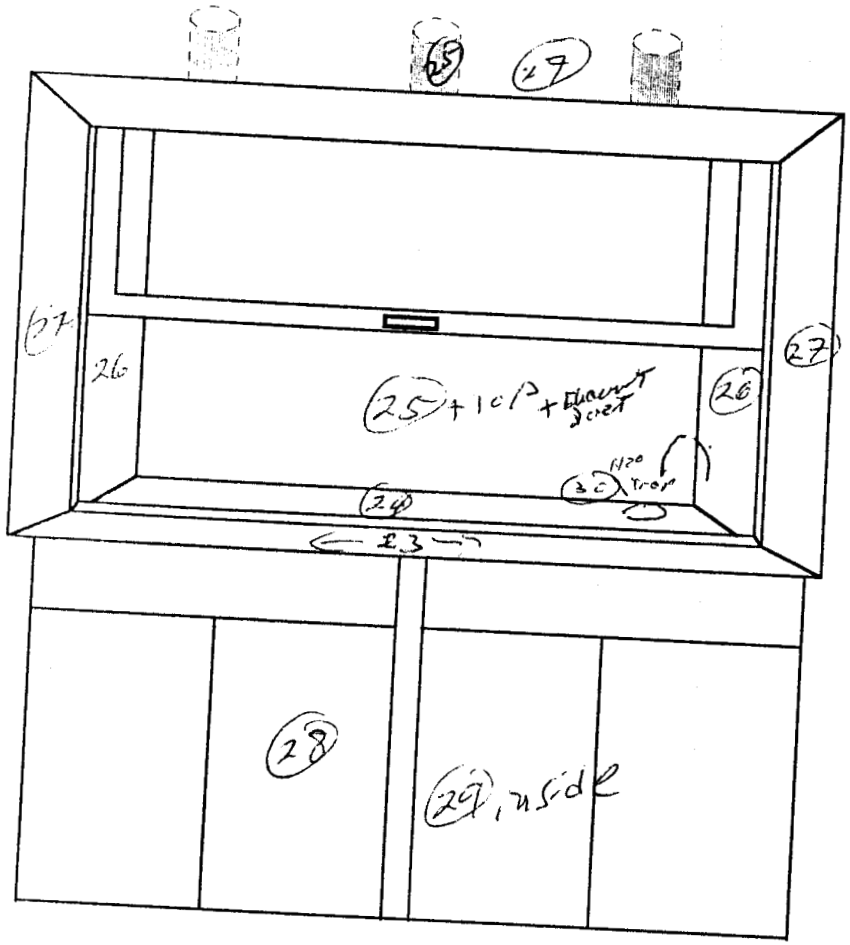
ch B = 46

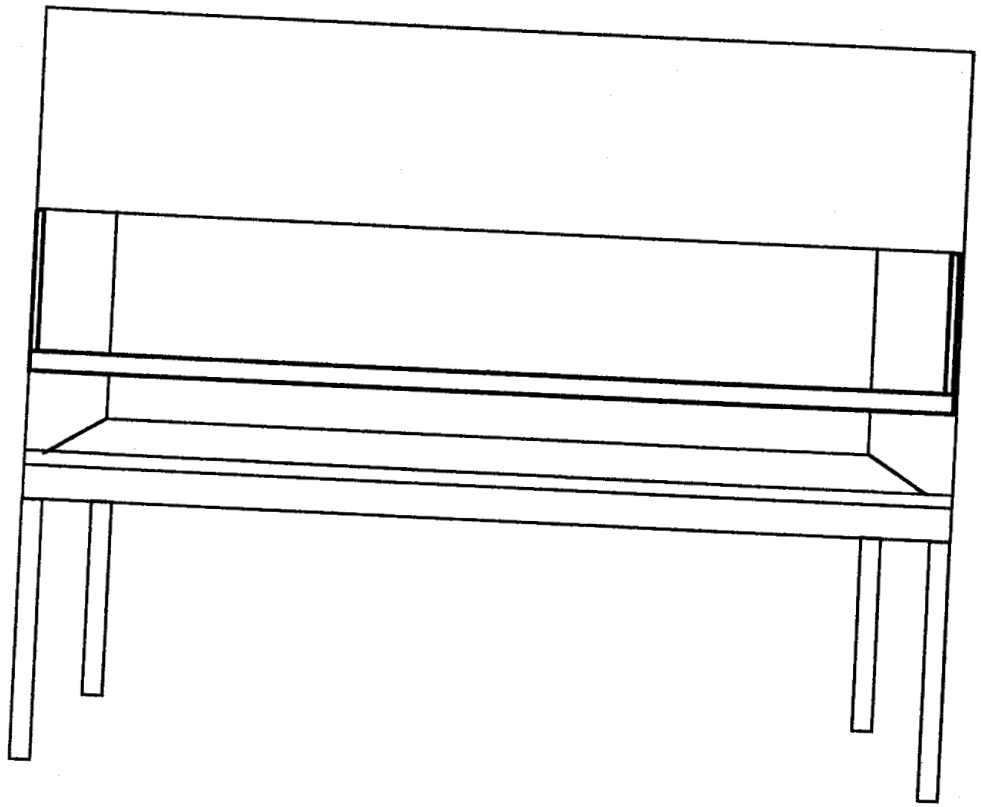
ch C = 65

^{35}S efficiency = 93%

all contamination found was determined to be ^{35}S ∴ counts in ch B were used

MDA = 6.5×10^{-6} dpm for ^{35}S





Room Number	Notes # 23 - 30
101	

Channel #:17 Name:[illegible] Slot: 2 [illegible]-Avg=57 11:13
Region A: LL-UL= [illegible] Lcr= [illegible] Skg= 1.00 %2 Sigma=0.00
Region B: LL-UL= [illegible] Lcr= 0 Skg= 1.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Skg= 0.00 %2 Sigma=2.00
Time = 1.00 Kif = tSIE ES Terminator = 10 sec
Quinescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	49.00	63.00	85.00	C	496.	3	
2	1.00	25.00	39.00	45.00	C	480.	5	
3	1.00	20.00	34.00	41.00	C	466.	15	
4	1.00	21.00	32.00	46.00	C	498.	13	
5	1.00	21.00	33.00	48.00	C	522.	3	
6	1.00	24.00	34.00	51.00	C	532.	3	
7	1.00	18.00	28.00	41.00	C	530.	7	
8	1.00	20.00	30.00	39.00	C	528.	3	
9	1.00	15.00	19.00	28.00	C	542.	16	
10	1.00	17.00	25.00	41.00	C	520.	16	
11	1.00	24.00	37.00	50.00	C	532.	0	
12	1.00	15.00	21.00	33.00	C	486.	10	
13	1.00	496.00	637.00	654.00	C	494.	0	Bench under flasks 685 dpm
14	1.00	19.00	27.00	43.00	C	510.	4	
15	1.00	25.00	34.00	47.00	C	525.	12	
16	1.00	18.00	27.00	44.00	C	511.	4	
17	1.00	19.00	33.00	48.00	C	527.	15	
18	1.00	18.00	34.00	49.00	C	501.	3	
19	1.00	27.00	39.00	53.00	C	534.	10	
20	1.00	18.00	23.00	36.00	C	529.	9	
21	1.00	27.00	40.00	59.00	C	502.	7	
22	1.00	14.00	27.00	44.00	C	514.	11	
23	1.00	12.00	19.00	44.00	C	522.	11	
24	1.00	20.00	43.00	55.00	C	519.	2	
25	1.00	80.00	97.00	118.00	C	516.	2	Removed from lab (104 dpm)
26	1.00	17.00	26.00	44.00	C	506.	4	
27	1.00	19.00	36.00	52.00	C	534.	17	
28	1.00	25.00	41.00	53.00	C	525.	2	
29	1.00	13.00	25.00	37.00	C	582.	8	
30	1.00	37.00	59.00	75.00	C	579.	10	
31	1.00	112.00	143.00	152.00	C	428.	1	sink (#65) (154 dpm)
32	1.00	26.00	43.00	56.00	C	539.	16	
33	1.00	80.00	124.00	135.00	C	516.	0	removed from lab (133 dpm)
34	1.00	244.00	447.00	461.00	C	534.	0	removed from lab (481 dpm)
35	1.00	160.00	214.00	235.00	C	420.	1	removed from lab (230 dpm)
36	1.00	54.00	76.00	89.00	C	559.	3	removed from lab (82 dpm) assumed water cont.
37	1.00	21.00	35.00	49.00	C	575.	3	removed from lab
38	1.00	48.00	64.00	83.00	C	396.	3	removed from lab (69 dpm) assumed water contamination
39	1.00	12.00	24.00	36.00	C	387.	4	BKG-1
40	1.00	18.00	29.00	38.00	C	433.	3	BKG-2
(1 missing vial)								
42	0.11	96781.8	96809.1	96818.2	C	631.	1	^{3}H std 198 500 dpm 4/12/95
43	0.20	48580.0	151680.	151690.	C	633.	0	^{14}C std 160 150 dpm 4/12/95
44	0.05	8580.00	86400.0	227760.	C	606.	0	^{36}Cl std 226 800 dpm 12/12/93
(1 missing vial)								
46	1.00	14.00	19.00	36.00	C	425.	32	BKG-3
47	1.00	12.00	26.00	38.00	C	239.	8	BKG-4

critical count for ^{35}S (ch. B) = 24 counts

MDA = 4.38×10^{-6} uCi

^{35}S efficiency = 93%

IDR D-101 second round swipes

1 drawer #1
2 drawer #2
3 drawer #3
4 drawer #4
5 cabinet
6 contents of drawer #1
7 contents of drawer #2
8 contents of drawer #3
9 contents of drawer #4
10 contents of cabinet
11 white laminate on bench
12 bench under white laminate
13 bench under RAM waste flasks
14 picofuge
15 drawer # 6
16 drawer # 7
17 drawer # 8
18 drawer # 9
19 cabinet
20 contents of drawer # 6
21 contents of drawer # 7
22 contents of drawer # 8
23 contents of drawer # 9
24 contents of cabinet
25 re-swipe of original swipe #8 after d-con
26 re-swipe of floor area #1 after d-con
27 re-swipe of #46 vortex after d-con
28 re-swipe 0f #50 after d-con
29 re-swipe of #55 (ref. exterior) after d-con
30 re-swipe of #55 (ref. interior) after d-con
31 re-swipe of #65 (sink) after d-con
32 re-swipe of #61 (sink counter) after d-con
33 bin under sink (original #61)
34 bin under sink (original #61)
35 bin under sink (original #61)
36 bin under sink (original #61)
37 bin under sink (original #61)
38 plastic covers under sink (original #61)

3[illegible]

Protocol #: 9 Name: 09-Aug-97 14:19
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
Quinescence Correction On

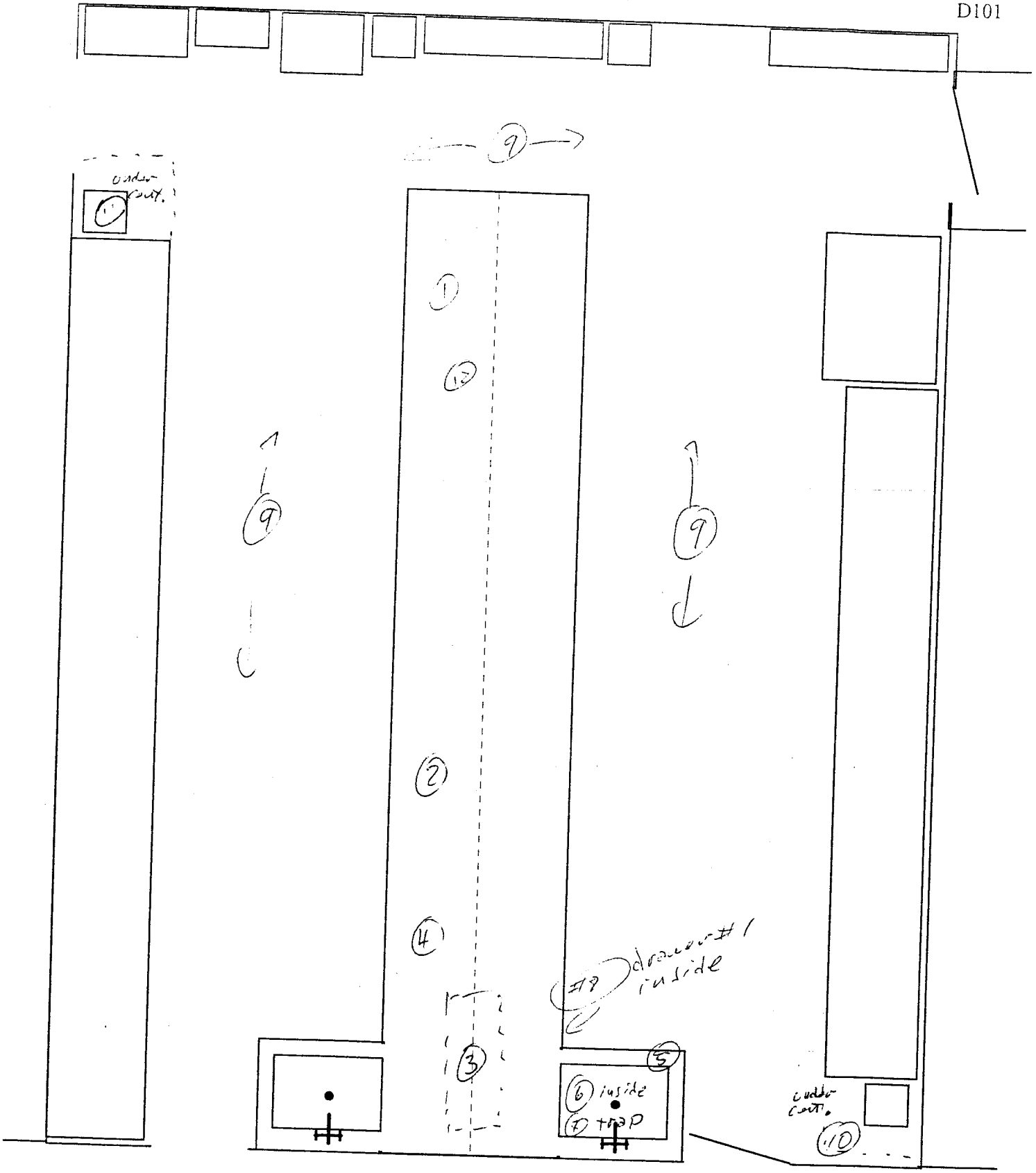
S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	34.00	43.00	50.00	C	527.	44	
2	1.00	25.00	38.00	51.00	C	478.	34	
3	1.00	73.00	89.00	100.00	C	553.	16	
4	1.00	22.00	34.00	49.00	C	552.	50	
5	1.00	19.00	31.00	46.00	C	556.	23	
6	1.00	32.00	46.00	66.00	C	494.	9	
7	1.00	19.00	31.00	44.00	C	548.	10	
8	1.00	21.00	41.00	56.00	C	533.	10	
9	1.00	30.00	40.00	54.00	C	439.	10	
10	1.00	22.00	32.00	47.00	C	536.	9	
11	1.00	20.00	33.00	43.00	C	509.	6	
12	1.00	48.00	69.00	78.00	C	488.	17	
(1 missing vial)								
14	1.00	16.00	20.00	39.00	C	424.	10	Blk-1
15	1.00	12.00	25.00	33.00	C	233.	20	Blk 2
(1 missing vial)								
17	0.11	93181.8	93227.3	93227.3	C	631.	1	^{3}H std
18	0.07	49785.7	149643.	149657.	C	634.	0	^{14}C std
19	0.05	7940.00	87780.0	225000.	C	602.	0	^{35}Cl std.

critical count ch. A: 23
ch. B: 34
ch C: 50

all samples < 100 dpm/100 cm² assuming worst efficiency for ^{3}H of 52%

II

1. under laminate
2. under laminate
3. area under RHM flasks (orig nal swipe #13 of 2nd round swipes)
4. top of laminate & under laminate next to #3
5. sink top and counter around sink (original #61)
6. sink inside (original #61)
7. sink trap (original #62)
8. inside drawer #1 re-swipe
9. floor (not under centrifuge #6)
10. floor under centrifuge #6
11. " " " #114
12. re-swipe of original swipe #82


outdoor cont.
1
9
1
12
9
9
2
4
#8 drawer #1 inside
3
5
6 inside
7 trap
outdoor cont.
10

Protocol #: 3 Name: 09-Aug-77 15:04
Region A: LL-UL= 1.0-19.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 SIP = tSIE ES Terminator = 10 sec
Quinescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM
1	1.00	15.00	33.00	52.00	C	532.	6 Recount of #3 after 2nd Decon
(1 missing vial)							
3	1.00	20.00	27.00	43.00	C	415.	11

Survey Data
Room D-103
IDR Facility

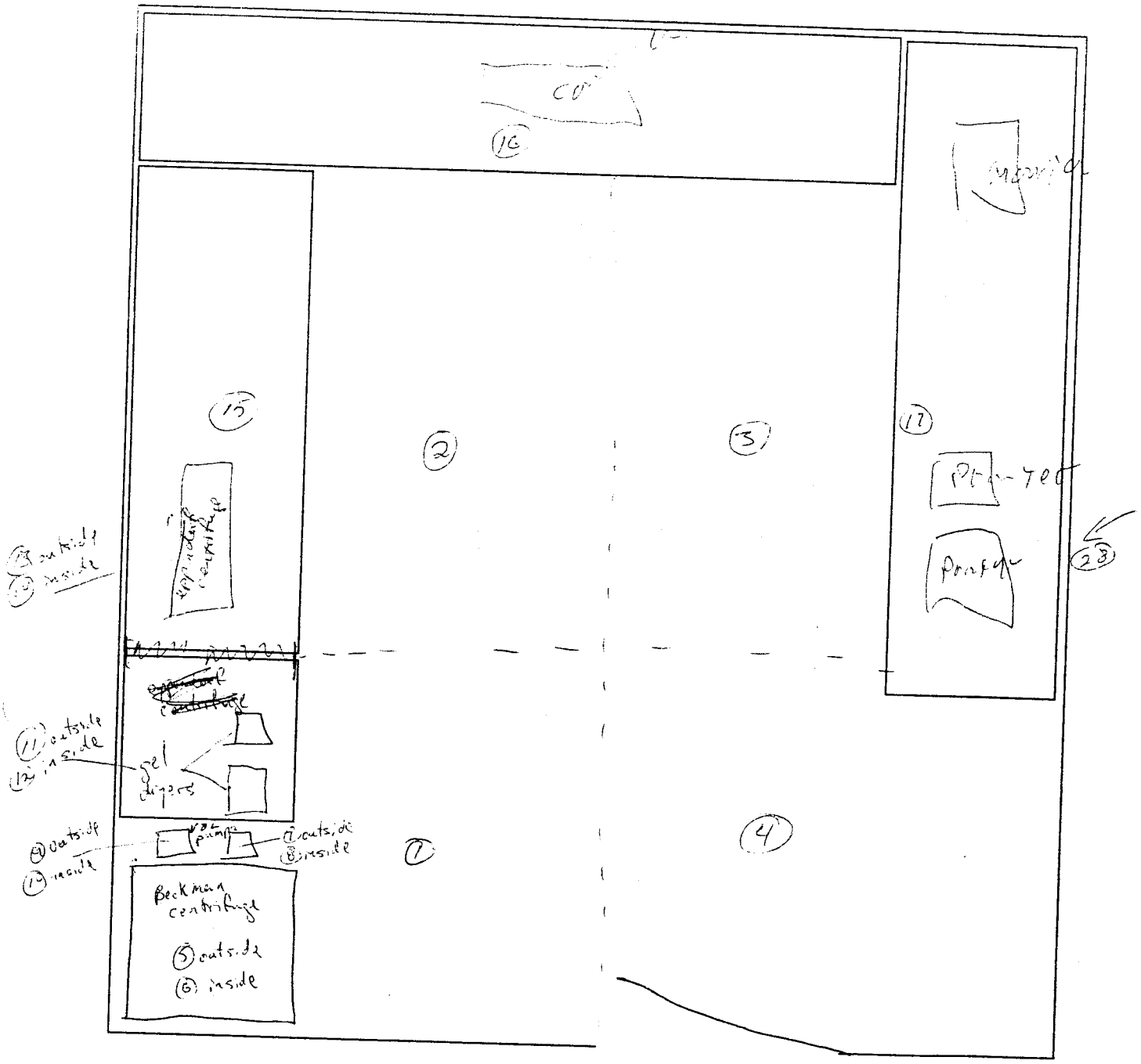
D-103

Protocol: [illegible] Name:DEIDM. SURVEY 2 26-Jul-97 08:19
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
[illegible]inescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM
1	1.00	18.00	30.00	41.00	C	461.	0
2	1.00	19.00	29.00	42.00	C	498.	7
3	1.00	12.00	24.00	32.00	C	532.	8
4	1.00	20.00	36.00	55.00	C	511.	6
5	1.00	25.00	38.00	51.00	C	559.	3
6	1.00	27.00	37.00	54.00	C	546.	11
7	1.00	23.00	41.00	58.00	C	509.	7
8	1.00	19.00	26.00	43.00	C	543.	12
9	1.00	18.00	28.00	45.00	C	503.	18
10	1.00	20.00	32.00	39.00	C	569.	3
11	1.00	19.00	32.00	49.00	C	480.	9
12	1.00	18.00	28.00	51.00	C	530.	14
13	1.00	19.00	39.00	52.00	C	556.	15
14	1.00	16.00	24.00	35.00	C	593.	4
15	1.00	21.00	31.00	44.00	C	526.	3
16	1.00	15.00	24.00	34.00	C	510.	8
17	1.00	24.00	32.00	45.00	C	547.	9
18	1.00	20.00	32.00	50.00	C	496.	13
19	1.00	16.00	25.00	41.00	C	542.	8
20	1.00	18.00	23.00	34.00	C	541.	13
21	1.00	16.00	26.00	39.00	C	522.	15
22	1.00	25.00	37.00	49.00	C	555.	8
23	1.00	15.00	23.00	39.00	C	512.	4
24	1.00	21.00	40.00	56.00	C	528.	5
25	1.00	17.00	32.00	46.00	C	520.	6
26	1.00	22.00	28.00	33.00	C	567.	4
27	1.00	20.00	35.00	48.00	C	512.	11
28	1.00	19.00	31.00	52.00	C	344.	13
29	1.00	14.00	27.00	40.00	C	513.	4
30	1.00	13.00	23.00	46.00	C	499.	30
31	1.00	11.00	22.00	38.00	C	328.	18
32	1.00	23.00	34.00	45.00	C	547.	6
33	1.00	15.00	21.00	31.00	C	542.	14
34	1.00	12.00	27.00	42.00	C	411.	11 BKG
35	1.00	18.00	26.00	43.00	C	486.	12 BKG
36	0.11	94345.5	94390.9	94409.1	C	639.	1 ^{3}H std 198500 DPM 4 Dec 95
37	0.07	47228.6	148471.	148486.	C	644.	0 ^{14}C std 160150 DPM 4 Dec 95
38	0.05	8880.00	87380.0	225480.	C	611.	0 ^{36}Cl std 226800 DPM 13 Dec 93

critical Count : Ch. A : 24
Ch. B : 39
Ch. C : 58

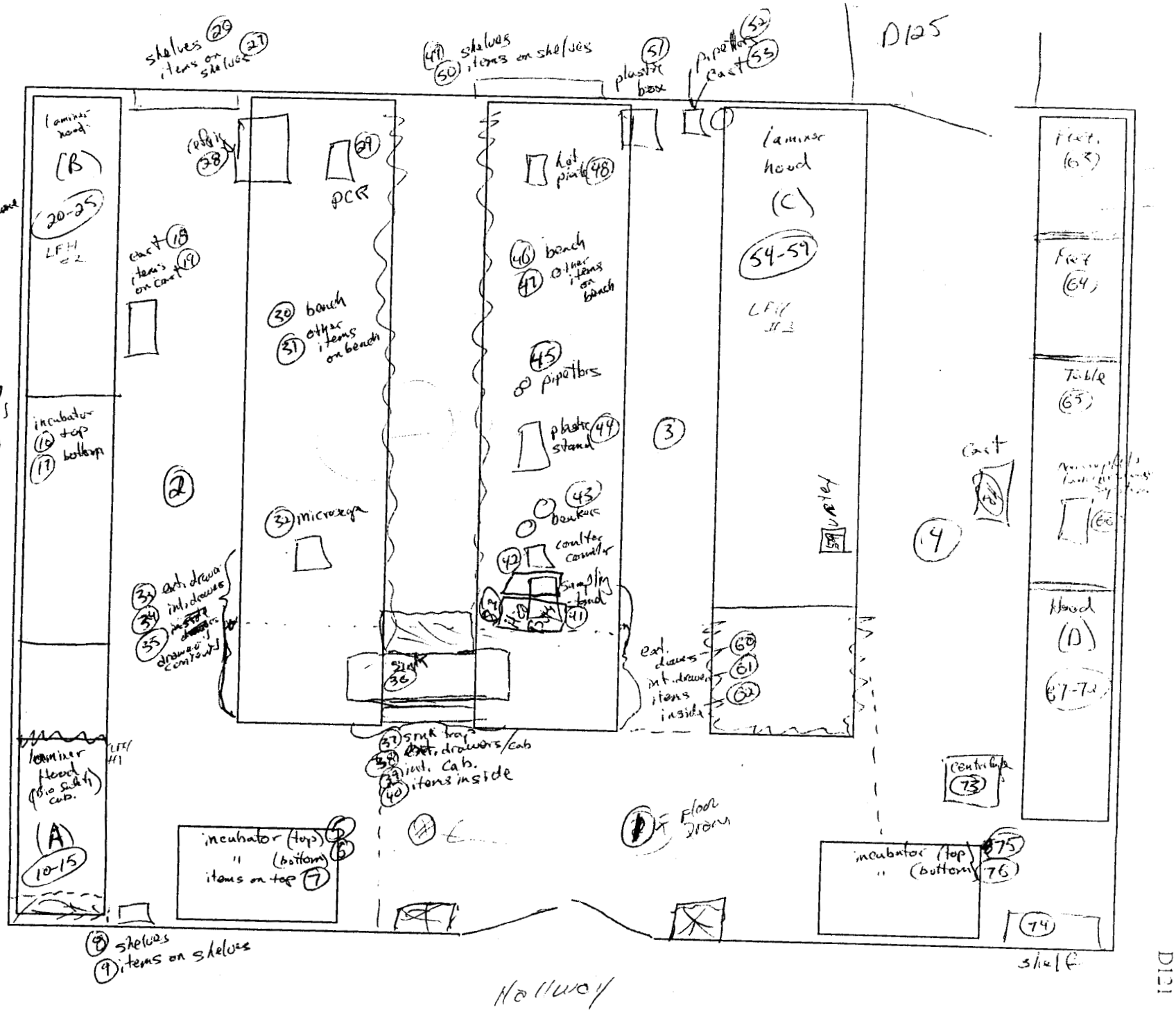
Samples 6 and 22 < 100 dpm/100 cm²
All other Samples < critical Count



18 Shelves
19 Centrifuge components
20 Sharps containers
21 Drawers + sides of benches
22 Phone / Handles + knobs / light switches
23 walls
24 Ceiling
25 Chair
26 Gel dryer tygon tubing
27 shelving under gel dryers
28 floor under bench
29 Threshold & Gallway
30 plexi shield
31 under Beckman centrifuge
32 waste can (in & out)
33 Kodak IDR

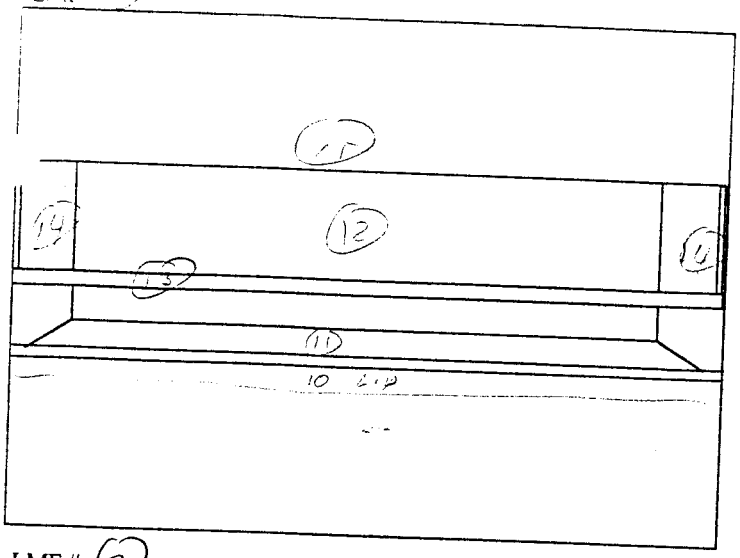
Survey Data
Room D-121
IDR Facility

~~(75) ceiling~~
~~(76) walls~~
(77) garbage cans
(78) Chairs
(79) handles/knobs/light switch/phone
(80) Other items on floor
(81) Hallway
(82) bench around sink
(83) H_2O bath
(84) cart & items in boxes
(85) ceilings
(86) walls

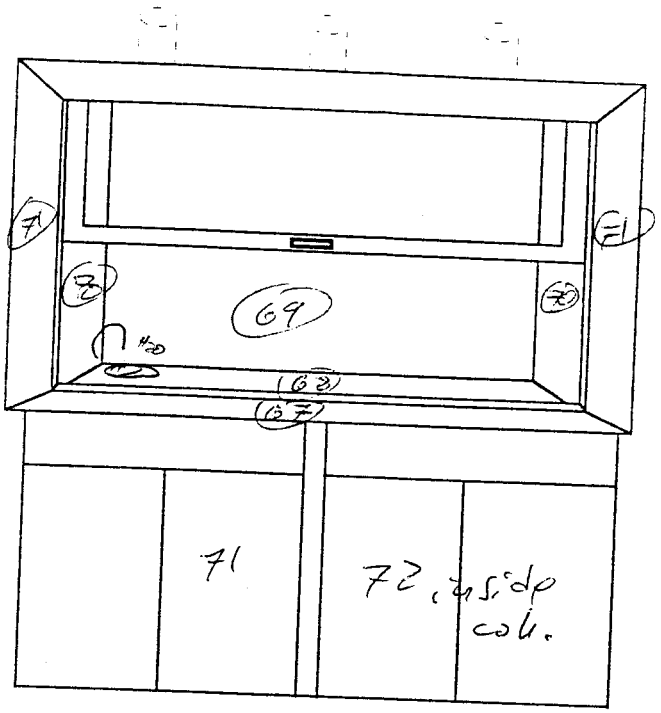


D121

LMF # 1



FH #



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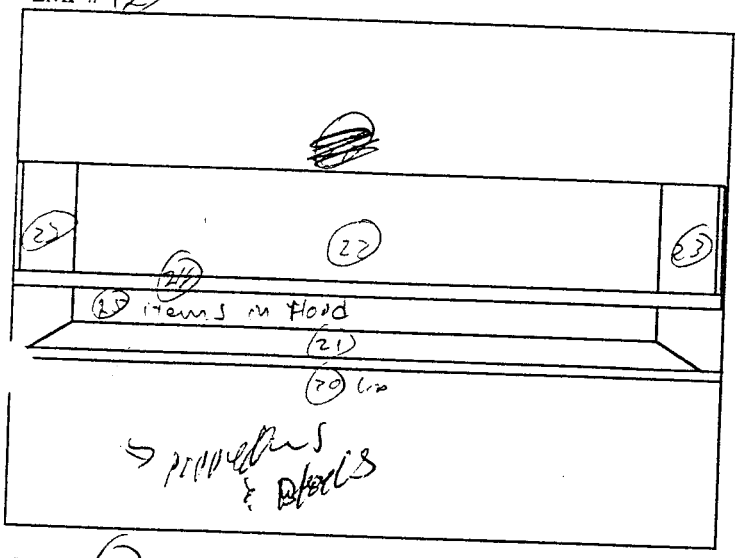
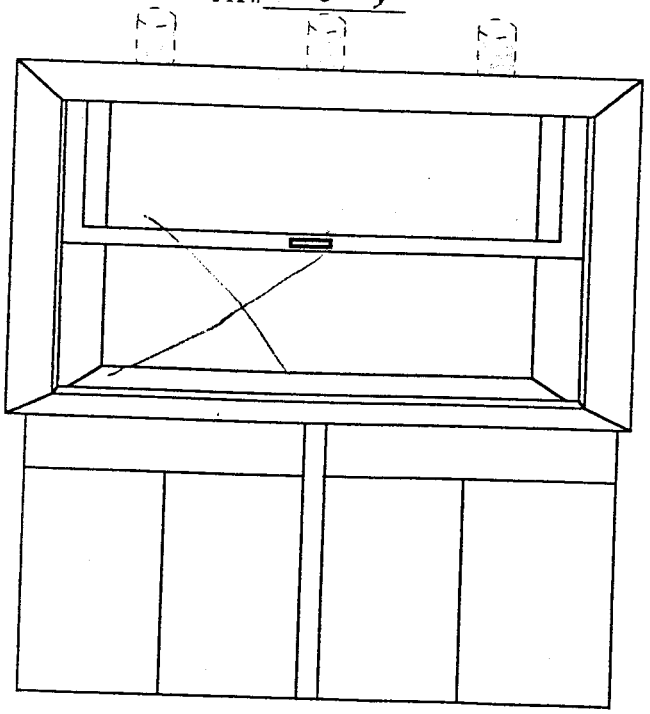
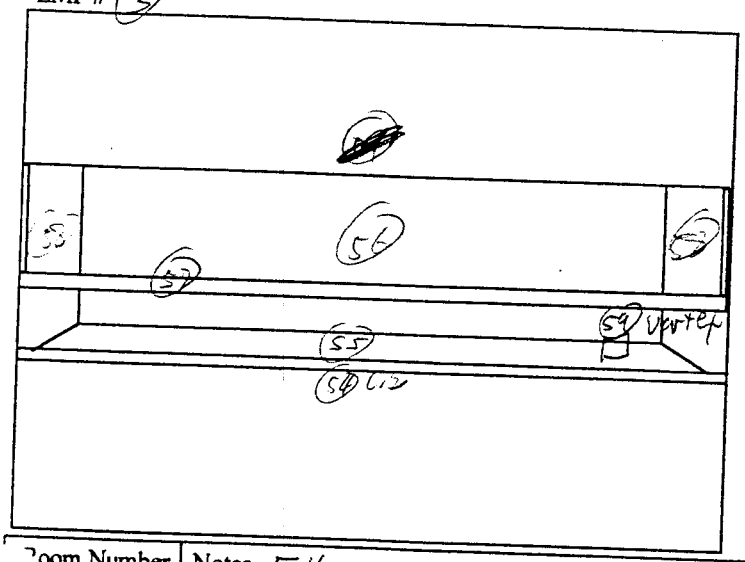


FH # 6 D-121



LMF # 3



Room Number	Notes FH # 67-72
D-121	LFH #1 10-15 LFH # 2 20-25 LFH # 3 54-59

cm

Protocol: [illegible] Name: 05-Aug-97 15:37 D-121

Region A: LL-UL= 0.0-18.2 Lsr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lsr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lsr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
Quinescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM
1	1.00	17.00	30.00	51.00	C	421.	3
2	1.00	20.00	32.00	42.00	C	333.	6
3	1.00	21.00	31.00	41.00	C	432.	3
4	1.00	26.00	34.00	48.00	C	421.	6
5	1.00	17.00	30.00	54.00	C	479.	10
6	1.00	21.00	38.00	53.00	C	462.	13
7	1.00	21.00	34.00	45.00	C	490.	9
8	1.00	18.00	27.00	46.00	C	480.	15
9	1.00	20.00	29.00	41.00	C	495.	28
10	1.00	26.00	36.00	47.00	C	482.	11
11	1.00	18.00	32.00	40.00	C	489.	9
12	1.00	14.00	30.00	47.00	C	496.	7
13	1.00	18.00	29.00	43.00	C	491.	3
14	1.00	20.00	31.00	46.00	C	487.	13
15	1.00	23.00	35.00	54.00	C	507.	14
16	1.00	19.00	27.00	33.00	C	476.	7
17	1.00	39.00	52.00	68.00	C	473.	8
18	1.00	18.00	26.00	38.00	C	460.	12
19	1.00	24.00	36.00	58.00	C	485.	8
20	1.00	15.00	30.00	43.00	C	495.	7
21	1.00	18.00	26.00	35.00	C	514.	12
22	1.00	20.00	30.00	48.00	C	498.	10
23	1.00	21.00	34.00	50.00	C	511.	9
24	1.00	15.00	25.00	41.00	C	490.	8
25	1.00	26.00	36.00	49.00	C	490.	11
26	1.00	13.00	24.00	33.00	C	482.	13
27	1.00	23.00	36.00	52.00	C	482.	11
28	1.00	19.00	32.00	37.00	C	490.	13
29	1.00	22.00	29.00	45.00	C	483.	3
30	1.00	29.00	42.00	55.00	C	439.	12
31	1.00	17.00	26.00	41.00	C	496.	4
32	1.00	22.00	33.00	43.00	C	498.	0
33	1.00	22.00	38.00	53.00	C	486.	8
34	1.00	21.00	27.00	39.00	C	486.	26
35	1.00	14.00	24.00	35.00	C	496.	25
36	1.00	26.00	33.00	48.00	C	467.	9
37	1.00	23.00	39.00	49.00	C	471.	8
38	1.00	19.00	26.00	43.00	C	502.	8
39	1.00	17.00	29.00	44.00	C	474.	10
40	1.00	16.00	24.00	32.00	C	477.	21
41	1.00	12.00	32.00	47.00	C	483.	13
42	1.00	26.00	35.00	48.00	C	416.	23
43	1.00	21.00	36.00	50.00	C	490.	17
44	1.00	21.00	27.00	44.00	C	462.	11
45	1.00	11.00	23.00	34.00	C	501.	9
46	1.00	15.00	25.00	37.00	C	395.	16
47	1.00	18.00	29.00	47.00	C	483.	7
48	1.00	18.00	29.00	42.00	C	466.	14
49	1.00	11.00	22.00	41.00	C	487.	14

	TIME	[illegible]	[illegible]	[illegible]	FLAG	[illegible]	LLM	
30	1.00	22.00	38.00	51.00	[illegible]	482.	11	
31	1.00	23.00	37.00	44.00	C	477.	19	
32	1.00	36.00	49.00	56.00	C	492.	16	
33	1.00	19.00	29.00	43.00	C	471.	10	
34	1.00	22.00	30.00	41.00	C	510.	13	
35	1.00	21.00	32.00	43.00	C	502.	28	
36	1.00	20.00	28.00	42.00	C	508.	0	
37	1.00	15.00	28.00	46.00	C	482.	4	
38	1.00	15.00	26.00	35.00	C	512.	12	
39	1.00	26.00	39.00	49.00	C	482.	8	
40	1.00	23.00	39.00	60.00	C	492.	5	
41	1.00	16.00	25.00	36.00	C	495.	8	
42	1.00	32.00	43.00	59.00	C	491.	5	
43	1.00	13.00	22.00	36.00	C	492.	19	
44	1.00	27.00	38.00	55.00	C	474.	3	
45	1.00	20.00	37.00	44.00	C	463.	5	
46	1.00	21.00	32.00	49.00	C	453.	6	
47	1.00	27.00	31.00	43.00	C	478.	16	
48	1.00	20.00	33.00	50.00	C	410.	21	
49	1.00	18.00	23.00	40.00	C	464.	9	
50	1.00	28.00	39.00	56.00	C	489.	5	
51	1.00	26.00	37.00	53.00	C	494.	14	
52	1.00	18.00	28.00	43.00	C	499.	21	
53	1.00	17.00	27.00	35.00	C	476.	19	
54	1.00	19.00	33.00	47.00	C	441.	3	
55	1.00	17.00	26.00	43.00	C	515.	12	
56	1.00	20.00	31.00	47.00	C	514.	10	
57	1.00	23.00	37.00	55.00	C	490.	8	
58	1.00	36.00	49.00	58.00	C	470.	20	
59	1.00	21.00	30.00	49.00	C	504.	7	
60	1.00	19.00	25.00	34.00	C	474.	12	
61	1.00	16.00	30.00	46.00	C	414.	3	
62	1.00	17.00	28.00	40.00	C	462.	14	
63	1.00	29.00	42.00	57.00	C	484.	19	
64	1.00	27.00	42.00	54.00	C	469.	10	
65	1.00	19.00	32.00	42.00	C	388.	6	
66	1.00	15.00	29.00	43.00	C	408.	0	
(1 missing vial)								
68	1.00	18.00	34.00	53.00	C	425.	15	17 BKG
69	1.00	16.00	29.00	37.00	C	481.	7	BKG
(2 missing vials)								
72	1.00	19.00	35.00	50.00	C	600.	9	BKG optimized
73	0.11	92800.0	92863.6	92900.0	C	634.	1	34
74	0.07	49414.3	150700.	150700.	C	640.	0	14C
75	0.05	7720.00	89520.0	226320.	C	607.	0	36Cl

CC ch A = 27 counts
ch B = 45 "
ch C = 61 "

sample #'s 17, 52, 62, 70, 78, 83 < 100 dpm/100 cm²

All other samples less than critical count

Survey Data
Room D-130
IDR Facility

Table: 1 Name:

Region 1: LL-UL= 0.0-18.6 Lim= 0 Bkgd= 0.00 K2 Sigma=0.00
Region 2: LL-UL= 3.7-156. Lim= 0 Bkgd= 0.00 K2 Sigma=0.00
Region 3: LL-UL= 0.0-2000. Lim= 0 Bkgd= 0.00 K2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
Quenscence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	24.00	44.00	68.00	C	443.	20	
2	1.00	514.00	521.00	528.00	C	535.	2	^3H 886 dpm (cell harvester)
3	1.00	13.00	22.00	36.00	C	480.	23	
4	1.00	142.00	160.00	172.00	C	537.	2	^3H 245 dpm
5	1.00	42.00	50.00	67.00	C	550.	4	
6	1.00	15.00	30.00	41.00	C	535.	10	MDA= 4.0×10^{-6} μCi
7	1.00	18.00	34.00	49.00	C	536.	6	
8	1.00	21.00	38.00	45.00	C	527.	16	
9	1.00	31.00	48.00	62.00	C	497.	15	
10	1.00	19.00	33.00	49.00	C	539.	6	
11	1.00	40.00	51.00	68.00	C	532.	6	
12	1.00	20.00	29.00	45.00	C	506.	10	
13	1.00	18.00	29.00	39.00	C	539.	21	
14	1.00	18.00	29.00	44.00	C	514.	3	
15	1.00	17.00	24.00	38.00	C	531.	25	
16	1.00	16.00	27.00	43.00	C	431.	19	
17	1.00	68.00	82.00	97.00	C	539.	2	
18	1.00	18.00	29.00	42.00	C	508.	10	
19	1.00	58.00	71.00	89.00	C	525.	4	
20	1.00	32.00	39.00	60.00	C	501.	0	
21	1.00	25.00	32.00	46.00	C	547.	6	
22	1.00	23.00	41.00	49.00	C	532.	5	
23	1.00	19.00	32.00	47.00	C	535.	6	
24	1.00	21.00	31.00	45.00	C	463.	6	
25	1.00	18.00	27.00	41.00	C	532.	7	
26	1.00	21.00	33.00	41.00	C	508.	9	
27	1.00	18.00	33.00	52.00	C	531.	9	
28	1.00	19.00	33.00	50.00	C	555.	0	
29	1.00	17.00	27.00	47.00	C	512.	4	
30	1.00	17.00	25.00	32.00	C	537.	16	
31	1.00	13.00	24.00	37.00	C	507.	0	
32	1.00	19.00	31.00	46.00	C	503.	13	All samples except for #'s 2 & 4
33	1.00	12.00	20.00	37.00	C	510.	10	are calculated to be
34	1.00	27.00	34.00	52.00	C	519.	18	< 100 dpm/100cm²
35	1.00	66.00	73.00	82.00	C	442.	58	
36	1.00	18.00	30.00	38.00	C	547.	7	
37	1.00	18.00	29.00	43.00	C	515.	7	
38	1.00	37.00	46.00	61.00	C	539.	11	
39	1.00	18.00	30.00	41.00	C	532.	7	
40	1.00	12.00	23.00	34.00	C	445.	9	
41	1.00	23.00	32.00	48.00	C	498.	16	
42	1.00	21.00	30.00	52.00	C	531.	13	
43	1.00	26.00	38.00	46.00	C	485.	8	
44	1.00	18.00	26.00	39.00	C	522.	12	
45	1.00	24.00	36.00	48.00	C	497.	8	
46	1.00	19.00	28.00	42.00	C	496.	32	
47	1.00	17.00	28.00	45.00	C	520.	14	
48	1.00	21.00	30.00	42.00	C	475.	17	
49	1.00	18.00	34.00	50.00	C	551.	0	

^3H efficiency calculated to be 58% on 8/5/97

CC cha. A 29
cha. B 49
cha. C 63

8/9/97

DISC Swipe Survey

1. items on stainless steel counter (left of harvester)
2. internal components harvester
3. external comp. "
4. large flask inside plastic bin
5. small " " " "
6. tubes to/from pump + pump
7. inside plastic bin
8. items on shelf behind harvester
9. items on counter (right of harvester)
10. Top refrig (inside)
11. Bottom refrig (inside)
12. Exterior both refrig.
13. Glass bowls (4) on bench
14. Ext. Radiac Wash bottles (2) and unused test tubes in pkgs (2)
15. items on top of plexiglass shelves (on top of refrig.)
16. plexiglass shelves (3)
17. blue plastic bin under plexiglass
18. floor dispensing bottles (2) + other bottle
19. Blue plastic bin (behind plexiglass items)
20. Items in beaker + beaker
21. equip. in plastic bin
22. glass + plexiglass item in plastic bin
23. plastic bin
24. tray
25. Tomtec harvester (internal)
26. " " (ext.)
27. - Supply bottle/tubing to Tomtec
28. - waste bottle/tubing from Tomtec
29. - Ext. auto tip from Tomtec
30. - Ext (and tubing) from Tomtec

Protocol #: 9 Name:DECOM. SURVEY 1 26-Jul-97 07:17
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec

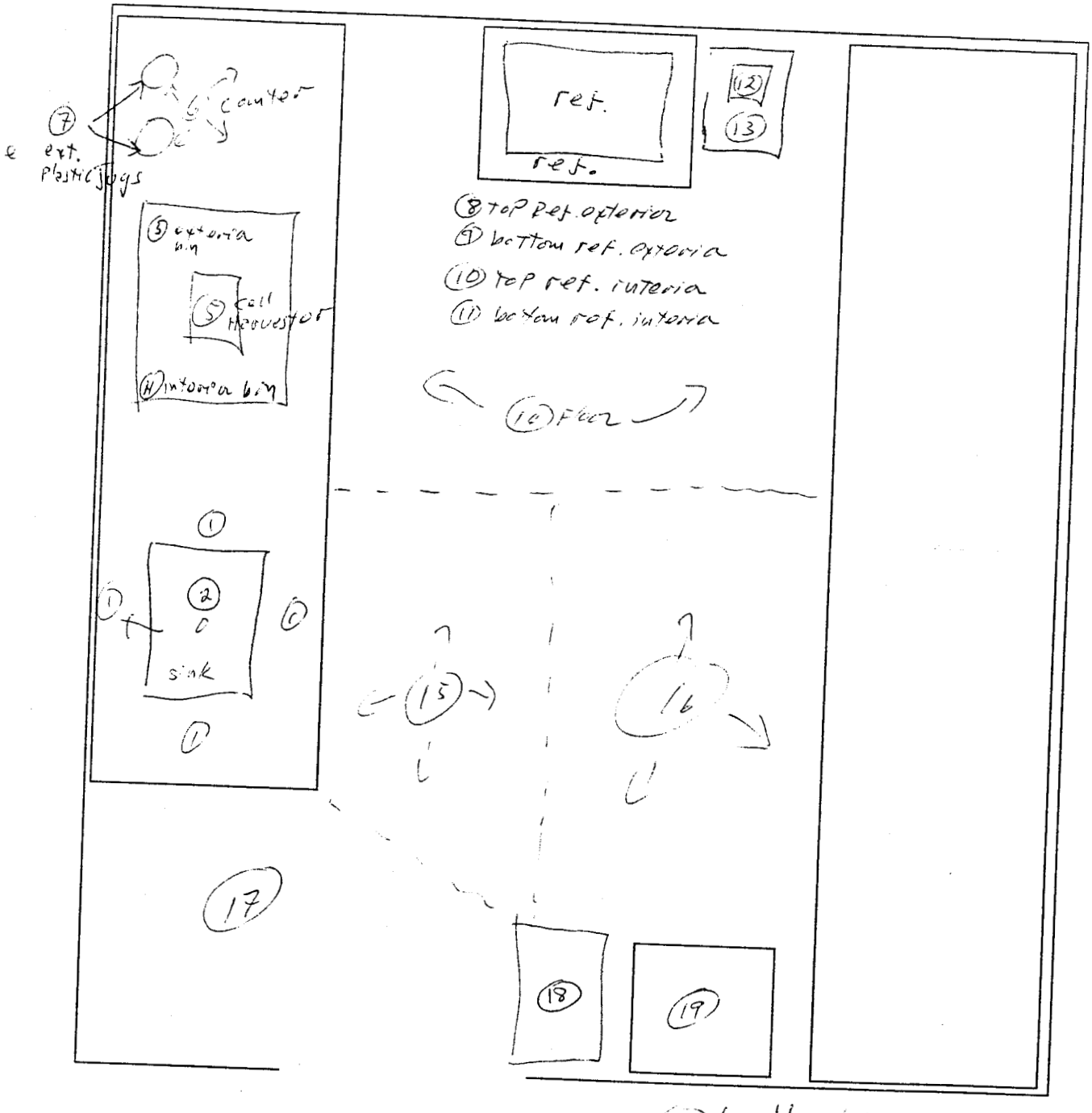
D-130

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE
1	1.00	21.00	33.00	50.00		525.
2	1.00	20.00	30.00	39.00		539.
3	1.00	19.00	30.00	39.00		559.
4	1.00	15.00	30.00	39.00		535.
5	1.00	317.00	327.00	343.00		541. 3H cell Harvested 547dpm
6	1.00	27.00	41.00	52.00		534.
7	1.00	19.00	29.00	41.00		534.
8	1.00	16.00	25.00	41.00		525.
9	1.00	26.00	36.00	53.00		561.
10	1.00	16.00	23.00	38.00		533.
11	1.00	✓46.00	60.00	69.00		548.
12	1.00	22.00	37.00	47.00		529. 43dpm assuming efficiency of 50% for 3H
13	1.00	13.00	25.00	44.00		517.
14	1.00	19.00	33.00	52.00		506.
15	1.00	14.00	23.00	35.00		520.
16	1.00	17.00	28.00	40.00		505.
17	1.00	19.00	26.00	43.00		507.
18	1.00	16.00	31.00	50.00		523.
19	1.00	22.00	30.00	49.00		535.
20	1.00	20.00	27.00	37.00		525.
21	1.00	19.00	25.00	37.00		504.
22	1.00	18.00	31.00	47.00		492. BKG
23	1.00	24.00	37.00	50.00		500. BKG
24	0.11	95309.1	95336.4	95372.7		639. 3H std
25	0.07	48900.0	150071.	150086.		644. 14C std
26	0.05	9420.00	87820.0	227520.		609. 36Cl std

Critical count ch A: 32
ch B: 48
ch C: 65

sample #11 < 100 dpm/100 cm²

All other samples except for #5 < critical count



20 handles & knobs
21 cabinets (doors)

GM measurement = DKa (0.02 mR/hr)
Ludlum 3 c 44-9 pancake probe
3a136692

Protocol #:10 Name:DECOM. SURVEY 2 29-Aug-97 14:47
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
Quinescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM
1	✓1.00	34.00	43.00	58.00	C	489.	35
2	✓1.00	48.00	53.00	63.00	C	528.	6
3	1.00	20.00	37.00	46.00	C	411.	16
4	1.00	28.00	41.00	55.00	C	493.	27
5	1.00	22.00	31.00	38.00	C	478.	19
6	1.00	19.00	31.00	42.00	C	482.	26
7	✓ 1.00	33.00	44.00	53.00	C	489.	39
8	1.00	21.00	25.00	37.00	C	552.	16
9	1.00	20.00	31.00	43.00	C	523.	6
10	1.00	23.00	33.00	46.00	C	479.	6
(2 missing vials)							
13	1.00	21.00	34.00	41.00	C	407.	15
14	1.00	17.00	36.00	49.00	C	238.	14
(1 missing vial)							
16	0.11	92200.0	92236.4	92236.4	C	627.	1
17	0.07	49271.4	150300.	150300.	C	635.	0
18	0.05	8220.00	87740.0	224720.	C	604.	0

Cortical Count chA: 29 counts
chB: 49 "
chC: 61 "

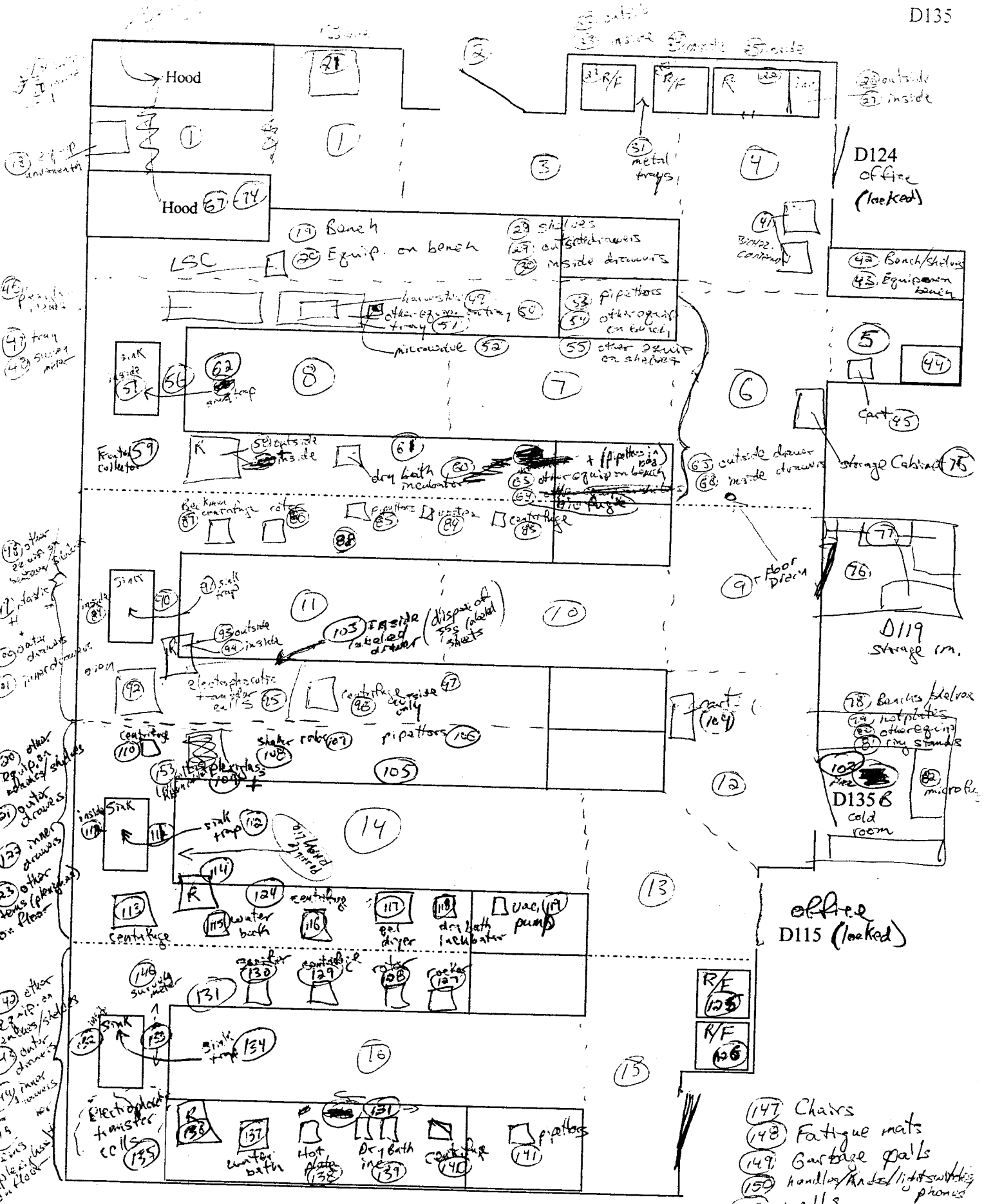
#

1 Largest plexi-box (exterior)
2 " " (interior)
3 plexi-shields (2) inside box
4 circular dispenser unit next to box
5 floor under counter next to sink
6 floor near doorway
7 Bench top (stainless steel section)
8 fluid inlet port at cell harvestor
9 Handles and knobs
10 ^{125}I shield

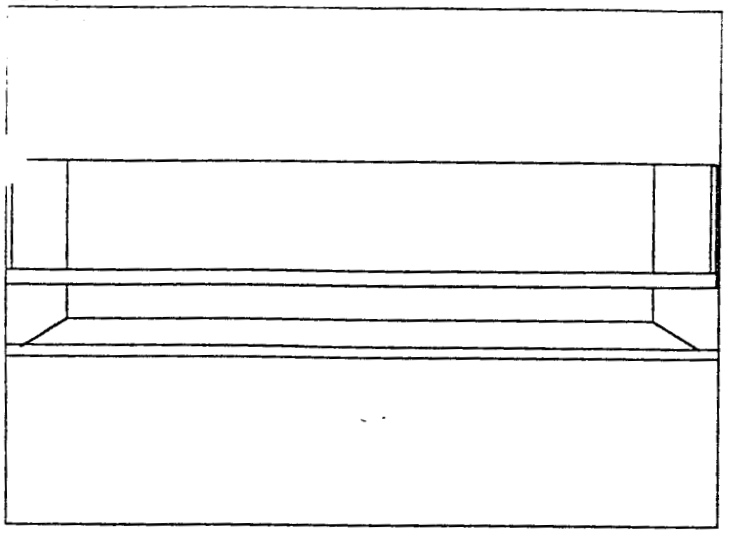
samples #'s 1, 2, 7 < 1000 dpm/100 cm²

All other samples < CC

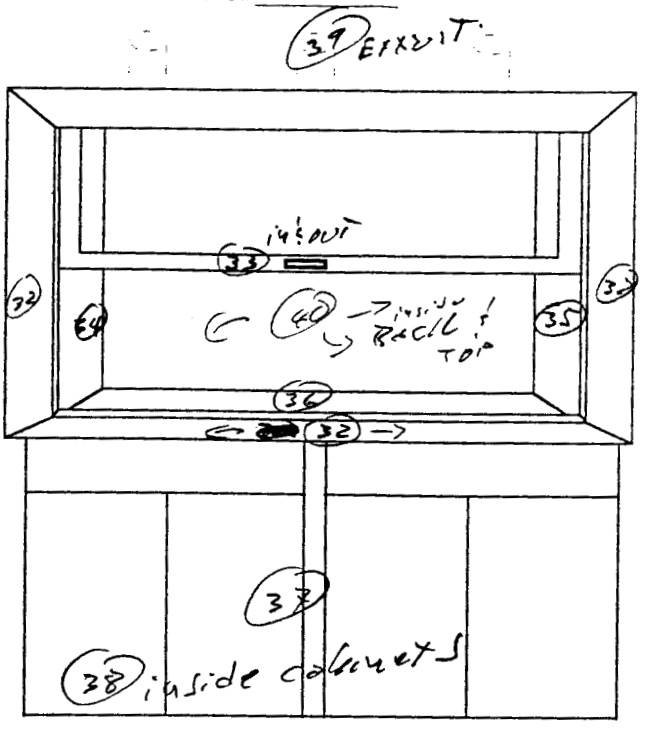
Survey Data
Room D-135
IDR Facility


Hood
Hood
D124 office (locked)
D119 storage rm.
D135B cold room
office D115 (locked)
LSC
Bench
Equip. on bench
shelves
inside drawers
pipettors
other equip on bench
other equip on shelves
microwave
sink
sink trap
dry bath incubator
storage Cabinet
Cart
Floor Drain
centrifuge
water bath
vac. pump
Chairs
Fatigue mats
Garbage cans
walls
ceilings
RAM (labeled pipettors see diagram)

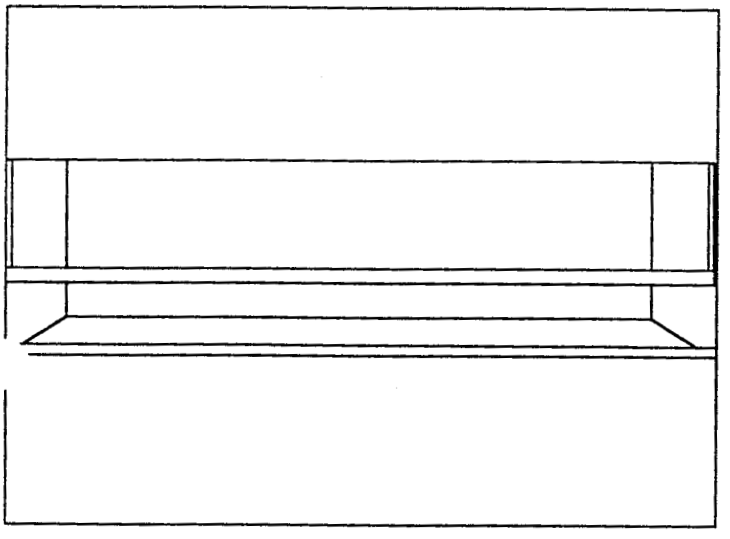
LMF #



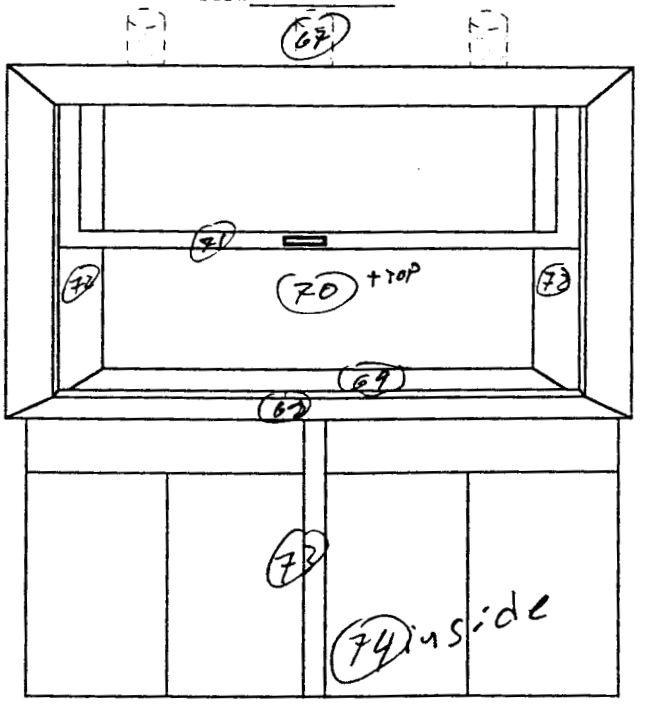
FH # 1



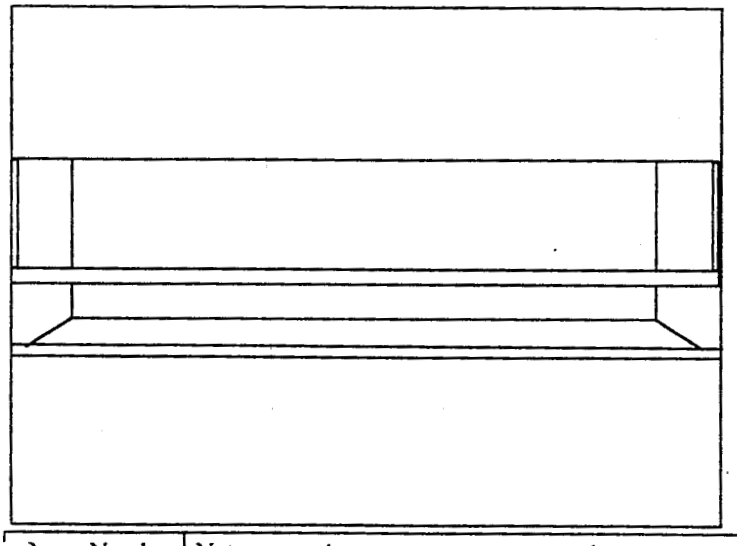
LMF #



FH # 2



LMF #



Room Number	Notes
D-135	only and Hood in lab #1 32-40 #2 67-74

Protocol #:10 Name:ZEECM. SURVEY I 25-Jul-97 09:54 D-135

Region A: LL-UL= 0.0-18.5 Lsr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lsr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lsr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
Luminescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM
1	1.00	24.00	33.00	45.00	C	547.	27
2	1.00	19.00	30.00	44.00	C	562.	7
3	1.00	12.00	23.00	32.00	C	557.	17
4	1.00	22.00	39.00	57.00	C	554.	0
5	1.00	17.00	28.00	44.00	C	553.	4
6	1.00	15.00	26.00	41.00	C	547.	12
7	1.00	15.00	27.00	36.00	C	541.	11
8	1.00	22.00	27.00	44.00	C	547.	11
9	1.00	15.00	33.00	45.00	C	506.	9
10	1.00	24.00	36.00	50.00	C	546.	3
11	1.00	23.00	34.00	52.00	C	550.	0
12	1.00	25.00	33.00	49.00	C	546.	6
13	1.00	21.00	32.00	39.00	C	543.	19
14	1.00	23.00	29.00	41.00	C	552.	14
15	1.00	16.00	25.00	36.00	C	552.	4
16	1.00	19.00	30.00	41.00	C	540.	7
17	1.00	25.00	41.00	55.00	C	535.	7
18	1.00	20.00	22.00	30.00	C	510.	14
19	1.00	20.00	29.00	42.00	C	553.	7
20	1.00	17.00	27.00	37.00	C	546.	19
21	1.00	20.00	32.00	43.00	C	554.	13
22	1.00	29.00	40.00	60.00	C	547.	5
23	1.00	26.00	39.00	52.00	C	541.	21
24	1.00	21.00	36.00	42.00	C	555.	8
25	1.00	18.00	26.00	40.00	C	487.	8
26	1.00	30.00	39.00	58.00	C	528.	8
27	1.00	18.00	33.00	50.00	C	542.	15
28	1.00	23.00	33.00	49.00	C	540.	6
29	1.00	30.00	41.00	54.00	C	555.	10
30	1.00	21.00	30.00	38.00	C	504.	3
31	1.00	17.00	29.00	38.00	C	566.	3
32	1.00	17.00	33.00	57.00	C	520.	9
33	1.00	26.00	37.00	49.00	C	528.	24
34	1.00	12.00	21.00	36.00	C	549.	24
35	1.00	24.00	36.00	53.00	C	561.	14
36	1.00	25.00	35.00	49.00	C	537.	3
37	1.00	20.00	32.00	46.00	C	572.	25
38	1.00	25.00	32.00	43.00	C	574.	6
39	1.00	19.00	30.00	39.00	C	542.	17
40	1.00	18.00	27.00	36.00	C	560.	15
41	1.00	19.00	26.00	44.00	C	534.	15
42	1.00	18.00	26.00	36.00	C	546.	8
43	1.00	15.00	27.00	41.00	C	538.	4
44	1.00	19.00	30.00	47.00	C	542.	30
45	1.00	22.00	31.00	51.00	C	532.	35
46	1.00	16.00	27.00	42.00	C	520.	22
47	1.00	18.00	25.00	38.00	C	551.	4
48	1.00	13.00	28.00	42.00	C	553.	25
49	1.00	25.00	40.00	55.00	C	511.	20

D-135

S#	TIME	CPMA	CPMB	CPMC	FLAG	SSIE	LUM
30	1.00	22.00	36.00	45.00	C	542.	14
31	1.00	20.00	31.00	40.00	C	537.	10
32	1.00	22.00	31.00	42.00	C	562.	16
33	1.00	25.00	38.00	52.00	C	542.	18
34	1.00	29.00	43.00	55.00	C	515.	7
35	1.00	14.00	24.00	32.00	C	519.	17
36	1.00	17.00	29.00	41.00	C	551.	7
37	1.00	17.00	31.00	42.00	C	537.	19
38	1.00	21.00	32.00	41.00	C	553.	3
39	1.00	24.00	39.00	54.00	C	533.	13
40	1.00	17.00	30.00	47.00	C	547.	17
41	1.00	30.00	37.00	55.00	C	543.	11
42	1.00	19.00	28.00	46.00	C	552.	14
43	1.00	20.00	27.00	43.00	C	547.	0
44	1.00	20.00	28.00	38.00	C	526.	14
45	1.00	27.00	31.00	44.00	C	536.	10
46	1.00	13.00	22.00	33.00	C	516.	9
47	1.00	21.00	32.00	45.00	C	539.	13
48	1.00	25.00	39.00	53.00	C	546.	10
49	1.00	15.00	29.00	47.00	C	538.	7
50	1.00	16.00	21.00	41.00	C	572.	29
51	1.00	30.00	45.00	55.00	C	552.	4
52	1.00	17.00	21.00	43.00	C	548.	14
53	1.00	25.00	31.00	50.00	C	536.	16
54	1.00	24.00	33.00	41.00	C	537.	24
55	1.00	17.00	27.00	38.00	C	479.	7
56	1.00	20.00	32.00	44.00	C	545.	13
57	1.00	15.00	30.00	48.00	C	528.	10
58	1.00	20.00	32.00	49.00	C	522.	16
59	1.00	25.00	39.00	52.00	C	530.	5
60	1.00	20.00	32.00	45.00	C	550.	22
61	1.00	28.00	39.00	54.00	C	536.	5
62	1.00	19.00	26.00	40.00	C	544.	12
63	1.00	19.00	30.00	41.00	C	542.	17
64	1.00	32.00	40.00	56.00	C	532.	17
65	1.00	22.00	28.00	34.00	C	548.	7
66	1.00	12.00	21.00	39.00	C	536.	29
67	1.00	24.00	33.00	49.00	C	531.	15
68	1.00	18.00	24.00	37.00	C	508.	42
69	1.00	20.00	28.00	37.00	C	556.	14
70	1.00	28.00	43.00	56.00	C	546.	16
71	1.00	25.00	37.00	53.00	C	525.	3
72	1.00	19.00	32.00	52.00	C	532.	38
73	1.00	21.00	30.00	39.00	C	554.	13
74	1.00	26.00	41.00	57.00	C	542.	17
75	1.00	23.00	35.00	48.00	C	538.	6
76	1.00	18.00	29.00	45.00	C	528.	24
77	1.00	19.00	23.00	37.00	C	495.	17
78	1.00	17.00	27.00	39.00	C	530.	15
79	1.00	12.00	24.00	41.00	C	488.	33
100	1.00	23.00	32.00	45.00	C	517.	16
101	1.00	32.00	44.00	59.00	C	468.	11
102	1.00	17.00	36.00	45.00	C	507.	17
103	1.00	19.00	27.00	42.00	C	537.	15
104	1.00	25.00	31.00	45.00	C	566.	39
105	1.00	27.00	36.00	53.00	C	546.	31

D-35

S#	TIME	CPMA	CPMB	CPMC	FLAG	ISIE	LUM
106	1.00	21.00	30.00	90.00	C	547.	8
107	1.00	21.00	29.00	41.00	C	535.	21
108	1.00	29.00	40.00	55.00	C	531.	17
109	1.00	27.00	36.00	55.00	C	527.	17
110	1.00	73.00	90.00	105.00	C	522.	8
111	1.00	26.00	34.00	45.00	C	528.	24
112	1.00	21.00	35.00	47.00	C	441.	26
113	1.00	31.00	45.00	56.00	C	517.	16
114	1.00	30.00	41.00	58.00	C	565.	15
115	1.00	27.00	40.00	52.00	C	537.	17
116	1.00	23.00	31.00	48.00	C	547.	32
117	1.00	15.00	32.00	43.00	C	521.	9
118	1.00	16.00	31.00	41.00	C	525.	16
119	1.00	20.00	29.00	46.00	C	480.	21
120	1.00	42.00	51.00	58.00	C	525.	24
121	1.00	24.00	37.00	51.00	C	479.	14
122	1.00	22.00	40.00	47.00	C	459.	13
123	1.00	19.00	32.00	40.00	C	484.	9
124	1.00	26.00	35.00	45.00	C	505.	34
125	1.00	28.00	36.00	53.00	C	533.	14
126	1.00	21.00	35.00	56.00	C	527.	17
127	1.00	25.00	38.00	60.00	C	561.	21
128	1.00	23.00	33.00	45.00	C	533.	12
129	1.00	19.00	27.00	45.00	C	519.	19
130	1.00	19.00	27.00	46.00	C	559.	26
131	1.00	23.00	33.00	52.00	C	545.	9
132	1.00	16.00	23.00	36.00	C	543.	30
133	1.00	24.00	30.00	41.00	C	536.	17
134	1.00	21.00	28.00	37.00	C	535.	11
135	1.00	21.00	29.00	42.00	C	547.	31
136	1.00	26.00	41.00	59.00	C	552.	5
137	1.00	16.00	23.00	38.00	C	536.	35
138	1.00	22.00	29.00	41.00	C	536.	34
139	1.00	44.00	52.00	68.00	C	528.	21
140	1.00	27.00	40.00	54.00	C	535.	5
141	1.00	22.00	29.00	46.00	C	520.	17
142	1.00	22.00	32.00	44.00	C	535.	6
143	1.00	24.00	34.00	51.00	C	550.	24
144	1.00	24.00	32.00	46.00	C	518.	16
145	1.00	22.00	32.00	48.00	C	531.	16
146	1.00	22.00	29.00	41.00	C	547.	21
147	1.00	25.00	40.00	47.00	C	526.	17
148	1.00	18.00	28.00	47.00	C	491.	29
149	1.00	16.00	25.00	36.00	C	528.	44
150	1.00	16.00	27.00	44.00	C	528.	33
151	1.00	26.00	36.00	45.00	C	493.	19
152	1.00	22.00	28.00	39.00	C	465.	11
153	1.00	33.00	45.00	56.00	C	547.	9
154	1.00	24.00	34.00	46.00	C	470.	6 BKG.
155	1.00	28.00	37.00	55.00	C	513.	19 BKG 2
156	0.11	94800.0	94818.2	94827.3	C	635.	1 ^{3}H std 198500 DPM 8 Dec 95
157	0.07	48314.3	150929.	150929.	C	641.	0 ^{14}C std 160150 DPM 4 Dec 95
158	0.05	7940.00	89320.0	226800.	C	607.	0 ^{36}Cl std 226800 dpm 13 Dec 93

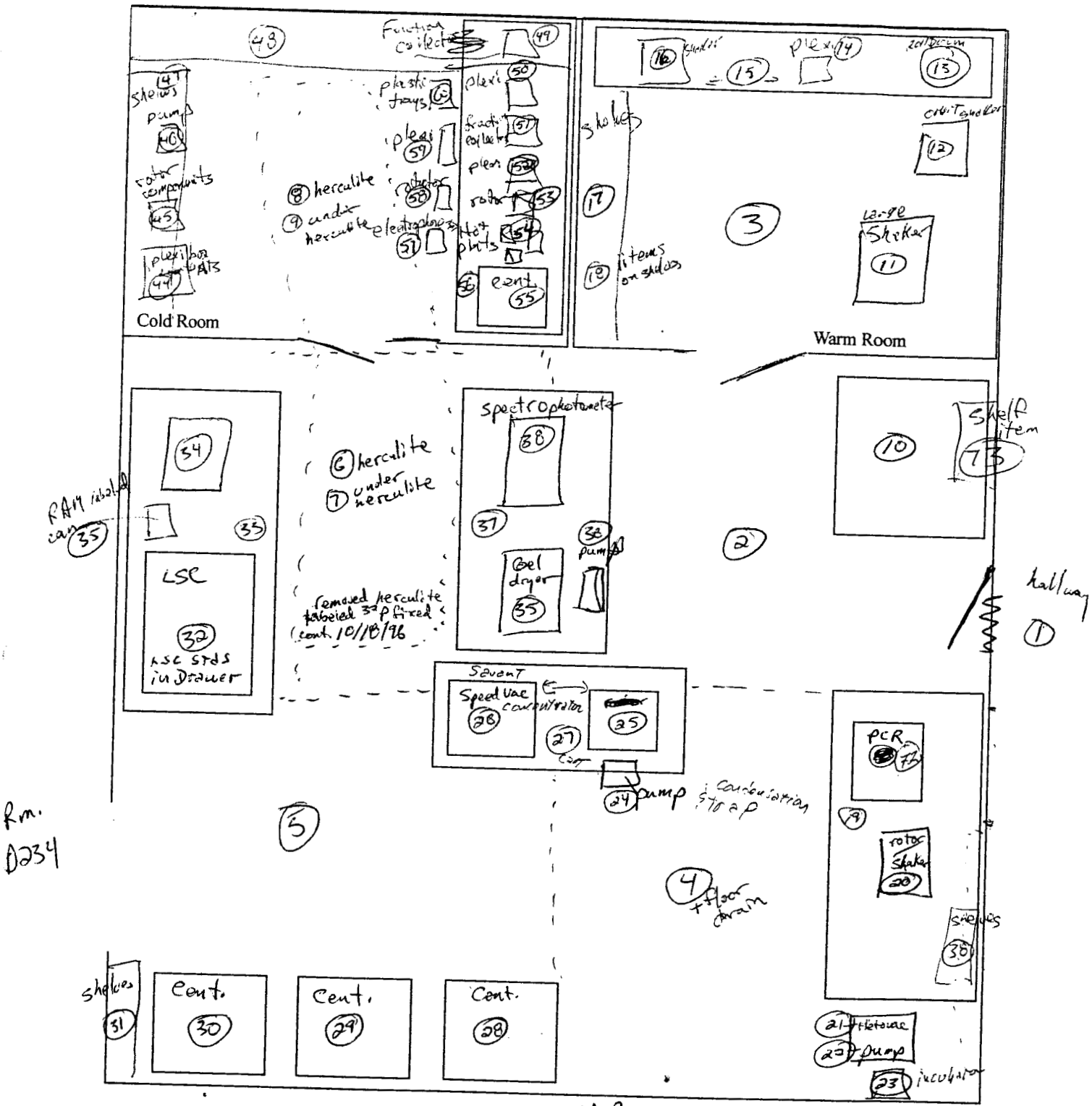
critical count CH H=38

CH B=50

CH C=67

All samples less than critical count

Survey Data
Room D-233
IDR Facility



(36) Other items on benches
(37) Other items on floor
(38) Shelves + items on shelves (Biometra tubes)
(39) Chairs
(40) Garbage cans
(41) handles/knobs/light switches
(42) Ceiling
(43) walls

Cold Rm.
(61) Ceiling
(62) walls
(63) other items on benches
(64) other items on floor
(65) other items shelves

Warm Rm.
(66) Ceiling
(67) walls
(68) other items in room

(69) Outside of drawers
(70) Inside drawers
(71) Items inside of drawers
(72) PCR
(73) Shelf item
(74) Fatigue mat thing in cold room
(75) Hot spots on floor (cold)

Protocol #: 5 Name:DE20M. SURVEY 1 27-Jul-97 11:04
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
Quinescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	20.00	30.00	42.00	C	526.	23	
2	1.00	19.00	26.00	37.00	C	381.	23	
3	1.00	23.00	32.00	41.00	C	509.	16	
4	1.00	25.00	41.00	61.00	C	472.	7	
5	1.00	23.00	38.00	54.00	C	241.	3	
6	1.00	18.00	23.00	38.00	C	498.	17	
7	1.00	19.00	26.00	37.00	C	502.	19	
8 ✓	1.00	35.00	48.00	56.00	C	501.	15	
9	1.00	28.00	43.00	55.00	C	488.	12	
10	1.00	19.00	34.00	46.00	C	482.	0	
11	1.00	20.00	30.00	41.00	C	507.	33	
12	1.00	20.00	30.00	42.00	C	533.	7	
13	1.00	192.00	241.00	253.00	C	518.	3	Ra'Drum (removed) 331 dpm
14	1.00	20.00	33.00	42.00	C	534.	18	
15	1.00	19.00	35.00	49.00	C	535.	14	
16	1.00	16.00	26.00	39.00	C	531.	8	
17	1.00	22.00	37.00	52.00	C	508.	11	
18	1.00	20.00	32.00	46.00	C	525.	19	
19 ✓	1.00	33.00	51.00	68.00	C	416.	4	
20	1.00	20.00	30.00	48.00	C	512.	13	
21	1.00	18.00	26.00	41.00	C	528.	12	
22	1.00	18.00	31.00	39.00	C	506.	16	
23	1.00	17.00	28.00	44.00	C	538.	14	
24	1.00	17.00	25.00	34.00	C	455.	4	
25	1.00	20.00	31.00	49.00	C	520.	16	
26	1.00	26.00	35.00	47.00	C	527.	9	
27	1.00	17.00	26.00	46.00	C	409.	12	
28	1.00	20.00	30.00	46.00	C	515.	7	
29	1.00	17.00	25.00	40.00	C	536.	8	
30	1.00	25.00	40.00	49.00	C	532.	15	
31	1.00	12.00	19.00	28.00	C	509.	5	
32	1.00	20.00	36.00	46.00	C	498.	11	
33	1.00	16.00	26.00	35.00	C	497.	8	
34	1.00	14.00	24.00	38.00	C	554.	17	
35	1.00	17.00	30.00	38.00	C	531.	33	
36 ✓	1.00	30.00	42.00	61.00	C	540.	5	
37	1.00	20.00	31.00	43.00	C	521.	3	
38	1.00	25.00	32.00	51.00	C	509.	13	
39	1.00	21.00	35.00	49.00	C	484.	20	
40	1.00	16.00	24.00	39.00	C	533.	21	
41	1.00	25.00	40.00	54.00	C	544.	2	
42	1.00	26.00	35.00	41.00	C	424.	23	
43 ✓	1.00	29.00	41.00	53.00	C	427.	12	
44 ✓	1.00	30.00	38.00	52.00	C	551.	13	
45	1.00	20.00	34.00	53.00	C	532.	9	
46	1.00	13.00	23.00	36.00	C	540.	17	
47	1.00	15.00	25.00	37.00	C	510.	28	
48	1.00	21.00	34.00	48.00	C	531.	15	
49	1.00	16.00	24.00	45.00	C	536.	13	

	TIME	CPM	CPM3	CPMC	FLAG	SBIE	LUM	
50	1.00	27.00	38.00	51.00	C	552.	11	
51	1.00	18.00	29.00	42.00	C	519.	14	
52	1.00	12.00	24.00	42.00	C	554.	25	
53	1.00	17.00	26.00	42.00	C	530.	8	
54	1.00	13.00	20.00	39.00	C	537.	10	
55	1.00	26.00	42.00	58.00	C	533.	10	
56	1.00	16.00	32.00	50.00	C	527.	6	
57	1.00	19.00	27.00	40.00	C	543.	11	
58	1.00	23.00	31.00	39.00	C	534.	42	
59	1.00	20.00	35.00	49.00	C	513.	6	
60	1.00	15.00	26.00	41.00	C	521.	15	
61	1.00	20.00	32.00	46.00	C	473.	22	
62	1.00	20.00	26.00	40.00	C	489.	8	
63	✓1.00	29.00	36.00	52.00	C	522.	0	
64	1.00	20.00	34.00	48.00	C	468.	6	
65	1.00	17.00	24.00	43.00	C	504.	17	
66	1.00	20.00	28.00	38.00	C	486.	7	
67	1.00	21.00	32.00	42.00	C	510.	9	
68	1.00	25.00	35.00	46.00	C	525.	9	
69	1.00	22.00	36.00	53.00	C	462.	6	
70	1.00	20.00	35.00	49.00	C	435.	6	
71	1.00	19.00	29.00	44.00	C	433.	24	
72	1.00	23.00	38.00	53.00	C	477.	11	
73	1.00	20.00	27.00	41.00	C	494.	7	
74	✓1.00	28.00	36.00	47.00	C	422.	17	
75	1.00	19.00	36.00	43.00	C	520.	11	
76	1.00	19.00	33.00	51.00	C	448.	0	BKG
77	1.00	15.00	29.00	42.00	C	489.	3	BKG
78	0.11	97000.0	97045.5	97054.5	C	632.	1	3H std
79	0.07	48685.7	150129.	150129.	C	635.	0	14C std
80	0.05	8260.00	87660.0	222420.	C	606.	0	36Cl std

critical count ch A = 27

ch B = 44

ch C = 63

Sample #'s 8, 19, 36, 63, 64, 63, 74 < 100 dpm/100cm²

all other samples < critical count

Protocol #: 9 Name:DECCM. SURVEY 1 27-Jul-97 13:07
Region A: LL-UL= 1.0-12.0 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
minescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM
1	1.00	212.00	282.00	296.00	C	498.	1

Recount of sample #13

Protocol: [illegible] Name:[illegible], SUBVE: [illegible] 02-Aug-97 07:43
Region A: LL-UL= 0.0-15.0 Lcr= [illegible] Bkg= 0.00 %Z Sigma=0.00
Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %Z Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %Z Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
Quinescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	208.00	296.00	310.00	C	487.	2	D-233 #13 recount
2	1.00	25.00	35.00	52.00	C	402.	17	Roll Drum (Holder) #13 swipes
3	1.00	365.00	418.00	430.00	C	233.	4	Roll Drum Housing
4	0.11	93209.1	93245.5	93254.5	C	636.	1	3H std 193500 dpm 11 Dec 95
5	0.07	49314.3	150529.	150571.	C	641.	0	14C std 160110 DPM 11 Dec 95
6	0.05	8080.00	87060.0	227440.	C	606.	0	36Cl std 226300 dpm 13 Dec 95
7	1.00	27.00	34.00	47.00	C	603.	0	0.1% Gold only 7-30-97
8	1.00	20.00	27.00	40.00	C	640.	0	BKG

3H contamination:
This item was returned to D-13c for decontamination

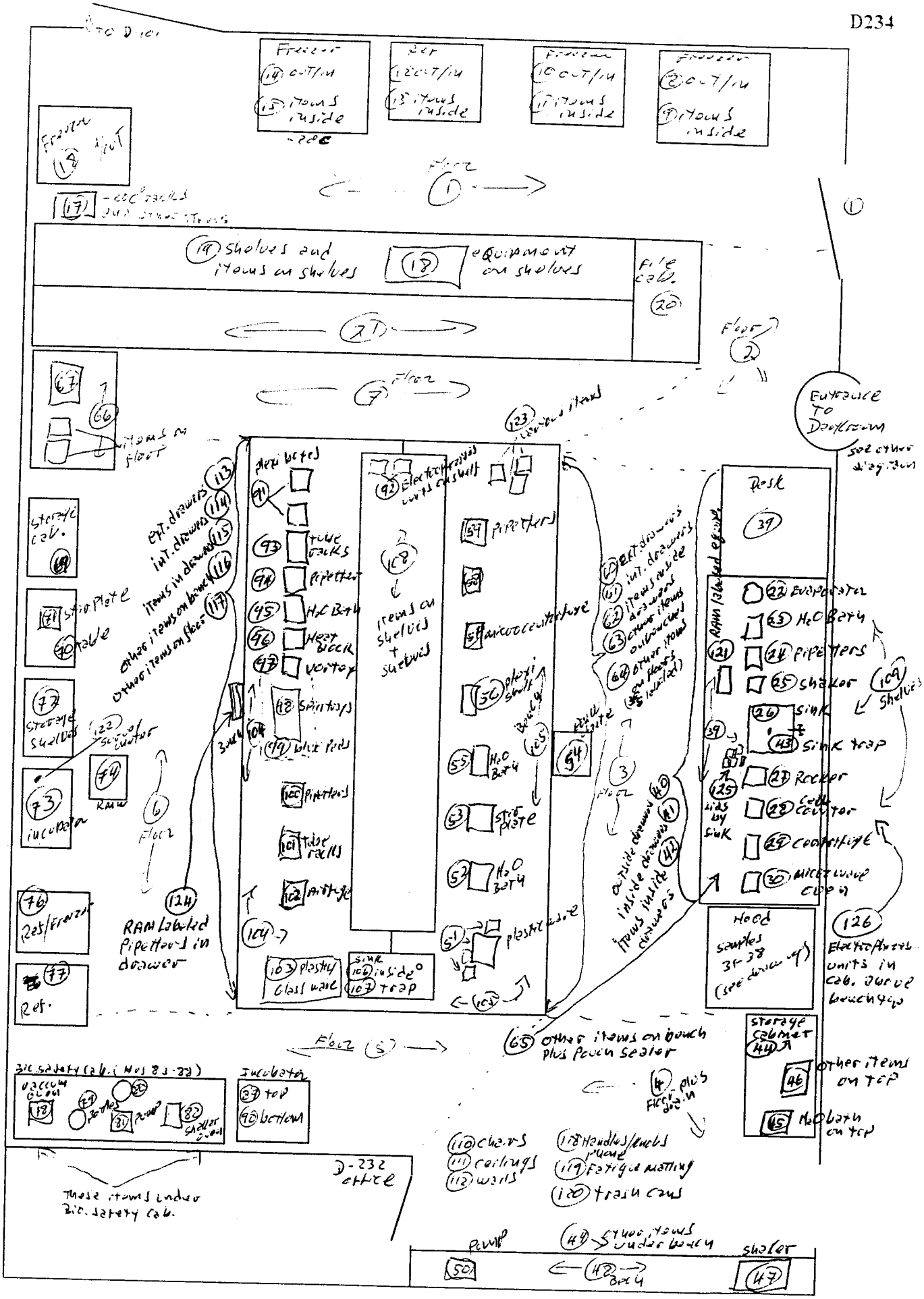
^3H eff = 58%
MDA = 8.7×10^{-6} uci

sample #1 359 dpm

sample #2 42 dpm

sample #3 629 dpm

Survey Data
Room D-234
IDR Facility


Freezer
(14) out/in
(15) items inside
Freezer
(12) out/in
(13) items inside
Freezer
(10) out/in
(11) items inside
Freezer
(8) out/in
(9) items inside
Frozen
(18) out
(17)
(19) shelves and items on shelves
(18) equipment on shelves
File cab.
(20)
Floor
(1)
(2)
(7)
(6)
(3)
(4)
(5)
(67)
(66)
items on floor
Entrance to Darkroom
see other diagram
storage cab.
(69)
(71) stir plate
(40) table
storage shelves
(73) incubator
(74) RAM
(122) serum cutter
(76) Refr/Frozen
(77) Ref.
(124) RAM labeled pipettors in drawer
ext. drawers (113)
int. drawers (114)
items in drawers (115)
other items on bench (116)
other items on floor (117)
sink
(104)
pipettors
(91)
tube racks
(93)
pipettor
(94)
H2O Bath
(95)
Heat block
(96)
vortex
(97)
spin trays
(98)
blue pipettors
(99)
pipettors
(100)
tube racks
(101)
pipettors
(102)
(103) plastic glassware
sink (106) inside
(107) trap
(92) electrophoresis units cabinet
(108) items on shelves + shelves
(123) overhead light
(54) pipettors
(55)
(56) anaerobic chamber
(57) epoxi shelf
(58) H2O Bath
(53) stir plate
(52) H2O Bath
(51) plastic ware
(105) bench
(64) stir plate
ext. drawers (61)
int. drawers (61)
items inside drawers (62)
other items on floor (63)
other items outside (64)
outside drawers (40)
inside drawers (41)
items inside drawers (42)
Desk
(39)
RAM labeled effort
(22) Evaporator
(23) H2O Bath
(24) pipettors
(25) shaker
(109) shelves
(26) sink
(43) sink trap
(27) Rocker
(28) cell counter
(29) coat rack
(30) microwave oven
(125) lids by sink
Hood
samples 37-38
(see drawing 4)
(126) Electrophoresis units in cab. above bench top
storage cabinet
(44)
(46) other items on top
(45) H2O bath on top
(65) other items on bench plus pouch sealer
(4) plus floor drain
Bio safety cab. (Nov 83-88)
vacuum gloves
(12)
(79) bottles
(81) pump
(82) shaker oven
Incubator
(87) top
(90) bottom
(110) chairs
(111) ceilings
(112) walls
(118) Handles/levels
(119) Fatigue matting
(120) trash cans
D-232 office
These items under Bio. safety cab.
pump
(50)
(49) Stuff items under bench
(48) bench
shaker
(47)

D-234

Protocol #: 9 Name:DECOM. SURVEY 1 27-Jul-97 13:52
Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL= 0.0-136. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00
Time = 1.00 QIP = tSIE ES Terminator = 10 sec
Quenescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM
1	1.00	23.00	42.00	50.00	C	280.	19
2	1.00	16.00	30.00	50.00	C	460.	23
3	1.00	22.00	34.00	41.00	C	334.	12
4	1.00	21.00	41.00	51.00	C	287.	2
5	1.00	13.00	24.00	32.00	C	411.	17
6	1.00	16.00	27.00	47.00	C	344.	26
7	1.00	16.00	27.00	39.00	C	199.	30
8	1.00	18.00	25.00	39.00	C	487.	24
9	1.00	23.00	31.00	48.00	C	549.	16
10	1.00	25.00	41.00	58.00	C	528.	5
11	1.00	22.00	33.00	44.00	C	551.	6
12	1.00	20.00	35.00	47.00	C	546.	11
13	1.00	21.00	27.00	42.00	C	543.	44
14	1.00	18.00	27.00	39.00	C	535.	7
15	1.00	24.00	29.00	49.00	C	542.	31
16	1.00	19.00	27.00	42.00	C	535.	7
17	1.00	31.00	41.00	56.00	C	484.	12
18	1.00	14.00	30.00	40.00	C	481.	17
19	1.00	21.00	33.00	44.00	C	497.	18
20	1.00	19.00	28.00	42.00	C	522.	14
21	1.00	18.00	29.00	35.00	C	515.	10
22	1.00	22.00	37.00	51.00	C	509.	19
23	1.00	23.00	31.00	49.00	C	535.	13
24	1.00	21.00	34.00	52.00	C	526.	12
25	1.00	22.00	35.00	50.00	C	518.	3
26	1.00	26.00	40.00	59.00	C	536.	15
27	1.00	17.00	25.00	32.00	C	526.	20
28	1.00	19.00	26.00	42.00	C	529.	4
29	1.00	21.00	32.00	49.00	C	539.	9
30	1.00	20.00	29.00	49.00	C	540.	14
31	1.00	18.00	30.00	38.00	C	520.	20
32	1.00	23.00	35.00	48.00	C	476.	6
33	1.00	14.00	22.00	36.00	C	540.	32
34	1.00	21.00	30.00	38.00	C	531.	13
35	1.00	22.00	29.00	47.00	C	525.	10
36	1.00	16.00	26.00	33.00	C	521.	4
37	1.00	20.00	32.00	44.00	C	524.	16
38	1.00	24.00	34.00	43.00	C	538.	9
39	1.00	24.00	33.00	50.00	C	440.	3
40	1.00	18.00	24.00	36.00	C	544.	13
41	1.00	21.00	33.00	46.00	C	516.	9
42	1.00	25.00	36.00	45.00	C	517.	8
43	1.00	11.00	20.00	35.00	C	521.	35
44	1.00	15.00	21.00	36.00	C	547.	0
45	1.00	17.00	30.00	48.00	C	502.	10
46	1.00	19.00	33.00	42.00	C	509.	3
47	1.00	21.00	32.00	40.00	C	518.	9
48	1.00	18.00	31.00	48.00	C	517.	16
49	1.00	17.00	27.00	45.00	C	486.	19

radon assuming counting efficiency for 241 Pu 52%

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM
50	1.00	15.00	29.00	38.00	C	512.	10
51	1.00	22.00	35.00	48.00	C	531.	11
52	1.00	17.00	30.00	48.00	C	525.	3
53	1.00	25.00	34.00	47.00	C	520.	12
54	1.00	18.00	30.00	48.00	C	528.	13
55	1.00	22.00	30.00	39.00	C	522.	10
56	1.00	12.00	21.00	29.00	C	504.	19
57	1.00	8.00	19.00	37.00	C	531.	26
58	1.00	25.00	34.00	50.00	C	533.	9
59	1.00	21.00	31.00	47.00	C	516.	10
60	1.00	17.00	30.00	47.00	C	528.	3
61	1.00	20.00	32.00	48.00	C	489.	19
62	1.00	21.00	31.00	46.00	C	541.	10
63	1.00	19.00	29.00	46.00	C	519.	34
64	1.00	22.00	34.00	42.00	C	487.	15
65	1.00	16.00	21.00	42.00	C	531.	10
66	1.00	13.00	22.00	36.00	C	530.	32
67	1.00	25.00	33.00	54.00	C	510.	6
68	1.00	15.00	23.00	32.00	C	511.	30
69	1.00	14.00	22.00	36.00	C	539.	23
70	1.00	23.00	33.00	46.00	C	543.	15
71	1.00	13.00	24.00	37.00	C	541.	8
72	1.00	25.00	31.00	45.00	C	497.	23
73	1.00	27.00	37.00	43.00	C	510.	16
74	1.00	20.00	33.00	44.00	C	537.	12
75	1.00	28.00	40.00	58.00	C	536.	2
76	1.00	20.00	31.00	39.00	C	538.	19
77	1.00	20.00	30.00	52.00	C	527.	10
78	1.00	14.00	24.00	35.00	C	518.	13
79	1.00	26.00	32.00	44.00	C	516.	9
80	1.00	19.00	28.00	42.00	C	520.	18
81	1.00	18.00	27.00	44.00	C	470.	15
82	1.00	10.00	25.00	33.00	C	534.	12
83	1.00	23.00	36.00	47.00	C	476.	22
84	1.00	22.00	37.00	54.00	C	558.	19
85	1.00	16.00	25.00	44.00	C	553.	4
86	1.00	26.00	35.00	44.00	C	558.	11
87	1.00	17.00	36.00	44.00	C	546.	19
88	1.00	19.00	28.00	44.00	C	539.	11
89	1.00	19.00	30.00	43.00	C	557.	20
90	1.00	20.00	34.00	48.00	C	543.	21
91	1.00	19.00	24.00	40.00	C	531.	25
92	1.00	26.00	37.00	47.00	C	535.	3
93	1.00	25.00	35.00	46.00	C	511.	26
94	1.00	17.00	31.00	39.00	C	545.	16
95	1.00	21.00	26.00	45.00	C	540.	8
96	1.00	18.00	31.00	46.00	C	513.	29
97	1.00	11.00	28.00	38.00	C	528.	7
98	1.00	18.00	28.00	52.00	C	528.	7
99	1.00	28.00	39.00	63.00	C	531.	10
100	1.00	25.00	43.00	54.00	C	521.	7
101	1.00	21.00	27.00	45.00	C	528.	15
102	1.00	22.00	28.00	41.00	C	534.	21
103	1.00	19.00	26.00	42.00	C	536.	12
104	1.00	26.00	38.00	50.00	C	513.	5
105	1.00	15.00	28.00	41.00	C	443.	18

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
106	1.00	21.00	27.00	41.00	C	516.	19	
107	1.00	17.00	24.00	35.00	C	519.	13	
108	1.00	24.00	31.00	49.00	C	466.	16	
109	1.00	18.00	32.00	47.00	C	476.	13	
110	1.00	69.00	79.00	94.00	C	355.	100	8 dpm assuming worse efficiency for 3H of 58%
111	1.00	28.00	42.00	55.00	C	272.	19	
112	1.00	12.00	25.00	40.00	C	493.	20	
113	1.00	17.00	26.00	44.00	C	502.	31	
114	1.00	18.00	33.00	43.00	C	516.	12	
115	1.00	24.00	33.00	49.00	C	490.	15	
116	1.00	26.00	34.00	45.00	C	460.	9	
117	1.00	21.00	37.00	48.00	C	502.	3	
118	1.00	13.00	22.00	42.00	C	522.	32	
119	1.00	24.00	35.00	46.00	C	318.	23	
120	1.00	18.00	27.00	39.00	C	535.	26	
121	1.00	22.00	32.00	41.00	C	510.	13	
122	1.00	19.00	26.00	34.00	C	538.	27	
123	1.00	27.00	38.00	52.00	C	443.	16	
124	1.00	20.00	27.00	40.00	C	533.	37	
125	1.00	21.00	29.00	45.00	C	527.	3	
126	1.00	27.00	38.00	46.00	C	400.	8	
127	1.00	22.00	29.00	52.00	C	436.	10	BKg. 20 min.
128	1.00	17.00	27.00	37.00	C	485.	15	BKg
129	0.11	95290.9	95290.9	95318.2	C	628.	1	3H std
130	0.07	47628.6	147229.	147229.	C	630.	0	14C std
131	0.05	8760.00	90660.0	229220.	C	602.	0	36Cl std.

Critical Count ch A = 30

ch B = 40

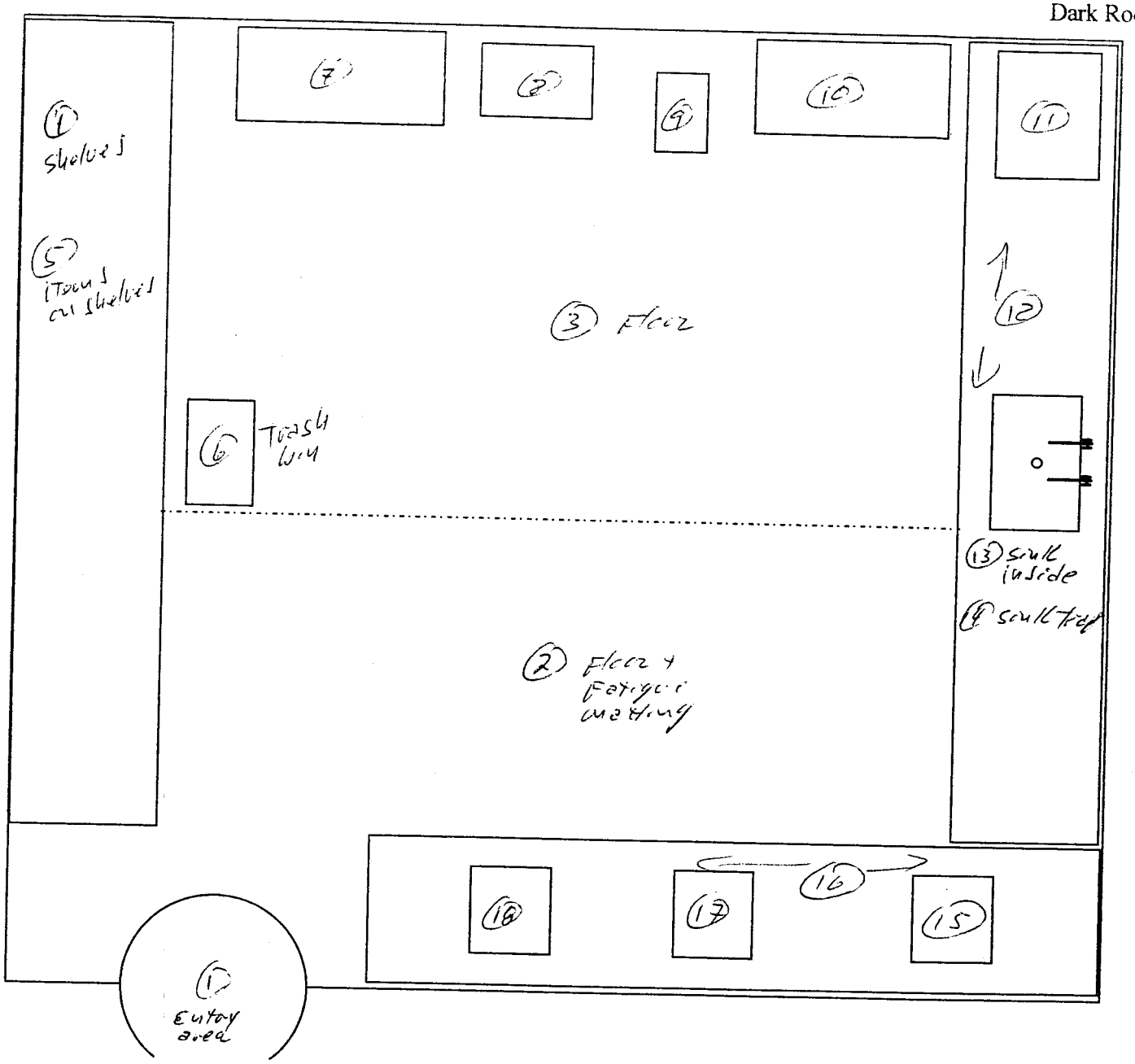
ch C = 60

Sample #'s 17 and 110 < 100 dpm/100 cm²

All other samples < critical count

MDA = 8.1×10^{-6} μCi

D234
Dark Room



(19) outer drawers
(20) inside drawers
(21) ceiling
(22) walls
(23) other items on benches
(24) Handles / knobs / light switches

Protocol #:10 Name:DECOM. SURVEY 2 27-Jul-97 13:09 D-23-

Region A: LL-UL= 0.0-18.6 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region B: LL-UL= 0.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.00

Region C: LL-UL= 0.0-2000 Lcr= 0 Bkg= 0.00 %2 Sigma=2.00

Time = 1.00 QIP = tSIE ES Terminator = 10 sec

inescence Correction On

S#	TIME	CPMA	CPMB	CPMC	FLAG	tSIE	LUM	
1	1.00	28.00	41.00	55.00	C	513.	17	
2	1.00	24.00	31.00	43.00	C	501.	6	
3	1.00	25.00	43.00	59.00	C	472.	5	
4	1.00	15.00	21.00	31.00	C	486.	19	
5	1.00	24.00	31.00	49.00	C	521.	13	
6	1.00	22.00	31.00	44.00	C	574.	13	
7	1.00	14.00	27.00	40.00	C	542.	22	
8	1.00	17.00	31.00	47.00	C	540.	10	
9	1.00	20.00	31.00	43.00	C	537.	13	
10	1.00	21.00	33.00	43.00	C	554.	21	
11	1.00	15.00	30.00	45.00	C	559.	10	
12	1.00	19.00	28.00	40.00	C	549.	18	
13	1.00	19.00	35.00	49.00	C	539.	9	
14	1.00	26.00	36.00	52.00	C	486.	6	
15	1.00	13.00	30.00	41.00	C	551.	27	
16	1.00	15.00	22.00	37.00	C	536.	27	
17	1.00	16.00	30.00	43.00	C	558.	17	
18	1.00	13.00	28.00	35.00	C	547.	14	
19	1.00	9.00	22.00	33.00	C	545.	9	
20	1.00	17.00	31.00	41.00	C	522.	39	
21	1.00	21.00	29.00	45.00	C	514.	10	
22	1.00	19.00	26.00	36.00	C	545.	4	
23	1.00	30.00	38.00	48.00	C	521.	26	
24	1.00	24.00	31.00	46.00	C	548.	13	
25	1.00	20.00	35.00	46.00	C	450.	9	BKG
26	1.00	21.00	31.00	41.00	C	488.	6	BKG
27	0.11	94872.7	94900.0	94900.0	C	631.	1	3H std
28	0.07	47842.9	151486.	151500.	C	634.	0	14C std
29	0.05	8360.00	88940.0	223880.	C	601.	0	36Cl std

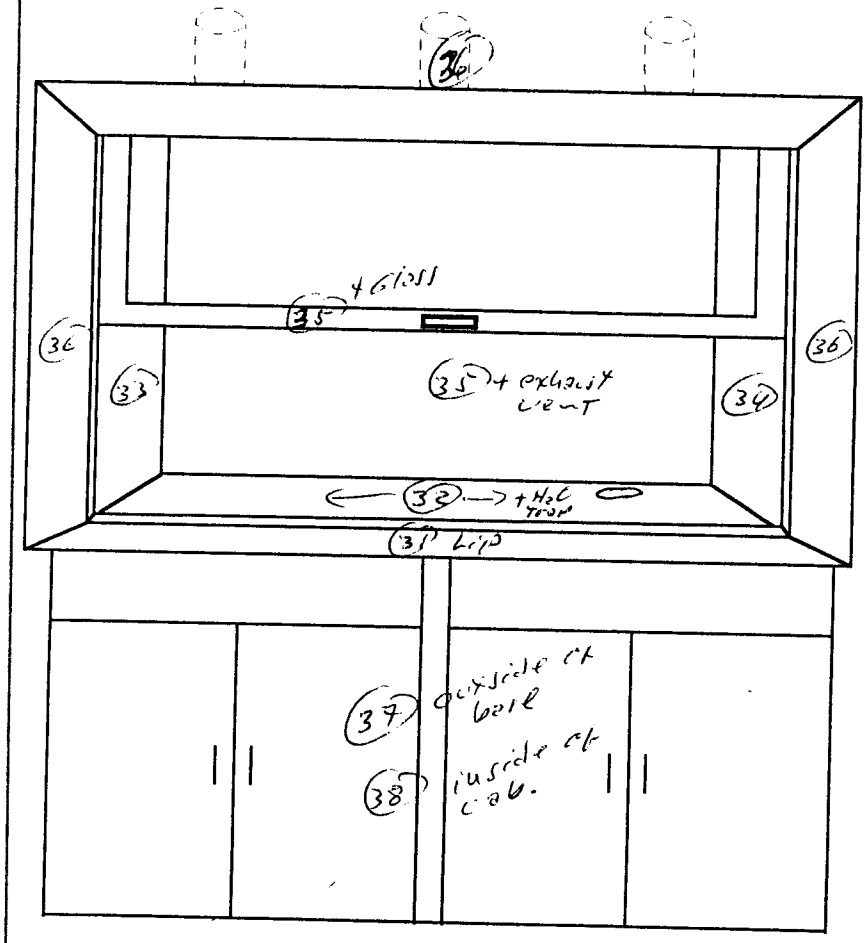
Critical count ch A = 32

ch B = 46

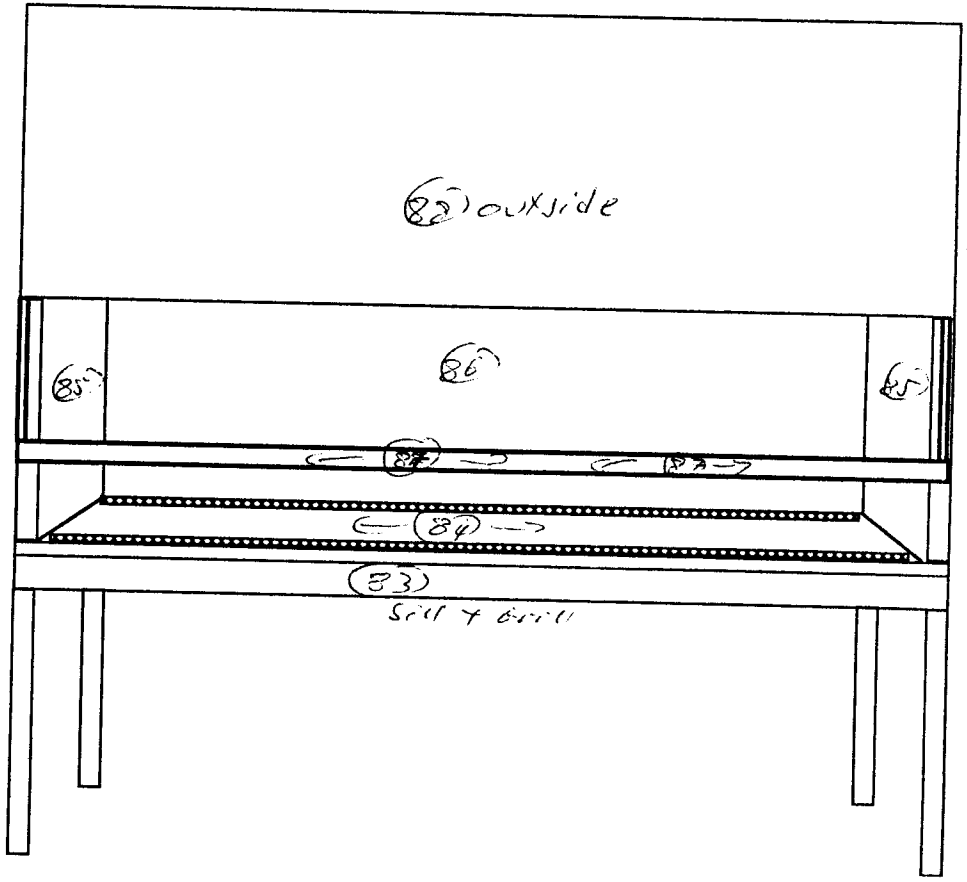
ch C = 59

All Samples less than critical count.

Fume Hood #_____



Biological Safety Cabinet #_____



Room Number	Notes
D-234	Fume Hood samples 83-88 Bio. safety cab. sampled 31-38

Waste Manifests Response to Item #10

APPENDIX L

Waste Shipment Manifests

EXPIRES: 08/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 540 (3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 3

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [X] YES [ ] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
000906270JJK

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-032307PF

CONTACT
Pete Babin

6. CARRIER - Name and Address
Tri State Motor Transit
8141 East 7th Street
Joplin, MO 64801

Truck #:

Trailer #:

CONTACT
Cassie Gardner

SIGNATURE - Authorized carrier acknowledging waste receipt

SHIPMENT ID NUMBER
0113-032307PF

X **COLLECTOR**
PROCESSOR
GENERATOR TYPE (Specify)

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

EPA I.D. NUMBER
MOD095038998

SHIPPING DATE
03/23/2007

TELEPHONE NUMBER (Include Area Code)
800-234-8768

DATE
3-23-07

7. FORM 540 AND 540A PAGE 1 OF 1 PAGE(S)
FORM 541 AND 541A 2 PAGE(S)
FORM 542 AND 542A 1 PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUMBE
(Use this number on ... continuation pages)
0113-032307PF

9. CONSIGNEE - Name and Facility Address
Perma-Fix of Florida
Operated By Perma-Fix of Florida
1940 NW 67th Place
Gainesville, FL 32606

CONTACT
Raymond Whittle

TELEPHONE NUMBER (Include Area Code)
(800) 365-6066

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
3/26/07

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE | **TITLE** Shipper | **DATE** 3.23.07

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS ETHANOL), 3, UN1993; PGII HAZ-LABPACK	NA	NA	LIQUID/OXIDES	C-14 ; H-3	41.440000	(1.120000)	NA	0.68 ft^3 22.00000 lb	07-001486 (207020)
WASTE OXIDIZING SOLID, N.O.S., (CONTAINS NITRATES), 5.1, (7), UN1479; PGII; "Limited Quantity Radioactive Material" URANYL NITRATE SOLID	NA	NA	SOLID/METAL OXIDES	U-238	0.943500	(0.025500)	NA	0.68 ft^3 13.00000 lb	07-001487 (207021)
WASTE OXIDIZING LIQUID, N.O.S., (CONTAINS NITRATES), 5.1, UN3139; PGII URANIUM COMPOUNDS	NA	NA	LIQUID/OXIDES	U-238	0.011100	(0.000300)	NA	0.68 ft^3 20.00000 lb	07-001488 (207022)

FOR CONSIGNEE USE ONLY

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER D. BABIN — Print Name | Signature | 3-23-07 — Date

NRC FORM 540 (3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 3

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [X] YES [ ] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
000906270JJK

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-032307PF

CONTACT
Pete Babin

SHIPMENT ID NUMBER
0113-032307PF

X COLLECTOR
PROCESSOR
GENERATOR TYPE (Specify)

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

6. CARRIER - Name and Address
Tri State Motor Transit
8141 East 7th Street
Joplin, MO 64801

Truck #:

Trailer #:

EPA I.D. NUMBER
MOD095038998

SHIPPING DATE
03/23/2007

CONTACT
Cassie Gardner

TELEPHONE NUMBER (Include Area Code)
800-234-8768

SIGNATURE - Authorized carrier acknowledging waste receipt

DATE
3.23.07

7. FORM 540 AND 540A PAGE 1 OF 1 PAGE(S)
FORM 541 AND 541A 2 PAGE(S)
FORM 542 AND 542A 1 PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUI (Use this numbe all continuation pages)
0113-032307PF

9. CONSIGNEE - Name and Facility Address
Perma-Fix of Florida
Operated By Perma-Fix of Florida
1940 NW 67th Place
Gainesville, FL 32606

CONTACT
Raymond Whittle

TELEPHONE NUMBER (Include Area Code)
(800) 365-6066

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE **TITLE** Shipper **DATE** 3.23.07

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS ETHANOL), 3, UN1993; PGII HAZ-LABPACK	NA	NA	LIQUID/OXIDES	C-14 ; H-3	41.440000	(1.120000)	NA	0.68 ft^3 22.00000 lb	07-001486 (207020)
WASTE OXIDIZING SOLID, N.O.S., (CONTAINS NITRATES), 5.1, (7), UN1479; PGII; "Limited Quantity Radioactive Material" URANYL NITRATE SOLID	NA	NA	SOLID/METAL OXIDES	U-238	0.943500	(0.025500)	NA	0.68 ft^3 13.00000 lb	07-001487 (207021)
WASTE OXIDIZING LIQUID, N.O.S., (CONTAINS NITRATES), 5.1, UN3139; PGII URANIUM COMPOUNDS	NA	NA	LIQUID/OXIDES	U-238	0.011100	(0.000300)	NA	0.68 ft^3 20.00000 lb	07-001488 (207022)

FOR CONSIGNEE USE ONLY

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER D. BABIN (Print Name) (Signature) 3-23-07 (Date)

NRC FORM 541
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME	NET WASTE WEIGHT
3	m^3 0.05778 kg ft^3 2.04000 lb	18.14360 40.00000

SPECIAL NUCLEAR MATERIAL (grams)

U-233	U-235	Pu	TOTAL
NP	NP	NP	NP

ACTIVITY (MBq/mCi) (LLD UNITS IN uCi/cc)

	ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129	SOURCE	
MBq	42.394600	9.990000	31.450000	NP	NP	kg	0.0758823529
mCi	1.145800	0.270000	0.850000	NP	NP	lb	0.1672928152

2. MANIFEST NUMBE
0113-032 PF

3. PAGE 1 OF 2 PAGE(S)

4. SHIPPER NAME
Bayer Corp.

SHIPMENT ID NUMBER
0113-032307PF

DISPOSAL CONTAINER DESCRIPTION / WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER

5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m^3 ft^3	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. PHYSICAL DESCRIPTION APPROXIMATE WASTE VOLUME(S) IN CONTAINER m^3 ft^3	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
# - Innerpack Container															
07-001486 (207020)	4	0.01926	9.97898	< 0.005	< 0.000003674	< 0.00003674	28	0.01926	100	LIQUID OXIDES / NP	NP	C-14	31.450000	0.850000	AU
		0.68000	22.00000	< 0.5	< 220	< 2200		0.68000				H-3	9.990000	0.270000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	41.440000	1.120000	
Package Total													41.440000	1.120000	
07-001487 (207021)	4	0.01926	5.89667	< 0.005	< 0.000003674	< 0.00003674	28	0.01926	100	SOLID METAL OXIDES / NP	NP	U-238	0.943500 [0.0750000000 kg]	0.025500	AU
		0.68000	13.00000	< 0.5	< 220	< 2200		0.68000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.943500 [0.0750000000 kg]	0.025500	
Package Total													0.943500 [0.0750000000 kg]	0.025500	
07-001488 (207022)	4	0.01926	9.07180	< 0.005	< 0.000003674	< 0.00003674	40	0.01926	100	LIQUID OXIDES / NP	NP	U-238	0.011100 [0.0008823529 kg]	0.000300	AU
		0.68000	20.00000	< 0.5	< 220	< 2200		0.68000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.011100 [0.0008823529 kg]	0.000300	
Package Total													0.011100 [0.0008823529 kg]	0.000300	

NOTE 1: Container Description Codes. For containers/waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP."

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpacked Waste
12. Unpackaged Components
13. High Integrity Container
19. Other. Describe in item 6, or additional page

NOTE 2: Waste Descriptor Codes. (Choose up to three which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source/Device
37. Paint or Plating
38. Evaporator Bottoms/Sludges/ Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal carcass)
43. Activated Material
59. Other. Describe in Item 11.

NOTE 3: Sorption, Solidification and Stabilization Media Codes. (Choose up to three which predominate by volume). For media meeting disposal site structral stability requirements, the numerical code must be followed by "-S". For all solidification media, the vendor and brand name must also be identified in Item 13. Code 100=None Required

Sorption

60. Speedi Dri
61. Celeton
62. Floor Dry/ Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Florco
67. Florco X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72 Dicaperl HP 200
73. Dicaperl HP500

Solidification

74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
89. Other. Describe in Item 13 or additional page.
90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in Item 13, or additional page
100. None Required

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMB.
0113-032307PF

3.
PAGE 2 OF 2 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
# - Innerpack Container														
Shipment Total		0.05778 2.04000	24.94745 55.00000										42.394600 [0.0758823529 kg]	1.145800	

NRC Form 541A (3-95) * - Indicates Cross Contamination

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CTD046615059
2. Page 1 of: 1
3. Emergency Response Phone: 800-424-9300
4. Manifest Tracking Number: 000906270 JJK

GENERATOR

5. Generator's Name and Mailing Address
Seyer Corp.
108 Morgan Lane
West Haven, CT 06516
Generator's Phone: (203) 812-4670

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: The State Motor Transport
U.S. EPA ID Number: MOD065038838

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Permafix of Florida
1940 NW 67th Place
Gainesville, FL 32606
Facility's Phone: (800) 365-4066
U.S. EPA ID Number: FLD980711071

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS ETHANOL), 3, UN1993, PGII	1	DM	10	K	D001		
X	2. WASTE OXIDIZING SOLID, N.O.S., (CONTAINS NITRATES), 5.1, (7), UN1479, PGII "Limited Quantity Regulated Material"	1	DM	5	K	D001		
X	3. WASTE OXIDIZING LIQUID, N.O.S., (CONTAINS NITRATES), 5.1, UN3139, PGII	1	DM	9	K	D001		
	4.							

14. Special Handling Instructions and Additional Information
1. Flammable Lab pack (ID# 207020) - ERG# 128 - PW# 435592
2. Solid U-Nitrate (ID# 207021) - ERG# 140, 151 - PW# 2016393
3. Liquid U-Nitrate (ID# 207022) - ERG# 140 - PW# 2016394
Reference NRC Manifest# 0113-0323807PF

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Peter D. Zarin
Signature:
Month 3 Day 23 Year 07

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Northeastern
Signature:
Month 3 Day 23 Year 07
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name:
Signature:
Month 03 Day 26 Year 07

EPA Form 8700-22 (Rev. 3-05). Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

NSSI/SOURCES & SERVICES, INC.
P.O. BOX 34042 HOUSTON, TEXAS 77234
PH: (713) 641-0391 www.nssihouston.com FAX: (713) 641-6153

February 21, 2007

Attn: Pete Babin
Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

Dear Mr. Babin:

I am returning the original copy of the uniform hazardous waste manifest used for shipping wastes to our facility for treatment.

In compliance with 40 CFR 264.12(b), NSSI is permitted to receive your waste, has received your waste and will continue to receive future shipment of this waste.

Please retain the manifest in your files for possible review by Regulatory Agencies to show proper disposal.

Your use of NSSI/Recovery Services, Inc. for treatment is appreciated.

Sincerely,

Robert D. Gallagher

Robert D. Gallagher
President

RDG/via
Ref. #omanfest.frm

CC: Annette Hansen
Philotechnics
201 Renovare Blvd.
Oak Ridge, TN 37830

EXPIRES: 08/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

CC

NRC FORM 540 (3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 2

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [X] YES [ ] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
000906241JJK

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

SHIPMENT ID NUMBER
0113-020107NSSI

X COLLECTOR
PROCESSOR
GENERATOR TYPE (Specify)

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-020107NSSI

CONTACT
Pete Babin

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

6. CARRIER - Name and Address
Hillman Transport Services
628 GALLAHER ROAD
KINGSTON, TN 37763

Truck #:
Trailer #:

EPA I.D. NUMBER
TND-987783065

SHIPPING DATE
02/01/2007

CONTACT
Karen Kirby

TELEPHONE NUMBER (Include Area Code)
800-233-9933

SIGNATURE - Authorized carrier acknowledging waste receipt

DATE
02/01/07

7. FORM 540 AND 540A PAGE 1 OF 1 PAGE(S)
FORM 541 AND 541A NONE PAGE(S)
FORM 542 AND 542A NONE PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
0113-020107NSSI

9. CONSIGNEE - Name and Facility Address
NSSI Recovery Services
Operated By NSSI Recovery Services
5709 Etheridge Street
Houston, TX 77087

JSF
Jill
C/B

CONTACT
Bob Gallagher

TELEPHONE NUMBER (Include Area Code)
(713) 641-0391

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
2/16/07

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE **TITLE** Philotechnics Shipper **DATE** 02/01/07

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS TOLUENE), 3, UN1993; PGII HAZ-LSV	NA	NA	LIQUID/OXIDES	C-14 ; H-3	0.740000	(0.020000)	NA	4.10 ft^3 145.00000 lb	07-000239 (207017)
WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS TOLUENE), 3, UN1993; PGII HAZ-LABPACK	NA	NA	LIQUID/OXIDES	C-14 ; P-33	11.951000	(0.323000)	NA	4.10 ft^3 150.00000 lb	07-000240 (207012)

FOR CONSIGNEE USE ONLY

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER D. BABIN — Print Name
Signature
02/01/07 — Date

NRC FORM 541 (3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME		NET WASTE WEIGHT
2	m^3 0.23220	kg	106.59365
	ft^3 8.20000	lb	235.00000

SPECIAL NUCLEAR MATERIAL (grams)

U-233	U-235	Pu	TOTAL
NP	NP	NP	NP

ACTIVITY (MBq/mCi) (LLD UNITS IN uCi/cc)

	ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129	SOURCE	
MBq	12.691000	0.370000	9.768000	NP	NP	kg	<0.0000000001
mCi	0.343000	0.010000	0.264000	NP	NP	lb	<0.0000000001

2. MANIFEST NUMBER 0113-020107NSSI

3. PAGE 1 OF 1 PAGE(S)

4. SHIPPER NAME Bayer Corp.

SHIPMENT ID NUMBER 0113-020107NSSI

DISPOSAL CONTAINER DESCRIPTION / WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER

5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Inserpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m^3 / ft^3	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m^3 / ft^3	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT: RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
07-000239 (207017)	4	0.11610	65.77055	< 0.005	< 0.000003674	< 0.00003674	28	0.11610	100	LIQUID OXIDES / NP	NP	C-14	0.370000	0.010000	AU
		4.10000	145.00000	< 0.5	< 220	< 2200		4.10000				H-3	0.370000	0.010000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.740000	0.020000	
Package Total													0.740000	0.020000	
07-000240 (207012)	4	0.11610	68.03850	< 0.005	< 0.000003674	< 0.00003674	28	0.11610	100	LIQUID OXIDES / NP	NP	C-14	9.398000	0.254000	AU
		4.10000	150.00000	< 0.5	< 220	< 2200		4.10000				P-33	2.553000	0.069000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	11.951000	0.323000	
Package Total													11.951000	0.323000	
Shipment Total		0.23220	133.80905										12.691000	0.343000	
		8.20000	295.00000												

NOTE 1: Container Description Codes. For containers/waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP."

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpacked Waste
12. Unpackaged Components
13. High Integrity Container
19. Other. Describe in item 6, or additional page

NOTE 2: Waste Descriptor Codes. (Choose up to three which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source/Device
37. Paint or Plating
38. Evaporator Bottoms/Sludges/ Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal carcass)
43. Activated Material
59. Other. Describe in item 11.

NOTE 3: Sorption, Solidification and Stabilization Media Codes. (Choose up to three which predominate by volume). For media meeting disposal site structral stability requirements, the numerical code must be followed by "-S". For all solidification media, the vendor and brand name must also be identified in item 13. Code 100=None Required

Sorption

60. Speedi Dri
61. Celeton
62. Floor Dry/ Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Florco
67. Florco X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicaperl HP 200
73. Dicaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
89. Other. Describe in item 13 or additional page.

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13, or additional page
100. None Required

 * - Indicates Cross Contamination

NRC FORM 542

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

MANIFEST INDEX AND REGIONAL COMPACT TABULATION

List all original "PROCESSED WASTE" generators (if any) before "COLLECTED WASTE" generators

1. WASTE COLLECTOR/PROCESSOR

NAME: Bayer Corp.

IDENTIFICATION NUMBER

SHIPPING DATE: 02/01/2007

SHIPPER USE ONLY

2. MANIFEST NUMBER: 0113-020107NSSI

3. PAGE 1 OF 1 PAGE(S)

4. S.C. TRANSPORT PERMIT NUMBER	5. GENERATOR NAME AND TELEPHONE NUMBER	6. GENERATOR FACILITY ADDRESS	6A. WASTE DESCRIPTION (NOMENCLATURE)	7. PREPROCESSED WASTE (OR MATERIAL) VOLUME m³	ft³	8. MANIFEST NUMBER(S) UNDER WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT	9. WASTE CODE P=PROCESSED C=COLLECTED	10. ORIGINATING COMPACT REGION OR STATE	11. AS PROCESSED/COLLECTED TOTAL A. SOURCE MATERIAL (kg)	(lb)	B. SNM (g)	C. ACTIVITY MBq	mCi	D. VOLUME m³	ft³	E. WEIGHT (lb)	F. MAXIMUM PACKAGE RADIATION LEVEL (mrem/hr)
	Bayer Corp. (203) 812-5633	400 Morgan Lane West Haven, CT 06516	EPA or State Hazardous			Onsite Generation 01/31/2007	C	CT	<0.0000000	<0.0000000	<0.0000000001	12.691	.343	0.23220	8.20000	235.00000	<0.5
TOTALS OF ALL PAGES (FORMS 542 AND 542A)									<0.0000000	<0.0000000	<0.0000000001	12.691000	0.343000	0.23220	8.20000	235.00000	N/A

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CT0[illegible]
2. Page 1 of 1
3. Emergency Response Phone: [illegible]
4. Manifest Tracking Number: 000906241 JJK

5. Generator's Name and Mailing Address
Dryer Corp
[illegible] Morgan Lane
West Haven, CT 06516
Generator's Phone: [illegible]

Generator's Site Address (if different than mailing address)
This is to inform the generator of the waste shipped on this manifest, that NSSI has the appropriate permits for, and will accept, the waste the generator is shipping.

6. Transporter 1 Company Name: [illegible] Transport Services
U.S. EPA ID Number: [illegible]

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
NSSI Recovery Services
6709 Rheridge Street
Houston, TX 77087
Facility's Phone: (713) [illegible]
U.S. EPA ID Number: TXD[illegible]

GENERATOR

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS TOLUENE), 3, UN1993, PGII	1	DM	68	K	D001	F005	
X	2. WASTE FLAMMABLE LIQUIDS, N.O.S., (CONTAINS TOLUENE), 3, UN1993, PGII	1	DM	68	K	D001	D022	F003
	3.					F005		
	4.							

14. Special Handling Instructions and Additional Information
[illegible] LSV (DOT 207017) [illegible]
[illegible] Lehigh-Lehigh (DOT 207012) [illegible]
Reference NRC Manifest [illegible]

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: [illegible] | Signature: [illegible] | Month 2 | Day 01 | Year 07

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: JASON FRITTS | Signature: [illegible] | Month 2 | Day 01 | Year 07
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

SIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Pacific EcoSolutions, Inc. . . . A New Vision for Waste Management
A subsidiary of Nuvotec$_{USA}$ www.pacificecosolutions.com

Certificate of Treatment/Destruction

March 12, 2007

License Number WN-10393-1

To: Bayer Corp c/o Philotechnics, Ltd.

P.O. Box 4489

Oak Ridge, TN 37831

Waste Description, including manifest number(s):

All Bayer Corp waste from manifest #0113-020107Pe on PEcoS Receipt LLR07-016

Pacific EcoSolutions, Inc. certifies that the above-described waste was properly treated in accordance with all applicable laws and regulations. The waste was treated to remove all volatile radionuclides. Remaining radioactive volume associated with this waste will be disposed of at Energy Solutions.

If you have any questions regarding this matter, please contact me at (509) 375-7045 or Bob Denne at (865) 384-1318.

Rosemary Vickers

Rosemary Vickers
Customer Service Supervisor
Pacific EcoSolutions

Corporate: 723 The Parkway • Richland, WA 99352 • (509) 943-5319 • Fax (509) 943-5560
Plant: 2025 Battelle Blvd. • Richland, WA 99354 • (509) 375-5160 • Fax (509) 375-0613

PHILOTECHNICS

April 2, 2007

Mr. Pete Babin
Bayer Healthcare
400 Morgan Lane
Research Safety Dept.
West Haven, CT 06516-2000CT

Subject: Certificate of Treatment

Dear Pete:

I have attached a Certificate of Treatment from Pacific EcoSolutions (Pecos) for waste received from Bayer Corporation on Manifest No. 0113-020107Pe on Receipt LLR07-016.

Please contact me if you have any questions or require additional information. I can be reached at 865-285-3006 or by e-mail at pseiber@philotechnics.com

Sincerely,

Philotechnics, Ltd.

Patty Seiber

Patty Seiber
Brokerage Clerk

ps
Enclosure

PHILOTECHNICS

March 12, 2007

Mr. Pete Babin
Bayer Healthcare
400 Morgan Lane
Research Safety Dept.
West Haven, CT 06516-2000CT

Subject: Shipment Receipt Acknowledgement

Dear Pete:

In accordance with the requirements of 10 CFR 20, Appendix G, Section III, C.1., the attached signed manifest copy is provided as your notice of receipt and acceptance of the radioactive waste materials specified on the manifest. Manifest No. 0113-020107Pe was received at Pacific EcoSolutions (Pecos) on February 20, 2007 and assigned Receipt Number LLR07-0016.

This letter is acknowledgement of receipt only. Any manifest discrepancies found during unloading or processing will be reported at a later date.

Please contact me if you have any questions or require additional information. I can be reached at 888-RADWASTe or 865-285-3006 (direct), or via email at pseiber@philotechnics.com.

Sincerely,

Philotechnics, Ltd.

Patty Seiber

Patty Seiber
Customer Service

NRC FORM 540 (3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 29

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [ ] YES [X] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
N/A

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-020107PE

CONTACT
Pete Babin

6. CARRIER - Name and Address
Hittman Transport Services
628 GALLAHER ROAD
KINGSTON, TN 37763

Truck #:

Trailer #:

CONTACT
Karen Kirby

SIGNATURE - Authorized carrier acknowledging waste receipt

SHIPMENT ID NUMBER
0113-020107PE

X COLLECTOR
PROCESSOR
GENERATOR TYPE (Specify)

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

EPA I.D. NUMBER
TND-987783065

SHIPPING DATE
02/01/2007

TELEPHONE NUMBER (Include Area Code)
800-233-9933

DATE
02/01/07

7. FORM 540 AND 540A PAGE 1 OF 3 PAGE(S)
FORM 541 AND 541A 8 PAGE(S)
FORM 542 AND 542A 1 PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUMBER (Use this number on all continuation pages)
0113-020107PE

9. CONSIGNEE - Name and Facility Address
Pacific EcoSolutions
Operated By Pacific EcoSolutions
2025 Battelle Blvd
Richland, WA 99352

CONTACT
Larry Morin

TELEPHONE NUMBER (Include Area Code)
(509) 375-5160 x7046

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
2-20-07

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE | **TITLE** Philotechnics Shipper | **DATE** 02/01/07

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT NON-HAZ LSV	NA	NA	LIQUID/OXIDES	C-14 ; H-3	0.296000	(0.008000)	NA	4.10 ft³ 168.00000 lb	07-000186 (207002)
Non-Radioactive per DOT NON-HAZ LSV	NA	NA	LIQUID/OXIDES	C-14 ; H-3	0.518000	(0.014000)	NA	4.10 ft³ 154.00000 lb	07-000187 (207014)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/OXIDES	C-14 ; H-3 ; P-33 ; S-35	287.046000	(7.758000)	NA	7.50 ft³ 147.00000 lb	07-000188 (207011)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	H-3 ; P-33 ; S-35	370.296000	(10.008000)	NA	7.80 ft³ 62.00000 lb	07-000189 (206115)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	H-3 ; P-33	0.740000	(0.020000)	NA	7.80 ft³ 47.00000 lb	07-000190 (206116)
Radioactive material, excepted package-limited quantity of material, 7, UN2910 DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	687.275000	(18.575000)	NA	7.80 ft³ 70.00000 lb	07-000191 (206117)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33	235.949000	(6.377000)	NA	7.80 ft³ 95.00000 lb	07-000192 (206118)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	H-3 ; I-125 ; P-33 ; S-35	319.754000	(8.642000)	NA	7.80 ft³ 59.00000 lb	07-000193 (206119)

FOR CONSIGNEE USE ONLY
2nd Carrier: R&R Trucking
302 Thunder Rd
Duenweg, MO 64841
Driver: Date: 2/14/06

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER D. BABIN (Print Name) | Signature | 02/01/07 (Date)

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
0113-020107PE

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; P-33 ; S-35	1.665000	(0.045000)	NA	7.80 ft^3 48.00000 lb	07-000194 (206120)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; P-33	16.724000	(0.452000)	NA	7.80 ft^3 62.00000 lb	07-000195 (207003)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; P-33	0.777000	(0.021000)	NA	7.80 ft^3 59.00000 lb	07-000196 (207006)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33	1.258000	(0.034000)	NA	7.80 ft^3 48.00000 lb	07-000197 (207008)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	0.740000	(0.020000)	NA	7.80 ft^3 41.00000 lb	07-000198 (207009)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	85.100000	(2.300000)	NA	7.80 ft^3 63.00000 lb	07-000199 (207010)
Radioactive material, excepted package-limited quantity of material, 7, UN2910 DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	1091.500000	(29.500000)	NA	7.80 ft^3 50.00000 lb	07-000200 (207015)
Non-Radioactive per DOT DAW/COMPACT	NA	NA	SOLID/METAL OXIDES	H-3 ; I-125 ; S-35	44.400000	(1.200000)	NA	7.50 ft^3 123.00000 lb	07-000201 (207004)
Non-Radioactive per DOT DAW/COMPACT	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; P-33	38.406000	(1.038000)	NA	7.50 ft^3 163.00000 lb	07-000202 (207005)
Non-Radioactive per DOT DAW/COMPACT	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	37.000000	(1.000000)	NA	7.50 ft^3 231.00000 lb	07-000203 (207007)
Non-Radioactive per DOT DAW/COMPACT	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125	51.800000	(1.400000)	NA	7.50 ft^3 130.00000 lb	07-000204 (207013)
RADIOACTIVE MATERIAL, TYPE A PACKAGE, 7, UN2915 DAW-SOURCES	Yellow II	.1	SOLID/METAL OXIDES	BA-133 ; BI-210 ; C-14 ; CD-109 ; CO-57 ; CO-60 ; CS-137 ; I-129 ; MN-54 ; NA-22 ; PM-147 ; SR-90 ; TC-99 ; TL-204	4.585780	(0.123940)	NA	4.10 ft^3 37.00000 lb	07-000205 (207016)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	0.925000	(0.025000)	NA	27.00 ft^3 400.00000 lb	07-000231 (1)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	0.925000	(0.025000)	NA	27.00 ft^3 400.00000 lb	07-000232 (2)

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
0113-020107PE

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	2.775000	(0.075000)	NA	27.00 ft^3 400.00000 lb	07-000233 (3)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	0.925000	(0.025000)	NA	27.00 ft^3 400.00000 lb	07-000234 (4)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	0.925000	(0.025000)	NA	27.00 ft^3 400.00000 lb	07-000235 (5)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	0.925000	(0.025000)	NA	27.00 ft^3 400.00000 lb	07-000236 (6)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; I-125 ; P-33 ; S-35	0.925000	(0.025000)	NA	27.00 ft^3 400.00000 lb	07-000237 (7)
Non-Radioactive per DOT EQUIPMENT TO PROCESS & DISPOSE OF	NA	NA	SOLID/METAL OXIDES	I-125	0.370000	(0.010000)	NA	28.00 ft^3 201.00000 lb	07-000238 (8)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; P-33	9.657000	(0.261000)	NA	7.80 ft^3 51.00000 lb	07-000310 (207001)

NRC FORM 541 (3-95) U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

NUMBER OF PACKAGES/ DISPOSAL CONTAINERS		NET WASTE VOLUME	NET WASTE WEIGHT
29	m^3	10.42652 kg	1793.04136
	ft^3	368.20000 lb	3953.00000

SPECIAL NUCLEAR MATERIAL (grams)

U-233	U-235	Pu	TOTAL
NP	NP	NP	NP

ACTIVITY (MBq/mCi) (LLD UNITS IN uCi/cc)

	ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129	SOURCE
MBq	3294.181780	1804.120000	738.894810	0.037000	0.019240 kg	<0.0000000001
mCi	89.031940	48.760000	19.970130	0.001000	0.000520 lb	<0.0000000001

2. MANIFEST NUMBER 0113-020107PE

3. PAGE 1 OF 8 PAGE(S)

4. SHIPPER NAME Bayer Corp.

SHIPMENT ID NUMBER 0113-020107PE

DISPOSAL CONTAINER DESCRIPTION / WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER

5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m^3 / ft^3	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm^2 / dpm/100 cm^2 ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. PHYSICAL DESCRIPTION APPROXIMATE WASTE VOLUME(S) IN CONTAINER m^3 / ft^3	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT: RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
07-000186 (207002)	4	0.11610	76.20312	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSV)	0.11610	100	LIQUID OXIDES / NP	NP	C-14	0.037000	0.001000	AU
		4.10000	168.00000	< 0.5	< 220	< 2200		4.10000				H-3	0.259000	0.007000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.296000	0.008000	
Package Total													0.296000	0.008000	
07-000187 (207014)	4	0.11610	69.85286	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSV)	0.11610	100	LIQUID OXIDES / NP	NP	C-14	0.185000	0.005000	AU
		4.10000	154.00000	< 0.5	< 220	< 2200		4.10000				H-3	0.333000	0.009000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.518000	0.014000	
Package Total													0.518000	0.014000	
07-000188 (207011)	4	0.21238	66.67773	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID OXIDES / NP	NP	C-14	63.640000	1.720000	AU
		7.50000	147.00000	< 0.5	< 220	< 2200		7.50000				H-3	222.629000	6.017000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	0.185000	0.005000	
												S-35	0.592000	0.016000	
												Sub Total	287.046000	7.758000	
Package Total													287.046000	7.758000	

NOTE 1: Container Description Codes. For containers/waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP."

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpacked Waste
12. Unpackaged Components
13. High Integrity Container
19. Other. Describe in item 8, or additional page

NOTE 2: Waste Descriptor Codes. (Choose up to three which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source/Device
37. Paint or Plating
38. Evaporator Bottoms/Sludges/ Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal carcass)
43. Activated Material
59. Other. Describe in item 11,

NOTE 3: Sorption, Solidification and Stabilization Media Codes. (Choose up to three which predominate by volume). For media meeting disposal site structral stability requirements, the numerical code must be followed by "-S". For all solidification media, the vendor and brand name must also be identified in item 13. Code 100=None Required

Sorption

80. Speedi Dri
61. Celetom
62. Floor Dry/ Superfine
63. HI Dri
64. Safe T Sorb
65. Safe N Dri
66. Floroc
67. Floroc X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicapsrl HP 200
73. Dicapsrl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
89. Other. Describe in item 13 or additional page.

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13, or additional page
100. None Required

 * - Indicates Cross Contamination

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U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER
0113-020107PE

3. PAGE 2 OF 8 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER								
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER # - Innerpack Container	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
07-000189 (206115)	19 Other-Fiber Drum	0.22088	28.12258	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	H-3	109.890000	2.970000	AU
		7.80000	62.00000	< 0.5	< 220	< 2200		7.80000				P-33	195.360000	5.280000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												S-35	65.046000	1.758000	
Package Total												Sub Total	370.296000	10.008000	
													370.296000	10.008000	
07-000190 (206116)	19 Other-Fiber Drum	0.22088	21.31873	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	H-3	0.370000	0.010000	AU
		7.80000	47.00000	< 0.5	< 220	< 2200		7.80000				P-33	0.370000	0.010000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.740000	0.020000	
Package Total													0.740000	0.020000	
07-000191 (206117)	19 Other-Fiber Drum	0.22088	31.75130	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	432.1[illegible]0000	11.680[illegible]0	AU
		7.80000	70.00000	< 0.5	< 220	< 2200		7.80000				H-3	121.360000	3.280000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	133.274000	3.602000	
												P-33	0.111000	0.003000	
												S-35	0.370000	0.010000	
Package Total												Sub Total	687.275000	18.575000	
													687.275000	18.575000	
07-000192 (206118)	19 Other-Fiber Drum	0.22088	43.09105	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	0.074000	0.002000	AU
		7.80000	95.00000	< 0.5	< 220	< 2200		7.80000				H-3	235.320000	6.360000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.185000	0.005000	
												P-33	0.370000	0.010000	
Package Total												Sub Total	235.949000	6.377000	
													235.949000	6.377000	

 * - Indicates Cross Contamination

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(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER
0113-020107PE

3.

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER								
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
* - Innerpack Container															
07-000193 (206119)	19 Other-Fiber Drum	0.22088	26.76181	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	H-3	0.185000	0.005000	AU
		7.80000	59.00000	< 0.5	< 220	< 2200		7.80000				I-125	4.625000	0.125000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	259.444000	7.012000	
												S-35	55.500000	1.500000	
												Sub Total	319.754000	8.642000	
Package Total													319.754000	8.642000	
07-000194 (206120)	19 Other-Fiber Drum	0.22088	21.77232	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	0.370000	0.010000	AU
		7.80000	48.00000	< 0.5	< 220	< 2200		7.80000				H-3	0.740000	0.020000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	0.185000	0.005000	
												S-35	0.370000	0.010000	
												Sub Total	1.665000	0.045000	
Package Total													1.665000	0.045000	
07-000195 (207003)	19 Other-Fiber Drum	0.22088	28.12258	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	3.885000	0.105000	AU
		7.80000	62.00000	< 0.5	< 220	< 2200		7.80000				H-3	4.292000	0.116000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	8.547000	0.231000	
												Sub Total	16.724000	0.452000	
Package Total													16.724000	0.452000	
07-000196 (207006)	19 Other-Fiber Drum	0.22088	26.76181	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	0.555000	0.015000	AU
		7.80000	59.00000	< 0.5	< 220	< 2200		7.80000				H-3	0.185000	0.005000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	0.037000	0.001000	
												Sub Total	0.777000	0.021000	
Package Total													0.777000	0.021000	

 * - Indicates Cross Contamination

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(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER: 0113-020107PE

3. PAGE 4 OF 8 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER # - Innerpack Container	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
07-000197 (207008)	19 Other-Fiber Drum	0.22088	21.77232	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	0.111000	0.003000	AU
		7.80000	48.00000	< 0.5	< 220	< 2200		7.80000				H-3	0.407000	0.011000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.370000	0.010000	
												P-33	0.370000	0.010000	
Package Total												Sub Total	1.258000	0.034000	
													1.258000	0.034000	
07-000198 (207009)	19 Other-Fiber Drum	0.22088	18.59719	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	0.370000	0.010000	AU
		7.80000	41.00000	< 0.5	< 220	< 2200		7.80000				H-3	0.370000	0.010000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516															
Package Total												Sub Total	0.740000	0.020000	
													0.740000	0.020000	
07-000199 (207010)	19 Other-Fiber Drum	0.22088	28.57617	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	1.850000	0.050000	AU
		7.80000	63.00000	< 0.5	< 220	< 2200		7.80000				H-3	83.250000	2.250000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516															
Package Total												Sub Total	85.100000	2.300000	
													85.100000	2.300000	
07-000200 (207015)	19 Other-Fiber Drum	0.22088	22.67950	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	166.500000	4.500000	AU
		7.80000	50.00000	< 0.5	< 220	< 2200		7.80000				H-3	925.000000	25.000000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516															
Package Total												Sub Total	1091.500000	29.500000	
													1091.500000	29.500000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER: 0113-020107PE

3. PAGE 5 OF 8 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER								
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT: RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
07-000201 (207004)	4	0.21238	55.79157	< 0.005	< 0.000003674	< 0.00003674	39	0.21238	100	SOLID METAL OXIDES / NP	NP	H-3	37.000000	1.000000	AU
		7.50000	123.00000	< 0.5	< 220	< 2200		7.50000				I-125	3.700000	0.100000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												S-35	3.700000	0.100000	
												Sub Total	44.400000	1.200000	
Package Total													44.400000	1.200000	
07-000202 (207005)	4	0.21238	73.93517	< 0.005	< 0.000003674	< 0.00003674	39	0.21238	100	SOLID METAL OXIDES / NP	NP	C-14	37.518000	1.014000	AU
		7.50000	163.00000	< 0.5	< 220	< 2200		7.50000				H-3	0.518000	0.014000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	0.370000	0.010000	
												Sub Total	38.406000	1.038000	
Package Total													38.406000	1.038000	
07-000203 (207007)	4	0.21238	104.77930	< 0.005	< 0.000003674	< 0.00003674	39	0.21238	100	SOLID METAL OXIDES / NP	NP	C-14	18.500000	0.500000	AU
		7.50000	231.00000	< 0.5	< 220	< 2200		7.50000				H-3	18.500000	0.500000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	37.000000	1.000000	
Package Total													37.000000	1.000000	
07-000204 (207013)	4	0.21238	58.96670	< 0.005	< 0.000003674	< 0.00003674	39	0.21238	100	SOLID METAL OXIDES / NP	NP	C-14	7.400000	0.200000	AU
		7.50000	130.00000	< 0.5	< 220	< 2200		7.50000				H-3	37.000000	1.000000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	7.400000	0.200000	
												Sub Total	51.800000	1.400000	
Package Total													51.800000	1.400000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER: 0113-020107PE

3.

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT			16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
												RADIONUCLIDES	MBq	mCi	
07-000205 (207016)	4	0.11610	16.78283	< 0.006	< 0.000003674	< 0.00003674	59(DAW-SOURCES)	0.11610	100	SOLID METAL OXIDES / NP	NP	BA-133	0.076590	0.002070	AU
		4.10000	37.00000	< 0.6	< 220	< 2200		4.10000				BI-210	0.000740	0.000020	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												C-14	0.004810	0.000130	
												CD-109	0.344100	0.009300	
												CO-57	0.089170	0.002410	
												CO-60	0.032930	0.000890	
												CS-137	3.853920	0.104160	
												I-129	0.019240	0.000520	
												MN-54	0.043290	0.001170	
												NA-22	0.042550	0.001150	
												PM-147	0.003700	0.000100	
												SR-90	0.000740	0.000020	
												TC-99	0.037000	0.001000	
												TL-204	0.037000	0.001000	
Package Total												Sub Total	4.585780	0.123940	
													4.585780	0.123940	
07-000231 (1)	FIBER-MESH BOX	0.76457	181.43601	< 0.005	< 0.000003674	< 0.00003674	40	0.76457	100	SOLID METAL OXIDES / NP	NP	C-14	0.185000	0.005000	AU
		27.00000	400.00000	< 0.5	< 220	< 2200		27.00000				H-3	0.185000	0.005000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.185000	0.005000	
												P-33	0.185000	0.005000	
												S-35	0.185000	0.005000	
Package Total												Sub Total	0.925000	0.025000	
													0.925000	0.025000	
07-000232 (2)	FIBER-MESH BOX	0.76457	181.43601	< 0.005	< 0.000003674	< 0.00003674	40	0.76457	100	SOLID METAL OXIDES / NP	NP	C-14	0.185000	0.005000	AU
		27.00000	400.00000	< 0.5	< 220	< 2200		27.00000				H-3	0.185000	0.005000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.185000	0.005000	
												P-33	0.185000	0.005000	
												S-35	0.185000	0.005000	
Package Total												Sub Total	0.925000	0.025000	
													0.925000	0.025000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER: 0113-020107PE

3. PAGE 7 OF 8 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER								
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
07-000233 (3)	FIBER-MESH BOX	0.76457	181.43601	< 0.005	< 0.000003674	< 0.00003674	40	0.76457	100	SOLID METAL OXIDES / NP	NP	C-14	0.555000	0.015000	AU
		27.00000	400.00000	< 0.5	< 220	< 2200		27.00000				H-3	0.555000	0.015000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.555000	0.015000	
												P-33	0.555000	0.015000	
												S-35	0.555000	0.015000	
Package Total												Sub Total	2.775000	0.075000	
													2.775000	0.075000	
07-000234 (4)	FIBER-MESH BOX	0.76457	181.43601	< 0.005	< 0.000003674	< 0.00003674	40	0.76457	100	SOLID METAL OXIDES / NP	NP	C-14	0.185000	0.005000	AU
		27.00000	400.00000	< 0.5	< 220	< 2200		27.00000				H-3	0.185000	0.005000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.185000	0.005000	
												P-33	0.185000	0.005000	
												S-35	0.185000	0.005000	
Package Total												Sub Total	0.925000	0.025000	
													0.925000	0.025000	
07-000235 (5)	FIBER-MESH BOX	0.76457	181.43601	< 0.005	< 0.000003674	< 0.00003674	40	0.76457	100	SOLID METAL OXIDES / NP	NP	C-14	0.185000	0.005000	AU
		27.00000	400.00000	< 0.5	< 220	< 2200		27.00000				H-3	0.185000	0.005000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.185000	0.005000	
												P-33	0.185000	0.005000	
												S-35	0.185000	0.005000	
Package Total												Sub Total	0.925000	0.025000	
													0.925000	0.025000	
07-000236 (6)	FIBER-MESH BOX	0.76457	181.43601	< 0.005	< 0.000003674	< 0.00003674	40	0.76457	100	SOLID METAL OXIDES / NP	NP	C-14	0.185000	0.005000	AU
		27.00000	400.00000	< 0.5	< 220	< 2200		27.00000				H-3	0.185000	0.005000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.185000	0.005000	
												P-33	0.185000	0.005000	
												S-35	0.185000	0.005000	
Package Total												Sub Total	0.925000	0.025000	
													0.925000	0.025000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER: 0113-020107PE

3. PAGE 8 OF 8 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER								
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
07-000237 (7)	FIBER-MESH BOX	0.76457	181.43601	< 0.005	< 0.000003674	< 0.00003674	40	0.76457	100	SOLID METAL OXIDES / NP	NP	C-14	0.185000	0.005000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		27.00000	400.00000	< 0.5	< 220	< 2200		27.00000				H-3	0.185000	0.005000	
												I-125	0.185000	0.005000	
												P-33	0.185000	0.005000	
												S-35	0.185000	0.005000	
Package Total												Sub Total	0.925000	0.025000	
													0.925000	0.025000	
07-000238 (8)	OTHER	0.79289	91.17160	< 0.005	< 0.000003674	< 0.00003674	40	0.79289	100	SOLID METAL OXIDES / NP	NP	I-125	0.370000	0.010000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		28.00000	201.00000	< 0.5	< 220	< 2200		28.00000							
Package Total												Sub Total	0.370000	0.010000	
													0.370000	0.010000	
07-000310 (207001)	19 Other-Fiber Drum	0.22088	23.13309	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	4.070000	0.110000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	51.00000	< 0.5	< 220	< 2200		7.80000				H-3	4.847000	0.131000	
												P-33	0.740000	0.020000	
Package Total												Sub Total	9.657000	0.261000	
													9.657000	0.261000	
Shipment Total		10.42652	2226.67340										3294.181780	89.031940	
		368.20000	4909.00000												

 * - Indicates Cross Contamination

EXPIRES: 08/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 542 U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

MANIFEST INDEX AND REGIONAL COMPACT TABULATION

List all original "PROCESSED WASTE" generators (if any) before "COLLECTED WASTE" generators

1. WASTE COLLECTOR/PROCESSOR

NAME: Bayer Corp.

IDENTIFICATION NUMBER

SHIPPING DATE: 02/01/2007

SHIPPER USE ONLY

2. MANIFEST NUMBER: 0113-020107PE

3. PAGE 1 OF 1 PAGE(S)

4. S.C. TRANSPORT PERMIT NUMBER	5. GENERATOR NAME AND TELEPHONE NUMBER	6. GENERATOR FACILITY ADDRESS	6A. WASTE DESCRIPTION (NOMENCLATURE)	7. PREPROCESSED WASTE (OR MATERIAL) VOLUME m³	ft³	8. MANIFEST NUMBER(S) UNDER WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT	9. WASTE CODE P=PROCESSED C=COLLECTED	10. ORIGINATING COMPACT REGION OR STATE	11. AS PROCESSED/COLLECTED TOTAL A. SOURCE MATERIAL (kg)	(lb)	B. SNM (g)	C. ACTIVITY MBq	mCi	D. VOLUME m³	ft³	E. WEIGHT (lb)	F. MAXIMUM PACKAGE RADIATION LEVEL (mrem/hr)
	Bayer Corp. (203) 812-5633	400 Morgan Lane West Haven, CT 06516	BPU/ENSO Compactible Trash EQUIPMENT TO PROCESS & DISPOSE OF Non-Compactible Trash Non-Haz LSP/BPU Non-Haz LSV/BPU			Onsite Generation 01/30/2007	C	CT	<0.0000000	<0.0000000	<0.0000000001	3294.18178	89.03194	10.42652	368.20000	3953.00000	<0.6
						TOTALS OF ALL PAGES (FORMS 542 AND 542A)			<0.0000000	<0.0000000	<0.0000000001	3294.181780	89.031940	10.42652	368.20000	3953.00000	N/A

NRC Form 542 (6-2004)

Pacific EcoSolutions, Inc. . . . A New Vision for Waste Management
A subsidiary of Nuvotec$_{USA}$ www.pacificecosolutions.com

Certificate of Treatment/Destruction

February 5, 2007

License Number WN-10393-1

To: Bayer Corp c/o Philotechnics, Ltd.

P.O. Box 4489

Oak Ridge, TN 37831

Waste Description, including manifest number(s):

All Bayer Corp waste from manifest #0113-121406Pe on PEcoS Receipt LLR07-001

Pacific EcoSolutions, Inc. certifies that the above-described waste was properly treated in accordance with all applicable laws and regulations. The waste was treated to remove all volatile radionuclides. Remaining radioactive volume associated with this waste will be disposed of at Energy Solutions.

If you have any questions regarding this matter, please contact me at (509) 375-7045 or Bob Denne at (865) 384-1318.

Rosemary Vickers

Rosemary Vickers
Customer Service Supervisor
Pacific EcoSolutions

Corporate: 723 The Parkway • Richland, WA 99352 • (509) 943-5319 • Fax (509) 943-5560
Plant: 2025 Battelle Blvd. • Richland, WA 99354 • (509) 375-5160 • Fax (509) 375-0613

PHILOTECHNICS

February 19, 2007

Bayer Corporation
P.O. Box 26330
West Haven, CT 06516
Attn: Peter Babin

Subject: Certificate of Treatment

Dear Peter:

I have attached a Certificate of Treatment from Pacific EcoSolutions (Pecos) for waste received from Bayer Corporation on Manifest No. 0113-121406Pe on receipt LLR07-001.

Please contact me if you have any questions or require additional information. I can be reached at 865-285-3006 or by e-mail at pseiber@philotechnics.com

Sincerely,

Philotechnics, Ltd.

Patty Seiber

Patty Seiber
Brokerage Clerk

ps
Enclosure

PHILOTECHNICS

January 15, 2007

Mr. Pete Babin
Bayer Corp
400 Morgan Lane
West Haven, CT 06516

Subject: Shipment Receipt Acknowledgement

Dear Mr. Babin,

In accordance with the requirements of 10 CFR 20, Appendix G, Section III, C.1., the attached signed manifest copy is provided as your notice of receipt and acceptance of the radioactive waste materials specified on the manifest. Manifest No. 0113-121406Pe was received at Pacific EcoSolutions (Pecos) on December 6, 2006 and assigned Receipt Number LLR06-141.

This letter is acknowledgement of receipt only. Any manifest discrepancies found during unloading or processing will be reported at a later date.

Please contact me if you have any questions or require additional information. I can be reached at 888-RADWASTe or 865-285-3015 (direct), or via email at tmrichards@philotechnics.com.

Sincerely,

Philotechnics, Ltd.

Tina Richards

Tina Richards

NRC FORM 540 (3-95) U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)	800-424-9300
ORGANIZATION	CHEMTREC
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?	[ ] YES [X] NO
3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========>	66
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes", provide Manifest Number ====>	[ ] YES [X] NO
EPA MANIFEST NUMBER	N/A

5. SHIPPER - NAME AND FACILITY	Philotechnics, Ltd @ Bayer Corp. 400 Morgan Lane West Haven, CT 06516
USER PERMIT NUMBER	
SHIPMENT NUMBER	0113-121406PE
CONTACT	Pete Babin
6. CARRIER - Name and Address	R & R Trucking 302 Thunder Road Duenweg, MO 64841
Truck #:	
Trailer #:	
CONTACT	Mitch Lunsford
SIGNATURE - Authorized carrier acknowledging waste receipt	Jason Nagera

SHIPMENT ID NUMBER	0113-121406PE
X COLLECTOR	
PROCESSOR	
GENERATOR TYPE (Specify)	
TELEPHONE NUMBER (Include Area Code)	(203) 812-5633
EPA I.D. NUMBER	MOR000501973
SHIPPING DATE	12/14/2006
TELEPHONE NUMBER (Include Area Code)	866-252-2784
DATE	12-14-06

7. FORM 540 AND 540A	PAGE 1 OF 5 PAGE(S)
FORM 541 AND 541A	18 PAGE(S)
FORM 542 AND 542A	1 PAGE(S)
ADDITIONAL INFORMATION	NONE PAGE(S)
8. MANIFEST NUMBER (Use this number on continuation pages)	0113-121406PE
9. CONSIGNEE - Name and Facility Address	Pacific EcoSolutions Operated By Pacific EcoSolutions 2025 Battelle Blvd Richland, WA 99352
CONTACT	Larry Morin
TELEPHONE NUMBER (Include Area Code)	(509) 375-5160 x7046
SIGNATURE - Authorized consignee acknowledging waste receipt	
DATE	1-2-07

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE	TITLE	DATE
Jason Nagera	Broker	12-14-06

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	0.074000	(0.002000)	NA	7.80 ft^3	06-001141 (206065)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	0.111000	(0.003000)	NA	7.80 ft^3	06-001142 (206066)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	16.946000	(0.458000)	NA	7.80 ft^3	06-001143 (206067)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	1.961000	(0.053000)	NA	7.80 ft^3	06-001144 (206068)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	2.294000	(0.062000)	NA	7.80 ft^3	06-001145 (206070)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	0.518000	(0.014000)	NA	7.80 ft^3	06-001146 (206071)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	122.914000	(3.322000)	NA	7.80 ft^3	06-001147 (206073)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	19.018000	(0.514000)	NA	7.80 ft^3	06-001148 (206087)

FOR CONSIGNEE USE ONLY

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.

B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.

C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.

D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

Print Name	Signature	Date
PETER P. BABIN		12-14-06

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER (Use this number on all continuation pages)
0113-121406PE

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	P-33	0.037000	(0.001000)	NA	7.80 ft^3	06-001149 (206091)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001150 (206048)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001151 (206049)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.259000	(0.007000)	NA	7.80 ft^3	06-001152 (206050)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001153 (206051)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001154 (206054)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.111000	(0.003000)	NA	7.80 ft^3	06-001155 (206055)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001156 (206056)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.370000	(0.010000)	NA	7.80 ft^3	06-001157 (206057)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	16.502000	(0.446000)	NA	7.80 ft^3	06-001158 (206058)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001159 (206060)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.740000	(0.020000)	NA	7.80 ft^3	06-001160 (206061)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001161 (206063)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001162 (206064)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.80 ft^3	06-001163 (206062)

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
0113-121406PE

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	I-125	1.998000	(0.054000)	NA	7.80 ft^3	06-001164 (206077)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	S-35	2.294000	(0.062000)	NA	7.80 ft^3	06-001165 (206078)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	S-35	0.037000	(0.001000)	NA	7.80 ft^3	06-001166 (206080)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	S-35	0.037000	(0.001000)	NA	7.80 ft^3	06-001167 (206085)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	S-35	0.296000	(0.008000)	NA	7.80 ft^3	06-001168 (206072)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	S-35	0.333000	(0.009000)	NA	7.80 ft^3	06-001169 (206086)
Radioactive material, excepted package-limited quantity of material, 7, UN2910 DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	2220.555000	(60.015000)	NA	7.80 ft^3	06-001170 (206032)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	11.840000	(0.320000)	NA	7.80 ft^3	06-001171 (206033)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	32.708000	(0.884000)	NA	7.80 ft^3	06-001172 (206034)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	118.252000	(3.196000)	NA	7.80 ft^3	06-001173 (206038)
Radioactive material, excepted package-limited quantity of material, 7, UN2910 DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	3053.647000	(82.531000)	NA	7.80 ft^3	06-001174 (206043)
Radioactive material, excepted package-limited quantity of material, 7, UN2910 DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	12378.350000	(334.550000)	NA	7.80 ft^3	06-001175 (206044)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	3.700000	(0.100000)	NA	7.80 ft^3	06-001176 (206045)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	642.727000	(17.371000)	NA	7.80 ft^3	06-001177 (206046)

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
0113-121406PE

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive material, excepted package-limited quantity of material, 7, UN2910 DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; U-238	113.294000	(3.062000)	NA	7.80 ft^3	06-001178 (206094)
Non-Radioactive per DOT DAW/NDV	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3	2.590000	(0.070000)	NA	7.80 ft^3	06-001179 (206113)
Non-Radioactive per DOT DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	C-14 ; H-3 ; P-33	74.962000	(2.026000)	NA	7.80 ft^3	06-001180 (206111)
Radioactive material, excepted package-limited quantity of material, 7, UN2910 DAW/THERMAL	NA	NA	SOLID/METAL OXIDES	I-125 ; P-33	332.075000	(8.975000)	NA	7.80 ft^3	06-001181 (206110)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125 ; P-33	113.886000	(3.078000)	NA	7.50 ft^3	06-001183 (206112)
Non-Radioactive per DOT NON-HAZ LSV	NA	NA	LIQUID/METAL OXIDES	C-14 ; H-3	11.100000	(0.300000)	NA	4.10 ft^3	06-001184 (206095)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	H-3 ; I-125 ; S-35	3.256000	(0.088000)	NA	7.50 ft^3	06-001185 (206015)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	C-14 ; H-3 ; P-33	16.576000	(0.448000)	NA	4.10 ft^3	06-001186 (206017)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	C-14 ; H-3 ; P-33	57.942000	(1.566000)	NA	4.10 ft^3	06-001187 (206025)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	C-14 ; H-3 ; P-33	78.366000	(2.118000)	NA	4.10 ft^3	06-001188 (206039)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	C-14 ; H-3 ; I-125	1.369000	(0.037000)	NA	7.50 ft^3	06-001189 (206041)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	P-33	0.037000	(0.001000)	NA	7.50 ft^3	06-001190 (206009)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	P-33	0.148000	(0.004000)	NA	7.50 ft^3	06-001191 (206014)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	P-33	0.222000	(0.006000)	NA	7.50 ft^3	06-001192 (206019)

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOAC
WASTE MANIFEST
SHIPPING PAPER (CONTINUATION)

8. MANIFEST N' ER
(Use this nu n all continuation pages)
0113-121406PE

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	P-33	1.665000	(0.045000)	NA	7.50 ft^3	06-001193 (206022)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	P-33	1.961000	(0.053000)	NA	7.50 ft^3	06-001194 (206027)
Non-Radioactive per DOT HAZ-LSP	NA	NA	SOLID/METAL OXIDES	P-33	14.430000	(0.390000)	NA	7.50 ft^3	06-001195 (206030)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	P-33	22.940000	(0.620000)	NA	7.50 ft^3	06-001196 (206035)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	P-33	43.512000	(1.176000)	NA	7.50 ft^3	06-001197 (206037)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	P-33	59.940000	(1.620000)	NA	7.50 ft^3	06-001198 (206040)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	2.405000	(0.065000)	NA	7.50 ft^3	06-001199 (206042)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.50 ft^3	06-001200 (206101)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.50 ft^3	06-001201 (206102)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.50 ft^3	06-001202 (206103)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.50 ft^3	06-001203 (206104)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.50 ft^3	06-001204 (206105)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	7.50 ft^3	06-001205 (206106)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	0.037000	(0.001000)	NA	4.10 ft^3	06-001206 (206107)
Non-Radioactive per DOT NON-HAZ LSP	NA	NA	LIQUID/METAL OXIDES	I-125	0.666000	(0.018000)	NA	4.10 ft^3	06-001207 (206108)

NRC FORM 541
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

FORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME	NET W. WEIGHT
66	m³ 13.78790 / ft³ 486.90000	kg 1748.13586 / lb 3854.00000

SPECIAL NUCLEAR MATERIAL (grams)

U-233	U-235	Pu	TOTAL
NP	NP	NP	NP

ACTIVITY (MBq/mCi) (LLD UNITS IN uCi/cc)

	ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129	SOURCE
MBq	19602.563000	16231.419000	2542.566000	NP	NP	kg 0.6970588235
mCi	529.799000	438.687000	68.718000	NP	NP	lb 1.5367595823

2. MANIFEST NU: 011[illegible]1406PE

3. PAGE 1 OF 18 PAGE(S)

4. SHIPPER NAME
Bayer Corp.

SHIPMENT ID NUMBER
0113-121406PE

DISPOSAL CONTAINER DESCRIPTION / WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER

5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. PHYSICAL DESCRIPTION APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT: RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001141 (206065)	19 Other-Fiber Drum	0.22088	22.22591	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	P-33	0.074000	0.002000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	49.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.074000	0.002000	
Package Total													0.074000	0.002000	
06-001142 (206066)	19 Other-Fiber Drum	0.22088	25.40104	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	P-33	0.111000	0.003000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	56.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.111000	0.003000	
Package Total													0.111000	0.003000	
06-001143 (206067)	19 Other-Fiber Drum	0.22088	26.30822	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	P-33	16.946000	0.458000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	58.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	16.946000	0.458000	
Package Total													16.946000	0.458000	

NOTE 1: Container Description Codes. For containers/waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP."

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpacked Waste
12. Unpackaged Components
13. High Integrity Container
19. Other. Describe in Item 6, or additional page

NOTE 2: Waste Descriptor Codes. (Choose up to three which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source/Device
37. Paint or Plating
38. Evaporator Bottoms/Sludges/ Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal carcass)
43. Activated Material
59. Other. Describe in Item 11.

NOTE 3: Sorption, Solidification and Stabilization Media Codes. (Choose up to three which predominate by volume). For media meeting disposal site structral stability requirements, the numerical code must be followed by "-S". For all solidification media, the vendor and brand name must also be identified in Item 13. Code 100=None Required

Sorption

60. Speedi Dri
61. Celeton
62. Floor Dry/ Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Florco
67. Florco X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicaperl HP 200
73. Dicaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
89. Other. Describe in Item 13 or additional page.

Solidification

90. Cement (encapsulation)
91. Concrete
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in Item 13, or additional page
100. None Required

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM L/ EVEL RADIOACTIVE W. MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFE MBER
J-121406PE

3.

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER # - Innerpack Container	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001144 (206068)	19 Other-Fiber Drum	0.22088	21.31873	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	P-33	1.961000	0.053000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	47.00000	< 0.5	< 220	< 2200		7.80000							
												Sub Total	1.961000	0.053000	
Package Total													1.961000	0.053000	
06-001145 (206070)	19 Other-Fiber Drum	0.22088	25.40104	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	P-33	2.294000	0.062000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	56.00000	< 0.5	< 220	< 2200		7.80000							
												Sub Total	2.294000	0.062000	
Package Total													2.294000	0.062000	
06-001146 (206071)	19 Other-Fiber Drum	0.22088	35.38002	< 0.005	< 0.000 3674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	P-33	0.518000	0.014000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	78.00000	< 0.5	< 220	< 2200		7.80000							
												Sub Total	0.518000	0.014000	
Package Total													0.518000	0.014000	
06-001147 (206073)	19 Other-Fiber Drum	0.22088	40.36951	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	P-33	122.914000	3.322000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	89.00000	< 0.5	< 220	< 2200		7.80000							
												Sub Total	122.914000	3.322000	
Package Total													122.914000	3.322000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOAC WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NU 01 21406PE

3. PAGE 3 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER # - Innerpack Container	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001148 (206087)	19 Other-Fiber Drum	0.22088 7.80000	25.85463 57.00000	< 0.005 < 0.5	< 0.000003674 < 220	< 0.00003674 < 2200	40	0.22088 7.80000	100	SOLID METAL OXIDES / NP	NP	P-33	19.018000	0.514000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	19.018000	0.514000	
Package Total													19.018000	0.514000	
06-001149 (206091)	19 Other-Fiber Drum	0.22088 7.80000	34.01925 75.00000	< 0.005 < 0.5	< 0.000003674 < 220	< 0.00003674 < 2200	40	0.22088 7.80000	100	SOLID METAL OXIDES / NP	NP	P-33	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001150 (206048)	19 Other-Fiber Drum	0.22088 7.80000	25.40104 56.00000	< 0.005 < 0.5	< 0.000003674 < 220	< 0.00003674 < 2200	40	0.22088 7.80000	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001151 (206049)	19 Other-Fiber Drum	0.22088 7.80000	35.38002 78.00000	< 0.005 < 0.5	< 0.000003674 < 220	< 0.00003674 < 2200	40	0.22088 7.80000	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER: 011 06PE

3.

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001152 (206050)	19 Other-Fiber Drum	0.22088	47.62695	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.259000	0.007000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	105.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.259000	0.007000	
Package Total													0.259000	0.007000	
06-001153 (206051)	19 Other-Fiber Drum	0.22088	24.94745	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	55.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001154 (206054)	19 Other-Fiber Drum	0.22088	22.67950	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	50.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001155 (206055)	19 Other-Fiber Drum	0.22088	32.65848	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.111000	0.003000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	72.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.111000	0.003000	
Package Total													0.111000	0.003000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER 01' 6PE

3. PAGE 5 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001156 (206056)	19 Other-Fiber Drum	0.22088	34.92643	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	77.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001157 (206057)	19 Other-Fiber Drum	0.22088	32.20489	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.370000	0.010000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	71.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.370000	0.010000	
Package Total													0.370000	0.010000	
06-001158 (206058)	19 Other-Fiber Drum	0.22088	30.84412	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	16.502000	0.446000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	68.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	16.502000	0.446000	
Package Total													16.502000	0.446000	
06-001159 (206060)	19 Other-Fiber Drum	0.22088	34.47284	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	76.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOA E WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER 1406PE

3. PAGE 6 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER								
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
# - Innerpack Container															
06-001160 (206061)	19 Other-Fiber Drum	0.22088	28.12258	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.740000	0.020000	AU
		7.80000	62.00000	< 0.5	< 220	< 2200		7.80000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.740000	0.020000	
Package Total													0.740000	0.020000	
06-001161 (206063)	19 Other-Fiber Drum	0.22088	36.28720	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
		7.80000	80.00000	< 0.5	< 220	< 2200		7.80000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001162 (206064)	19 Other-Fiber Drum	0.22088	34.47284	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
		7.80000	76.00000	< 0.5	< 220	< 2200		7.80000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001163 (206062)	19 Other-Fiber Drum	0.22088	30.84412	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
		7.80000	68.00000	< 0.5	< 220	< 2200		7.80000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	

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NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOA(:
WASTE MANIFEST

2. MANIFEST NUMBER
0 406PE

3.

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER # - Innerpack Container	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001164 (206077)	19 Other-Fiber Drum	0.22088	26.30822	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	1.998000	0.054000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	58.00000	< 0.5	< 220	< 2200		7.80000							
Package Total												Sub Total	1.998000	0.054000	
													1.998000	0.054000	
06-001165 (206078)	19 Other-Fiber Drum	0.22088	30.39053	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	S-35	2.294000	0.062000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	67.00000	< 0.5	< 220	< 2200		7.80000							
Package Total												Sub Total	2.294000	0.062000	
													2.294000	0.062000	
06-00116[illegible] (206080)	19 Other-Fiber Drum	0.22088	33.5[illegible]566	< 0.005	0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	S-35	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	74.00000	< 0.5	< 220	< 2200		7.80000							
Package Total												Sub Total	0.037000	0.001000	
													0.037000	0.001000	
06-001167 (206085)	19 Other-Fiber Drum	0.22088	27.66899	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	S-35	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	61.00000	< 0.5	< 220	< 2200		7.80000							
Package Total												Sub Total	0.037000	0.001000	
													0.037000	0.001000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

...y, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER: 0113-121409PE

3. PAGE 8 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001168 (206072)	19 Other-Fiber Drum	0.22088	23.58668	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	S-35	0.296000	0.008000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	52.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.296000	0.008000	
Package Total															
06-001169 (206086)	19 Other-Fiber Drum	0.22088	27.66899	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	S-35	0.296000	0.008000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	61.00000	< 0.5	< 220	< 2200		7.80000				Sub Total	0.333000	0.009000	
Package Total															
06-001170 (206032)	19 Other-Fiber Drum	0.22088	31.29771	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	0.333000	0.009000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	69.00000	< 0.5	< 220	< 2200		7.80000				H-3	370.185000 1850.370000	10.005000 50.010000	
Package Total												Sub Total	2220.555000	60.015000	
06-001171 (206033)	19 Other-Fiber Drum	0.22088	22.67950	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	2220.555000	60.015000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	50.00000	< 0.5	< 220	< 2200		7.80000				H-3	9.620000 2.220000	0.280000 0.060000	
Package Total												Sub Total	11.840000	0.320000	
													11.840000	0.320000	

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U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER 0113-121406PE

3. PAGE 9 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION		
INER CATION IER/ PORT UMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT — RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
iner	19 Other-Fiber Drum	0.22088	19.05078	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	3.774000	0.102000	AU
		7.80000	42.00000	< 0.5	< 220	< 2200		7.80000				H-3	28.934000	0.782000	
ne T 06516												Sub Total	32.708000	0.884000	
													32.708000	0.884000	
	19 Other-Fiber Drum	0.22088	24.04027	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	18.759000	0.507000	AU
		7.80000	53.00000	< 0.5	< 220	< 2200		7.80000				H-3	99.493000	2.689000	
ne T 06516												Sub Total	118.252000	3.196000	
													118.252000	3.196000	
	19 Other-Fiber Drum	0.22088	24.49[illegible]6	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	629.111000	17.000000	AU
		7.80000	54.00000	< 0.5	< 220	< 2200		7.80000				H-3	2424.536000	65.528000	
ne T 06516												Sub Total	3053.647000	82.531000	
													3053.647000	82.531000	
	19 Other-Fiber Drum	0.22088	35.83361	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	1296.850000	35.050000	AU
		7.80000	79.00000	< 0.5	< 220	< 2200		7.80000				H-3	11081.500000	299.500000	
ne T 06516												Sub Total	12378.350000	334.550000	
													12378.350000	334.550000	

IA (3-95) * - Indicates Cross Contamination

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(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOA E WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER 1406PE

3. PAGE 10 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001176 (206045)	19 Other-Fiber Drum	0.22088	29.02976	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	1.850000	0.050000	AU
		7.80000	64.00000	< 0.5	< 220	< 2200		7.80000				H-3	1.850000	0.050000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	3.700000	0.100000	
Package Total													3.700000	0.100000	
06-001177 (206046)	19 Other-Fiber Drum	0.22088	28.12258	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	155.955000	4.215000	AU
		7.80000	62.00000	< 0.5	< 220	< 2200		7.80000				H-3	486.772000	13.156000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	642.727000	17.371000	
Package Total													642.727000	17.371000	
06-001178 (206094)	19 Other-Fiber Drum	0.22088	33.56566	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	15.725000	0.425000	AU
		7.80000	74.00000	< 0.5	< 220	< 2200		7.80000				H-3	88.800000	2.400000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												U-238	8.769000 [0.6970588235 kg]	0.237000	
												Sub Total	113.294000 [0.6970588235 kg]	3.062000	
Package Total													113.294000 [0.6970588235 kg]	3.062000	

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NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIO/ 'E WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER 21406PE

3. PAGE 11 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001179 (206113)	19 Other-Fiber Drum	0.22088	28.57617	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	1.295000	0.035000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	63.00000	< 0.5	< 220	< 2200		7.80000				H-3	1.295000	0.035000	
												Sub Total	2.590000	0.070000	
Package Total													2.590000	0.070000	
06-001180 (206111)	19 Other-Fiber Drum	0.22088	25.40104	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	C-14	0.222000	0.006000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	56.00000	< 0.5	< 220	< 2200		7.80000				H-3	74.185000	2.005000	
												P-33	0.555000	0.015000	
												Sub Total	74.962000	2.026000	
Package Total													74.962000	2.026000	
06-001181 (206110)	19 Other-Fiber Drum	0.22088	29.02976	< 0.005	< 0.000003674	< 0.00003674	40	0.22088	100	SOLID METAL OXIDES / NP	NP	I-125	17.575000	0.475000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.80000	64.00000	< 0.5	< 220	< 2200		7.80000				P-33	314.500000	8.500000	
												Sub Total	332.075000	8.975000	
Package Total													332.075000	8.975000	
06-001183 (206112)	4	0.21238	76.20312	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	I-125	1.406000	0.038000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	168.00000	< 0.5	< 220	< 2200		7.50000				P-33	112.480000	3.040000	
												Sub Total	113.886000	3.078000	
Package Total													113.886000	3.078000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIO, 'E WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER
01406PE

3. PAGE 12 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001184 (206095)	4	0.11610	62.14183	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSV)	0.11610	100	LIQUID METAL OXIDES / NP	NP	C-14	0.370000	0.010000	AU
		4.10000	137.00000	< 0.5	< 220	< 2200		4.10000				H-3	10.730000	0.290000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	11.100000	0.300000	
Package Total													11.100000	0.300000	
06-001185 (206015)	4	0.21238	59.87388	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	H-3	2.331000	0.063000	AU
		7.50000	132.00000	< 0.5	< 220	< 2200		7.50000				I-125	0.629000	0.017000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												S-35	0.296000	0.008000	
												Sub Total	3.256000	0.088000	
Package Total													3.256000	0.088000	
06-001186 (206017)	19 Other	0.11610	39.00874	0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.11610	100	LIQUID METAL OXIDES / NP	NP	C-14	3.700000	0.100000	AU
		4.10000	86.00000	< 0.5	< 220	< 2200		4.10000				H-3	12.839000	0.347000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	0.037000	0.001000	
												Sub Total	16.576000	0.448000	
Package Total													16.576000	0.448000	
06-001187 (206025)	4	0.11610	42.18387	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.11610	100	LIQUID METAL OXIDES / NP	NP	C-14	30.710000	0.830000	AU
		4.10000	93.00000	< 0.5	< 220	< 2200		4.10000				H-3	27.010000	0.730000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	0.222000	0.006000	
												Sub Total	57.942000	1.566000	
Package Total													57.942000	1.566000	

NRC Form 541A (3-95) * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM W-LEVEL RADIOACTIVE
TE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER
0113-121406PE

3.
PAGE 13 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m^3 ft^3	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m^3 ft^3	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
# - Innerpack Container														
06-001188 (206039)	4	0.11610	41.73028	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.11610	100	LIQUID METAL OXIDES / NP	NP	C-14	4.070000	0.110000	AU
		4.10000	92.00000	< 0.5	< 220	< 2200		4.10000				H-3	37.740000	1.020000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												P-33	36.556000	0.988000	
Package Total												Sub Total	78.366000	2.118000	
													78.366000	2.118000	
06-001189 (206041)	4	0.21238	65.77055	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	C-14	0.370000	0.010000	AU
		7.50000	145.00000	< 0.5	< 220	< 2200		7.50000				H-3	0.814000	0.022000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												I-125	0.185000	0.005000	
Package Total												Sub Total	1.369000	0.037000	
													1.369000	0.037000	
06-001190 (206009)	4	0.21238	61.23465	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	P-33	0.037000	0.001000	AU
		7.50000	135.00000	< 0.5	< 220	< 2200		7.50000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001191 (206014)	4	0.21238	63.50260	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	P-33	0.148000	0.004000	AU
		7.50000	140.00000	< 0.5	< 220	< 2200		7.50000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.148000	0.004000	
Package Total													0.148000	0.004000	

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NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFC OW-LEVEL RADIOACTIVE ASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER 0113-121406PE

3. .GE 14 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
# - Innerpack Container															
06-001192 (206019)	4	0.21238	86.67773	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	P-33	0.222000	0.006000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	147.00000	< 0.5	< 220	< 2200		7.50000							
Package Total												Sub Total	0.222000	0.006000	
													0.222000	0.006000	
06-001193 (206022)	4	0.21238	76.20312	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	P-33	1.665000	0.045000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	168.00000	< 0.5	< 220	< 2200		7.50000							
Package Total												Sub Total	1.665000	0.045000	
													1.665000	0.045000	
06-001194 (206027)	4	0.21238	74.38876	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	P-33	1.961000	0.053000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	164.00000	< 0.5	< 220	< 2200		7.50000							
Package Total												Sub Total	1.961000	0.053000	
													1.961000	0.053000	
06-001195 (206030)	4	0.21238	83.00698	< 0.005	< 0.000003674	< 0.00003674	40	0.21238	100	SOLID METAL OXIDES / NP	NP	P-33	14.430000	0.390000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	183.00000	< 0.5	< 220	< 2200		7.50000							
Package Total												Sub Total	14.430000	0.390000	
													14.430000	0.390000	

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NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMBER: 0113-12-06PE

3.

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION		16. WASTE CLASSIFICATION
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ / ft³	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTION (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ / ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	RADIONUCLIDES	MBq / mCi	AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
* - Innerpack Container														
06-001196 (206035)	4	0.21238	82.09980	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	P-33	22.940000 / 0.620000	AU
		7.50000	181.00000	< 0.5	< 220	< 2200		7.50000						
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	22.940000 / 0.620000	
Package Total													22.940000 / 0.620000	
06-001197 (206037)	4	0.21238	82.55339	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	P-33	43.512000 / 1.176000	AU
		7.50000	182.00000	< 0.5	< 220	< 2200		7.50000						
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	43.512000 / 1.176000	
Package Total													43.512000 / 1.176000	
06-001198 (206040)	4	0.21238	78.924[illegible]	< 0.005	< [illegible]000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	P-33	59.940000 / 1.620000	AU
		7.50000	174.00000	< 0.5	< 220	< 2200		7.50000						
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	59.940000 / 1.620000	
Package Total													59.940000 / 1.620000	
06-001199 (206042)	4	0.21238	57.15234	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	I-125	2.405000 / 0.065000	AU
		7.50000	126.00000	< 0.5	< 220	< 2200		7.50000						
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	2.405000 / 0.065000	
Package Total													2.405000 / 0.065000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTI
WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUM
0112 PE

3.
PAGE 16 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER * - Innerpack Container	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. PHYSICAL DESCRIPTION APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-001200 (206101)	4	0.21238	57.60593	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	127.00000	< 0.5	< 220	< 2200		7.50000				Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001201 (206102)	4	0.21238	68.94568	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	152.00000	< 0.5	< 220	< 2200		7.50000				Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001202 (206103)	4	0.21238	48.98772	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	108.00000	< 0.5	< 220	< 2200		7.50000				Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001203 (206104)	4	0.21238	59.42029	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516		7.50000	131.00000	< 0.5	< 220	< 2200		7.50000				Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	

NRC Form 541A (3-95) * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTI' WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMI 0113-. .PE

3. PAGE 17 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFI-CATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
#- Innerpack Container														
06-001204 (206105)	4	0.21238	56.69875	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
		7.50000	125.00000	< 0.5	< 220	< 2200		7.50000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001205 (206106)	4	0.21238	67.13132	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.21238	100	LIQUID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
		7.50000	148.00000	< 0.5	< 220	< 2200		7.50000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001206 (206107)	4	0.11610	29.48335	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.11610	100	LIQUID METAL OXIDES / NP	NP	I-125	0.037000	0.001000	AU
		4.10000	65.00000	< 0.5	< 220	< 2200		4.10000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.037000	0.001000	
Package Total													0.037000	0.001000	
06-001207 (206108)	4	0.11610	24.49386	< 0.005	< 0.000003674	< 0.00003674	59(NON-HAZ LSP)	0.11610	100	LIQUID METAL OXIDES / NP	NP	I-125	0.666000	0.018000	AU
		4.10000	54.00000	< 0.5	< 220	< 2200		4.10000							
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	0.666000	0.018000	
Package Total													0.666000	0.018000	

 * - Indicates Cross Contamination

NRC FORM 541A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTI\
WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION (CONTINUATION)

2. MANIFEST NUMB
0113-1 PE

3.
PAGE 18 OF 18 PAGE(S)

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER							
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m³ ft³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m³ ft³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
# - Innerpack Container														
Shipment Total		13.78790 486.90000	2732.87979 6025.00000										19602.563000 [0.6970588235 kg]	529.799000	

NRC Form 541A (3-95) * - Indicates Cross Contamination

EXPIRES: 06/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 542 U.S. NUCLEAR REGULATORY COMMISSION

ORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

MANIFEST INDEX AND REGIONAL COMPACT TABULATION

List all original "PROCESSED WASTE" generators (if any) before "COLLECTED WASTE" generators

1. WASTE COL OR/PROCESSOR

NAME: Bayer Corp.

IDENTIFICATION NUMBER

SHIPPER USE ONLY

SHIPPING DATE: 12/14/2006

2. MANIFEST NUMBER: 0113-121406PE

3. PAGE 1 OF 1 PAGE(S)

4. S.C. TRANSPORT PERMIT NUMBER	5. GENERATOR NAME AND TELEPHONE NUMBER	6. GENERATOR FACILITY ADDRESS	6A. WASTE DESCRIPTION (NOMENCLATURE)	7. PREPROCESSED WASTE (OR MATERIAL) VOLUME m³	ft³	8. MANIFEST NUMBER(S) UNDER WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT	9. WASTE CODE P=PROCESSED C=COLLECTED	10. ORIGINATING COMPACT REGION OR STATE	11. AS PROCESSED/COLLECTED TOTAL A. SOURCE MATERIAL (kg)	(lb)	B. SNM (g)	C. ACTIVITY MBq	mCi	D. VOLUME m³	ft³	E. WEIGHT (lb)	F. MAXIMUM PACKAGE RADIATION LEVEL (mrem/hr)
	Bayer Corp. (203) 812-5633	400 Morgan Lane West Haven, CT 06516	HAZ-LSP Non-Compactible Trash Non-Haz LSP/BPU Non-Haz LSV/BPU			Onsite Generation 12/11/2006	C	CT	0.69705882	1.53675958	<0.0000000001	19602.563	529.799	13.78790	486.90000	3854.00000	<0.5
TOTALS OF ALL PAGES (FORMS 542 AND 542A)									0.69705882	1.53675958	<0.0000000001	19602.563000	529.799000	13.78790	486.90000	3854.00000	N/A

'07

PHILOTECHNICS	'0602083R2						
Dec	Bayer	12/19/2006	0113-121406IM	26 Pkgs	Non-DOT Regulated	Gross #	Est. Net #
						2412	2412
	Disposed	1/4/2007	WM Chestnut Ridge		WMNA 10464661	972	972
	Disposed	1/4/2007	WM Chestnut Ridge		WMNA 10464562	1440	1440

CERTIFICATE OF DISPOSAL

(FULLY DECANTED WASTE)

MANIFEST 0113-121406IM

D:\My Documents\ETTP Facility\Inv Monthly Report Waste Tax 0204.xls 1/5/2007

CC

Contains Hazardous Materials

STRAIGHT BILL OF LADING

Original – Not Negotiable

Carrier: R&R Trucking

Shipper's No.: 0113-121406IM

Carrier's No.:

Date: 12/14/06

TO:		**FROM:**	
Consignee:	Impact Services	Shipper:	Philotechnics, Ltd for Bayer Corp
Street:	West Perimeter Road-Bldg. # 1310MP	Street:	400 Morgan Lane
Destination:	Oak Ridge, TN 37830	Origin:	West Haven, CT 06516

Route: Major Interstates & Hiways

Vehicle Number: 1653

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS – PROPER SHIPPING NAME)	Hazard Class	I.D. Number	Weight (Subject to Correction)	Rate	Labels Required (or exemption)
16		Fiber Drums Paper, Plastic, Glass			490 Kgs. 1,078 (LBS)		NA
		(FULLY DECAYED MATERIAL)-(BSFR)					
		Nuclides: P-33, I-125, S-35 (NA)					
		Total Activity: 0 MBq 0 (mCi)					
		Description/Package ID: (See Attached Inventory)					
10		Metal Drums containing Scintillation Plates-(BSFR)			621 Kgs. 1,367 (LBS)		NA
		(FULLY DECAYED MATERIAL)					
		Nuclides: P-33, I-125 (NA)					
		Total Activity: 0 MBq 0 (mCi)					
		Description/Package ID: **Drum ID # (See Attached Inventory)**					

This is to certify that the above-named materials are properly classified, described, packaged and labeled and are in proper condition for transportation according to applicable regulations of the Department of Transportation.

Per. Jason Roberts

Placards Requires	None Required	Placards Supplied	[ ] YES	[X] No Furnished by Carrier
			Driver Signature:	

Shipper:	Philotechnics, Ltd. for Bayer Corp.		Carrier:	R&R Trucking
Per:	Peter Babin		Per:	Jason Roberts
Date:	12/14/06		Date:	12/14/06
Emergency Response Telephone #: (800) 424-9300 (CHEMTREC)			Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.	

Contains Hazardous Materials

Appendix B

Page 1 of 1
Incoming Shipment Material Weight Determination

For conveyances with one container: Scale Location_____
Scale Serial #_____

Tractor #	Trailer #	Original Container #	IMPACT Container #	Incoming Truck Wt. (lbs)	Outgoing Truck Wt. (lbs)	Container Tare Wt. (lbs)	Material Wt. (lbs)
6140	N	—	A	N/A	N/A	N/A	2412

Health Physics Technician — Date: 12-19-06

For shipments of more than one container: Scale Location_____
Scale Serial #_____

Original Container #	IMPACT Container #	Loaded container Wt. (lbs)	Container Tare Wt. (lbs)	Material Wt. (lbs)
N				
				A

Yard Crew Representative — Date

For smaller packages: Scale Location 1310MP
Scale Serial # 017903

Original Package #	IMPACT Package #	Wt. (lbs)	Original Package #	IMPACT Package #	Wt. (lbs)	Original Package #	IMPACT Package #	Wt. (lbs)
206053	100-1252	67	206047	100-1250	47	206088	100-1263	69
206092	100-1265	37	206096	100-1271	183	206083	100-1261	67
206090	100-1264	69	206095	100-1270	187	206079	100-1258	54
206052	100-1251	76	206099	100-1274	82	206075	100-1256	70
206081	100-1259	53	206097	100-1272	153	206076	100-1257	60
206084	100-1262	70	206012	100-1269	123	206100	100-1275	83
206074	100-1255	70	206098	100-1273	151			
206082	100-1260	69	206007	100-1268	126			
206069	100-1254	73	206002	100-1266	148			
206059	100-1253	74	206-005	100-1267	131			

Yard Crew Representative — Date: 12-19-06

NSSI/SOURCES & SERVICES, INC.
P.O. BOX 34042 HOUSTON, TEXAS 77234
PH: (713) 641-0391 www.nssihouston.com FAX: (713) 641-6153

January 08, 2007

Attn: Pete Babin
Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

Dear Mr. Babin:

I am returning the original copy of the uniform hazardous waste manifest used for shipping wastes to our facility for treatment.

In compliance with 40 CFR 264.12(b), NSSI is permitted to receive your waste, has received your waste and will continue to receive future shipment of this waste.

Please retain the manifest in your files for possible review by Regulatory Agencies to show proper disposal.

Your use of NSSI/Recovery Services, Inc. for treatment is appreciated.

Sincerely,

Robert D. Gallagher

Robert D. Gallagher
President

RDG/vla
Ref. #omanfest.frm

CC: Attn: Annette Hansen
Philotechnics
201 Renovare Blvd.
Oak Ridge, TN 37830

NRC FORM 540 (3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 2

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [X] YES [ ] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
000906186JJK

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-120506NSSI

CONTACT
Pete Babin

6. CARRIER - Name and Address
R & R Trucking
302 Thunder Road
Duenweg, MO 64841

Truck #:

Trailer #:

CONTACT
Mitch Lunsford

SIGNATURE - Authorized carrier acknowledging waste receipt

SHIPMENT ID NUMBER
0113-120506NSSI

X **COLLECTOR**
PROCESSOR
GENERATOR TYPE (Specify)

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

EPA I.D. NUMBER
MOR000501973

SHIPPING DATE
12/05/2006

TELEPHONE NUMBER (Include Area Code)
866-252-2784

DATE
12-5-06

7. FORM 540 AND 540A PAGE 1 OF 1 PAGE(S)
FORM 541 AND 541A NONE PAGE(S)
FORM 542 AND 542A NONE PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
0113-120506NSSI

9. CONSIGNEE - Name and Facility Address
NSSI Recovery Services
Operated By NSSI Recovery Services
5709 Etheridge Street
Houston, TX 77087

CONTACT
Bob Gallagher

TELEPHONE NUMBER (Include Area Code)
(713) 641-0391

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
12/20/06

10. CERTIFICATION
This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE **TITLE** Broker **DATE** 12-5-06

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S., (CONTAINS ACETONITRILE,TCA), 3, UN2924; PGII HAZ-LABPACK	NA	NA	LIQUID/METAL OXIDES	C-14 ; H-3	2.479000	(0.067000)	NA	4.10 ft^3	06-000968 (206093)
WASTE OXIDIZING SOLID, N.O.S., (CONTAINS THORIUM NITRATE), 5.1, UN1479; PGII; "Limited Quantity Radioactive Material" THORIUM NITRATE	NA	NA	SOLID/METAL OXIDES	TH-232	5.328000	(0.144000)	NA	0.68 ft^3	06-000969 (206109)

FOR CONSIGNEE USE ONLY

This is to inform the generator of the waste shipped on this manifest, that NSSI has the appropriate permits for, and will accept, the waste the generator is shipping.

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER P. BABIN — Print Name
Signature
12-05-06 — Date

EXPIRES: 08/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 540 (3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code)
800-424-9300

ORGANIZATION
CHEMTREC

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT?
[ ] YES
[X] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ==========> 2

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [X] YES [ ] NO
If "Yes", provide Manifest Number ====>

EPA MANIFEST NUMBER
000906186JJK

5. SHIPPER - NAME AND FACILITY
Philotechnics, Ltd @ Bayer Corp.
400 Morgan Lane
West Haven, CT 06516

USER PERMIT NUMBER

SHIPMENT NUMBER
0113-120506NSSI

CONTACT
Pete Babin

6. CARRIER - Name and Address
R & R Trucking
302 Thunder Road
Duenweg, MO 64841

Truck #:

Trailer #:

CONTACT
Mitch Lunsford

SIGNATURE - Authorized carrier acknowledging waste receipt

SHIPMENT ID NUMBER
0113-120506NSSI

X **COLLECTOR**
PROCESSOR
GENERATOR TYPE (Specify)

TELEPHONE NUMBER (Include Area Code)
(203) 812-5633

EPA I.D. NUMBER
MOR000501973

SHIPPING DATE
12/05/2006

TELEPHONE NUMBER (Include Area Code)
866-252-2784

DATE
12-5-06

7. FORM 540 AND 540A PAGE 1 OF 1 PAGE(S)
FORM 541 AND 541A NONE PAGE(S)
FORM 542 AND 542A NONE PAGE(S)
ADDITIONAL INFORMATION NONE PAGE(S)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
0113-120506NSSI

9. CONSIGNEE - Name and Facility Address
NSSI Recovery Services
Operated By NSSI Recovery Services
5709 Etheridge Street
Houston, TX 77087

CONTACT
Bob Gallagher

TELEPHONE NUMBER (Include Area Code)
(713) 641-0391

SIGNATURE - Authorized consignee acknowledging waste receipt

DATE
12/20/06

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE

TITLE
B Poker

DATE
12-5-06

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY MBq	mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S., (CONTAINS ACETONITRILE,TCA), 3, UN2924; PGII HAZ-LABPACK	NA	NA	LIQUID/METAL OXIDES	C-14 ; H-3	2.479000	(0.067000)	NA	4.10 ft^3	06-000968 (206093)
WASTE OXIDIZING SOLID, N.O.S., (CONTAINS THORIUM NITRATE), 5.1, UN1479; PGII; "Limited Quantity Radioactive Material" THORIUM NITRATE	NA	NA	SOLID/METAL OXIDES	TH-232	5.328000	(0.144000)	NA	0.68 ft^3	06-000969 (206109)

FOR CONSIGNEE USE ONLY

This is to inform the generator of the waste shipped on this manifest, that NSSI has the appropriate permits for, and will accept, the waste the generator is shipping.

20. Generator Certification Statement

A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria.
B) Hazardous Materials. Generator hereby certifies that this material does not contain a hazardous waste as defined in 40 CFR 261.
C) Data. Generator hereby represents and warrants that all data set forth in this (UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST) are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and site Radioactive Material Licenses.
D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134

PETER P. BABIN — Print Name
Signature
12-05-06 — Date

EXPIRES: 06/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 542 U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

MANIFEST INDEX AND REGIONAL COMPACT TABULATION

List all original "PROCESSED WASTE" generators (if any) before "COLLECTED WASTE" generators

1. WASTE COLLECTOR/PROCESSOR

NAME: Bayer Corp.

IDENTIFICATION NUMBER:

SHIPPER USE ONLY

SHIPPING DATE: 12/05/2006

2. MANIFEST NUMBER: 0113-120506NSSI

3. PAGE 1 OF 1 PAGE(S)

4. S.C. TRANSPORT PERMIT NUMBER	5. GENERATOR NAME AND TELEPHONE NUMBER	6. GENERATOR FACILITY ADDRESS	6A. WASTE DESCRIPTION (NOMENCLATURE)	7. PREPROCESSED WASTE (OR MATERIAL) VOLUME m³	ft³	8. MANIFEST NUMBER(S) UNDER WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT	9. WASTE CODE P=PROCESSED C=COLLECTED	10. ORIGINATING COMPACT REGION OR STATE	11. AS PROCESSED/COLLECTED TOTAL A. SOURCE MATERIAL (kg)	(lb)	B. SNM (g)	C. ACTIVITY MBq	mCi	D. VOLUME m³	ft³	E. WEIGHT (lb)	F. MAXIMUM PACKAGE RADIATION LEVEL (mrem/hr)
	Bayer Corp. (203) 812-5633	400 Morgan Lane West Haven, CT 06516	EPA or State Hazardous			Onsite Generation 12/01/2006	C	CT	1.30909090	2.88606632	<0.0000000001	7.807	.211	0.13536	4.78000	115.00000	<0.5
TOTALS OF ALL PAGES (FORMS 542 AND 542A)									1.30909090	2.88606632	<0.0000000001	7.807000	0.211000	0.13536	4.78000	115.00000	N/A

NRC Form 542 (6-2004)

EXPIRES: 06/30/2007

Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 541
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME	NET WASTE WEIGHT
2	m^3 0.13536 ft^3 4.78000	kg 52.16285 lb 115.00000

SPECIAL NUCLEAR MATERIAL (grams)

U-233	U-235	Pu	TOTAL
NP	NP	NP	NP

ACTIVITY (MBq/mCi) (LLD UNITS IN uCi/cc)

	ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129	SOURCE
MBq	7.807000	0.962000	1.517000	NP	NP	kg 1.3090909091
mCi	0.211000	0.026000	0.041000	NP	NP	lb 2.8860663273

2. MANIFEST NUMBER
0113-120506NSSI

3. PAGE 1 OF 1 PAGE(S)

4. SHIPPER NAME
Bayer Corp.

SHIPMENT ID NUMBER
0113-120506NSSI

DISPOSAL CONTAINER DESCRIPTION / WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER

5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER (# - Innerpack Container)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m^3 / ft^3	8. WASTE AND CONTAINER WEIGHT kg / lb	9. SURFACE RADIATION LEVEL mSv/hr / mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm² / dpm/100 cm² ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m^3 / ft^3	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION: CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION: INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT: RADIONUCLIDES	MBq	mCi	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C
06-000968 (206093)	4	0.11610	63.50260	< 0.005	< 0.000003674	< 0.00003674	28	0.11610	100	LIQUID METAL OXIDES / NP	NP	C-14	1.517000	0.041000	AU
		4.10000	140.00000	< 0.5	< 220	< 2200		4.10000				H-3	0.962000	0.026000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516												Sub Total	2.479000	0.067000	
Package Total													2.479000	0.067000	
06-000969 (206109)	4	0.01926	4.53590	0.005	< 0.000003674	< 0.00003674	28	0.01926	100	SOLID METAL OXIDES / NP	NP	TH-232	5.328000 [1.3090909091 kg]	0.144000	AU
		0.68000	10.00000	0.5	< 220	< 2200		0.68000				Sub Total	5.328000 [1.3090909091 kg]	0.144000	
Origin: CT Bayer Corp. 400 Morgan Lane West Haven, CT 06516															
Package Total													5.328000 [1.3090909091 kg]	0.144000	
Shipment Total		0.13536	68.03850										7.807000 [1.3090909091 kg]	0.211000	
		4.78000	150.00000												

NOTE 1: Container Description Codes. For containers/waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP."

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpacked Waste
12. Unpackaged Components
13. High Integrity Container
19. Other. Describe in Item 6, or additional page

NOTE 2: Waste Descriptor Codes. (Choose up to three which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source/Device
37. Paint or Plating
38. Evaporator Bottoms/Sludges/ Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal carcass)
43. Activated Material
59. Other. Describe in Item 11.

NOTE 3: Sorption, Solidification and Stabilization Media Codes. (Choose up to three which predominate by volume). For media meeting disposal site structral stability requirements, the numerical code must be followed by "-S". For all solidification media, the vendor and brand name must also be identified in Item 13. Code 100=None Required

Sorption

60. Speedi Dri
61. Celeton
62. Floor Dry/ Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Florco
67. Florco X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72 Dicapert HP 200
73. Dicapert HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
89. Other. Describe in Item 13 or additional page.

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13, or additional page
100. None Required

* - Indicates Cross Contamination

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
CTD046418059	1	800-424-9300	000906186 JJK

5. Generator's Name and Mailing Address
Bayer Corp.
400 Morgan Lane
West Haven, CT 06516
Generator's Phone: (203) 812-6633

Generator's Site Address (if different than mailing address)

This is to inform the generator of the waste shipped on this manifest, that NSSI has the appropriate permits for, and will accept, the waste the generator is shipping.

6. Transporter 1 Company Name
K & R Trucking
U.S. EPA ID Number
MOD000501271

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
NSSI Recovery Services
5789 Emerdale Street
Houston, TX 77087
Facility's Phone: (713) 641-0351
U.S. EPA ID Number
TXD982661294

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. WASTE FLAMMABLE LIQUIDS, CORROSIVE, N.O.S., (CONTAINS ACETONITRILE, TCA), 3, UN2924, PGII	1	DM	64	K	D001	D002	F003
X	2. WASTE OXIDIZING SOLID, N.O.S., (CONTAINS THORIUM NITRATE), 5.1, UN1479, PGIII, "LIMITED QUANTITY RADIOACTIVE MATERIAL"	1	DM	5	K	D001		
	3.							
	4.							

Special Handling Instructions and Additional Information
1=Liquids (ID# 206083) Reference PROS# 132
No. 2=Solid Th-Nitrate (ID# 206180) Reference PROS# 140
Reference NRC Manifest# 011-12850NRS1

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Peter D. Babin | Signature | Month 12 | Day 23 | Year 0

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Robert McTosh | Signature | Month | Day | Year
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1 | 2. | 3. | 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name | Signature | Month | Day | Year

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Philotechnics Response to Item #'s 11 & 12

PHILOTECHNICS

May 15, 2007

Mr. Peter Babin
Bayer Healthcare Pharmaceuticals
400 Morgan Lane
West Haven, CT 06516

RE: NRC Response for West Haven facility closure

Dear Mr. Babin:

In regards to question #11, there were two mistakes on the MDA worksheet page (Appendix E). The surface efficiencies were incorrectly stated and the instrument efficiencies for the beta hand held meters incorrectly entered. The surface efficiencies have been corrected to 0.5 and 0.25, respectively for beta emitters with maximum energies above 0.4 Mev and maximum beta energies between 0.15 and 0.4 MeV as per ISO 7503-1 recommendations referenced in NUREG 1775, Rev. 1. The instrument efficiencies stated on the calibration certificates (Appendix B) are based upon 4π geometry. Because direct 2π efficiencies were not provided, this is being estimated by two times the 4π efficiency.

Total efficiencies and instrument efficiencies were corrected in Appendix E as follows:

Survey Meter	Instrument Efficiency (2π)	Total Efficiency
5056	34.80% (Tc-99), 13.4% (C-14)	17.4% (Tc-99), 3.35% (C-14)
5057	33.86% (Tc-99), 7.26% (C-14)	16.93% (Tc-99), 1.82% (C-14)

After both the surface and instrument efficiency corrections are made, the static MDC values for beta emitters with energies between 0.15 and 0.4 MeV decrease by a factor of two. The values for beta emitters with energies above 0.4 MeV remain the same. A copy of the updated MDC calculations (Appendix E) has been included for your review. The correct total efficiency was used for the static reading calculations (Appendix H) and do not need to be adjusted. The contamination survey reports (Appendix C) detail which survey meters were used in each survey unit.

Philotechnics, Ltd.
7676 Hazard Center Drive, Suite 500
San Diego, CA 92108
Phone: 619.497.2682 • Fax: 619.497.2666

For question #12, a note at the bottom of the Static Count MDC Calculations table in Appendix E incorrectly stated that P-32 efficiency is estimated by Sr-90. The P-32 efficiency is estimated by Tc-99.

Sincerely,

Robert Trimble
Health Physicist

Philotechnics, Ltd.
7676 Hazard Center Drive, Suite 500
San Diego, CA 92108
Phone: 619.497.2682 • Fax: 619.497.2666

Philotechnics
Analytical Worksheet

Minimum Detectable Concentration (MDC) Static Count Calculations for Liquid Scintillation Counter

(95% confidence level via NUREG 1507 method)

$$MDC\,(dpm/100cm^2) = \frac{3+3.29\sqrt{(R_b)(T_{s+b})(1+T_{s+b}/T_b)}}{(Eff.)(T_{s+b})} \qquad \text{(Eq. 1)}$$

Where:

Eff. = Liquid Scintillation Counter efficiency
R_b = LSC background rate (cpm)
T_{s+b} = Sample count time (minutes)
T_b = Background count time (minutes)

Static Count MDC Calculations					
Isotope	**Eff.**	**R_b**	**T_{s+b}**	**T_b**	**MDC (Static)**
H-3	52.3%	8.2	1	10	24.6 dpm/100 cm^2
S-35 / C-14*	83.2%	7.6	1	10	15.0 dpm/100 cm^2
Gross Beta	64.5%	6.6	1	10	18.4 dpm/100 cm^2
I-125	60.0%	8.2	1	10	21.5 dpm/100 cm^2

***S-35 efficiency is estimated by C-14**

Minimum Detectable Concentration (MDC) Static Count Calculations for Hand-Held Monitors

(95% confidence level via NUREG 1507 method)

$$MDC\,(dpm/100cm^2) = \frac{3+3.29\sqrt{(R_b)(T_{s+b})(1+T_{s+b}/T_b)}}{(Eff.)(T_{s+b})(probeareacm^2/100cm^2)} \qquad \text{(Eq. 2)}$$

Where:

Eff. = Total efficiency (2π geometry)
R_b = Average background rate (cpm)
T_{s+b} = Sample count time (minutes)
T_b = Background count time (minutes)
P = Probe area (cm2)

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Static Count MDC Calculations							
Isotope	**Eff.**	**R_b**	**T_{s+b}**	**T_b**	**P**	**MDC (Static)**	
Probe: BP19DD							
P-32*	17.40%	393.8	1	1	100	547.9 dpm/100 cm^2	#5056
C-14 / S-35*	3.35%	393.8	1	1	100	2845.7 dpm/100 cm^2	#5056
P-32*	16.93%	333.2	1	1	100	519.4 dpm/100 cm^2	#5057
C-14 / S-35*	1.82%	333.2	1	1	100	4831.3 dpm/100 cm^2	#5057
Probe: GP13A							
I-125	10.8%	2364.0	1	1	100	2122.4 dpm/100 cm^2	#4422
I-125	15.5%	3204.0	1	1	100	1718.5 dpm/100 cm^2	#4807

* P-32 efficiency is estimated by Tc-99 efficiency and S-35 efficiency by C-14

Scan Minimum Detectable Concentration (MDC)
Calculations for Hand-Held Monitors
(Scan MDA per NUREG-1575, NUREG-1507 methodology)

$$Scan\,MDC = \frac{MDCR}{\sqrt{p}\,(\varepsilon_i)(\varepsilon_s)\left(\frac{A}{100cm^2}\right)} \qquad \text{(Eq. 3)}$$

Where:

p = surveyor efficiency, per NUREG 1507 (0.5)
ε_i = instrument efficiency (2π geometry)
ε_s = surface efficiency, 0.5 for gammas and high energy betas >1 MeV Emax (e.g. P-32, Cl-36, S/Y-90, etc.), 0.25 for low energy betas (e.g. C-14, P-33, S-35, Tc-99, Ca-45, etc.)
A = probe active area (cm^2)

And,

$$MDCR = S_i\,(60\,\text{sec}/\text{min})/i\,\text{sec} \qquad \text{(Eq. 4)}$$

Where:

MDCR = Minimum detectable count rate (cpm)
S_i = source counts in time interval, i.

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And,

$$S_i = d'\sqrt{B_i} \qquad \text{(Eq. 5)}$$

Where:

d' = 1.38 for 95% true positive scan detection rate, per, NUREG 1507, Table 6.1

B_i = Background counts in interval, i

And,

$$B_i = (P_b)(i)(1\,\text{min}/60\,\text{sec}) \qquad \text{(Eq. 6)}$$

Where:

P_b = probe background count rate (cpm)

i = observation interval

Scan Minimum Detectable Concentration (MDC)
Calculations for Hand-Held Monitors
(Scan MDA per NUREG-1575, NUREG-1507 methodology)

Specific Scan MDC calculation results:

BP19DD #5056	
P_b =	393.8
i =	2
B_i =	13.13
d' =	1.38
S_i =	5.00
MDCR =	150.0

BP19DD #5057	
P_b =	333.2
i =	2
B_i =	11.11
d' =	1.38
S_i =	4.60
MDCR =	138.0

2221 w/43-37 #149941	
P_b =	634.2
i =	2
B_i =	21.14
d' =	1.38
S_i =	6.34
MDCR =	190.3

GP13A #4422	
P_b =	2364.0
i =	2
B_i =	78.80
d' =	1.38
S_i =	12.25
MDCR =	367.5

GP13A #4807	
P_b =	3204.0
i =	2
B_i =	106.80
d' =	1.38
S_i =	14.26
MDCR =	427.8

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Scan MDC Calculations					
Isotope	ε_i	ε_s	**A**	**MDC (Scan)**	
Probe: IBP19DD					
P-32*	34.80%	0.50	100	1219.1 dpm/100 cm^2	#5056
C-14 / S-35*	13.40%	0.25	100	6332.1 dpm/100 cm^2	#5056
P-32*	33.96%	0.50	100	1149.1 dpm/100 cm^2	#5057
C-14 / S-35*	7.26%	0.25	100	10750.5 dpm/100 cm^2	#5057
Probe: GP13A					
I-125	10.80%	0.50	100	9624.6 dpm/100 cm^2	#4422
I-125	15.50%	0.50	100	7807.3 dpm/100 cm^2	#4807
Probe: 43-37					
P-32*	35.58%	0.50	582	260.0 dpm/100 cm^2	#149981
C-14 / S-35*	14.52%	0.25	582	1274.2 dpm/100 cm^2	#149981

* P-32 efficiency is estimated by Tc-99 efficiency and S-35 efficiency by C-14