NRC FORM 304
(8-1997)

U.S. NUCLEAR REGULATORY COMMISSION

SAMPLE RECORD SHEET

LABORATORY -- ☑ REGION I ☐ REGION III

LABORATORY CONTROL NUMBER: 302108

☑ ROUTINE ☐ URGENT

DATE REQUIRED:

SAMPLE LOCATION	DATE ANALYSIS BEGAN	DATE COMPLETED	ANALYZED BY	DATE
Department of the Army-Fort McClellan, Alabama			CKJ	1/7/2000

COLLECTED BY	REG	DIVISION	TELEPHONE	CONTACT NOTIFIED	DATE APPROVED	APPROVED BY	DATE APPROVED
Orysia Masnyk Baily	II		404-562-4739			[illegible]	01/07/2000

SAMPLE NO.	DATE	HOUR	DESCRIPTION	ANALYZE FOR	INSTRUMENT USED	QUANTITY USED	DATE COUNTED	COUNT TIME	GROSS COUNT	BACK-GROUND	NET COUNT	Radio-nuclide	RESULT *
1	10/13	12:00p	Soil #1	Gamma Scan	#3	270.9 g	01/06	10,000 s				Cs-137	0.54±0.02 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
2	10/13	12:00p	Soil #2	Gamma Scan	#3	358.4 g	01/05	10,000 s				Cs-137	0.067±0.016 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
3	10/13	12:00p	Soil #3	Gamma Scan	#3	284.7 g	01/07	10,000 s				Cs-137	0.017±0.011 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
4	10/13	12:00p	Soil #4	Gamma Scan	#1	290.0 g	12/28	10,000 s				Cs-137	0.431±0.015 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
5	10/13	12:00p	Soil #5	Gamma Scan	#1	305.0 g	12/22	10,000 s				Cs-137	0.039±0.008 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
6	10/13	12:00p	Soil #6	Gamma Scan	#3	315.2 g	01/05	10,000 s				Cs-137	0.033±0.011 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)

Random uncertainties as reported: ☑ ± 1 σ, ☐ ± 2 σ. Small negative and other results ≤ 2 σ are interpreted as including "zero": or as not detected. If appropriate, estiates of possible systematic errors are reported in parentheses.

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NRC FORM 304A
(8-1997)

U.S. NUCLEAR REGULATORY COMMISSION

SAMPLE RECORD SHEET (Continued)

LABORATORY CONTROL NUMBER
302108

SAMPLE NO.	DATE	HOUR	DESCRIPTION	ANALYZE FOR	INSTRUMENT USED	QUANTITY USED	DATE COUNTED	COUNT TIME	GROSS COUNT	BACK-GROUND	NET COUNT	Radio-nuclide	RESULT *
7	10/13	12:00p	Soil #7	Gamma Scan	#1	279.5 g	12/23	10,000 s				Cs-137	0.41±0.02 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
8	10/13	12:00p	Soil #8	Gamma Scan	#3	385.1 g	12/28	10,000 s				Cs-137	0.034±0.010 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
9	10/13	12:00p	Soil #9	Gamma Scan	#3	362.5 g	01/06	10,000 s				Cs-137	0.031±0.014 pCi/g (dry wt.)
												Co-60	<0.04 pCi/g (dry wt.)
10	10/13	12:00p	Soil #10	Gamma Scan	#1	312.0 g	12/27	10,000 s				Cs-137	0.290±0.015 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
11	10/13	12:00p	Soil #11	Gamma Scan	#1	275.6 g	12/23	10,000 s				Cs-137	0.23±0.02 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
12	10/13	12:00p	Soil #12	Gamma Scan	#3	305.8 g	01/06	10,000 s				Cs-137	0.143±0.016 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
13	10/13	12:00p	Soil #13	Gamma Scan	#3	306.1 g	12/23	10,000 s				Cs-137	0.075±0.014 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)

NRC FORM 304 (8-1997)

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NRC FORM 304A
(8-1997)

U.S. NUCLEAR REGULATORY COMMISSION

SAMPLE RECORD SHEET (Continued)

LABORATORY CONTROL NUMBER
302108

SAMPLE NO.	DATE	HOUR	DESCRIPTION	ANALYZE FOR	INSTRUMENT USED	QUANTITY USED	DATE COUNTED	COUNT TIME	GROSS COUNT	BACK-GROUND	NET COUNT	Radio-nuclide	RESULT *
14	10/13	12:00p	Soil #14	Gamma Scan	#1	342.9 g	12/27	10,000 s				Cs-137	<0.03 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
15	10/13	12:00p	Soil #15	Gamma Scan	#3	312.2 g	12/27	10,000 s				Cs-137	<0.03 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
16	10/13	12:00p	Soil #16	Gamma Scan	#3	264.4 g	12/21	10,000 s				Cs-137	0.58±0.02 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
17	10/13	12:00p	Soil #17	Gamma Scan	#1	374.1 g	12/20	10,000 s				Cs-137	0.088±0.014 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
18	10/13	12:00p	Soil #18	Gamma Scan	#3	291.4 g	12/20	10,000 s				Cs-137	0.41±0.02 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
19	10/13	12:00p	Soil #19	Gamma Scan	#1	317.0 g	12/21	10,000 s				Cs-137	0.50±0.02 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
20	10/13	12:00p	Soil #20	Gamma Scan	#3	348.2 g	12/21	10,000 s				Cs-137	0.080±0.012 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)

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U.S. NUCLEAR REGULATORY COMMISSION

SAMPLE RECORD SHEET (Continued)

LABORATORY CONTROL NUMBER
302108

SAMPLE NO.	DATE	HOUR	DESCRIPTION	ANALYZE FOR	INSTRU-MENT USED	QUANTITY USED	DATE COUNTED	COUNT TIME	GROSS COUNT	BACK-GROUND	NET COUNT	Radio-nuclide	RESULT *
21	10/13	12:00p	Soil #21	Gamma Scan	#1	326.6 g	12/20	10,000 s				Cs-137	0.28±0:02 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
22	10/13	12:00p	Soil #22	Gamma Scan	#3	338.4 g	12/23	10,000 s				Cs-137	<0.03 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
23	10/13	12:00p	Soil #23	Gamma Scan	#3	322.3 g	12/27	10,000 s				Cs-137	<0.03 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)
24	10/13	12:00p	Soil #24	Gamma Scan	#1	279.0 g	12/21	10,000 s				Cs-137	0.46±0.02 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
25	10/13	12:00p	Soil #25	Gamma Scan	#1	330.8 g	12/22	10,000 s				Cs-137	0.111±0.014 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
26	10/13	12:00p	Soil #26	Gamma Scan	#3	342.8 g	12/22	10,000 s				Cs-137	0.079±0.016 pCi/g (dry wt.)
												Co-60	<0.02 pCi/g (dry wt.)
27	10/13	12:00p	Soil #27	Gamma Scan	#3	337.5 g	12/20	10,000 s				Cs-137	<0.03 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)

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(8-1997)

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SAMPLE RECORD SHEET (Continued)

LABORATORY CONTROL NUMBER
302108

SAMPLE NO.	DATE	HOUR	DESCRIPTION	ANALYZE FOR	INSTRU-MENT USED	QUANTITY USED	DATE COUNTED	COUNT TIME	GROSS COUNT	BACK-GROUND	NET COUNT	Radio-nuclide	RESULT *
28	10/13	12:00p	Soil #28	Gamma Scan	#3	335.3 g	12/22	10,000 s				Cs-137	<0.03 pCi/g (dry wt.)
												Co-60	<0.03 pCi/g (dry wt.)

NRC FORM 304 (8-1997)

Random uncertainties as reported: ☑ ± 1 σ, ☐ ± 2 σ. Small negative and other results ≤ 2 σ are interpreted as including "zero": or as not detected. If appropriate, estiates of possible systematic errors are reported in parentheses.

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NRC FORM 303
(8-1997)

U. S. NUCLEAR REGULATORY COMMISSION

REQUEST FOR ANALYSIS

LABORATORY -- [✓] REGION I [ ] REGION III

LABORATORY USE ONLY

CONTROL NUMBER: 302108

SAMPLE LOCATION (LICENSEE): Dept of the Army — Ft McClellan ALABAMA

LICENSE NO.	DOCKET NO.
01-02861-05	030-17584

SAMPLE SUBMITTED

# TOTAL	TYPE	VOLUME	WEIGHT

DATE SAMPLES SUBMITTED	PRIORITY
10-13-99	ROUTINE
	URGENT

SAMPLE COLLECTION INTERVAL

	MONTH	DAY	YEAR	TIME
START				
STOP				

INSPECTOR RESPONSIBLE: Orysia Masnyk Bailey

TELEPHONE NUMBER: 404 562 4739

	ANALYSIS TO BE PERFORMED	LIST DESIRED LLD (Optional)		OTHER TYPE OF ANALYSIS (Specify)	LIST DESIRED LLD (Optional)
	GROSS ALPHA (GA)				
X	GROSS BETA (GB) *				
	GAMMA SPEC (GS)				
	TRITIUM (H3)				
	CARBON-14 (C14)				
	IODINE-125 (I125)				

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
	OK			Delivered to lab for analysis - see note below.

REMARKS: * If anything found with gross beta, please do gamma spec. The radionuclides of interest are probably cobalt and/or cesium.

NOTE: Samples received on 10/19, 10/20, 10/21 for a total of ~~5~~ 7 boxes

NOTE: SAMPLES WILL BE DISCARDED AFTER ANALYSIS UNLESS REASONS ARE NOTED IN REMARKS ABOVE.

NRC FORM 303 (8-1997)

INSPECTOR

NRC FORM 303A (8-1997)

U.S. NUCLEAR REGULATORY COMMISSION

LABORATORY USE ONLY

CONTROL NUMBER

SAMPLE RECORD -- (Continued)

LABORATORY -- ☑ REGION I ☐ REGION III

SAMPLE NUMBER	SAMPLE NAME AND DESCRIPTION	COLLECTION DATE/TIME	REMARKS, PRESERVATIVE ANALYSIS REQUESTED, ETC.
1	IRON MTN BKGD SOIL (SURFACE)	9/28/99	
2	IRON MTN BKGD SOIL (4')		
3	IRON MTN BKGD SOIL (8')		
4	IRON MTN SOIL (SURFACE)		
5	IRON MTN SOIL (4')		
6	IRON MTN SOIL (8')		
7	IRON MTN SOIL (SURFACE)		
8	IRON MTN SOIL (4')		
9	IRON MTN SOIL (8 or 6')		
10	IRON MTN SOIL (MOUND)		
11	IRON MTN SOIL (4')		
12	IRON MTN SOIL (8')		
13	IRON MTN SOIL (SURFACE)		
14	IRON MTN SOIL (4')		
15	IRON MTN SOIL (8')		
16	RATTLESNAKE GULCH SOIL (SURF)		
17	RG SOIL (3')		
18	RG SOIL (SURFACE)		
19	RG SOIL (SURFACE)		
20	RG SOIL (3')		
21	RG SOIL (SURFACE)		
22	RG SOIL (4')		
23	RG SOIL (6')		
24	RG SOIL (SURFACE)		
25	RG SOIL (3')		
26	DOWNGRADE BKGD SOIL (SURFACE)		
27	4' DOWNGRADE BKGD SOIL		
28	DOWNGRADE SOIL (6')		

NRC FORM 303
(8-1997)

U. S. NUCLEAR REGULATORY COMMISSION

REQUEST FOR ANALYSIS

LABORATORY -- [✓] REGION I [ ] REGION III

LABORATORY USE ONLY

CONTROL NUMBER

SAMPLE LOCATION (LICENSEE): Dept of The Army — Ft McClellan ALABAMA

LICENSE NO.	DOCKET NO.
01-02861-05	030-17584

SAMPLE SUBMITTED

# TOTAL	TYPE	VOLUME	WEIGHT

DATE SAMPLES SUBMITTED	PRIORITY
10-13-99	ROUTINE / URGENT

SAMPLE COLLECTION INTERVAL

	MONTH	DAY	YEAR	TIME
START				
STOP				

INSPECTOR RESPONSIBLE: Orysia Masnyk Bailey

TELEPHONE NUMBER: 404 562 4739

	ANALYSIS TO BE PERFORMED	LIST DESIRED LLD (Optional)		OTHER TYPE OF ANALYSIS (Specify)	LIST DESIRED LLD (Optional)
	GROSS ALPHA (GA)				
X	GROSS BETA (GB) *				
	GAMMA SPEC (GS)				
	TRITIUM (H3)				
	CARBON-14 (C14)				
	IODINE-125 (I125)				

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY

REMARKS: * If anything found with gross beta, please do gamma spec. The radionuclides of interest are probably cobalt and/or cesium.

NOTE: SAMPLES WILL BE DISCARDED AFTER ANALYSIS UNLESS REASONS ARE NOTED IN REMARKS ABOVE.

NRC FORM 303
(8-1997)

U. S. NUCLEAR REGULATORY COMMISSION

REQUEST FOR ANALYSIS

LABORATORY – [✓] REGION I [ ] REGION III

LABORATORY USE ONLY

CONTROL NUMBER

SAMPLE LOCATION (LICENSEE): Dept of The Army — Ft McClellan ALABAMA

LICENSE NO.	DOCKET NO.
01-02861-05	030-17584

SAMPLE SUBMITTED

# TOTAL	TYPE	VOLUME	WEIGHT

DATE SAMPLES SUBMITTED: 10-13-99

PRIORITY: [ ] ROUTINE [ ] URGENT

SAMPLE COLLECTION INTERVAL

	MONTH	DAY	YEAR	TIME
START				
STOP				

INSPECTOR RESPONSIBLE: Orysia Masnyk Bailey

TELEPHONE NUMBER: 404 562 4739

	ANALYSIS TO BE PERFORMED	LIST DESIRED LLD (Optional)		OTHER TYPE OF ANALYSIS (Specify)	LIST DESIRED LLD (Optional)
	GROSS ALPHA (GA)				
X	GROSS BETA (GB) *				
	GAMMA SPEC (GS)				
	TRITIUM (H3)				
	CARBON-14 (C14)				
	IODINE-125 (I125)				

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY

REMARKS: * If anything found with gross beta, please do gamma spec. The radionuclides of interest are probably cobalt and/or cesium.

NRC FORM 303A (8-1997)

U.S. NUCLEAR REGULATORY COMMISSION

LABORATORY USE ONLY

CONTROL NUMBER

SAMPLE RECORD -- (Continued)

LABORATORY -- ☑ REGION I ☐ REGION III

SAMPLE NUMBER	SAMPLE NAME AND DESCRIPTION	COLLECTION DATE/TIME	REMARKS, PRESERVATIVE ANALYSIS REQUESTED, ETC.
1	IRON MTN BKGD SOIL (SURFACE)	9/28/99	
2	IRON MTN BKGD SOIL (4')		
3	IRON MTN BKGD SOIL (8')		
4	IRON MTN SOIL (SURFACE)		
5	IRON MTN SOIL (4')		
6	IRON MTN SOIL (8')		
7	IRON MTN SOIL (SURFACE)		
8	IRON MTN SOIL (4')		
9	IRON MTN SOIL (8 or 6')		
10	IRON MTN SOIL (MOUND)		
11	IRON MTN SOIL (4')		
12	IRON MTN SOIL (8')		
13	IRON MTN SOIL (SURFACE)		
14	IRON MTN SOIL (4')		
15	IRON MTN SOIL (8')		
16	RATTLESNAKE GULCH SOIL (SURF)		
17	RG SOIL (3')		
18	RG SOIL (SURFACE)		
19	RG SOIL (SURFACE)		
20	RG SOIL (3')		
21	RG SOIL (SURFACE)		
22	RG SOIL (4')		
23	RG SOIL (6')		
24	RG SOIL (SURFACE)		
25	RG SOIL (3')		
26	DOWNGRADE BKG SOIL (SURFACE)		
27	4' DOWNGRADE BKGD SOIL		
28	DOWNGRADE SOIL (6')		

NRC FORM 303A (8-1997) U.S. NUCLEAR REGULATORY COMMISSION

LABORATORY USE ONLY
CONTROL NUMBER

SAMPLE RECORD – (Continued)

LABORATORY – ☑ REGION I ☐ REGION III

SAMPLE NUMBER	SAMPLE NAME AND DESCRIPTION	COLLECTION DATE/TIME	REMARKS, PRESERVATIVE ANALYSIS REQUESTED, ETC.
1	IRON MTN BKGD SOIL (SURFACE)	9/28/99	
2	IRON MTN BKGD SOIL (4')		
3	IRON MTN BKGD SOIL (8')		
4	IRON MTN SOIL (SURFACE)		
5	IRON MTN SOIL (4')		
6	IRON MTN SOIL (8')		
7	IRON MTN SOIL (SURFACE)		
8	IRON MTN SOIL (4')		
9	IRON MTN SOIL (8 or 6')		
10	IRON MTN SOIL (MOUND)		
11	IRON MTN SOIL (4')		
12	IRON MTN SOIL (8')		
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15	IRON MTN SOIL (8')		
16	RATTLESNAKE GULCH SOIL (SURF)		
17	RG SOIL (3')		
18	RG SOIL (SURFACE)		
19	RG SOIL (SURFACE)		
20	RG SOIL (3')		
21	RG SOIL (SURFACE)		
22	RG SOIL (4')		
23	RG SOIL (6')		
24	RG SOIL (SURFACE)		
25	RG SOIL (3')		
26	DOWNGRADE BKG SOIL (SURFACE)		
27	4' DOWNGRADE BKGD SOIL		
28	DOWNGRADE SOIL (6')		

me Chull
~2600
91555

-gen bkgrd
8uR

(1) BACKGROUND (8uR) N 33° 41.707 min W 85° 48.631 min
Surface

(2) BKGD ≈ 4 feet down to 4 feet 10uR on contact

(3) BKGD ≈ down to 8 feet 9uR on contact

(4) IRON MNTN N 33° 41.762 min W 85° 48.599 min
IN HOLE SURFACE 6uR 774
Soil on contact ~~8 on contact~~

(5) IRON MTN. 8 on contact up to 4 feet

(6) IRON MTN ~~up~~ down to 8 feet 7uR

(7) IRON MTN 7uR surface 33°N 41.764 min 85°W 48.634 m

(8) IRON MTN down to 4 feet 7uR

(9) IRON MTN down to 8 feet 8 feet Rock 6uR

(10) IRON MTN dirt mound surface N 33° 41.785 min W 85° 48.615 min
7 on mon 9 in hol

(11) IRON MTN down to 4 feet 8uR

(12) IRON MNT down to 8 feet 8uR

REGION II SAMPLE RECORD FORM

Licensee: _____ License No.: _____

Location: _____ Docket No.: _____

Sample No.: _____ Log No.: _____

Collection Date/Time: _____

Sample location: _____

Collected by: _____ Others present: _____

Purpose of Sampling: _____

_____

Radionuclides of Interest: _____

Sample type:
- [ ] Soil, rock, sediment
- [ ] Vegetation
- [ ] Animal
- [ ] Water
- [ ] Air
- [ ] Other

Processing
- [ ] as received
- [ ] processed
- [ ] other

Sample size/volume: _____

Additional description: _____

_____

_____

Sample container: [ ] Glass w/teflon liner [ ] Glass w/teflon septum [ ] Ziploc bag [ ] Plastic [ ] Other

Other description: _____

Remarks: _____

_____

_____

_____

20 feet 240° from last sampl

10 on contact

(13) IRON MTN 8 waste 9 in the hole surface

(14) 4 to feet deep 8 MR

(15) 8 to feet deep 7 MR

Rattlesnake Gulch

(16) surface N 33° 42.002 min West 85° 48.711 min 5 on soil surface ~~5~~ on contact

(17) → 3 feet covered go deeper rocky 5 MR

(18) surface 6 MR on soil surf N° 33 42.000 min W 85. 48.720 min 7 in hole 7 on contact down = 1½ - 2 feet [illegible] deeper pits in 1 mile samples are too rocky to dig.

(19) ≈ 20 feet left 350 5 on soil surf 5 on sample cut

(20) ≈ 3 feet 5 MR

(21) N 33° 41.997 min W 85° 48.725 min surface in hole 6 on contact

---

(22) ≈ 4 feet 5 on contact

(23) ≈ 6 feet 6 MR on contact

---

5 MR

Confirmatory Survey Results

North

Page ____ of ____

Rattlensnake Gulch

(24) surface Sullivan Sullivan bag N 85° 48.719 min
N 33° 42.020 min

(25) to 8 feet 5 on control

Downgrade Blgd
(D.G. B.K. G.D.)

(26) N 33° 42.145 min N 85° 48.745 min
8 on hole
7 on control

(27) 4 down 8 on control

(28) 6½ down 7 on control

Confirmatory Survey Results

North

Page ____ of ____

				a		b	
1	BIGGO						
2	Am						
3	TC						
4	JJ 5 E wall lower vault storage	✓	0.9	1	0.7	2	
5	JJ 5 S wall upper vault storage	✓	-0.1 ~~0.0~~	0	-1.3	0	
6	3Y S wall lower vault	✓	-0.1 ~~0.0~~	0	2.7	4	
7	LL6 N wall lower vault storage	✓	-0.1 ~~0.0~~	0	-1.3	0	
8	LL8 floor vault storage	✓	-0.1 ~~0.0~~	0	0.7	2	
9	LL8 N wall lower vault storage	✓	-0.1 ~~0.0~~	0	0.7	2	
10	JJ5 floor vault storage	✓	-0.1 ~~0.0~~	0	-1.3	0	
11	LL8 W wall upper vault storage	✓	-0.1 0.0	0	-1.3	0	
12	JJ 7 S wall lower vault storage		-0.1 ~~0.0~~	1	1.7	3	
13	GG 8 N wall lower vault	✓	-0.1 ~~0.0~~	0	-1.3	0	
14	II 5 N wall lower vault	✓	-0.1 ~~0.0~~	0	~~0.0~~	1	-0.3
15	II 2 N wall lower vault	✓	-0.1 ~~0.0~~	0	~~0.0~~	1	-0.3
16	Y8 S wall lower vault		-0.1 ~~0.0~~	0	-1.3	0	
17	4Y S wall lower vault	✓	0.9	1	-1.3	0	
18	1AA E wall upper vault	✓	0.9	1	~~0.0~~	1	-0.3
19	1AA E wall lower vault	✓	0.9	1	~~0.0~~	1	-0.3
20	DDI E wall lower vault	✓	-0.1 ~~0.0~~	0	2.7	4	
21	II 1 N wall upper vault	✓	-0.1 ~~0.0~~	0	~~0.0~~	1	-0.3
22	Y5 S wall upper vault	✓	-0.1 ~~0.0~~	0	0.7	2	
23	LAB 2 M2	✓	-0.1 ~~0.0~~	0	-1.3	0	
24	LAB 2 S1 EAST wall	✓	-0.1 ~~0.0~~	0	-1.3	0	
25	Lab 2 I 1	✓	-0.1	0	-1.3	0	
26	Lab 2 L11 West wall	✓	-0.1	0	-1.3	0	
27	hall r9 EAST wall		-0.1	0	-1.3	0	
28	FF 10 Hall floor	✓	-0.1	0	0.7	2	
29	Lab 2 R11 W wall	✓	-0.1	0	0.7	2	
30	Lab 2 N9	✓	-0.1	0	0.7	2	

(31)	Hall XII floor Lab 2 ✓	-0.1	0	-1.3	0
(32)	Lab 2 S wall L6 ✓	-0.1	0	-1.3	0
(33)	Lab 2 R9 floor ✓	-0.1	0	-0.3	1
(34)	BB 11 W wall hall	-0.1	0	-0.3	1
(35)	CC 8 W Door lower vault ✓	-0.1	0	-0.3	1
(36)	Lab 2 O1 wall ✓	-0.1	0	-0.3	1
(37)	BB 8 W wall upper vault	-0.1	0	3.75	
(38)	Outside Room 108 Boiler Room Mid Opposite wall	-0.1	0	-0.3	1
(39)	2281 Outside Room 108 Boiler Room floor	-0.1	0	1.7	3
(40)					

4 (1)	J3 ✓ Bldg 2281	-0.1	0	0.7	2
5 (2)	J2 I-3 floor ✓	-0.1	0	0.7	2
6 (3)	Lab 2 Area J-7 J1 floor ✓	-0.1	0	-1.3	0
7 (4)	J-14 Lab 2 K-6 N wall lower ✓	0.9	1	1.7	3
8 (5)	J-13 Lab 2 ✓	-0.1	0	-0.3	1
9 (6)	J-17 Lab 2 C-11 West wall Upper ✓	-0.1	0	0.7	2
10 (7)	J-16 Lab 2 J-11 West wall Upper ✓	-0.1	0	-0.3	1
11 (8)	J-15 Lab 2 G-11 N Lower wall ✓	-0.1	0	0.7	2
12 (9)	J-12 Lab 2 J-1 Upper wall east ✓	-0.1	0	0.3	1
13 (10)	J-11 Lab 2 D-1 East wall upper ✓	0.9	1	0.7	2
14 (11)	J-9 A-9 Upper wall South ✓	-0.1	0	2.7	4
15 (12)	J-10 Lab 2 A-3 Upper South wall ✓	-0.1	0	-1.3	0
16 (13)	J-8 Lab 2 A-9 Low South wall ✓	-0.1	0	1.7	3
17 (14)	J-7 Lab 2 A-3 S wall Low ✓	-0.1	0	0.7	2
18 (15)	J-6 Lab 2 A-3 Floor ✓	-0.1	0	0.7	2
19 (16)	J-5 Lab 2 C-9 Floor ✓	-0.1	0	1.3	0
20 (17)	J-4 Lab 2 G-5 Floor ✓	-0.1	0	0.7	2
21 (18)	#34 decon room east wall A ✓	-0.1	0		-0.3
22 (19)	#33 east wall A ✓	-0.1	0		-0.3

Bldg 2281

23	HP LAB #22 Floor		✓	-0.1	0	-1.3	0	
24	↓ #21 Floor		✓	-0.1	0	-0.3	1	
25 (22)	↓ east wall 6' from N wall		✓	-0.1	0	0.7	0	
26 (23)	↓ south wall between windows		✓	-0.1	0	-0.3	1	
27 (24)	↓ east wall 14 feet from North wall		✓	-0.1	0	0.3	1	
28 (25)	#32 down room east wall		✓	-0.1	0	0.3	1	
29 (26)	#37 ↓ North wall		✓	-0.1	0	0.7	0	
30 (27)	35 ↓ east wall		✓	-0.1	0	-0.3	1	
31 (28)	36 ↓ north wall		✓	-0.1	0	-0.3	1	
32 (29)	54 ↓		✓	-0.1	0	2.74		
33 (30)	59 ↓		✓	0.9	1	-0.3	1	
34 (31)	58 ↓		✓	-0.1	0	-0.3	1	
35 (32)	57 ↓		✓	-0.1	0	0.7	0	
36 (33)	56 ↓		✓	-0.1			1	-0.3
37 (34)	55 ↓		✓	-0.1			1	-0.3
38 (35)	53 ↓		✓	-0.1	0		1	-0.3
39 (36)	52 ↓		✓	-0.1	0	1		-0.3
40 (37)	51 ↓		✓	-0.1	0	3		1.7
(38)								
(39)								
(40)								

4 (1)	2281 LAB 1 5LOW N wall	✓	-0.1	0	5	4.7
5 (8)	LAB 1 West wall F/OW	✓	-0.1	0	7	5.7
6 (5)	LAB 1 N wall 1 LOW	✓	-0.1	0	4	2.7
7 (4)	LAB 1 N wall A LOW	✓	-0.1	0	4	2.7
8 (5)	↓ e wall A LOW	✓	-0.1	0	7	5.7
(6) 9	↓ N wall 8 LOW	✓	-0.1	0	10	8.7
(8) 10	↓ W wall C LOW	✓	-0.1	0	4	2.7
(7) 11	↓ S wall 8 LOW	✓	0.9	1	6	4.7
(9) 12	↓ S wall 5 LOW	✓	-0.1	0	3	1.7
(10) 13	↓ S wall 2 LOW	✓	-0.1	0	3	1.7
(11) 14	↓ E wall G LOW	✓	-0.1	0	2	0.7
(12) 15	↓ e wall D LOW	✓	-0.1	0	5	3.7
(13) 16	HPLAB #26 FLOOR	✓	-0.1	0	4	2.7
(14) 17	decon room W wall 4 feet from NORTH	✓	-0.1	0	1	-0.3
(15) 18	HPLAB #25 FLOOR		0.9	1	4	2.7
(16) 19	↓ #23 FLOOR	✓	-0.1	0	3	1.7
(17) 20	↓ #24 FLOOR		-0.1	0	1	-0.3
(18) 21	↓ West wall #16 22' from NORTH	✓	1.9	2	3	1.7
(19) 22	↓ West wall #16 14' from NORTH wall low	✓	-0.1	0	2	0.7
(20) 23	HPLAB #14 W wall 8' from NORTH LOW	✓	-0.1	0	2	0.7
(21) 24	↓ #18 EAST wall 20' from NORTH	✓	-0.1	0	1	-0.3
(22) 25	DECON ROOM W wall #38	✓	-0.1	0	1	-0.3
(23) 26	↓ B W wall low #39		1.9	2	7	5.7
(24) 27	↓ ↓ low #40	✓	-0.1	0	1	-0.3
(25) 28	↓ ↓ #41		-0.1	0	3	1.7
(26) 29	↓ SOUTH wall #42		-0.1	0	1	-0.3
(27) 30	↓ ↓ #43	✓	-0.1	0	1	-0.3
(28) 31	↓ 44	✓	-0.1	0	2	0.7
(29) 32	↓ 45	✓	0.9	1	4	2.7
(30) 33	↓ 46	✓	-0.1	0	2	0.7

31	34	decon room	SW wall	#30	✓	-0.1	0	-0.3
32	35	↓	↓	#31	✓	-0.1	0	1.73
33	36	↓		47	✓	-0.1	0	-0.3
34	37	↓	N wall	#48	✓	-0.1	0	4 2.7
35	38	↓	N wall	#49	✓	-0.1	0	1 -0.3
36	39	HP LAB	N wall	RIGHT OF LIGHT SWITCH	✓	-0.1	0	0 -1.3
37	40	decon room	SW wall	#29	✓	-0.1	0	1 -0.3
38								
39								
40								

4	2281 decon room	west wall	20 feet from North	✓	-0.1	0	5.7
5	decon room	50		✓	-0.1	0	.072
6	↓	60		✓	-0.1	0	-0.3
7	equip room	U4 S wall	upper	✓	-0.1	0	0.31
8	↓	U5	floor		-0.1	0	2 0.7
9	U8	N wall	lower	✓	-0.1	0	4 2.7
10	X6	N wall	lower	✓	0.9	1	0 7.3
11	X3	N wall	lower	✓	-0.1	0	2 0.7
12	U1	S wall	lower		-0.1	0	1 -0.3
13	U1	East wall	lower	✓	-0.1	0	3 1.7
14	X7	N wall	upper	✓	-0.1	0	4 2.7
15	U4	S wall	upper	✓	-0.1	0	3 1.7
16	U1	floor		✓	-0.1	0	5 0.7
17	B-1081	#105	7B Q Hall	✓	-0.1	0	1 -0.3
18	106	10C	Q Hall	✓	-0.1	0	0 -1.3
19	104	7E	Q Hall	✓	-0.1	0	0 -1.3
20	103	Q 17B	Bldg 1081	✓	0.9	1	3 1.7
21	102	Floor	Q Hall 15E	✓	-0.1	0	3 1.7
22	101	11D	Q Floor	✓	-0.1	0	3 1.7
23	99	Lab	Hall 5E	✓	-0.1	0	2 0.7

24	108	3D area I floor		✓		-0.1	0	1	-0.3
25	Lab 5	7C			✓	-0.1	0	0	-1.3
26	↓	2G			✓	-0.1	0	1	-0.3
27	↓	6L			✓	-0.1	0	2	0.7
28	↓	14B		✓		-0.1	0	0	-1.3
29	↓	13M			✓	-0.1	0	3	1.7
30	112	Bldg 1081	Area I wall 2D		✓	-0.1	0	2	0.7
31	111	↓	↓ 3B		✓	-0.1	0	1	-0.3
32	109	4G	area i wall		✓	-0.1	0	0	-1.3
33	110		5C		✓	0.9	1	1	-0.3
34	107		3C	floor	✓	-0.1	0	2	0.7
35	Lab 5	H18			✓	0.9		1	-0.3
36	91	Area P Lab	18D wall		✓	-0.1	0	2	0.7
37	90	Area P wall	19H		✓	-0.1	0	2	0.7
38	88	Area P Lab wall	13L		✓	-0.1	0	0	-1.3
39	85	↓	15B wall		✓	-0.1	0	4	2.7
40	84	↓	wall 14C		✓	-0.1	0	1	-0.3

1									
2									
3									
4	81	area P floor 4G			✓	-0.1	0	0	-1.3
5	96	ceiling 12D			✓	-0.1	0	7	5.7
6	95	ceiling 8H			✓	-0.1	0	3	1.7
7	80	6F floor			✓	-0.1	0	1	-0.3
8	94	ceiling 4F			✓	-0.1	0	2	0.7
9	93	wall 3D			✓	-0.1	0	2	0.7
10	92	wall 2i			✓	-0.1	0	0	-1.3
11	89	wall 16M		✓		-0.1	0	0	-1.3
12	87	wall 7K		✓		-0.1	0	1	-0.3

13	86	12L wall	✓	0.9	1	-0.3	1
14	83	12B wall	✓	-0.1	0	1.7	3
15	82	10E wall	✓	-0.1	0	1.7	3
16	79	floor 6J	✓	-0.1	0	-0.3	1
17	78	floor 7H	✓	-0.1	0	0.7	2
18	76	floor 12E	✓	-0.1	0	-1.3	0
19	Lab 5	14H ✓		-0.1	0	-1.3	0
20		7E ✓		-0.1	0	-1.3	0
21	100	1081 80 Q floor ✓		0.9	1	1.7	3
22	98	area P Lab Ceiling 14I ✓		-0.1	0	-0.3	1
23	Lab 4	7H		-0.1	0	0.7	2
24		7E floor ✓		-0.1	0	0.7	2
25		2F ✓		-0.1	0	-0.3	1
26		3I		-0.1	0	-0.3	1
27		13F		-0.1	0	0.7	2
28		12H		-0.1	0	0.7	2
29		3B ✓		-0.1	0	0.7	2
30		10E ✓		0.9	1	.0.7	2
31		5A ✓		-0.1	0	-0.3	1
32		3D floor ✓		-0.1	0	-1.3	0
33	77	area P floor 10G ✓		-0.1	0	-1.3	0
34	Lab 5	10J ✓		-0.1	0	-0.3	1
35	Lab 5 ~	13E ✓		-0.1	0	-0.3	1
36	97	area P Ceiling 15F ✓		-0.1	0	-0.3	1
37	75	area P Lab 11H floor	✓	-0.1	0	0.7	2
38	74	14F floor	✓	-0.1	0	1.7	3
39	73	15G floor	✓	-0.1	0	0.7	2
40	72	16D floor	✓	0.9	1	3.7	5

4	71	Area V vault	8i ceiling	✓	-0.1	0	0.7	2		
5	70		9G ceiling	✓	-0.1	0	-0.3			
6	69		7f ceiling	✓	-0.1	0	2.7	4		
7	67		3F wall	✓	-0.1	0	1.7	3		
8	68		4B wall	✓	-0.1	0	-1.3	0		
9	66		2i wall	✓	0.9	1	-0.3	1		
10	65		5L wall	✓	-0.1	0	-0.3	1		
11	64		8m wall	✓	-0.1	0	0.7	2		
12	63		9l wall	✓	-0.1	0	-1.3	0		
13	62		wall	✓	-0.1	0	-1.3	0		
14	61		13g wall	✓	-0.1	0	-1.3	0		
15	59		6e floor	✓	-0.1	0	-0.3	1		
16	58		4D floor	✓	-0.1	0	2.7	4		
17	60		11i floor	✓	0.9	1	-0.3	1		
18	57		6i floor	✓	-0.1	0	4.7	6		
19	56		9j floor	✓	-0.1	0	1.7	3		
20	55		9g floor	✓	-0.1	0	5.7	7		
21		Room O	6N ✓		0.9	1	-1.3	0		
22			5N ✓		-0.1	0	-0.3	1		
23			8D ✓		-0.1	0	-1.3	0		
24		Room O =	10F ✓		0.9	1	1.7	3		
25			7C		-0.1	0	-1.3	0		
26			9I ✓		-0.1	0	-1.3	0		
27			8g ✓		-0.1	0	0.7	2		
28			2e		-0.1	0	1.7	3		
29			9e ✓		-0.1	0	1.7	3		
30			5B		0.9	1	-0.3	1		
31		T-03 Tank room	Bldg class chain		-0.1	0	3	~~-0.3~~ 1.7		
32		tank room T-01	bottom		-0.1	0	1	-0.3		
33		T-02 tank	bottom		-0.1	0	0	-1.3		

(35)	34	T06	7C wall tank room	✓	-0.1	0	0.7	2
(36)	35	T05	Tank room floor 7C	✓	-0.1	0	2.7	4
(37)	36	T04	tank room floor 5D	✓	-0.1	0	4.7	6
(38)	37	LAB 7	4F floor	✓	-0.1	0	-0.3	1
(39)	38	Room 0	9H ✓		-0.1	0	-0.3	
(40)	39	LAB 7	9L		-0.1	0	0.7	2
	(40)	Vault hot spot	9G floor		-0.1	0	-1.3	0

(4)	Room 0	4N	✓		-0.1	0	-1.3	0
(5)		6M	✓		-0.1	0	0.7	2
(6)		7L	✓		-0.1	0	0.7	2
(7)		4A	✓		-0.1	0	1.7	3
(8)		6B	✓		-0.1	0	-0.3	1
(9)		2D	✓		-0.1	0	-0.3	1
(10)		3G	✓		-0.1	0	5	3.7
(11)		3i	✓		0.9	1	0	-1.3
(12)		5B	✓		-0.1	0	1	-0.3
(13)		1i	✓		-0.1	0	0	-1.3
(14)		4D floor	✓		-0.1	0	3	1.7
(15)	Room 0 =	2e	✓		-0.1	0	4	2.7
(16)		6F	✓		-0.1	0	1	-0.3
(17)		7G	✓		0.9	1	1	-0.3
(18)		6i	✓		-0.1	0	4	2.7
(19)		5K floor	✓		-0.1	0	1	-0.3
(20)		5i ceil	✓		-0.1	0	1	-0.3
(21)		6H ceil	✓		-0.1	0	1	-0.3
(22)		6D ceil	✓		-0.1	0	1	-0.3
(23)		12H pump lab	✓		-0.1	0	1	-0.3
(24)		14i	✓		0.9	1	0	-1.3

(25)	Prep lab 9M		✓	-0.1	0	3	1.7
(26)	10L		✓	0.9	1	4	-0.3
(27)	Inside hood		✓	-0.1	0	19	17.70
(28)	Surround hood		✓	-0.1	0	3	1.7
(29)	6B	✓		-0.1	0	5	3.7
(30)	4C	✓		-0.1	0	1	-0.3
(31)	9C	✓		-0.1	0	4	2.7
(32)	13F	✓		-0.1	0	1	-0.3
(33)	6M	✓		-0.1	0	2	0.7
(34)	2i	✓		-0.1	0	0	-1.3
(35)	4i floor	✓		-0.1	0	1	-0.3
(36)	5f	✓		-0.1	0	4	2.7
(37)	8F	✓		-0.1	0	0	-1.3
(38)	2D	✓		-0.1	0	2	0.7
(39)	5e 1g	✓		-0.1	0	0	-1.3
(40)			✓	-0.1	0	0	-1.3

(4)	Prep lab 9i		✓	-0.1	0	3	1.7
(5)	6C floor			-0.1	0	3	1.7
(6)	10D	✓		-0.1	0	2	0.7
(7)	8e			-0.1	0	0	-1.3
(8)	8i			-0.1	0	1	-0.3
(9)	6K		✓	-0.1	0	2	0.7
(10)	B20 Lab 2			-0.1	0	2	0.7
(11)	11F Lab 7			-0.1	0	1	-0.3
(12)	10i			-0.1	0	3	1.7
(13)	108 BIGGS			-0.1	0	0	-1.3
(14)	↓			-0.1	0	2	0.7
(15)	7H			-0.1	0	0	-1.3
(16)	Lab 2 8W			-0.1	0	4	2.7

			0.9	1.7 0.9			3
17	9F flor		-0.1	-0.3	0		1
18	7B		-0.1	-0.3	0		1
19	7e	Lab 7	-0.1	1.7	0		3
20	1e		-0.1	-1.3		0	0
21	5R		-0.1	-1.3		0	0
22	6O	Lab 2	-0.1	0.7		0	2
23	2G'		-0.1	2.7		0	4
24	6F		0.9	3.7			5
25	8C						

~ 2000 - 2200
dead computer
2,800
to program
livable
comp

MDC $2.71 + 4.65\sqrt{B}$

$$MDA = \frac{2.71 + 4.65\sqrt{B_{bkg} \cdot 1}}{1 \times E} = \frac{2.71 + 4.65\sqrt{3}}{0.27} = 40 \text{ dpm}$$

efficiency = counts/dis $\frac{\text{what you got}}{\text{what you should get}}$

432.2 yrs

AM 52795-123
CTC 52794-123
2.111 E+05 yrs

dps 388
1.877

9/3/96 12:0pm

$1877 \frac{d}{s} \times \frac{60 s}{min} = 1.13 E 5$ dpm

$E = \frac{cpm}{DPm} = \frac{3.1 E 4 \text{ cpm}}{1.13 E 5 \text{ dpm}} = 0.27$ or 27% efficiency

Tue Feb 27 10:37:05 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 6 Sample Id: d9 Sample Type: 1
Tue Feb 27 10:38:10 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 7 Sample Id: d10 Sample Type: 1
Tue Feb 27 10:39:17 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 1 Sample Id: bkgd ✓ Sample Type: 1
Tue Feb 27 10:32:32 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		3
Net CPM		-0.100		1.700
Std Deviation	(%)	0.000		115.470
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 2 Sample Id: am-241 ✓ Sample Type: 1
Tue Feb 27 10:33:40 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		6387		2244
Net CPM		6386.900		2242.700
Std Deviation	(%)	2.503		4.222
Concentration	(pCi/ml)	2876.98	(pCi/ml)	1010.23

Sample Number 3 Sample Id: Tc-99 ✓ Sample Type: 1
Tue Feb 27 10:34:48 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		31438
Net CPM		-0.100		31436.699
Std Deviation	(%)	0.000		1.128
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	14160.7

Sample Number 4 Sample Id: d3 ✓ Sample Type: 1
Tue Feb 27 10:35:55 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		3
Net CPM		-0.100		1.700
Std Deviation	(%)	0.000		115.470
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	0.765766

Tue Feb 27 08:33:23 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Tue Feb 27 08:27:46 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		2
Net CPM		-0.100		0.700
Std Deviation	(%)	0.000		141.421
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 36 Sample Id: a1 Sample Type: 1
Tue Feb 27 08:28:53 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		4
Net CPM		-0.100		2.700
Std Deviation	(%)	0.000		100.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 37 Sample Id: a6 Sample Type: 1
Tue Feb 27 08:30:01 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		0
Net CPM		-0.100		-1.300
Std Deviation	(%)	0.000		0.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 38 Sample Id: a12 Sample Type: 1
Tue Feb 27 08:31:08 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		2
Net CPM		-0.100		0.700
Std Deviation	(%)	0.000		141.421
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 39 Sample Id: b4 Sample Type: 1
Tue Feb 27 08:32:16 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		1
Net CPM		-0.100		-0.300
Std Deviation	(%)	0.000		200.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Tue Feb 27 08:22:09 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 31 Sample Id: d15 ✓ Sample Type: 1
Tue Feb 27 08:23:17 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		2
Net CPM	0.900		0.700
Std Deviation (%)	200.000		141.421
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.315315

Sample Number 32 Sample Id: d18 ✓ Sample Type: 1
Tue Feb 27 08:24:24 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 33 Sample Id: d7 ✓ Sample Type: 1
Tue Feb 27 08:25:31 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 34 Sample Id: c2 Sample Type: 1
Tue Feb 27 08:26:39 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Tue Feb 27 08:16:32 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		7
Net CPM	-0.100		5.700
Std Deviation (%)	0.000		75.593
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.56757

Sample Number 26 Sample Id: a15✓ Sample Type: 1
Tue Feb 27 08:17:40 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 27 Sample Id: a14 ✓ Sample Type: 1
Tue Feb 27 08:18:47 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 28 Sample Id: b10 ✓ Sample Type: 1
Tue Feb 27 08:19:54 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 29 Sample Id: d16 ✓ Sample Type: 1
Tue Feb 27 08:21:02 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Tue Feb 27 08:10:55 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 21 Sample Id: d12 Sample Type: 1
Tue Feb 27 08:12:03 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 22 Sample Id: d8 Sample Type: 1
Tue Feb 27 08:13:10 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 23 Sample Id: d11 Sample Type: 1
Tue Feb 27 08:14:17 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 24 Sample Id: a20 Sample Type: 1
Tue Feb 27 08:15:25 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Tue Feb 27 08:05:18 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		4
Net CPM		-0.100		2.700
Std Deviation	(%)	0.000		100.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 16 Sample Id: [illegible] Sample Type: 1
Tue Feb 27 08:06:26 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		7
Net CPM		-0.100		5.700
Std Deviation	(%)	0.000		75.593
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	2.56757

Sample Number 17 Sample Id: d7 Sample Type: 1
Tue Feb 27 08:07:33 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		3
Net CPM		-0.100		1.700
Std Deviation	(%)	0.000		115.470
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 18 Sample Id: d6 Sample Type: 1
Tue Feb 27 08:08:40 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		4
Net CPM		-0.100		2.700
Std Deviation	(%)	0.000		100.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 19 Sample Id: d13 Sample Type: 1
Tue Feb 27 08:09:48 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		2
Net CPM		-0.100		0.700
Std Deviation	(%)	0.000		141.421
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	0.315315

Tue Feb 27 07:59:42 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		5
Net CPM	0.900		3.700
Std Deviation (%)	200.000		89.443
Concentration (pCi/ml)	0.405405	(pCi/ml)	1.66667

Sample Number 11 Sample Id: b11 Sample Type: 1
Tue Feb 27 08:00:49 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		11
Net CPM	-0.100		9.700
Std Deviation (%)	0.000		60.302
Concentration (pCi/ml)	-0.045045	(pCi/ml)	4.36937

Sample Number 12 Sample Id: a17 Sample Type: 1
Tue Feb 27 08:01:56 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		6
Net CPM	-0.100		4.700
Std Deviation (%)	0.000		81.650
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.11712

Sample Number 13 Sample Id: a19 Sample Type: 1
Tue Feb 27 08:03:04 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 14 Sample Id: a7 Sample Type: 1
Tue Feb 27 08:04:11 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		7
Net CPM	-0.100		5.700
Std Deviation (%)	0.000		75.593
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.56757

Tue Feb 27 07:54:05 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		10
Net CPM	-0.100		8.700
Std Deviation (%)	0.000		63.246
Concentration (pCi/ml)	-0.045045	(pCi/ml)	3.91892

Sample Number 6 Sample Id: a11 Sample Type: 1
Tue Feb 27 07:55:12 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		12
Net CPM	-0.100		10.700
Std Deviation (%)	0.000		57.735
Concentration (pCi/ml)	-0.045045	(pCi/ml)	4.81982

Sample Number 7 Sample Id: a18 Sample Type: 1
Tue Feb 27 07:56:19 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		11
Net CPM	-0.100		9.700
Std Deviation (%)	0.000		60.302
Concentration (pCi/ml)	-0.045045	(pCi/ml)	4.36937

Sample Number 8 Sample Id: a9 Sample Type: 1
Tue Feb 27 07:57:27 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		10
Net CPM	-0.100		8.700
Std Deviation (%)	0.000		63.246
Concentration (pCi/ml)	-0.045045	(pCi/ml)	3.91892

Sample Number 9 Sample Id: a4 Sample Type: 1
Tue Feb 27 07:58:34 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		12
Net CPM	-0.100		10.700
Std Deviation (%)	0.000		57.735
Concentration (pCi/ml)	-0.045045	(pCi/ml)	4.81982

Sample Number 1 Sample Id: bkgd ✓ Sample Type: 1
Tue Feb 27 07:49:35 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		6
Net CPM		-0.100		4.700
Std Deviation	(%)	0.000		81.650
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	2.11712

Sample Number 2 Sample Id: am-241 ✓ Sample Type: 1
Tue Feb 27 07:50:42 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		6334		2270
Net CPM		6333.900		2268.700
Std Deviation	(%)	2.513		4.198
Concentration	(pCi/ml)	2853.11	(pCi/ml)	1021.94

Sample Number 3 Sample Id: Tc-99 ✓ Sample Type: 1
Tue Feb 27 07:51:50 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		2		30959
Net CPM		1.900		30957.699
Std Deviation	(%)	141.421		1.137
Concentration	(pCi/ml)	0.855856	(pCi/ml)	13944.9

Sample Number 4 Sample Id: ci ✓ Sample Type: 1
Tue Feb 27 07:52:57 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		12
Net CPM		-0.100		10.700
Std Deviation	(%)	0.000		57.735
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	4.81982

Sample Number 26 Sample Id: a13 ✓ Sample Type: 1

Mon Feb 26 15:22:39 2001

Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 21 Sample Id: b8 Sample Type: 1
Mon Feb 26 15:17:02 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 22 Sample Id: d4 Sample Type: 1
Mon Feb 26 15:18:09 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 23 Sample Id: b6 Sample Type: 1
Mon Feb 26 15:19:17 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 24 Sample Id: c4 Sample Type: 1
Mon Feb 26 15:20:24 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 25 Sample Id: a21 Sample Type: 1
Mon Feb 26 15:21:31 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 16 Sample Id: b5 ✓ Sample Type: 1
Mon Feb 26 15:11:25 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 17 Sample Id: c6 ✓ Sample Type: 1
Mon Feb 26 15:12:32 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 18 Sample Id: a5 ✓ Sample Type: 1
Mon Feb 26 15:13:40 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 19 Sample Id: b14 Sample Type: 1
Mon Feb 26 15:14:47 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 20 Sample Id: b17 ✓ Sample Type: 1
Mon Feb 26 15:15:54 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 11 Sample Id: b13 Sample Type: 1
Mon Feb 26 15:05:48 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		1
Net CPM		-0.100		-0.300
Std Deviation	(%)	0.000		200.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 12 Sample Id: b9 Sample Type: 1
Mon Feb 26 15:06:55 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		1
Net CPM		-0.100		-0.300
Std Deviation	(%)	0.000		200.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 13 Sample Id: b16 Sample Type: 1
Mon Feb 26 15:08:03 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		1
Net CPM		-0.100		-0.300
Std Deviation	(%)	0.000		200.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 14 Sample Id: c3 Sample Type: 1
Mon Feb 26 15:09:10 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		4
Net CPM		-0.100		2.700
Std Deviation	(%)	0.000		100.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 15 Sample Id: a2 Sample Type: 1
Mon Feb 26 15:10:18 2001
Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		0
Net CPM		-0.100		-1.300
Std Deviation	(%)	0.000		0.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 6 Sample Id: c7 ✓ Sample Type: 1
Mon Feb 26 15:00:11 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 7 Sample Id: c5 ✓ Sample Type: 1
Mon Feb 26 15:01:18 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 8 Sample Id: a8 ✓ Sample Type: 1
Mon Feb 26 15:02:26 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 9 Sample Id: a3 ✓ Sample Type: 1
Mon Feb 26 15:03:33 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 10 Sample Id: c1 ✓ Sample Type: 1
Mon Feb 26 15:04:41 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 1 Sample Id: bkgd ✓ Sample Type: 1
Mon Feb 26 14:54:34 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 2 Sample Id: Am 241 ✓ Sample Type: 1
Mon Feb 26 14:55:42 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		6
Net CPM	-0.100		4.700
Std Deviation (%)	0.000		81.650
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.11712

Sample Number 3 Sample Id: Tc 99 ✓ Sample Type: 1
Mon Feb 26 14:56:49 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 4 Sample Id: a10 ✓ Sample Type: 1
Mon Feb 26 14:57:56 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 5 Sample Id: b1 ✓ Sample Type: 1
Mon Feb 26 14:59:04 2001
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector:	Date: 2-15-01
Licensee: Dept Army - Ft McClellan	Location: Ft Mc Ala
License No.:	Docket No.:
Report No.:	Survey Date(s):

Isotopes of Interest: Co-60 Cs137

Survey Instrument

Type: E600	Probe: pancake
Serial No.:	Serial No.: N/A
NRC Tag No.: 073470	NRC Tag No.: N/A
Calibration Date: 9/23/00	Size (S): 15 cm^2

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr _____

(1) 59	(2) 40	(3) 40	(4) 42	(5) 42	Avg.: 45

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1888	013414	Cs137	3475	2470	71
1126/87	022981	Tc99	14,300	6800	48
3391	—	Cs137 check source		66,800	

Efficiency (E) = **(M-B)/A**

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (X): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

Average Release Criteria for Isotope of Interest (Y): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
8/21	8:30	3182	CS137	66,000	Actuals		

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector:	Date: 2-15-01
Licensee: Dept Army - Ft McClellan	Location: Ft Mc ALA
License No.:	Docket No.:
Report No.:	Survey Date(s):

Isotopes of Interest: Co-60 Cs137

Survey Instrument

Type: ESP-2	Probe:
Serial No.: 00793	Serial No.:
NRC Tag No.: 026418	NRC Tag No.:
Calibration Date: 5/27/00	Size (S): cm^2

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr _____

(1) 36	(2) 35	(3) 36	(4) 40	(5) 35	Avg.: 36

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1888	013414	Cs137	3475	2570	74
1126/87	022981	Tc99	14,300	2520	18
3391	—	Cs check source		72,200	
	8/20			4E4	

Efficiency (E) = (M-B)/A

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector:	Date:
Licensee:	Location:
License No.:	Docket No.:
Report No.:	Survey Date(s):

Isotopes of Interest: _____

Survey Instrument

Type:	Probe: LRGX SPA 6
Serial No.:	Serial No.: 286
NRC Tag No.:	NRC Tag No.: 026740
Calibration Date:	Size (S): 15 cm^2

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr _____

(1)	(2)	(3)	(4)	(5)	Avg.:

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1889		CS137		≈1,250	.08
3391	CS137	check source		≈ 89,000	

Efficiency (E) = (M-B)/A

.0151 uCi on 7/23/79

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (X): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

Average Release Criteria for Isotope of Interest (Y): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
2/21	8:30	3182	Cs137	68,100	[illegible]		

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector:	Date:
Licensee:	Location:
License No.:	Docket No.:
Report No.:	Survey Date(s):

Isotopes of Interest: _____

Survey Instrument

Type: Ludlum 2401-P	Probe:
Serial No.:	Serial No.:
NRC Tag No.:	NRC Tag No.:
Calibration Date:	Size (S): cm^2

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr _____

(1)	(2)	(3)	(4)	(5)	Avg.:

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1888	013414	Cs137	2550	1800	71
1126/87	022981	Tc99	14,300	2200	15
3391		Cs137 check			

Efficiency (E) = (M-B)/A

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector:	Date: 2-15-01
Licensee: Dept of the Army Ft McClellan	Location: Ft Mc ARA
License No.:	Docket No.:
Report No.:	Survey Date(s):

Isotopes of Interest: Co60 Cs137

Survey Instrument

Type: ESP-2	Probe:
Serial No.:	Serial No.:
NRC Tag No.: 026729	NRC Tag No.:
Calibration Date: 5-26-00	Size (S): cm²

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr _____

(1)	(2)	(3)	(4)	(5)	Avg.:

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1888	013414	Cs 137	3475	~~1720~~ 2430 cpm	~~49~~ cpm 72
1126/87	022981	Tc 99	14,310	2020	14
3391		Cs check source		64,100	
	2/20			764	

Efficiency (E) = (M-B)/A

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector:	Date:
Licensee:	Location:
License No.:	Docket No.:
Report No.:	Survey Date(s):

Isotopes of Interest: _____

Survey Instrument

Type:	Probe: LEG-1
Serial No.:	Serial No.:
NRC Tag No.:	NRC Tag No.:
Calibration Date:	Size (S): cm^2

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr _____

(1)	(2)	(3)	(4)	(5)	Avg.:

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
SN 1889		Cs137		11,000	
3391		Cs chelisour		890,000	

Efficiency (E) = (M-B)/A

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (X): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

Average Release Criteria for Isotope of Interest (Y): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
2/21	8:30	3182	Cs137	65,000			

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector:	Date: 2-15-01
Licensee: Army - Ft McClellan	Location: Ft Mc ALA
License No.:	Docket No.:
Report No.:	Survey Date(s):

Isotopes of Interest: Co 60 Cs137

Survey Instrument

Type: ESP-2	Probe: Pancake
Serial No.:	Serial No.:
NRC Tag No.: 026730	NRC Tag No.:
Calibration Date: 9-23-00	Size (S): cm²

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr _____

(1)	(2)	(3)	(4)	(5)	Avg.:

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1888	013414	Cs137	3475	2550	73
1106/87	022981.	Tc99	14,300	2150	15
3391		Cs137 check source		49200	
	2/20			9X104	

Efficiency (E) = (M-B)/A

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector:	Date:
Licensee:	Location:
License No.:	Docket No.:
Report No.:	Survey Date(s):

Isotopes of Interest: _____

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:
NRC Tag No.:	NRC Tag No.:
Calibration Date:	Size (S): cm^2

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr _____

(1)	(2)	(3)	(4)	(5)	Avg.:

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1889		Cs137		2300	
3391		Cs checksource		117,000	

Efficiency (E) = (M-B)/A

pancake

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

986

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

108 / .1095

30.61 / .0225 1360

Surface Activity Measurement Minimum Detectable Activity

Cs137

Scanning

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

$\frac{B_R}{t_c}$

Mode	MDA

Cs137

108 / .0225 = 4800

Tc99

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (X): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

Average Release Criteria for Isotope of Interest (Y): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

30.61 / .73 x .15 = .1095 = 280

Scaler

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
2/21	8:30am	CST 3182	Cs137	50,000	[illegible]		

Example

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector: HENSON PARKER MASNYK-BAILEY	Date: 3-4-98
Licensee: Dept of The Army	Location: Fort McClellan
License No.: 01-02861-04	Docket No.: 030-14759
Report No.: 98-01	Survey Date(s): March 9-13, 1998

Isotopes of Interest: Sr90 Cs 137 Co60

Survey Instrument

Type: ESP-2	Probe: HP-260
Serial No.: ~~00782~~ NA	Serial No.: 706888
NRC Tag No.: 026729	NRC Tag No.: 026732
Calibration Date: 11-20-97	Size (S): 15 cm²

Background Determination (B)

Units: cpm 34 mrem/hr _____ μRem/hr _____

(1) 30	(2) 39	(3) 35	(4) 35	(5) 30	Avg.: 34

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1888	013414	Cs137 β	3475	2780	.80
NEN	N/A	Sr90	44,144	29,100	.65
1126/87	022981	Tc99	14,300	5300	.37
NA	NRC 01 014	Cs137	10,944,600	230,000	check source

Efficiency (E) = (M-B)/A

Tc β 292 keV = Co β 314 keV

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

NRC 026732

Field Check Source Measurements Instrument Serial No.: 00782 Probe Serial No.: 706888

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1) NRC 01014	NA	CS137	10,944,600	
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA ~~dpm~~
Scaler	CS137 → 249 Sr90 → 304 Tc99 - 497
Ratemeter	CS137 → 64 Sr90 → 78 Tc99 - 128
Scanning	CS137 → 850 Sr90 → 1040 Tc99 - 1700

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (X): 15,000 dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

CS137

= [(15,000 /100) x 15 x .80] + 34 = 1834 cpm

Average Release Criteria for Isotope of Interest (Y): 5,000 dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(5,000 /100) x 15 x .80] + 34 = 634 cpm

1000 AV = Sr90 3000 max = Sr90

ESP-2 + HP260
00782

SCALER

Cs-137

$$MDA = \frac{2.71 + 4.65\sqrt{BF \cdot t}}{t \times E \cdot A/100}$$

$$= \frac{2.71 + 4.65\sqrt{34 \cdot 1}}{1 \times .8 \times .15} = \frac{29.82}{.12} = 249$$

Sr90

$$\frac{29.82}{.098} = 304$$

Tc99

$$\frac{29.82}{.06} = 497$$

Ratemeter

Cs 137

$$\frac{4.65\sqrt{\frac{BF}{2} \times Tc}}{E \times \frac{A}{100}} = \frac{4.65\sqrt{34 \times .16}}{.80 \times .15} = \frac{7.67}{.12} = 64$$

Sr90

$$\frac{7.67}{.65 \times .15} = \frac{7.67}{.098} = 78$$

Tc99

$$\frac{7.67}{.37 \times .15} = \frac{7.67}{.06} = 128$$

ESP2 + HP260
00782

Scanning

Cs 137 $MPA = \frac{3 \cdot Bq}{E \cdot A/W} = \frac{34 \times 3}{.80 \times .15} = \frac{102}{.12} = 850$

Sr 90 $\frac{102}{.098} = 1040$

Tc 99 $\frac{102}{.06} = 1700$

Release Criteria

Sr 90 $\frac{3000}{100} \times .15 \times .65 + 34 = 327$ cpm

Cs 137 $\frac{1000}{100} \times 15 \times .65 + 34 = 132$

60 $\frac{15000}{100} \times 15 \times .37 + 34 = 867$

$\frac{5000}{100} \times 15 \times .37 + 34 = 312$

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.: 01-02861-04	Survey Date(s): March 9-13, 1998

Survey Instrument

Type: ESP-2	Probe: HP-260
Serial No.: 00782	Serial No.: 706888 NRC 026732

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
3/9/98	1225 est	3142 entrance	Cs137	163,000	40		
3/9	4:10 est	apron		160,000			
3/10	9:40 est			223,000			

CLOSEOUT INSPECTION AND SURVEY PLAN

FORT MCCLELLAN
LICENSE NO. 01-02861-05
DOCKET NO. 030-17584

INSPECTION DATES: JANUARY 22-26, 2001

INSPECTORS: ORYSIA MASNYK BAILEY

PURPOSE OF INSPECTION: Perform confirmatory survey of Select Commodity Site Areas included in licensee's Final Radiological Status Report dated October 2000 in support of releasing these areas for unrestricted use.

RADIONUCLIDES OF INTEREST: Cobalt 60, Cesium 137, Strontium 90. There are records of Radium 226 use as well, although not licensed by the NRC, this should be considered in the event of elevated readings, for referral to the EPA.

AFFECTED AREAS: Buildings 3182, 3185, T-810, T-811, T-812, T-836, T-837, and areas identified by licensee to be included in Rattle Snake Gulch and Chemical School burial grounds on Iron Mountain.

NO UNAFFECTED AREAS WILL BE REVIEWED DURING THIS SURVEY.

SURVEY INSTRUMENTS:
ESP-2 with pancake and SPA-6 probe
Ludlum Model 3 with pancake probe
E-600 with pancake and ion chamber
RO2A ion chamber
Model 3-98 with 44-3 probe

SURVEY/SAMPLING POINTS:
Utilizing licensee's grid system:
Verify background values
Perform 10% confirmatory Survey:
-fixed point measurements
-smears
-ground walkover
Take biased readings as necessary.

The licensee' report, Final Radiological Status Report, Select Commodity Site Areas, dated October 2000, contains the data gathered by Allied Technology Group (ATG), August 1-18, 2000. This data is the result of surveys conducted at areas that were identified via an Army Historical Records Search as having radiological issues (the storage and/or routine maintenance of Army radioactive commodities).

Six sites were identified; Buildings T-810, T-811, T-812, T-837, 3182, 3185, the former site of Building T-836, original Rattlesnake Gulch area, and Chemical School Radiological Burial Grounds.

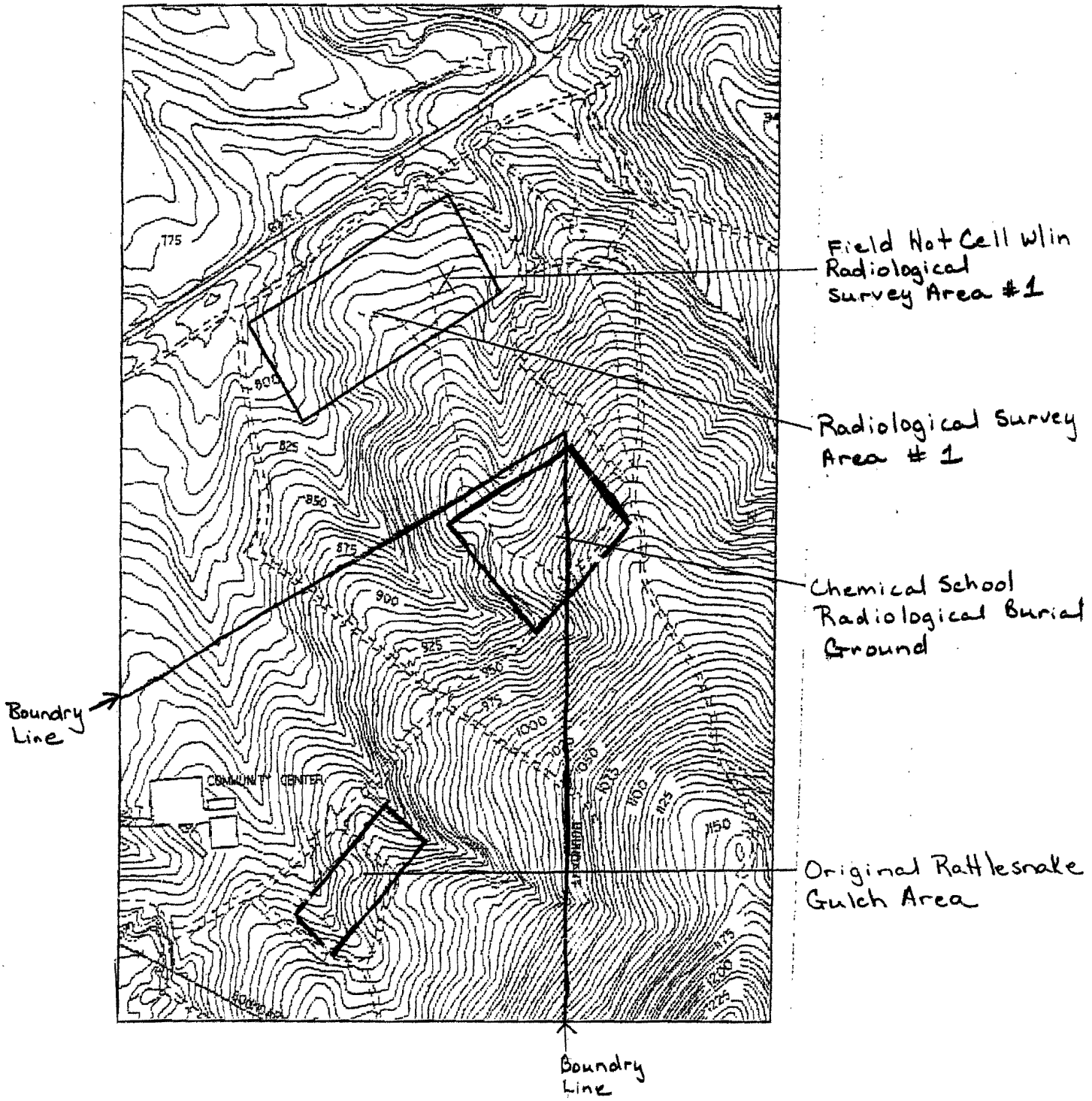
Building 3182 (Military Police Museum) was previously released by the NRC. When the building was vacated, ATG performed a Class III survey and found discrete elevated readings. These were remediated and the building was resurveyed as a Class I area. We will survey 10% of the floor and of the lower two meters of the room where the contamination was found. The rest of the building has been surveyed. The room where the contamination was found contained the exhibits when the building was a museum. The contamination was found in Survey Unit 5, the licensee had 175 sample points, we will take 18 samples and survey the floor and two bottom meters of the wall.

Buildings T-810, T-811, T-812, T-T-836, and T-837 were used as temporary classrooms and labs in the early 1950s when the school was first licensed. Building T-836 has been demolished and was surveyed as an outdoor area. We will confirm 10% of the licensee's sampling points, performing a survey 10% of the floor area as well as of the associated grid. With the exception of Building T-837, these areas were surveyed as a Class III area. The licensee treated Building T-837 as a Class II area. We will confirm 10% of the licensee's sampling point, performing a complete scan of the associated grid and 10 % of the floor. Each building had 15 sampling points, we will confirm 3 points in each room.

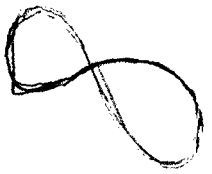
Building 3185 was primarily used as a personnel decontamination facility using Bromide 82 (T ½ of 35 hours). However, the licensee identified Cesium 137, Radium 226, Cobalt 60, and Strontium 90 as possible contaminants. We will confirm 10% of the licensee's 15 sampling points, performing a scan of the affected grid, and of 10% of the floor.

The licensee has identified an area near the Anniston Community Center that may be part of the Rattlesnake Gulch training area. The radionuclides of concern are Cesium 137 and Cobalt 60. The area east of the Community Center parking lot, it is a wooded ravine located at a present bike trail, and the grassy bank of the tree line on the west (Community Center/parking area) side. The overall area of concern is 200' wide across the ravine by 400' long. The licensee surveyed for gross gamma contamination as a Class III area. The licensee surveyed 10% of the area, we will also survey 10%.

The licensee has also identified additional areas that they feel should be included as part of the Chemical School Burial Grounds. The site includes the northeast corner of the Anniston Community Center property. The area is approximately 400' by 400' and spans both sides of the chain link fence and the unimproved Perimeter Road, with the majority of the site within the City side (NW) of the fence line. The area was surveyed by the licensee as a Class II area, for gross gamma contamination. The licensee surveyed 50%, we will survey 10%.


Field Hot Cell w/in Radiological Survey Area #1
Radiological Survey Area # 1
Chemical School Radiological Burial Ground
Boundry Line
Original Rattlesnake Gulch Area
Boundry Line
COMMUNITY CENTER
775
800
825
850
875
900
925
950
975
1000
1025
1050
1075
1100
1125
1150
1175
1200
1225

Enclosure 1



Sample Number 1 Sample Id: bkgd Sample Type: 1
Thu Oct 21 14:26:22 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		3
Net CPM	0.900		1.700
Std Deviation (%)	200.000		115.470
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.765766

Sample Number 2 Sample Id: Am-241 Sample Type: 1
Thu Oct 21 14:27:30 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	5879		2006
Net CPM	5878.900		2004.700
Std Deviation (%)	2.608		4.465
Concentration (pCi/ml)	2648.15	(pCi/ml)	903.018

Sample Number 3 Sample Id: Tc-99 Sample Type: 1
Thu Oct 21 14:28:38 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	4		30847
Net CPM	3.900		30845.699
Std Deviation (%)	100.000		1.139
Concentration (pCi/ml)	1.75676	(pCi/ml)	13894.5

Sample Number 4 Sample Id: 9i Sample Type: 1
Thu Oct 21 14:29:45 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 5 Sample Id: 6k Sample Type: 1
Thu Oct 21 14:30:52 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 6 Sample Id: 10d Sample Type: 1
Thu Oct 21 14:32:00 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 7 Sample Id: 8e Sample Type: 1
Thu Oct 21 14:33:07 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585585

Sample Number 8 Sample Id: 8i Sample Type: 1
Thu Oct 21 14:34:14 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 9 Sample Id: 6k Sample Type: 1
Thu Oct 21 14:35:22 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	[illegible]		2
Net CPM	0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 10 Sample Id: b20 Sample Type: 1
Thu Oct 21 14:36:29 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 11 Sample Id: 11f Sample Type: 1
Thu Oct 21 14:37:37 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 12 Sample Id: 10i Sample Type: 1
Thu Oct 21 14:38:44 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 13 Sample Id: 1081 bkgd Sample Type: 1
Thu Oct 21 14:39:51 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 14 Sample Id: 1081 bkgd Sample Type: 1
Thu Oct 21 14:40:59 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 15 Sample Id: 7h Sample Type: 1
Thu Oct 21 14:42:06 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 16 Sample Id: 8w Sample Type: 1
Thu Oct 21 14:43:14 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 17 Sample Id: 9f Sample Type: 1
Thu Oct 21 14:44:21 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		3
Net CPM	0.900		1.700
Std Deviation (%)	200.000		115.470
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.765766

Sample Number 18 Sample Id: 7s Sample Type: 1
Thu Oct 21 14:45:28 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 19 Sample Id: 7e Sample Type: 1
Thu Oct 21 14:46:36 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 20 Sample Id: 1e Sample Type: 1
Thu Oct 21 14:47:43 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 21 Sample Id: 5r Sample Type: 1
Thu Oct 21 14:48:50 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 22 Sample Id: 6o Sample Type: 1
Thu Oct 21 14:49:58 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 23 Sample Id: 2q Sample Type: 1
Thu Oct 21 14:51:05 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 24 Sample Id: 6f Sample Type: 1
Thu Oct 21 14:52:13 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 25 Sample Id: 8c Sample Type: 1
Thu Oct 21 14:53:20 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		5
Net CPM	0.900		3.700
Std Deviation (%)	200.000		89.443
Concentration (pCi/ml)	0.405405	(pCi/ml)	1.66667

1

Sample Number 1 Sample Id: bk Sample Type: 1
Thu Oct 21 08:36:50 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 2 Sample Id: Am-241 Sample Type: 1
Thu Oct 21 08:37:57 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	5933		2026
Net CPM	5932.900		2024.700
Std Deviation (%)	2.597		4.443
Concentration (pCi/ml)	2672.48	(pCi/ml)	912.027

Sample Number 3 Sample Id: Tc-99 Sample Type: 1
Thu Oct 21 08:39:05 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		31009
Net CPM	0.900		31007.699
Std Deviation (%)	200.000		1.136
Concentration (pCi/ml)	0.405405	(pCi/ml)	13967.4

Sample Number 4 Sample Id: 4n Sample Type: 1
Thu Oct 21 08:40:12 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 5 Sample Id: 6m Sample Type: 1
Thu Oct 21 08:41:20 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 6 Sample Id: 7i Sample Type: 1
Thu Oct 21 08:42:27 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 7 Sample Id: 4a Sample Type: 1
Thu Oct 21 08:43:34 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 8 Sample Id: 6b Sample Type: 1
Thu Oct 21 08:44:42 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 9 Sample Id: 2d Sample Type: 1
Thu Oct 21 08:45:49 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 10 Sample Id: 3g Sample Type: 1
Thu Oct 21 08:46:57 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 11 Sample Id: 3i Sample Type: 1
Thu Oct 21 08:48:04 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		0
Net CPM	0.900		-1.300
Std Deviation (%)	200.000		0.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.585586

Sample Number 12 Sample Id: 5b Sample Type: 1
Thu Oct 21 08:49:11 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 13 Sample Id: 1i Sample Type: 1
Thu Oct 21 08:50:19 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 14 Sample Id: 4d Sample Type: 1
Thu Oct 21 08:51:26 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 15 Sample Id: room o Sample Type: 1
Thu Oct 21 08:52:33 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 16 Sample Id: 6f Sample Type: 1
Thu Oct 21 08:53:41 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 17 Sample Id: 7g Sample Type: 1
Thu Oct 21 08:54:48 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 18 Sample Id: 6i Sample Type: 1
Thu Oct 21 08:55:56 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 19 Sample Id: 5k Sample Type: 1
Thu Oct 21 08:57:03 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 20 Sample Id: 5i Sample Type: 1
Thu Oct 21 08:58:10 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 21 Sample Id: 6h Sample Type: 1
Thu Oct 21 08:59:18 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 22 Sample Id: cd Sample Type: 1
Thu Oct 21 09:00:25 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 23 Sample Id: 12h Sample Type: 1
Thu Oct 21 09:01:32 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 24 Sample Id: 14i Sample Type: 1
Thu Oct 21 09:02:40 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		0
Net CPM	0.900		-1.300
Std Deviation (%)	200.000		0.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.585586

Sample Number 25 Sample Id: 9m Sample Type: 1
Thu Oct 21 09:03:47 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 26 Sample Id: 101 Sample Type: 1
Thu Oct 21 09:04:55 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 27 Sample Id: inside hood Sample Type: 1
Thu Oct 21 09:06:02 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		19
Net CPM	-0.100		17.700
Std Deviation (%)	0.000		45.883
Concentration (pCi/ml)	-0.045045	(pCi/ml)	7.97297

Sample Number 28 Sample Id: surround hood Sample Type: 1
Thu Oct 21 09:07:09 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 29 Sample Id: 6b Sample Type: 1
Thu Oct 21 09:08:17 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 30 Sample Id: 4ce Sample Type: 1
Thu Oct 21 09:09:24 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 31 Sample Id: 9c Sample Type: 1
Thu Oct 21 09:10:32 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 32 Sample Id: 13f Sample Type: 1
Thu Oct 21 09:11:39 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 33 Sample Id: 6m Sample Type: 1
Thu Oct 21 09:12:46 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 34 Sample Id: 2i Sample Type: 1
Thu Oct 21 09:13:54 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 35 Sample Id: 4i Sample Type: 1
Thu Oct 21 09:15:01 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 36 Sample Id: 5f Sample Type: 1
Thu Oct 21 09:16:08 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 37 Sample Id: 8f Sample Type: 1
Thu Oct 21 09:17:16 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 38 Sample Id: 2d Sample Type: 1
Thu Oct 21 09:18:23 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 39 Sample Id: 1g Sample Type: 1
Thu Oct 21 09:19:31 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 40 Sample Id: 5e Sample Type: 1
Thu Oct 21 09:20:38 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 1 Sample Id: bk Sample Type: 1
Wed Oct 20 08:30:20 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 2 Sample Id: Am-241 Sample Type: 1
Wed Oct 20 08:31:28 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	5898		2088
Net CPM	5897.900		2086.700
Std Deviation (%)	2.604		4.377
Concentration (pCi/ml)	2656.71	(pCi/ml)	939.955

Sample Number 3 Sample Id: Tc-99 Sample Type: 1
Wed Oct 20 08:32:35 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	2		30610
Net CPM	1.900		30608.699
Std Deviation (%)	141.421		1.143
Concentration (pCi/ml)	0.855856	(pCi/ml)	13787.7

Sample Number 4 Sample Id: 8i Sample Type: 1
Wed Oct 20 08:33:43 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 5 Sample Id: 9g Sample Type: 1
Wed Oct 20 08:34:50 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 6 Sample Id: 7f Sample Type: 1
Wed Oct 20 08:35:58 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 7 Sample Id: 3f Sample Type: 1
Wed Oct 20 08:37:05 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 8 Sample Id: 4b Sample Type: 1
Wed Oct 20 08:38:12 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 9 Sample Id: 2i Sample Type: 1
Wed Oct 20 08:39:20 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 10 Sample Id: 5l Sample Type: 1
Wed Oct 20 08:40:27 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 11 Sample Id: 8m Sample Type: 1
Wed Oct 20 08:41:34 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 12 Sample Id: 91 Sample Type: 1
Wed Oct 20 08:42:42 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 13 Sample Id: #62 Sample Type: 1
Wed Oct 20 08:43:49 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 14 Sample Id: 13q Sample Type: 1
Wed Oct 20 08:44:57 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 15 Sample Id: 6e Sample Type: 1
Wed Oct 20 08:46:04 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 16 Sample Id: 4d Sample Type: 1
Wed Oct 20 08:47:11 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 17 Sample Id: 11i Sample Type: 1
Wed Oct 20 08:48:19 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 18 Sample Id: 6i Sample Type: 1
Wed Oct 20 08:49:26 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		6
Net CPM	-0.100		4.700
Std Deviation (%)	0.000		81.650
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.11712

Sample Number 19 Sample Id: 9jh Sample Type: 1
Wed Oct 20 08:50:33 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 20 Sample Id: 9g Sample Type: 1
Wed Oct 20 08:51:41 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		7
Net CPM	-0.100		5.700
Std Deviation (%)	0.000		75.593
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.56757

Sample Number 21 Sample Id: 6n0 Sample Type: 1
Wed Oct 20 08:52:48 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		0
Net CPM	0.900		-1.300
Std Deviation (%)	200.000		0.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.585586

Sample Number 22 Sample Id: 5n Sample Type: 1
Wed Oct 20 08:53:55 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 23 Sample Id: 8d Sample Type: 1
Wed Oct 20 08:55:03 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 24 Sample Id: room 0 Sample Type: 1
Wed Oct 20 08:56:10 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		3
Net CPM	0.900		1.700
Std Deviation (%)	200.000		115.470
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.765766

Sample Number 25 Sample Id: 7c Sample Type: 1
Wed Oct 20 08:57:18 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 26 Sample Id: 9i Sample Type: 1
Wed Oct 20 08:58:25 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 27 Sample Id: 8yf Sample Type: 1
Wed Oct 20 08:59:32 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 28 Sample Id: 2eh Sample Type: 1
Wed Oct 20 09:00:40 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 29 Sample Id: 9e Sample Type: 1
Wed Oct 20 09:01:47 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 30 Sample Id: 5be Sample Type: 1
Wed Oct 20 09:02:55 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 31 Sample Id: t3 Sample Type: 1
Wed Oct 20 09:04:02 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 32 Sample Id: t1 Sample Type: 1
Wed Oct 20 09:05:09 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 33 Sample Id: t2 Sample Type: 1
Wed Oct 20 09:06:17 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 34 Sample Id: t6 Sample Type: 1
Wed Oct 20 09:07:24 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 35 Sample Id: t5 Sample Type: 1
Wed Oct 20 09:08:31 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 36 Sample Id: t4 Sample Type: 1
Wed Oct 20 09:09:39 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	6
Net CPM	-0.100	4.700
Std Deviation (%)	0.000	81.650
Concentration (pCi/ml)	-0.045045 (pCi/ml)	2.11712

Sample Number 37 Sample Id: 4f Sample Type: 1
Wed Oct 20 09:10:46 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	1
Net CPM	-0.100	-0.300
Std Deviation (%)	0.000	200.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.135135

Sample Number 38 Sample Id: 9h Sample Type: 1
Wed Oct 20 09:11:54 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	1
Net CPM	-0.100	-0.300
Std Deviation (%)	0.000	200.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.135135

Sample Number 39 Sample Id: 9l Sample Type: 1
Wed Oct 20 09:13:01 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	2
Net CPM	-0.100	0.700
Std Deviation (%)	0.000	141.421
Concentration (pCi/ml)	-0.045045 (pCi/ml)	0.315315

Sample Number 40 Sample Id: 9g Sample Type: 1
Wed Oct 20 09:14:08 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	0
Net CPM	-0.100	-1.300
Std Deviation (%)	0.000	0.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.585586

Batch 5

Sample Number 1 Sample Id: bkgd Sample Type: 1
Tue Oct 19 09:25:11 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		2
Net CPM	0.900		0.700
Std Deviation (%)	200.000		141.421
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.315315

Sample Number 2 Sample Id: Am-241 Sample Type: 1
Tue Oct 19 09:26:18 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	5998		2040
Net CPM	5997.900		2038.700
Std Deviation (%)	2.582		4.428
Concentration (pCi/ml)	2701.76	(pCi/ml)	918.333

Sample Number 3 Sample Id: Tc-99 Sample Type: 1
Tue Oct 19 09:27:26 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	2		30749
Net CPM	1.900		30747.699
Std Deviation (%)	141.421		1.141
Concentration (pCi/ml)	0.855856	(pCi/ml)	13850.3

Sample Number 4 Sample Id: 81 Sample Type: 1
Tue Oct 19 09:28:33 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 5 Sample Id: 96 Sample Type: 1
Tue Oct 19 09:29:41 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		7
Net CPM	-0.100		5.700
Std Deviation (%)	0.000		75.593
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.56757

Sample Number 6 Sample Id: 95 Sample Type: 1
Tue Oct 19 09:30:48 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 7 Sample Id: 80 Sample Type: 1
Tue Oct 19 09:31:55 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 8 Sample Id: 94 Sample Type: 1
Tue Oct 19 09:33:03 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 9 Sample Id: 93 Sample Type: 1
Tue Oct 19 09:34:10 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 10 Sample Id: 92 Sample Type: 1
Tue Oct 19 09:35:18 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 11 Sample Id: 89 Sample Type: 1
Tue Oct 19 09:36:25 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 12 Sample Id: 87 Sample Type: 1
Tue Oct 19 09:37:32 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 13 Sample Id: 86 Sample Type: 1
Tue Oct 19 09:38:40 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 14 Sample Id: 83 Sample Type: 1
Tue Oct 19 09:39:47 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 15 Sample Id: 82 Sample Type: 1
Tue Oct 19 09:40:55 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 16 Sample Id: 79 Sample Type: 1
Tue Oct 19 09:42:02 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 17 Sample Id: 78 Sample Type: 1
Tue Oct 19 09:43:09 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 18 Sample Id: 76 Sample Type: 1
Tue Oct 19 09:44:17 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 19 Sample Id: 14h Sample Type: 1
Tue Oct 19 09:45:24 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 20 Sample Id: 7e Sample Type: 1
Tue Oct 19 09:46:32 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 21 Sample Id: 100 Sample Type: 1
Tue Oct 19 09:47:39 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		3
Net CPM	0.900		1.700
Std Deviation (%)	200.000		115.470
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.765766

Sample Number 22 Sample Id: 98 Sample Type: 1
Tue Oct 19 09:48:46 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 23 Sample Id: 7a Sample Type: 1
Tue Oct 19 09:49:54 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 24 Sample Id: 7e Sample Type: 1
Tue Oct 19 09:51:01 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 25 Sample Id: 2f Sample Type: 1
Tue Oct 19 09:52:08 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 26 Sample Id: 3i Sample Type: 1
Tue Oct 19 09:53:16 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 27 Sample Id: 13f Sample Type: 1
Tue Oct 19 09:54:23 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 28 Sample Id: 12h Sample Type: 1
Tue Oct 19 09:55:31 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 29 Sample Id: 3b Sample Type: 1
Tue Oct 19 09:56:38 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 30 Sample Id: 10e Sample Type: 1
Tue Oct 19 09:57:45 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		2
Net CPM	0.900		0.700
Std Deviation (%)	200.000		141.421
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.315315

Sample Number 31 Sample Id: 5a Sample Type: 1
Tue Oct 19 09:58:53 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 32 Sample Id: 3d Sample Type: 1
Tue Oct 19 10:00:00 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 33 Sample Id: 7 Sample Type: 1
Tue Oct 19 10:01:07 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 34 Sample Id: 10j Sample Type: 1
Tue Oct 19 10:02:15 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 35 Sample Id: 1b 5 Sample Type: 1
Tue Oct 19 10:03:22 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 36 Sample Id: 97 Sample Type: 1
Tue Oct 19 10:04:30 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 37 Sample Id: 75 Sample Type: 1
Tue Oct 19 10:05:37 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 38 Sample Id: 74 Sample Type: 1
Tue Oct 19 10:06:44 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 39 Sample Id: 73 Sample Type: 1
Tue Oct 19 10:07:52 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 40 Sample Id: 72 Sample Type: 1
Tue Oct 19 10:08:59 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		5
Net CPM	0.900		3.700
Std Deviation (%)	200.000		89.443
Concentration (pCi/ml)	0.405405	(pCi/ml)	1.66667

Sample Number 1 Sample Id: bkgd Sample Type: 1
Fri Oct 15 12:07:01 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 2 Sample Id: am-241 Sample Type: 1
Fri Oct 15 12:08:08 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	5945		1884
Net CPM	5944.900		1882.700
Std Deviation (%)	2.594		4.608
Concentration (pCi/ml)	2677.88	(pCi/ml)	848.063

Sample Number 3 Sample Id: tc-99 Sample Type: 1
Fri Oct 15 12:09:16 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		31029
Net CPM	0.900		31027.699
Std Deviation (%)	200.000		1.135
Concentration (pCi/ml)	0.405405	(pCi/ml)	13976.4

Sample Number 4 Sample Id: w wall 20'11 Sample Type: 1
Fri Oct 15 12:10:23 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		7
Net CPM	-0.100		5.700
Std Deviation (%)	0.000		75.593
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.56757

Sample Number 5 Sample Id: 50 Sample Type: 1
Fri Oct 15 12:11:31 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 6 Sample Id: 60 Sample Type: 1
Fri Oct 15 12:12:38 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 7 Sample Id: u4 Sample Type: 1
Fri Oct 15 12:13:45 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 8 Sample Id: u5 Sample Type: 1
Fri Oct 15 12:14:53 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 9 Sample Id: 48 Sample Type: 1
Fri Oct 15 12:16:00 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 10 Sample Id: x6 Sample Type: 1
Fri Oct 15 12:17:08 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		0
Net CPM	0.900		-1.300
Std Deviation (%)	200.000		0.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.585586

Sample Number 11 Sample Id: x3 Sample Type: 1
Fri Oct 15 12:18:15 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 12 Sample Id: u1 Sample Type: 1
Fri Oct 15 12:19:22 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 13 Sample Id: u1 east wall Sample Type: 1
Fri Oct 15 12:20:30 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 14 Sample Id: x7 Sample Type: 1
Fri Oct 15 12:21:37 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 15 Sample Id: u4 s wall Sample Type: 1
Fri Oct 15 12:22:44 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 31 Sample Id: 111 Sample Type: 1
Fri Oct 15 12:40:43 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 32 Sample Id: 109 Sample Type: 1
Fri Oct 15 12:41:50 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 33 Sample Id: 110 Sample Type: 1
Fri Oct 15 12:42:57 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 34 Sample Id: 107 Sample Type: 1
Fri Oct 15 12:44:05 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 35 Sample Id: h18 Sample Type: 1
Fri Oct 15 12:45:12 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 36 Sample Id: 91 Sample Type: 1
Fri Oct 15 12:46:19 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 37 Sample Id: 90 Sample Type: 1
Fri Oct 15 12:47:27 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 38 Sample Id: 88 Sample Type: 1
Fri Oct 15 12:48:34 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 39 Sample Id: 85 Sample Type: 1
Fri Oct 15 12:49:42 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 40 Sample Id: 84 Sample Type: 1
Fri Oct 15 12:50:49 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

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Sample Number 1 Sample Id: bkgd Sample Type: 1
Thu Oct 14 07:53:56 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		7
Net CPM	-0.100		5.700
Std Deviation (%)	0.000		75.593
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.56757

Sample Number 2 Sample Id: am-241 Sample Type: 1
Thu Oct 14 07:55:04 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	6018		1991
Net CPM	6017.900		1989.700
Std Deviation (%)	2.578		4.482
Concentration (pCi/ml)	2710.77	(pCi/ml)	896.261

Sample Number 3 Sample Id: tc-99 Sample Type: 1
Thu Oct 14 07:56:12 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	2		31321
Net CPM	1.900		31319.699
Std Deviation (%)	141.421		1.130
Concentration (pCi/ml)	0.855856	(pCi/ml)	14108

Sample Number 4 Sample Id: 5 low n wall Sample Type: 1
Thu Oct 14 07:57:19 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		6
Net CPM	-0.100		4.700
Std Deviation (%)	0.000		81.650
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.11712

Sample Number 5 Sample Id: † low w wall1 Sample Type: 1
Thu Oct 14 07:58:26 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		7
Net CPM	-0.100		5.700
Std Deviation (%)	0.000		75.593
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.56757

Sample Number 6 Sample Id: 1 low n wall Sample Type: 1
Thu Oct 14 07:59:34 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 7 Sample Id: w wall a low Sample Type: 1
Thu Oct 14 08:00:41 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 8 Sample Id: e wall a low Sample Type: 1
Thu Oct 14 08:01:48 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		7
Net CPM	-0.100		5.700
Std Deviation (%)	0.000		75.593
Concentration (pCi/ml)	-0.045045	(pCi/ml)	2.56757

Sample Number 9 Sample Id: n wall 8 low Sample Type: 1
Thu Oct 14 08:02:56 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		10
Net CPM	-0.100		8.700
Std Deviation (%)	0.000		63.246
Concentration (pCi/ml)	-0.045045	(pCi/ml)	3.91892

Sample Number 10 Sample Id: w wall c low Sample Type: 1
Thu Oct 14 08:04:03 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 11 Sample Id: s wall 8 low Sample Type: 1
Thu Oct 14 08:05:11 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		6
Net CPM	0.900		4.700
Std Deviation (%)	200.000		81.650
Concentration (pCi/ml)	0.405405	(pCi/ml)	2.11712

Sample Number 12 Sample Id: s wall 5 low Sample Type: 1
Thu Oct 14 08:06:18 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 13 Sample Id: s wall 2 low Sample Type: 1
Thu Oct 14 08:07:25 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 14 Sample Id: e wall g low Sample Type: 1
Thu Oct 14 08:08:33 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 15 Sample Id: e wall d low Sample Type: 1
Thu Oct 14 08:09:40 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 16 Sample Id: hp lab 26 floor Sample Type: 1
Thu Oct 14 08:10:48 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 17 Sample Id: decon room w wall 4' Sample Type: 1
Thu Oct 14 08:11:55 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 18 Sample Id: 25 floor Sample Type: 1
Thu Oct 14 08:13:02 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		4
Net CPM	0.900		2.700
Std Deviation (%)	200.000		100.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	1.21622

Sample Number 19 Sample Id: 23 floor Sample Type: 1
Thu Oct 14 08:14:10 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 20 Sample Id: 24 floor Sample Type: 1
Thu Oct 14 08:15:17 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 21 Sample Id: 16 w wall 22' Sample Type: 1
Thu Oct 14 08:16:25 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	2		3
Net CPM	1.900		1.700
Std Deviation (%)	141.421		115.470
Concentration (pCi/ml)	0.855856	(pCi/ml)	0.765765

Sample Number 22 Sample Id: west wall 14' Sample Type: 1
Thu Oct 14 08:17:32 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 23 Sample Id: 14 w wall Sample Type: 1
Thu Oct 14 08:18:39 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 24 Sample Id: 18 east wall Sample Type: 1
Thu Oct 14 08:19:47 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 25 Sample Id: 38 w wall Sample Type: 1
Thu Oct 14 08:20:54 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 26 Sample Id: w wall 39 Sample Type: 1
Thu Oct 14 08:22:01 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	2	7
Net CPM	1.900	5.700
Std Deviation (%)	141.421	75.593
Concentration (pCi/ml)	0.855856 (pCi/ml)	2.56757

Sample Number 27 Sample Id: 40 w wall Sample Type: 1
Thu Oct 14 08:23:09 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	1
Net CPM	-0.100	-0.300
Std Deviation (%)	0.000	200.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.135135

Sample Number 28 Sample Id: w wall 41 Sample Type: 1
Thu Oct 14 08:24:16 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	3
Net CPM	-0.100	1.700
Std Deviation (%)	0.000	115.470
Concentration (pCi/ml)	-0.045045 (pCi/ml)	0.765766

Sample Number 29 Sample Id: s wall 42 Sample Type: 1
Thu Oct 14 08:25:23 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	1
Net CPM	-0.100	-0.300
Std Deviation (%)	0.000	200.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.135135

Sample Number 30 Sample Id: s wall 43 Sample Type: 1
Thu Oct 14 08:26:31 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	1
Net CPM	-0.100	-0.300
Std Deviation (%)	0.000	200.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.135135

Sample Number 31 Sample Id: s wall 44 Sample Type: 1
Thu Oct 14 08:27:38 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 32 Sample Id: s wall 45 Sample Type: 1
Thu Oct 14 08:28:46 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		4
Net CPM	0.900		2.700
Std Deviation (%)	200.000		100.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	1.21622

Sample Number 33 Sample Id: s wall 46 Sample Type: 1
Thu Oct 14 08:29:53 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 34 Sample Id: s wall 30 Sample Type: 1
Thu Oct 14 08:31:00 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 35 Sample Id: s wall 31 Sample Type: 1
Thu Oct 14 08:32:08 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 36 Sample Id: s wall 47 Sample Type: 1
Thu Oct 14 08:33:15 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 37 Sample Id: n wall 48 Sample Type: 1
Thu Oct 14 08:34:22 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 38 Sample Id: n wall 49 Sample Type: 1
Thu Oct 14 08:35:30 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 39 Sample Id: hp lab n wall rswitc Sample Type: 1
Thu Oct 14 08:36:37 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 40 Sample Id: s wall 29 Sample Type: 1
Thu Oct 14 08:37:45 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 1 Sample Id: bkgd Sample Type: 1

Wed Oct 13 14:10:14 1999

Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 2 Sample Id: am-241 Sample Type: 1
Wed Oct 13 14:11:22 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	5930	1989
Net CPM	5929.900	1987.700
Std Deviation (%)	2.597	4.484
Concentration (pCi/ml)	2671.13 (pCi/ml)	895.36

Sample Number 3 Sample Id: tc-99 Sample Type: 1
Wed Oct 13 14:12:29 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	1	31317
Net CPM	0.900	31315.699
Std Deviation (%)	200.000	1.130
Concentration (pCi/ml)	0.405405 (pCi/ml)	14106.2

Sample Number 4 Sample Id: j3 Sample Type: 1
Wed Oct 13 14:13:36 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	2
Net CPM	-0.100	0.700
Std Deviation (%)	0.000	141.421
Concentration (pCi/ml)	-0.045045 (pCi/ml)	0.315315

Sample Number 5 Sample Id: j2 Sample Type: 1
Wed Oct 13 14:14:44 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	2
Net CPM	-0.100	0.700
Std Deviation (%)	0.000	141.421
Concentration (pCi/ml)	-0.045045 (pCi/ml)	0.315315

Sample Number 6 Sample Id: j7 Sample Type: 1
Wed Oct 13 14:15:51 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	0
Net CPM	-0.100	-1.300
Std Deviation (%)	0.000	0.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.585586

Sample Number 7 Sample Id: j14 Sample Type: 1
Wed Oct 13 14:16:59 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		3
Net CPM	0.900		1.700
Std Deviation (%)	200.000		115.470
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.765765

Sample Number 8 Sample Id: j13 Sample Type: 1
Wed Oct 13 14:18:06 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 9 Sample Id: j17 Sample Type: 1
Wed Oct 13 14:19:13 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 10 Sample Id: j16 Sample Type: 1
Wed Oct 13 14:20:21 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 11 Sample Id: j15 Sample Type: 1
Wed Oct 13 14:21:28 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 12 Sample Id: j12 Sample Type: 1
Wed Oct 13 14:22:36 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 13 Sample Id: j11 Sample Type: 1
Wed Oct 13 14:23:43 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		2
Net CPM	0.900		0.700
Std Deviation (%)	200.000		141.421
Concentration (pCi/ml)	0.405405	(pCi/ml)	0.315315

Sample Number 14 Sample Id: j9 Sample Type: 1
Wed Oct 13 14:24:50 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 15 Sample Id: j10 Sample Type: 1
Wed Oct 13 14:25:58 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 16 Sample Id: j8 Sample Type: 1
Wed Oct 13 14:27:05 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 17 Sample Id: j7 Sample Type: 1
Wed Oct 13 14:28:13 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	2
Net CPM	-0.100	0.700
Std Deviation (%)	0.000	141.421
Concentration (pCi/ml)	-0.045045 (pCi/ml)	0.315315

Sample Number 18 Sample Id: j6 Sample Type: 1
Wed Oct 13 14:29:20 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	2
Net CPM	-0.100	0.700
Std Deviation (%)	0.000	141.421
Concentration (pCi/ml)	-0.045045 (pCi/ml)	0.315315

Sample Number 19 Sample Id: j5 Sample Type: 1
Wed Oct 13 14:30:27 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	0
Net CPM	-0.100	-1.300
Std Deviation (%)	0.000	0.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.585586

Sample Number 20 Sample Id: j4 Sample Type: 1
Wed Oct 13 14:31:35 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	2
Net CPM	-0.100	0.700
Std Deviation (%)	0.000	141.421
Concentration (pCi/ml)	-0.045045 (pCi/ml)	0.315315

Sample Number 21 Sample Id: #34 Sample Type: 1
Wed Oct 13 14:32:42 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	1
Net CPM	-0.100	-0.300
Std Deviation (%)	0.000	200.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.135135

Sample Number 22 Sample Id: #33 Sample Type: 1
Wed Oct 13 14:33:49 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 23 Sample Id: #22 Sample Type: 1
Wed Oct 13 14:34:57 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 24 Sample Id: #21 Sample Type: 1
Wed Oct 13 14:36:04 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 25 Sample Id: east wall 6 Sample Type: 1
Wed Oct 13 14:37:11 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 26 Sample Id: south wall b windows Sample Type: 1
Wed Oct 13 14:38:19 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 27 Sample Id: east wall 14' Sample Type: 1
Wed Oct 13 14:39:26 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 28 Sample Id: #32 Sample Type: 1
Wed Oct 13 14:40:34 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 29 Sample Id: #37 Sample Type: 1
Wed Oct 13 14:41:41 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 30 Sample Id: #35 Sample Type: 1
Wed Oct 13 14:42:48 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 31 Sample Id: #36 Sample Type: 1
Wed Oct 13 14:43:56 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 32 Sample Id: #54 Sample Type: 1
Wed Oct 13 14:45:03 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	4
Net CPM	-0.100	2.700
Std Deviation (%)	0.000	100.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	1.21622

Sample Number 33 Sample Id: #59 Sample Type: 1
Wed Oct 13 14:46:10 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	1	1
Net CPM	0.900	-0.300
Std Deviation (%)	200.000	200.000
Concentration (pCi/ml)	0.405405 (pCi/ml)	-0.135135

Sample Number 34 Sample Id: #58 Sample Type: 1
Wed Oct 13 14:47:18 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	1
Net CPM	-0.100	-0.300
Std Deviation (%)	0.000	200.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.135135

Sample Number 35 Sample Id: #57 Sample Type: 1
Wed Oct 13 14:48:25 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	2
Net CPM	-0.100	0.700
Std Deviation (%)	0.000	141.421
Concentration (pCi/ml)	-0.045045 (pCi/ml)	0.315315

Sample Number 36 Sample Id: #56 Sample Type: 1
Wed Oct 13 14:49:33 1999
Counting Time: 1 min 0 sec

	Alpha Counts	Beta Counts
Gross	0	1
Net CPM	-0.100	-0.300
Std Deviation (%)	0.000	200.000
Concentration (pCi/ml)	-0.045045 (pCi/ml)	-0.135135

Sample Number 37 Sample Id: #55 Sample Type: 1
Wed Oct 13 14:50:40 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 38 Sample Id: #53 Sample Type: 1
Wed Oct 13 14:51:47 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 39 Sample Id: #52 Sample Type: 1
Wed Oct 13 14:52:55 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 40 Sample Id: #51 Sample Type: 1
Wed Oct 13 14:54:02 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 1 Sample Id: bkgd Sample Type: 1

Wed Oct 13 09:52:54 1999

Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		3
Net CPM		0.100		1.700
Std Deviation	(%)	0.000		115.470
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 2 Sample Id: am-241 Sample Type: 1

Wed Oct 13 09:54:02 1999

Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		5985		2011
Net CPM		5984.900		2009.700
Std Deviation	(%)	2.585		4.460
Concentration	(pCi/ml)	2695.9	(pCi/ml)	905.27

Sample Number 3 Sample Id: tc-99 Sample Type: 1

Wed Oct 13 09:55:10 1999

Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		1		31013
Net CPM		0.900		31011.699
Std Deviation	(%)	200.000		1.136
Concentration	(pCi/ml)	0.405405	(pCi/ml)	13969.2

Sample Number 4 Sample Id: jj5 ewall Sample Type: 1

Wed Oct 13 09:56:17 1999

Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		1		2
Net CPM		0.900		0.700
Std Deviation	(%)	200.000		141.421
Concentration	(pCi/ml)	0.405405	(pCi/ml)	0.315315

Sample Number 5 Sample Id: jj5 s wall Sample Type: 1

Wed Oct 13 09:57:24 1999

Counting Time: 1 min 0 sec

		Alpha Counts		Beta Counts
Gross		0		0
Net CPM		-0.100		-1.300
Std Deviation	(%)	0.000		0.000
Concentration	(pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 6 Sample Id: 3y s wall Sample Type: 1
Wed Oct 13 09:58:32 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 7 Sample Id: LL6 N WALL Sample Type: 1
Wed Oct 13 09:59:39 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 8 Sample Id: LL8 FLOOR Sample Type: 1
Wed Oct 13 10:00:46 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 9 Sample Id: LL8 N WALL Sample Type: 1
Wed Oct 13 10:01:54 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 10 Sample Id: jj5 floor Sample Type: 1
Wed Oct 13 10:03:01 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 11 Sample Id: LL8 w wall Sample Type: 1
Wed Oct 13 10:04:09 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 12 Sample Id: jj7 s wall Sample Type: 1
Wed Oct 13 10:05:16 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Sample Number 13 Sample Id: gg8 w wall Sample Type: 1
Wed Oct 13 10:06:23 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 14 Sample Id: ii5 n wall Sample Type: 1
Wed Oct 13 10:07:31 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 15 Sample Id: ii2 n wall Sample Type: 1
Wed Oct 13 10:08:38 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 16 Sample Id: y8 s wall Sample Type: 1
Wed Oct 13 10:09:46 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 17 Sample Id: 4y s wall Sample Type: 1
Wed Oct 13 10:10:53 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		0
Net CPM	0.900		-1.300
Std Deviation (%)	200.000		0.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.585586

Sample Number 18 Sample Id: 1aa e wall upper Sample Type: 1
Wed Oct 13 10:12:00 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 19 Sample Id: 1aa e wall lower Sample Type: 1
Wed Oct 13 10:13:08 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	1		1
Net CPM	0.900		-0.300
Std Deviation (%)	200.000		200.000
Concentration (pCi/ml)	0.405405	(pCi/ml)	-0.135135

Sample Number 20 Sample Id: dd1 e wall Sample Type: 1
Wed Oct 13 10:14:15 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		4
Net CPM	-0.100		2.700
Std Deviation (%)	0.000		100.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.21622

Sample Number 21 Sample Id: ii1 n wall Sample Type: 1
Wed Oct 13 10:15:23 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 22 Sample Id: y5 s wall Sample Type: 1
Wed Oct 13 10:16:30 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 23 Sample Id: lab 2 m2 Sample Type: 1
Wed Oct 13 10:17:37 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 24 Sample Id: lab 2 s1 Sample Type: 1
Wed Oct 13 10:18:45 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 25 Sample Id: lab 2 i1 Sample Type: 1
Wed Oct 13 10:19:52 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 26 Sample Id: lab 2 L11 Sample Type: 1
Wed Oct 13 10:21:00 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 27 Sample Id: hall r9 Sample Type: 1
Wed Oct 13 10:22:07 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 28 Sample Id: ff10 hall floor Sample Type: 1
Wed Oct 13 10:23:14 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 29 Sample Id: lab 2 r11 Sample Type: 1
Wed Oct 13 10:24:22 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 30 Sample Id: lab 2 n9 Sample Type: 1
Wed Oct 13 10:25:29 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		2
Net CPM	-0.100		0.700
Std Deviation (%)	0.000		141.421
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.315315

Sample Number 31 Sample Id: hall x11 Sample Type: 1
Wed Oct 13 10:26:36 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 32 Sample Id: lab 2 s wall L6 Sample Type: 1
Wed Oct 13 10:27:44 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		0
Net CPM	-0.100		-1.300
Std Deviation (%)	0.000		0.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.585586

Sample Number 33 Sample Id: lab 2 r9 floor Sample Type: 1
Wed Oct 13 10:28:51 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 34 Sample Id: bb11 w wall Sample Type: 1
Wed Oct 13 10:29:58 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 35 Sample Id: cc8 w door lower vau Sample Type: 1
Wed Oct 13 10:31:06 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 36 Sample Id: lab 2 01 wall Sample Type: 1
Wed Oct 13 10:32:13 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 37 Sample Id: bb8 w wall up vault Sample Type: 1
Wed Oct 13 10:33:21 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		5
Net CPM	-0.100		3.700
Std Deviation (%)	0.000		89.443
Concentration (pCi/ml)	-0.045045	(pCi/ml)	1.66667

Sample Number 38 Sample Id: o/s rm 108 mid-opp Sample Type: 1
Wed Oct 13 10:34:28 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		1
Net CPM	-0.100		-0.300
Std Deviation (%)	0.000		200.000
Concentration (pCi/ml)	-0.045045	(pCi/ml)	-0.135135

Sample Number 39 Sample Id: o/s rm 108 floor Sample Type: 1
Wed Oct 13 10:35:35 1999
Counting Time: 1 min 0 sec

	Alpha Counts		Beta Counts
Gross	0		3
Net CPM	-0.100		1.700
Std Deviation (%)	0.000		115.470
Concentration (pCi/ml)	-0.045045	(pCi/ml)	0.765766

Protocol #:11 Name:TRITIUM/CARBON14 19-Oct-99 10:12
Region A: LL-UL= 0.0-12.0 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Region B: LL-UL=12.0-156. 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
Time = 10.00 QIP = tSIE/AEC ES Terminator = Count
GROSS COUNTS FOR Ni-63 ACTIVITY
Conventional DPM
Nuclide 1 = 204200 Nuclide 2 = 117700

S#	TIME	CPMA	CPMB	DPM1	DPM2	3H Eff	C14 Ef	FLAG
1	10.00	11.90	9.20			0.00	0.00	B
2	10.00	18029.3	117041.	0.00	145177.	0.00	80.62	E
3	10.00	69537.0	4742.60	98794.3	0.00	70.39	0.00	E
4	10.00	0.00	4.40	137.60	16.63	0.00	26.45	E
5	10.00	0.00	4.10	150.82	14.85	0.00	27.60	E
6	10.00	0.00	3.40	134.01	12.14	0.00	28.01	E
7	10.00	0.00	3.00	87.29	11.61	0.00	25.83	E
8	10.00	0.00	5.70	180.22	21.48	0.00	26.54	E
9	10.00	0.00	4.00	132.97	14.86	0.00	26.92	E
10	10.00	0.00	4.50	143.46	16.91	0.00	26.60	E
11	10.00	0.00	4.20	153.50	15.24	0.00	27.56	E
12	10.00	0.00	4.50	144.57	16.88	0.00	26.66	E
13	10.00	0.00	5.20	165.36	19.56	0.00	26.59	E
14	10.00	0.00	4.50	142.02	16.96	0.00	26.53	E
15	10.00	0.00	6.20	201.24	23.18	0.00	26.74	E
16	10.00	0.00	1.90	70.78	6.86	0.00	27.68	E
17	10.00	0.00	2.00	74.55	7.22	0.00	27.68	E
18	10.00	0.00	5.80	187.88	21.70	0.00	26.73	E

Bldg 2281 (1)

CONFIRMATORY SURVEY RESULTS

Licensee: Dept of The Army
FA McClellan

License No.: 01-02861-05

Docket No.: 030-17584

Inspectors: Pelchat, Parker, Hanson, Massmann, Barry

Survey Date: 9-27-99

Radionuclides of Interest:

Instrumentation:

Instrument #1		Instrument #2	
Type: Ludlum 2221	Probe: floor monitor 43-97	Type: Ludlum 2221	Probe: 43-68
S/N: 117632	S/N: PR 147969	S/N: 117647	S/N: 120553
NRC#: 056337	NRC#: 070513	NRC#: 056338	NRC#: 056339
Calibration Due: 8/10/00	Size (S): 600 cm²	Calibration Due: 9-15-00	Size (S): 100 cm²
Efficiency (E): TC 1790	Background: ~~460~~ cpm 734	Efficiency (E): 2870 TC	Background: ~~340~~ 515
Check Source: TC 99	MDA: 1925 dpm/100 cm² Scanning	Check Source: TC 99	MDA: 141 dpm/100 cm² scaling

Survey Results

	Location	Ins. No.	Gross cpm	Net cpm	~~Net dpm~~ alpha	~~dpm/100 cm²~~ beta	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
	Bldg 2281								
	Lab #1			2367					
(1)	No Wall, 1 Low		517	<34>	-BKGD			23	<3>
	Smear				-0.1	2.7			
(2)	No Wall 5 Low		650	95	339			25	<1>
	Smear				-0.1	2.7			

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Bldg 2281 (1)

CONFIRMATORY SURVEY RESULTS

Licensee: Dept of The Army
Ft McClellan

License No.: 01-02861-05

Docket No.: 030-17584

Inspectors: Pelchat, Parker, Hasson, Masnik, Bailey

Survey Date: 9-27-99

Radionuclides of Interest:

Instrumentation:

Instrument #1		Instrument #2	
Type: Ludlum 2221	Probe: floor monitor 43-97	Type: Ludlum 2221	Probe: 43-68
S/N: 117632	S/N: PR 147969	S/N: 117647	S/N: 120553
NRC#: 056337	NRC#: 070513	NRC#: 056338	NRC#: 056339
Calibration Due: 8/10/00	Size (S): 600 cm²	Calibration Due: 9-15-00	Size (S): 100 cm²
Efficiency (E): TC 1790	Background: ~~460~~ cpm 734	Efficiency (E): 2870 TC	Background: ~~340~~ 515
Check Source: TC 99	MDA: 1925 dpm 100 cm² Scanning	Check Source: TC 99	MDA: 141 dpm 100 cm² Scaler

Survey Results

	Location	Ins. No.	Gross cpm	Net cpm	~~Net dpm~~ alpha	~~dpm / 100 cm²~~ beta	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
	Bldg 2281								
	Lab #1			1367					
(1)	No. Wall, 1 Low		517	<34>	-BKGD			23	<3>
	Smear				-0.1	2.7			
(2)	No Wall 5 Low		650	95	339			25	<1>
	Smear				-0.1	2.7			

555 26 Bldg 228

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
(3)	Bldg 228 LAB 1 N. Wall 8 LOW		469	-86	<307 -BKD			22	<4>
	↓ Smear				<77>	-0.1	8.7		
(4)	LAB 1 West Wall A LOW		507	-48	-BKD			20	<6>
	↓ Smear				<507>	-0.1	2.7		
(5)	West Wall C LOW		513	-42	-BKD			21	<5>
	LAB ↓ Smear				<867>	-0.1	2.7		
(6)	LAB 1 West Wall LOW		531	-24	-BKD			21	<5>
	↓ Smear					-0.1	5.7		
(7)	LAB 1 South Wall 8 LOW		695	140	500			27	1
	↓ Smear					.9	4.7		
(8)	LAB 1 South Wall 5 LOW		704	149	532			25	<1>
	↓ Smear					-0.1	1.7		
(9)	LAB 1 South Wall 2		753	198	707			26	0
	↓ Smear					-0.1	1.7		
(10)	LAB 1 East Wall G		743	188	671			28	2
	↓ Smear					-0.1	0.7		

Bldg 2281

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: U.S. Army
Ft. McClellan

License No.:

Docket No.:

Inspectors:

Survey Date: 9/27 after pctr

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
	Bldg 228								
(11)	Lab #1 EAST WALL D		759	204	729			29	3
	↓ Smear					-0.1	3.7		
(12)	LAB 1 EAST WALL A		769	214	764			25	<1>
	↓ Smear				<243>	-0.1	5.7		
(13)	HP LAB NORTH RIGHT OF LIGHT SWITCH		487	-68	-BKD			23	<3>
	Smear ↓				<239>	-0.1	-1.3		
(14)	HP LAB WEST WALL		485	-67	-BKD			21	<5>
	8 feet from NORTH WALL ↓ Smear				<96>	-0.1	0.7		
(15)	HP LAB WEST WALL		528	-27	-BKD			20	<6>
	14 feet from NORTH WALL ↓ Smear				<96>	-0.1	0.7		
(16)	HP LAB WEST WALL		475	-80	-BKD			18	<8>
	22 feet from NORTH WALL ↓ Smear				<243>	1.9	1.7		
(17)	HP LAB SOUTH WALL		459	-96	-BKD			18	<8>
	Between windows SWIPE					-0.1	-0.3		
(18)	H.P. LAB EAST WALL		716	161	575			25	<1>
	20 feet from NORTH SWIPE					-0.1	-0.3		

Bldg 2281

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	~~dpm / 100 cm²~~	~~Ins. No.~~	Gross μ / m rem/hr	Net μ / m rem/hr
19	HP LAB [illegible]		542	-13	<146> -BKD			25	<1>
	14 feet from NORTH WALL ↓ smear					-0.1	-0.3		
20	HP LAB [illegible]		685	130	464			26	0
	6 feet from [illegible] smear				<164>	-0.1	0.7		
21	HP LAB FLOOR		509	-46	-BKD			19	7
	6 from NORTH, 3 from east Smear					-0.1	-0.3		
22	HP LAB floor		496	-59	<211> -BKD			21	<5>
	10 from NORTH 4 from east Smear					[illegible]	-1.3		
23	HP LAB floor		517	-38	<136> -BKD			22	<4>
	15 from NORTH 1 from east Smear					-0.1	1.7		
24	HP LAB floor		5[illegible]	-32	<114> -BKD			[illegible]	<6>
	22 from NORTH 4 from east Smear					-0.1	-0.3		
25	HP LAB floor		486	-69	<246> -BKD			21	<5>
	20 from NORTH 8 from east Smear					0.9	2.7		
26	HP LAB floor		488	-67	<239> -BKD			20	<4>
	12 from NORTH 6 from east smear					-0.1	2.7		

Page 4 of ____

Bldg 228

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: after petr

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
27	decon room A west wall		486	-69	<246> -BKD			20	<6>
	4 feet from NORTH (HIGH) smear					-0.1	-0.3		
28	decon room A west wall		515	-40	<143> -BKD			19	<7>
	20 feet from NORTH (HIGH) smear					-0.1	5.7		
29	decon room A south wall		529	-26	<93> -BKD			19	<7>
	5 feet from west wall HIGH smear					-0.1	-0.3		
30	decon room A south wall		600	45	161			22	<4>
	16 from west low wall smear					-0.1	-0.3		
31	decon room A south wall		600	45	161			20	<6>
	22 from west low wall smear					-0.1	1.7		
32	decon room A east wall		505	-50	<179> -BKD			21	<5>
	6 from south smear					-0.1	-0.3		
33	decon room A east wall		473	-82	<293> -BKD			21	<5>
	16 from south smear					-0.1	-0.3		
34	decon room A east wall		486	-69	<246> -BKD			22	<4>
	22 from south smear HIGH					-0.1	-0.3		

Bldg 22 81

55 CONFIRMATORY SURVEY RESULTS 20
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: after beta

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm/100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
35	decon room A east wall		488	-67	<239> -BKD			23	<3>
	22 from south low smear					-0.1	-0.3		
36	decon room A north wall		692	137	489			23	<3>
	3 feet from east					-0.1	-0.3		
37	[illegible] A north wall		729	174	621			24	<2>
	8 feet from east wall					-0.1	0.7		
38	decon room B west wall		509	-46	<164> -BKD			22	<4>
	2 feet from N wall smear					-0.1	-0.3		
39	decon room B [illegible] wall		441	-114	<407> -BKD			22	<4>
	12 feet from N wall smear					1.9	5.1		
40	decon room B [illegible] wall		492	-63	<225> -BKD			22	<4>
	20 feet from N wall smear					-0.1	-0.3		
41	decon room B [illegible] wall		477	-78	<279> -BKD			22	<4>
	24 feet from N wall smear					-0.1	1.7		
42	decon room B south wall		503	-52	<186> -BKD			20	<6>
	4 feet from E wall smear					-0.1	-0.3		

Page 2 of ____

55

Bldg 2281

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: [illegible]

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
43	decon room B south wall		436	-119	<457> -BKD			22	<4>
	4' from S wall low smear					-0.1	-0.3		
44	decon room B east wall		507	-48	<177> -BKD			20	<6>
	10' from S wall low smear					-0.1	0.7		
45	decon room B east wall		536	-19	<687> -BKD			22	<4>
	20' from S wall low smear					0.9	2.7		
46	decon room B east wall		510	-45	<167> -BKD			22	<4>
	24' from S wall smear					-0.1	0.7		
47	[illegible]		497	-58	<207> -BKD			22	<4>
	28' from S wall smear					-0.1	-0.3		
48	decon room B north wall		692	137	489			24	<2>
	4ft from W wall smear					-0.1	2.7		
49	decon room B north wall		608	53	189			24	<2>
	16ft from W wall smear					-0.1	-0.3		
50	prep lab north wall		784	233	832			20	<4>
	2 feet - west smear					-0.1	0.7		

555 26

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
51	prep lab north wall		676	121	432			21	<5>
	15 from west smear				<32>	-0.1	1.7		
52	prep lab [illegible]		518	-37	-BKD			22	<4>
	7 from north smear				<29>	-0.1	-0.3		
53	prep lab [illegible]		472	-83	-BKD			21	<5>
	14 from north smear				<23>	-0.1	-0.3		
54	prep lab west wall		488	-67	-BKD			21	<5>
	23 from north smear					-0.1	2.7		
55	prep lab south wall		588	33	118			21	<5>
	6 from west smear				<8>	-0.1	-0.3		
56	prep lab south wall		532	-23	-BKD			21	<5>
	15 from west smear					-0.1	-0.3		
57	prep lab east wall		767	212	757			22	<4>
	2 from south smear					-0.1	0.7		
58	prep lab east wall		779	224	800			22	<4>
	7 from south smear					-0.1	-0.3		

555 36

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm/100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
59	east wall prefab		538	-17	<67 -BKD			23	<3>
	13 from south smear					.09	-0.3		
60	west wall prefab		713	158	564			28	2
	23 from south smear					-0.1	-0.3		
61	Lab 2 T1 floor		462	-93	<3327 -BKD			21	<5>
	smear				<75	-0.1	-1.3		
62	east wall S1		534	-21	-BKD			21	<5>
	smear					-0.1	-1.3		
63	M2 floor		444	-111	<3967 -BKD			22	<4>
	smear					-0.1	-1.3		
64	L6 Swarf		441	-114	<4087 -BKD			23	<3>
	smear					-0.1	-1.3		
65	R9 floor		515	-40	<1437 -BKD			23	<3>
	smear					-0.1	-0.3		
66	R11 west wal		566	11	39			23	<3>
	smear					-0.1	0.7		

Page 9 of ____

535 26 Bldg 2281

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: _____

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
	Lab 2								
67	O1 east wall		542	-13	<447 -BKG			20	<6>
	smear					-0.1	-0.3		
68	L11 west wall		471	-84	<300? -BKG			22	<4>
	smear					-0.1	-1.3		
69	N9 floor		482	-73	<247 -BKG			22	<4>
	smear					-0.1	0.7		
70	Lab 2 hall X11 floor		469	-86	<307 -BKG			23	<3>
	smear					-0.1	-1.3		
71	V9 E wall		491	-64	<224? -BKG			22	<4>
	smear					0.1	0.7		
72	BB11 west wall		693	138	493			23	<3>
	smear					-0.1	-0.3		
73	FF10 floor		537	-18	<447 -BKG			23	<3>
	smear					-0.1	0.7		
74	Lab 2 office V5 floor		474	-81	<289? -BKG			21	<5>
	smear					-0.1	-0.3		

555 26

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: after before

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm/100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
75	LAB2 office U4		476	-79	<227 -BKD			22	<4>
	swall upper smear					-0.1	-0.3		
76	V1 east wall		535	-20	<717 -BKD			22	<4>
	lower smear					0.9	0.7		
77	U8 W wall lower		505	-50	<147 -BKD			20	<6>
	smear					-0.1	2.7		
78	X7 N wall upper		673	118	421			23	<3>
	smear					-0.1	2.7		
79	X6 N wall		713	158	564			22	<4>
	lower smear					0.9	-1.3		
80	X3 N wall		667	112	400			22	<4>
	lower smear					-0.1	0.7		
(8)	~~V1 E wall~~								
	~~lower smear~~								
81	U1 swall		483	-72	<257 -BKD			22	<4>
	lower wall					-0.1	-0.3		
	smear								

555 26

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm/100 cm²	Ins. No.	Gross µ / m rem/hr	Net µ / m rem/hr
82	U4 floor Lab & Office		461	-44	<334 -BKD			20	<4>
	↓ smear					-0.1	1.7		
83	V1 floor ↓		516	-39	<139 -BKD			21	<5>
	↓ smear					-0.1	0.7		
84	Vault store JJ5		597	42	150			23	<3>
	S wall upper smear					-0.1	-1.3		
85	JJ7		766	211	754			23	<3>
	S wall lower smear				<79	-0.1	1.7		
86	JJ5		533	-22	-BKD			30	4
	E wall lower smear				<29	0.9	0.7		
87	LL6 N wall lower		547	-8	-BKD			24	<2>
	smear				<314	-0.1	-1.3		
88	LL8 N wall lower		467	-88	-BKD			24	<2>
	smear				<134	-0.1	0.7		
89	LL8 wall upper		516	-39	-BKD			24	<2>
	smear					-0.1	-1.3		

Book

equipment room = lab & office

555 26

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross µ / m rem/hr	Net µ / m rem/hr
90	LL8 flor vault stne		509	-46	-BLD			23	<3
	smear					-0.1	0.7		
91	J55 flor		537	-18	-BLD			24	<2
	smear					-0.1	-1.3		
92	vault DD1		718	163	582			22	<4
	E wall smear					-0.1	2.7		
93	1AA		752	137	704			29	3
	E wall lower smear		[illegible]			0.9	-0.3		
94	1AA		[illegible]	128	457			29	3
	east wall upper smear		683			0.9	-0.3		
95	3y swall		691	136	486			29	3
	lower smear					-0.1	2.7		
96	4y swall		677	122	436			22	<4
	lower smear					0.9	-1.3		
97	Y5 swall		497	-58	-BLD			28	2
	upper smear					-0.1	0.7		

555 26

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross µ / m rem/hr	Net µ / m rem/hr
98	Vault BB 8		592	37	132			22	<4>
	L wall upper smear				<397> -BKD	-0.1	-0.3		
99	CC 8		456	-99				22	<4>
	U door lower smear					-0.1	-0.3		
100	Y8 S wall lower		687	132	471			29	3
	↓ smear					0.9	1.7		
101	GG 8 W wall lower		718	163	582			29	3
	smear				<227> -BKD	-0.1	-1.3		
102	II 5 N wall lower		493	-62				28	2
	smear				<247> -BKD	-0.1	-0.3		
103	II 2 N wall lower		480	-75				30	4
	smear				<367> -BKD	-0.1	-0.3		
104	II 1 E wall upper		517	-38				31	5
	↓ smear					-0.1	-0.3		
105									

555 26

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

FM/HH

Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
Bldg 2281 Lab 2								
A-8 Wall, South Upper		593	38	136			26	0
Smear J9					-0.1	2.7		
A-2 Wall, South Upper		553	-2	<17 -BKD			24	<2>
Smear J10					-0.1	-1.3		
D-1 Wall East Upper		502	-53	<189 -BKD			24	<2>
Smear J11					0.9	0.7		
J-1 Wall East Upper		466	-89	<318 -BKD			22	<4>
Smear J12					-0.1	0.3		
H-1 Wall East Lower		571	16	57			25	<1>
Smear J13					-0.1	-0.3		
K-6 Wall North Lower		414	-141	<504 -BKD			22	<4>
Smear J14					0.9	1.7		
G-11 Wall West Lower		537	-18	<64 -BKD			24	<2>
Smear J-15					-0.1	0.7		
J-11 Wall West Upper		489	-66	<236 -BKD			24	<2>
Smear J-16					-0.1	-0.3		

Page ____ of ____

555 20

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

FM/HH Inspectors: _____ Survey Date: 9/27

Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
Bldg 2281								
Lab 2								
J-7 Floor		472	-83	<2967 -BKD			22	<4>
Smear J1					-0.1	-1.3		
I-3 Floor		524	-31	<1117 -BKD			25	<1>
Smear J2					-0.1	0.7		
F-1 Floor		546	-9	<327 -BKD			24	<2>
Smear J3					-0.1	0.7		
G-5 Floor		525	-30	<1027 -BKD			23	<3>
Smear J4					-0.1	0.7		
C-9 Floor		546	-9	<327 -BKD			24	<2>
Smear J5					-0.1	-1.3		
A-3 Floor		517	-38	<1367 -BKD			24	<2>
Smear J6					-0.1	0.7		
A-3. S Wall Low		500	-55	<1967 -BKD			26	<2>
Smear J7					-0.1	0.7		
A-9 S Wall		616	61	219 ~~-BKD~~			26	<2>
Smear J8					-0.1	1.7		

Page ____ of ____

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: _____

FM/HH

Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ γ m rem/hr	Net μ / m rem/hr
Bldg 2281 Lab 2								
C-11 West Wall Upper		531	<24>	-BKD			25	<1>
Smear J-17					-0.1	0.7		

Page ____ of ____

OLD LAB

555 34

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: _____

Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
Bldg 2281								
Bkgd								
BCKGND Floor #1 up Stairs		546	-[illegible]	-[illegible]			26	0
Floor #2 up Stairs		545					26	0
Floor #3 up Stairs		514					26	0
Floor #4 "		379					22	<0
Floor #5 "		578					26	0
Wall #5 "		572					24	0
#1 "		611					24	<0
#2 "		607					28	2
#3 "		616					24	<0
#4 "		643					28	2

Page ____ of ____

CONFIRMATORY SURVEY RESULTS

Licensee: Dept of The Army
Ft McClellan

License No.: 01-02861-05

Docket No.: 030-17584

Inspectors: Henson, Pelchat, Parker, Masry, Bailey

Survey Date: 9/29/99

Radionuclides of Interest:

Instrumentation:

Instrument #1		Instrument #2	
Type: Ludlum 2221	Probe: 43-68	Type: Ludlum 2221	Probe: 43-37 flow monitor
S/N: 117647	S/N: PR 120553	S/N: 117632	S/N: PR 147969
NRC#: 056338	NRC#: 056339	NRC#: 056337	NRC#: 070513
Calibration Due: 9/15/00	Size (S): 100 cm²	Calibration Due: 8/10/00	Size (S): 430 cm²
Efficiency (E): 28% Tc99	Background:	Efficiency (E): 17% Tc99	Background:
Check Source: Tc99 #2898	MDA: 316 dpm/100cm² Scaler	Check Source: Tc99m 2898	MDA: 1,925 dpm/100cm² Scaling

Survey Results

	Location		Ins. No.	Gross cpm	Net cpm	Net dpm	~~dpm / 100 cm²~~ alpha	~~Ins. No.~~ beta	Gross μ / m rem/hr	Net μ / m rem/hr
1	Bldg 1081 Room 0	4N		289	22	79			8	0
		smear					-0.1	-1.3		
2		6M		309	42	150			8	0
		smear					-0.1	0.7		
3		7L		276	9	32			8	0
		smear					-0.1	0.7		

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: dpt pdt

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
(4)	Bldg 1081 Room O 6N		309	42	150			7	<1>
	smear					0.9	-1.3		
(5)	5N		362	95	339			8	0
	smear					-0.1	-0.3		
(6)	9H		361	94	336			7	<1>
	smear					-0.1	-0.3		
(7)	9I		297	30	107			8	0
	smear					-0.1	-1.3		
(8)	8G		275	107	382			8	0
	smear					-0.1	0.7		
(9)	9E		312	45	161			7	<1>
	smear					-0.1	1.7		
(10)	8D		269	2	7			8	0
	smear					-0.1	-1.3		
(11)	10F		332	65	232			8	0
	smear					0.9	1.7		

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: after petr

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
(12)	Bldg 1081 Room 0 7G		286	19	68			7	<1>
	smear					0.9	-0.3		
(13)	5B		281	14	50			7	<1>
	smear					-0.1	-0.3		
(14)	4C		292	25	89			7	<1>
	smear					-0.1	-0.3		
(15)	4A		297	30	107			8	0
	smear					-0.1	1.7		
(16)	6B		322	55	196			8	0
	smear					-0.1	-0.3		
(17)	2D		325	58	207			7	<1>
	smear					-0.1	-0.3		
(18)	2E		306	39	139			7	<1>
	smear					-0.1	2.7		
(19)	3G		347	80	286			7	<1>
	smear					-0.1	3.7		

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	~~dpm / 100 cm²~~	~~Ins. No.~~	Gross μ / m rem/hr	Net μ / m rem/hr
20	Bldg 1081 Room O 3I		328	61	218			7	<1>
	smear					0.9	-1.3		
21	1 I		315	48	171			7	<1>
	smear					-0.1	-1.3		
22	4D floor ~~2K~~		271	4	14			8	0
	smear					-0.1	1.7		
23	5E floor		283	16	57			7	<1>
	smear			LLD		-0.1	-1.3		
24	6F floor		254	<13>	~~MDA~~ BKGD			7	<1>
	smear					-0.1	-0.3		
25	7G floor		289	22	79			7	<1>
	smear					0.9	-0.3		
26	6I floor		627	359	1282			7	<1>
	smear					-0.1	2.7		
27	~~6~~ 5K		276	9	32			7	<1>
	smear					-0.1	-0.3		

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: _____

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
28	Bldg 1081 Room 0 5' ceiling		451	184	657			7	<1>
	smear				<57>	-0.1	-0.3		
29	6H ceiling		251	-16	-BKGD			7	<1>
	smear					-0.1	-0.3		
30	6D ceiling		408	141	504			8	0
	smear				<57>	-0.1	-0.3		
31	PREP LAB BIAS inside hood		253	<14>	-BKGD			8	0
	smear					-0.1	17.70		
32	~~BIAS inside hood~~ surrounding hood floor		scan only					8	0
	smear					-0.1	1.7		
33	PREP Lab 6B		300	33	118			8	0
	smear					-0.1	3.7		
34	4C		316	49	175			8	0
	smear					-0.1	-0.3		
35	9C		339	72	257			7	<2>
	smear					-0.1	2.7		

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	~~dpm / 100 cm²~~	~~Ins. No.~~	Gross μ / m rem/hr	Net μ / m rem/hr
36	prep lab 13F		342	75	268			10	2
	smear					-0.1	-0.3		
37	12H		368	101	361			7	<1>
	smear					-0.1	-0.3		
38	14i		353	86	307			8	0
	smear					0.9	-1.3		
39	9m		329	62	221			11	3
	smear					-0.1	1.7		
40	10L		284	17	61			10	2
	smear					0.9	-0.3		
41	6M		355	88	314			11	3
	smear					-0.1	0.7		
42	2i		326	59	211			10	2
	smear					-0.1	-1.3		
43	4i floor		271	4	14			9	1
	smear					-0.1	-0.3		

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: after before

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	~~dpm~~ / ~~100~~ cm²	~~Ins. No.~~	Gross μ / m rem/hr	Net μ / m rem/hr
44	prep lab 1G		295	28	100			8	0
	smear				0	-0.1	-1.3		
45	5f floor		267	0	~~BKGD~~			8	0
	smear					-0.1	2.7		
46	2D		334	67	239			7	<1>
	smear				<5>	-0.1	0.7		
47	5e floor		251	-16	-BKGD			8	0
	smear				<5>	-0.1	-1.3		
48	8F floor		261	-6	-BKGD			7	<1>
	smear					-0.1	-1.3		
49	9i		289	22	79			7	<1>
	smear					-0.1	1.7		
50	6k floor		263	-4	<4> -BKGD			7	<1>
	smear				<5>	-0.1	0.7		
51	10D floor		253	-14	-BKGD			7	<1>
	smear					-0.1	0.7		

267 8

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: Army-Ft McClellan

License No.:

Docket No.:

Inspectors:

Survey Date: alpha beta

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr	
52	Prep LAB 8e ceiling		423	156	557			7	<1>	
	smear					-0.1	-1.3			
53	8i ceiling		429	162	579			7	<1>	
	smear					-0.1	-0.3			
54	6K ceiling		428	161	575			8	0	
	smear					-0.1	0.7			
55	Area V-Vault 9-G floor		662	395	1411			7	<1>	~2x bckgrd
	smear				1967	-0.1	2.7			
56	Area V-Vault 9-J floor		240	-27	-BKD			8 ~~7.5~~	0	
	smear				217	0.9	-0.3			
57	Area V-Vault 6-I floor		261	-6	-BKD			8	0	
	smear					-0.1	-0.3			
58	Area V-Vault 4-D floor		266	-1	-BKD			8	0	
	smear					-0.1	0.7			
59	Area V-Vault 6E floor		272	5	18			9	1	
	smear					-0.1	-0.3			

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: Ft. McClellan

License No.:

Docket No.:

Inspectors:

Survey Date: [illegible]

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	~~dpm / 100 cm²~~	~~Ins. No.~~	Gross μ / m rem/hr	Net μ / m rem/hr
60	Area V - Vault 11i floor		269	2	7			7	<1>
	smear					0.9	-0.3		
61	13G wall		317	50	179			8	0
	smear					-0.1	-1.3		
62	9f (11-14) wall		318	51	182			8	0
	smear					-0.1	-1.3		
63	9i (11-14) wall		308	41	146			8	0
	smear					-0.1	-1.3		
64	8m wall		275	8	29			8	0
	smear					-0.1	0.7		
65	5L wall		277	10	36			8	0
	smear					-0.1	-0.3		
66	2i wall ~~smear~~		329	62	221			8	0
	smear					0.9	-0.3		
67	3f wall		284	17	61			9	1
	smear					-0.1	1.7		

247 CONFIRMATORY SURVEY RESULTS 8
(continuation page)

Licensee: Ft. Mc Clellan

License No.:

Docket No.:

Inspectors:

Survey Date: alpha beta

	Location			Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
(68)	Area V - Vault	4b floor	wall		310	43	154			9	1
			smear					-0.1	-1.3		
(69)		7f	ceiling		447	~~109~~ 180	~~BKD~~ 643			8	0
			smear					-0.1	2.7		
(70)		9-G (ceiling duct)	ceiling		250	~~305~~ -17	~~BKD~~ <617			8	0
			smear					-0.1	-0.3		
(71)		8i	ceiling		423	~~132~~ 156	~~BKD~~ 557			8	0
			smear					-0.1	0.7		
(72)	Area P - Lab 1	16D	floor		279	~~270~~ 12	~~BKD~~ 43			8	0
			smear					0.9	3.7		
(73)		15G	floor		286	~~264~~ 19	~~BKD~~ 68			7	<1>
			smear					-0.1	0.7		
(74)		14F	floor		272	~~45~~	18			7	<1>
			smear					-0.1	1.7		
(75)		11H	floor		269	2	7			7	<1>
			smear					-0.1	0.7		

267 CONFIRMATORY SURVEY RESULTS 8
(continuation page)

Licensee: Ft McClellan

License No.:

Docket No.:

Inspectors:

Survey Date: 4th bldg

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
76	Area P - Lab 12E floor		278	11	39			7	<1>
	smear					-0.1	-1.3		
77	10G floor		283	16	57			7	<1>
	smear					-01	-1.3		
78	7H floor		283	16	57			7	<1>
	smear					-0.1	0.7		
79	6J floor		288	21	75			7	<1>
	smear					-0.1	-0.3		
80	6F floor		295	28	100			7	<1>
	smear					-0.1	-0.3		
81	4G floor		297	30	107			7	<1>
	smear					-0.1	-1.3		
82	10A wall (1)		336	69	246			7	<1>
	smear					-0.1	1.7		
83	12B wall (1)		336	69	244			8	0
	smear					-0.1	1.7		

267 CONFIRMATORY SURVEY RESULTS 8
(continuation page)

Licensee: Ft McClellan

License No.:

Docket No.:

Inspectors:

Survey Date: 14th pm

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
84	Area P - Lab 14C wall (1)		332	65	232			9	1
	smear					-0.1	-0.3		
85	15B (1) wall		349	82	293			9	1
	smear					-0.1	2.7		
86	6L (1) wall		299	32	114			7	<1>
	smear					0.9	-0.3		
87	7K (1) wall		350	83	296			7	<1>
	smear					-0.1	-0.3		
88	13L (1) wall		350	83	296			8	0
	smear					-0.1	-1.3		
89	16M (1) wall		343	76	271			8	0
	smear					-0.1	-1.3		
90	19H (s) wall		384	117	418			8	0
	smear					-0.1	0.7		
91	13D (s) wall		335	68	243			8	0
	smear					-0.1	0.7		

267 CONFIRMATORY SURVEY RESULTS 8
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
92	Area P · Lab 2I (s) wall		350	83	296			7	<1>
	smear					-0.1	-1.3		
93	3D (s) wall		337	70	250			7	<1>
	smear					-0.1	0.7		
94	4F ceiling		427	160	571			7	<1>
	smear					-0.1	0.7		
95	8H ceiling		429	162	579			7	<1>
	smear					-0.1	1.7		
96	12D ceiling		386	119	425			8	0
	smear					-0.1	5.7		
97	15F ceiling		449	182	650			8	0
	smear					-0.1	-0.3		
98	14I ceiling		430	163	582			8	0
	smear								

267 CONFIRMATORY SURVEY RESULTS 8
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

FM/HH

	Location 1081	Ins. No.	Gross cpm	Net cpm	Net dpm	~~dpm/100 cm²~~	~~Ins. No.~~	Gross μ / m rem/hr	Net μ / m rem/hr
99	AREA Q LAB HALLWAY 5E FLOOR		263	-4	<147> -BKD			8	0
	SMEAR					-0.1	0.7		
100	8D FLOOR		284	17	61			7	<1>
	SMEAR					-0.1	-0.3		
101	11D FLOOR		227	-40	<143> -BKD			8	0
	SMEAR					-0.1	1.7		
102	15E FLOOR		254	-13	<146> -BKD			7	<1>
	SMEAR					-0.1	1.7		
103	17B WALL		315	48	171			8	0
	SMEAR					0.9	1.7		
104	7F WALL		281	14	50			7	<1>
	SMEAR					-0.1	-1.3		
105	7B WALL		325	58	207			7	<1>
	SMEAR					-0.1	-0.3		
106	10C WALL		301	34	121			7	<1>
	SMEAR					-0.1	-1.3		

247 CONFIRMATORY SURVEY RESULTS 8
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: 4th Det

FM/HH

	Location 1081	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm/100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
107	Area I Janitors Closet 3C Floor		294	27	96			8	0
	Smear				<147 -BKD	-0.1	0.7		
108	3D Floor		263	-4				7	<1>
	Smear					-0.1	-0.3		
109	4G Wall		354	87	311			8	0
	Smear					-0.1	-1.3		
110	5C Wall		312	45	161			8	0
	Smear					0.9	-0.3		
111	3B Wall		308	41	146			8	0
	Smear					-0.1	-0.3		
112	(Door) 2D Wall		202	-65	<232 -BKD			7	<1>
	Smear					-0.1	0.7		

Page 14 of 15

SN 56338 1081

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta 9/29

	Bldg 1081 Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
B1	Lab#4 7E floor		280	13	46			7	<1>
	smear					-0.1	0.7		
B2	3D floor		268	1	4			7	<1>
	smear					-0.1	-1.3		
B3	5A		309	42	150			8	0
	smear					-0.1	-0.3		
B4	3B		303	36	129			8	0
	smear					-0.1	0.7		
B5	2F		311	44	157			11	3
	smear					-0.1	-0.3		
B6	3i		552	85	304			8	0
	smear					-0.1	-0.3		
B7	7H		311	44	157			7	<1>
	smear					-0.1	0.7		
B8	10E		327	60	214			7	<1>
	smear					0.9	0.7		

SN 56338 BUB 6 081

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta 9/29

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	~~dpm / 100 cm²~~	~~Ins. No.~~	Gross μ / m rem/hr	Net μ / m rem/hr
B9	Lab 5 14B		298	31	111			7	<1>
	smear					-0.1	-1.3		
B10	7C		325	58	207			6	<2>
	smear					-0.1	-1.3		
B11	2G		341	74	264			11	3
	smear					-0.1	-0.3		
B12	6L		313	46	164			7	<1>
	smear					-0.1	0.7		
B13	13m		377	110	393			7	<1>
	smear					-0.1	1.7		
B14	18H		347	80	286			7	<1>
	smear					0.9	-0.3		
B15	14H floor		284	17	61			6	<2>
	smear			147		-0.1	-1.3		
B16	10J floor		262	-5	-BKGD			7	<1>
	smear					-0.1	-0.3		

SN56338
1081

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta 9/29

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm/100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
B17	Lab 5 7E floor		243	-24	<167 -BKGD			7	<1>
	smear					-0.1	-1.3		
B18	13E floor		257	-10	<367 -BKGD			6	<2>
	smear					-0.1	-0.3		
B19	Lab 2 13F		311	44	157			7	<1>
	smear					-0.1	-0.3		
B20	12Q ~~12H~~		322	55	196			7	<1>
	smear					.09	.07		
B21	10Q floor		244	23	<827 -BKGD			6	<2>
	smear					-0.1	-0.3		
B22	8W		335	68	243			7	<1>
	smear					-0.1	-1.3		
B23	7S floor		295	28	100			7	<1>
	smear					-0.1	-0.3		
B24	3R		303	36	129			7	<1>
	smear					-0.1	-0.3		

stats 9/30

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: after before 9/30

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
B25	Lab 2 5R floor		258	-9	-BLGD (327)			6	<2>
	smear					-0.1	-1.3		
B26	6 floor		247	-20	-BLGD (717)			7	<1>
	smear					-0.1	-1.3		
B27	2G		341	74	264			8	0
	smear					-0.1	0.7		
B28	6F floor		234	33	-BLGD (187)			7	<1>
	smear					-0.1	2.7		
B29	8C		341	74	264			7	<1>
	smear					0.9	3.7		
B30	9F floor		269	2	7			7	<1>
	smear					0.9	1.7		
B31	7H floor		261	-6	-BLGD (217)			7	<1>
	smear					-0.1	-1.3		
~~B32~~									
	smear								

New LAB.

267

CONFIRMATORY SURVEY RESULTS 8
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: alpha beta 9/30

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm/100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
B32	Lab 7 Fe floor		263	-4	-BKD <47>			6	<2>
	smear					-0.1	0.7		
B33	1e		312	45	161			7	<1>
	smear					-0.1	-1.3		
B34	4F floor		262	-5	-BKD <47>			7	<1>
	smear		~~26~~			-0.1	-0.3		
B35	9L		323	56	200			7	<1>
	smear					.09	-0.3		
B36	10i		252	-15	-BKD <47>			7	<1>
	smear					-0.1	-0.3		
B27	11F floor		279	12	43			6	<2>
	smear					-0.1	0.7		
	BKGD Hall outside Lab		248					8	
			266					7	
			269					8	
			268					7	
			289					8	

MR - 8 8 8 7 7 8 → 043988

BKG

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

9/30 2221 (NRC 056337) 43-68 (120554)

Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
1081		387	120	429				
Vault 9G Floor		369	102	364				
Hot Spot Resurvey Smear								
LSC Smears								
Water Bkg 1					138			
(Hot Spot) 9G Floor 2					151			
9J Floor 3					134			
6I Floor 4					87			
4D Floor 5					180			
6E Floor 6					133			
9F Wall 7					143			
11-14								

LSC

Page ____ of ____

21

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: alpha

Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
1081								
Vault LSE (No #8)					154			
SL Wall 9								
					145			
Vent 9G 10								
					165			
Ceiling 8H 11								
					142			

LSE

Page ____ of ____

22

267 8

CONFIRMATORY SURVEY RESULTS
(continuation page)

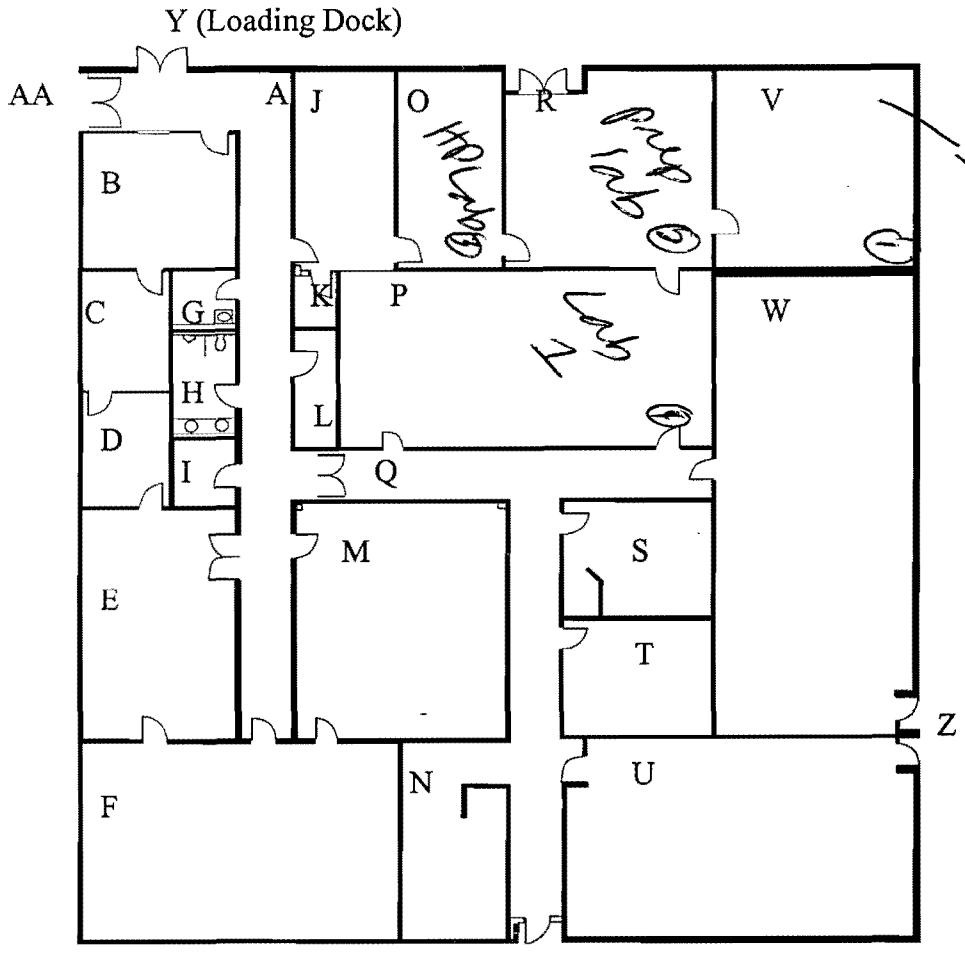
Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: alpha beta

Ratemeter 2221 NRC 056337 43-68 (120554) 5/~~pulse~~ #91555

Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm/100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
Bldg 1081 9/30/99								
Tank Room 5D Floor		294	27	96			5	<3>
T04 Smear					-0.1	4.7		
7E Floor		349	82	293			5	<3>
T05 Smear					-0.1	2.7		
7C Wall		288	21	75			5	<3>
T06 Smear					-0.1	0.7		



RADIOLOGICAL LABORATORIES
BUILDING 1081, SIBERT HALL
FORT MCCLELLAN, AL 36205

AREA CODE	LOCATION	ROOM NUMBER	AREA CLASS	# OF SMEARS A & B	# OF SMEARS LSC	Floor/Ceiling SIZE	WALL (L) SIZE	WALL (W) SIZE	AREA IN METERS SQ FLOOR AREA	AREA IN METERS SQ CEILING AREA	AREA IN METERS SQ WALL AREA	NUMBER OF SMEARS FOR FLOOR SMEARS	NUMBER OF SMEARS FOR CEILING SMEARS	NUMBER OF SMEARS FOR WALL SMEARS
	IMPACT AREA						H = 2.74	H = 2.74						
A	MAIN HALLWAY	NA	3	198	198	33.83 X 2.00	(2) 33.83	(2) 2.00	67.66	67.66	143.32	64	0	134
B	Rad Lab OFFICE	1010	3	84	84	5.56 X 5.18	(2) 5.56	(2) 5.18	28.81	28.81	58.86	36	0	48
C	Instructor's OFC	1010-A	3	56	56	4.57 X 3.51	(2) 4.57	(2) 3.51	16.02	16.02	44.28	20	0	36
D	Rad Lab CHIEF	1010-B	3	56	56	4.57 X 3.51	(2) 4.57	(2) 3.51	16.02	16.02	44.28	20	0	36
E	Electronic SHOP	1010-C	3	114	114	8.99 x 5.59	(2) 8.99	(2) 5.59	50.24	50.24	79.9	54	0	60
F	LAB 7	1017	3	176	176	11.89 x 7.67	(2) 11.89	(2) 7.67	91.18	91.18	107.19	96	0	80
G	WOMEN's RM	1013	3	20	20	1.93 x 1.78	(2) 1.93	(2) 1.78	3.43	3.43	20.17	4	0	16
H	MEN's RM	1015	3	32	32	3.45 x 1.78	(2) 3.45	(2) 1.78	6.14	6.14	28.66	8	0	24
I	JANITOR RM	1016	3	32	32	2.79 x 1.78	(2) 2.79	(2) 1.78	4.97	4.97	25.04	8	0	24
J	H. P. OFFICE	1011	3	80	80	7.62 x 3.71	(2) 7.62	(2) 3.71	28.26	28.26	62.09	32	0	48
K	H. P. STORAGE	1012	3	20	20	1.85 x 1.40	(2) 1.85	(2) 1.40	2.59	2.59	17.81	4	0	16
L	RAD Lab Storage	1014	3	38	38	4.57 x 1.40	(2) 4.57	(2) 1.40	6.38	6.38	32.72	10	0	28
M	LAB 8	1018	3	152	152	9.14 x 7.62	(2) 9.14	(2) 7.62	69.65	69.65	91.84	80	0	72
N	LAB 6	1023	3	80	80	7.62 x 3.45	(2) 7.62	(2) 3.45	26.32	26.32	60.66	32	0	48
Nw	Lab 6 X Wall	1023	3	4	4	Both Sides	(2) 0.94	NA	NA	NA	5.15	0	0	4
O	H. P. LAB	1011-A	1	516	516	7.62 x 3.71	(2) 7.62	(2) 3.71	28.26	28.26	62.09	120	120	276
P	LAB 1	1019	1	1288	1288	13.64 x 6.60	(2) 13.64	(2) 6.60	90.08	90.08	110.91	392	392	504
Q	Hallway To LABS	NA	2	850	850	29.57 x 1.93	(2) 29.57	(2) 1.93	57.06	57.06	172.62	264	66	520
R	PREP LAB	1011-B	1	810	810	7.62 x 7.47	(2) 7.62	(2) 7.47	56.92	56.92	82.69	225	225	360
S	LAB 3	1021	3	74	74	5.28 x 4.34	(2) 5.28	(2) 4.34	22.92	22.92	52.72	30	0	44
Sw	Lab 3 X Wall	1021	3	8	8	Both Sides	(2) 2.24	NA	NA	NA	12.25	0	0	8
T	LAB 4	1022	3	74	74	5.28 x 4.47	(2) 5.28	(2) 4.47	23.60	23.60	53.43	30	0	44
U	LAB 5	1024	2	800	800	12.8 x 7.62	(2) 12.8	(2) 7.62	97.54	97.54	111.90	389	91	320
V	VAULT	1011-C	1	810	810	7.47 x 7.39	(2) 7.47	(2) 7.39	55.21	55.21	81.43	225	225	360
Vw	Vault, X Wall	1011-C	1	156	156	Both Sides	(2) 6.25	NA	NA	NA	34.24	0	0	156
W	LAB 2	1020	2	0	0	18.08 x 7.37	(2) 18.08	(2) 7.37	133.29	133.29	139.47			
Ww	Lab 2 X Wall	1020	2	0	0	Both Sides	(2) 2.54	(2) 1.37	NA	NA	21.44	0	0	
X**	TANK ROOM	1025	2	0	0	5.31 x 2.11	(2) 5.31	(2) 2.11	11.20	11.20	40.66			
Xw	Tank Rm X Wall	1025	2	0	0	Both Sides	(2) 1.19	NA	NA	NA	5.90	0	0	
	NON IMPACT AREA													
Y	Loading Dock		non-imp	0	0								0	
Z	Outside Lab 2&5		non-imp	0	0								0	
AA	Ajadcent		non-imp	0	0								0	
AB	Outside Exit To Tank RM		non-imp	0	0								0	
			TOTAL	6528	6528								0	

NOTE: FOUR (4) CLASS 1; FOUR (4) CLASS 2; SIXTEEN (16) CLASS 3; & FOUR (4) NON AFFECTED AREAS.

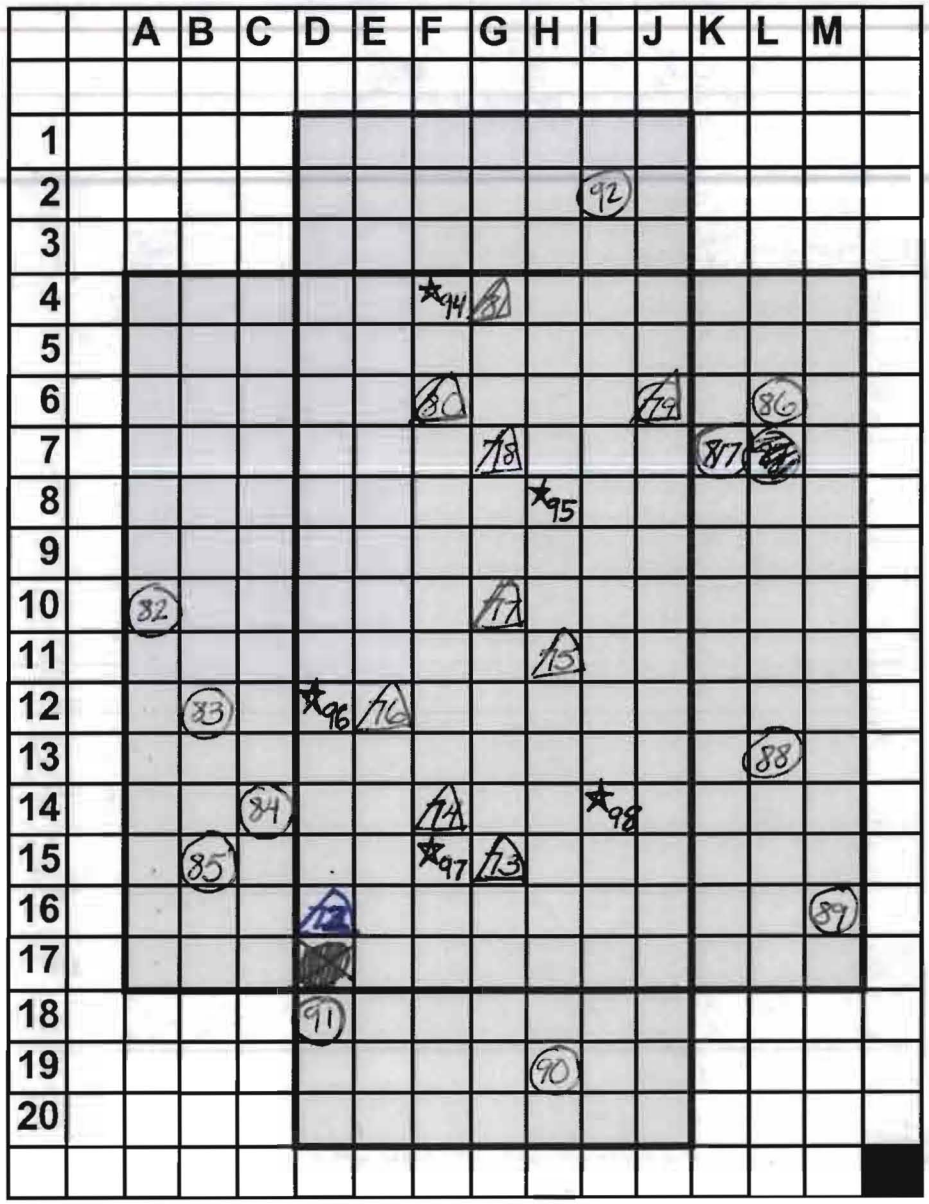
EDWIN R. BRADLEY LABORATORIES

AREA P - LABORATORY 1 - ROOM 1019 - CLASS 1

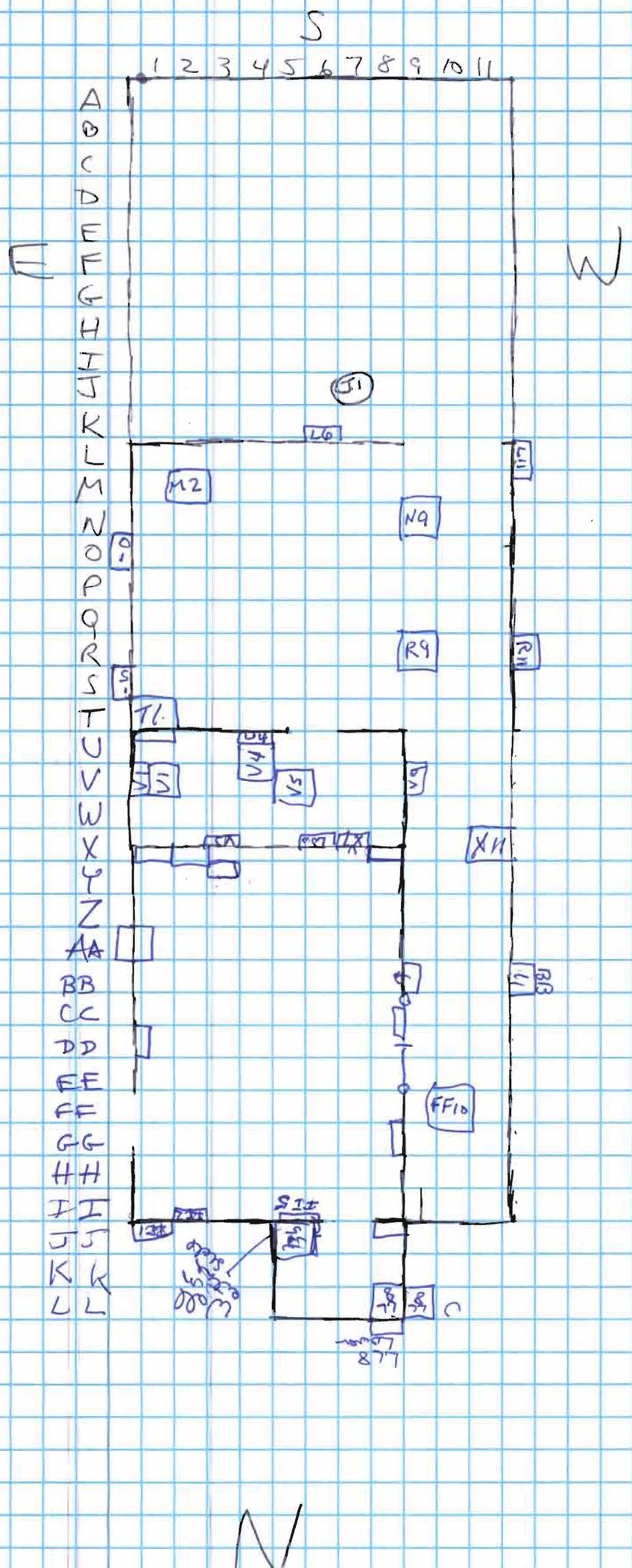
F - 10 ㎡
LW - 8 (4/wall)
SW - 4 (2/wall)

Ceiling - 5

○ = wall
△ = floor
★ = ceiling



1 METER SQ.

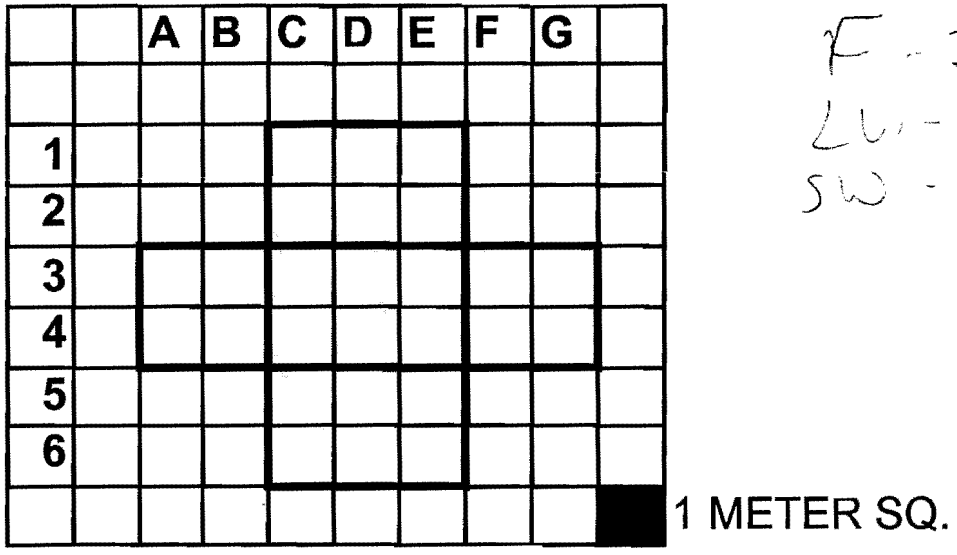

S
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA BB CC DD EE FF GG HH II JJ KK LL
E
W
J1
L6
L11
M2
N9
R9
R11
T1
V5
X11
BB
FF10
SIX
C
N

AREA CODE	LOCATION	ROOM NUMBER	AREA CLASS	# OF SMEARS A & B	# OF SMEARS LSC	Floor/Ceiling SIZE	WALL (L) SIZE	WALL (W) SIZE	AREA IN METERS SQ FLOOR AREA	AREA IN METERS SQ CEILING AREA	AREA IN METERS SQ WALL AREA	NUMBER OF SMEARS FOR FLOOR SMEARS	NUMBER OF SMEARS FOR CEILING SMEARS	NUMBER OF SMEARS FOR WALL SMEARS	DATE ROOM AVAILABLE	DATE ROOM COMPLETED	
	IMPACT AREA						H = 2.74	H = 2.74									
A	MAIN HALLWAY	NA	3	206	206	33.83 X 2.00	(2) 33.83	(2) 2.00	67.66	67.66	143.3	70	0	136	16-Jul-99	26-Aug-99	206
B	Rad Lab OFFICE	1010	3	84	84	5.56 X 5.18	(2) 5.56	(2) 5.18	28.81	28.81	58.86	36	0	48	9-Jul-99	18-Aug-99	84
C	Instructor's OFC	1010-A	3	56	56	4.57 X 3.51	(2) 4.57	(2) 3.51	16.02	16.02	44.28	20	0	36	9-Jul-99	18-Aug-99	56
D	Rad Lab CHIEF	1010-B	3	56	56	4.57 X 3.51	(2) 4.57	(2) 3.51	16.02	16.02	44.28	20	0	36	9-Jul-99	18-Aug-99	56
E	Electronic SHOP	1010-C	3	120	120	8.99 x 5.59	(2) 8.99	(2) 5.59	50.24	50.24	79.9	54	0	66	16-Jul-99	23-Aug-99	120
F	LAB 7	1017	3	176	176	11.89 x 7.67	(2) 11.89	(2) 7.67	91.18	91.18	107.2	96	0	80	16-Jul-99	23-Aug-99	176
G	WOMEN's RM	1013	3	20	20	1.93 x 1.78	(2) 1.93	(2) 1.78	3.43	3.43	20.17	4	0	16	16-Jul-99	26-Aug-99	20
H	MEN's RM	1015	3	32	32	3.45 x 1.78	(2) 3.45	(2) 1.78	6.14	6.14	28.66	8	0	24	2-Aug-99	26-Aug-99	32
I	JANITOR RM	1016	3	26	26	2.79 x 1.78	(2) 2.79	(2) 1.78	4.97	4.97	25.04	6	0	20	2-Aug-99	26-Aug-99	26
J	H. P. OFFICE	1011	3	80	80	7.62 x 3.71	(2) 7.62	(2) 3.71	28.26	28.26	62.09	32	0	48	14-Aug-99	25-Aug-99	80
K	H. P. STORAGE	1012	3	20	20	1.85 x 1.40	(2) 1.85	(2) 1.40	2.59	2.59	17.81	4	0	16	16-Jul-99	24-Aug-99	20
L	RAD Lab Storage	1014	3	38	38	4.57 x 1.40	(2) 4.57	(2) 1.40	6.38	6.38	32.72	10	0	28	16-Jul-99	24-Aug-99	38
M	LAB 8	1018	3	161	161	9.14 x 7.62	(2) 9.14	(2) 7.62	69.65	69.65	91.84	80	0	81	9-Jul-99	24-Aug-99	161
N	LAB 6	1023	3	80	80	7.62 x 3.45	(2) 7.62	(2) 3.45	26.32	26.32	60.66	32	0	48	3-May-99	20-Aug-99	80
Nw	Lab 6 X Wall	1023	3	6	6	Both Sides	(2) 0.94	(1) 0.20	NA	NA	5.15	0	0	6	3-May-99	20-Aug-99	6
O	H. P. LAB	1011-A	1	544	544	7.62 x 3.71	(2) 7.62	(2) 3.71	28.26	28.26	62.09	128	128	288	24-Aug-99		
P	LAB 1	1019	1	1288	1288	13.64 x 6.60	(2) 13.64	(2) 6.60	90.08	90.08	110.9	392	392	504	8-Jul-99		
Q	Hallway To LABS	NA	2	736	736	29.57 x 1.93	(2) 29.57	(2) 1.93	57.06	57.06	172.6	248	62	426	6-Jul-99		
R	PREP LAB	1011-B	1	850	850	7.62 x 7.47	(2) 7.62	(2) 7.47	56.92	56.92	82.69	239	239	372	10-Aug-99		
S	LAB 3	1021	3	74	74	5.28 x 4.34	(2) 5.28	(2) 4.34	22.92	22.92	52.72	30	0	44	24-Jun-99	25-Aug-99	74
Sw	Lab 3 X Wall	1021	3	14	14	Both Sides	(2) 2.24	NA	NA	NA	12.25	0	0	14	24-Jun-99	25-Aug-99	14
T	LAB 4	1022	3	74	74	5.28 x 4.47	(2) 5.28	(2) 4.47	23.60	23.60	53.43	30	0	44	3-May-99	20-Aug-99	74
U	LAB 5	1024	2	898	898	12.8 x 7.62	(2) 12.8	(2) 7.62	97.54	97.54	111.90	416	104	378	3-May-99	20-Aug-99	898
V	VAULT	1011-C	1	810	810	7.47 x 7.39	(2) 7.47	(2) 7.39	55.21	55.21	81.43	225	225	360	16-Jul-99		
Vw	Vault, X Wall	1011-C	1	156	156	Both Sides	(2) 6.25	(1) 0.20	NA	NA	34.24	0	0	156	16-Jul-99		
W	LAB 2	1020	2	1008	1008	18.08 x 7.37	(2) 18.08	(2) 7.37	133.3	133.29	139.5	540	0	468	24-Jun-99		1008
Ww	Lab 2 X Wall	1020	2	33	33	Both Sides	(2) 2.54	(2) 1.37	NA	NA	21.44	0	0	33	24-Jun-99		33
X**	TANK ROOM	1025	2	196	196	5.31 x 2.11	(2) 5.31	(2) 2.11	11.20	11.20	40.66	55	18	123	24-Jun-99	27-Aug-99	196
Xw	Tank Rm X Wall	1025	2	33	33	Both Sides	(2) 1.19	NA	NA	NA	5.90	0	0	33	24-Jun-99	27-Aug-99	33
	NON IMPACT AREA																
Y	Loading Dock		non-imp	42	42							20	0	22	2-Aug-99		
Z	Outside Lab 2&5		non-imp	20	20							6	0	14	16-Jul-99		
AA	Ajadcent Hallway		non-imp	31	31							10	0	21	2-Aug-99		
AB	Outside Exit To Tank RM		non-imp	49	49							22	0	27	4-Aug-99		
			TOTAL	8017	8017							2833	1168	4016			3491

NOTE: FOUR (4) CLASS 1; FOUR (4) CLASS 2; SIXTEEN (16) CLASS 3; & FOUR (4) NON AFFECTED AREAS.

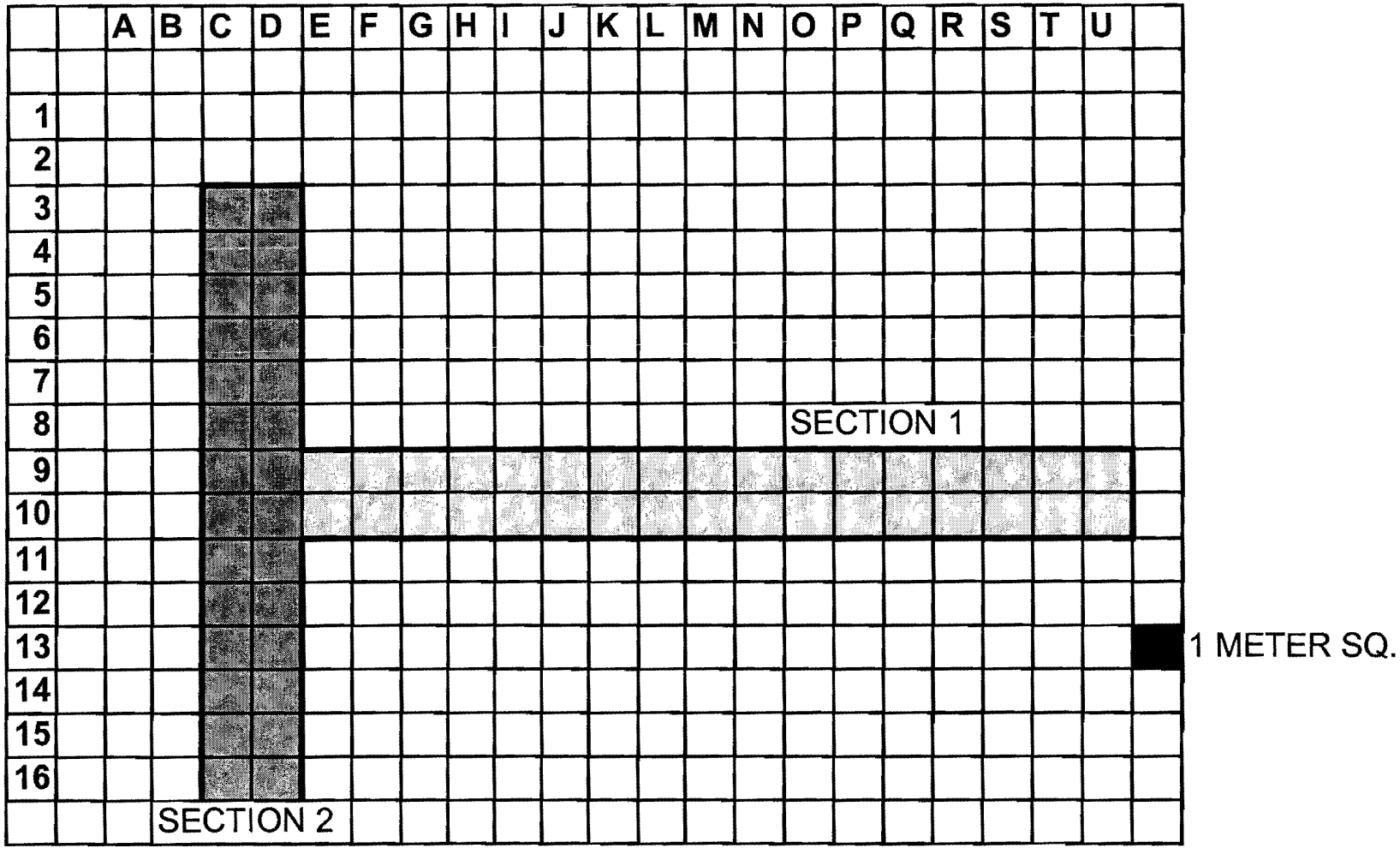
TOTAL	8017
DONE	7887
LEFT	130

AREA I - JANITOR'S ROOM - RM 1016 - CLASS 3

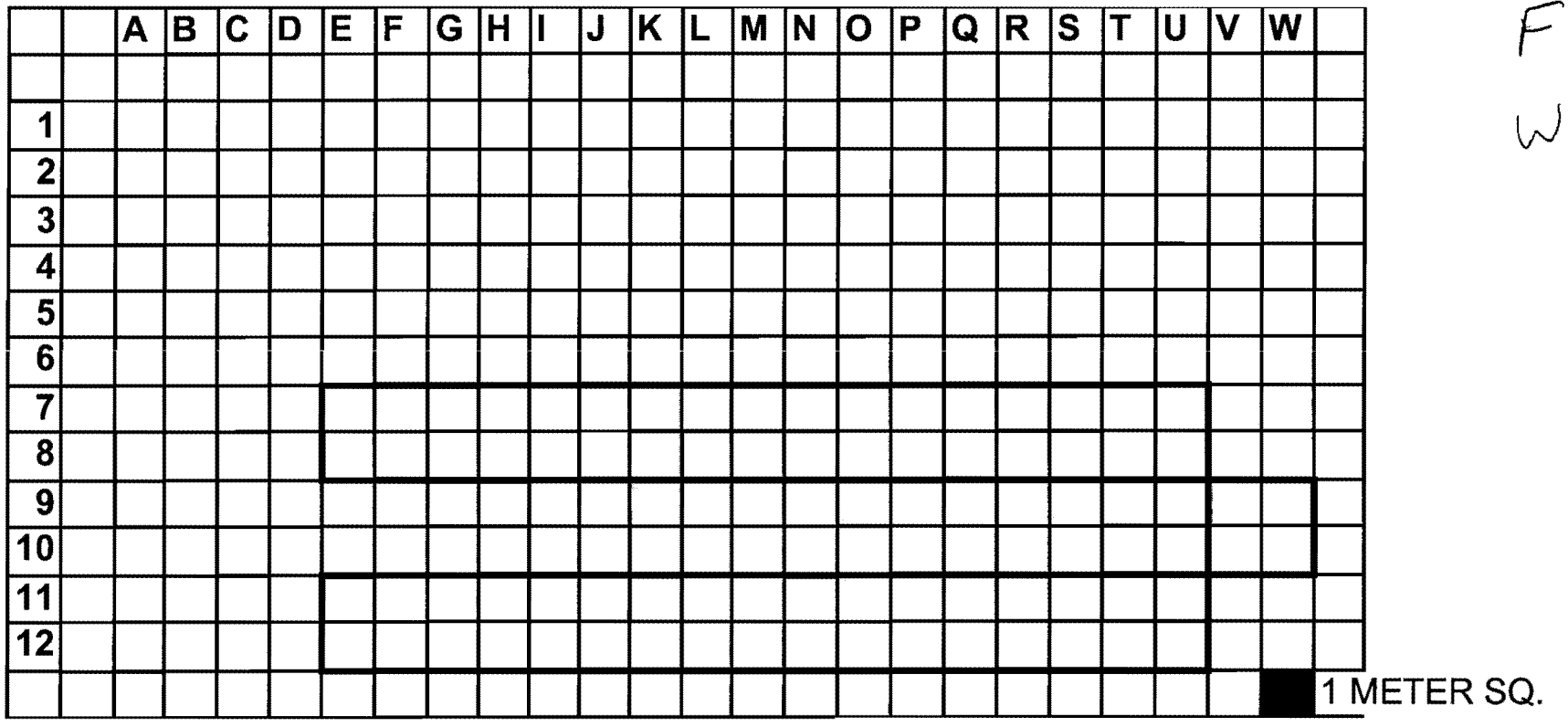


F - 2
LW - 2 (1 wall)
SW - 2 (1 wall)

AREA Q - SECTION FLOOR LAYOUT - LABORATORY HALLWAY - CLASS 2



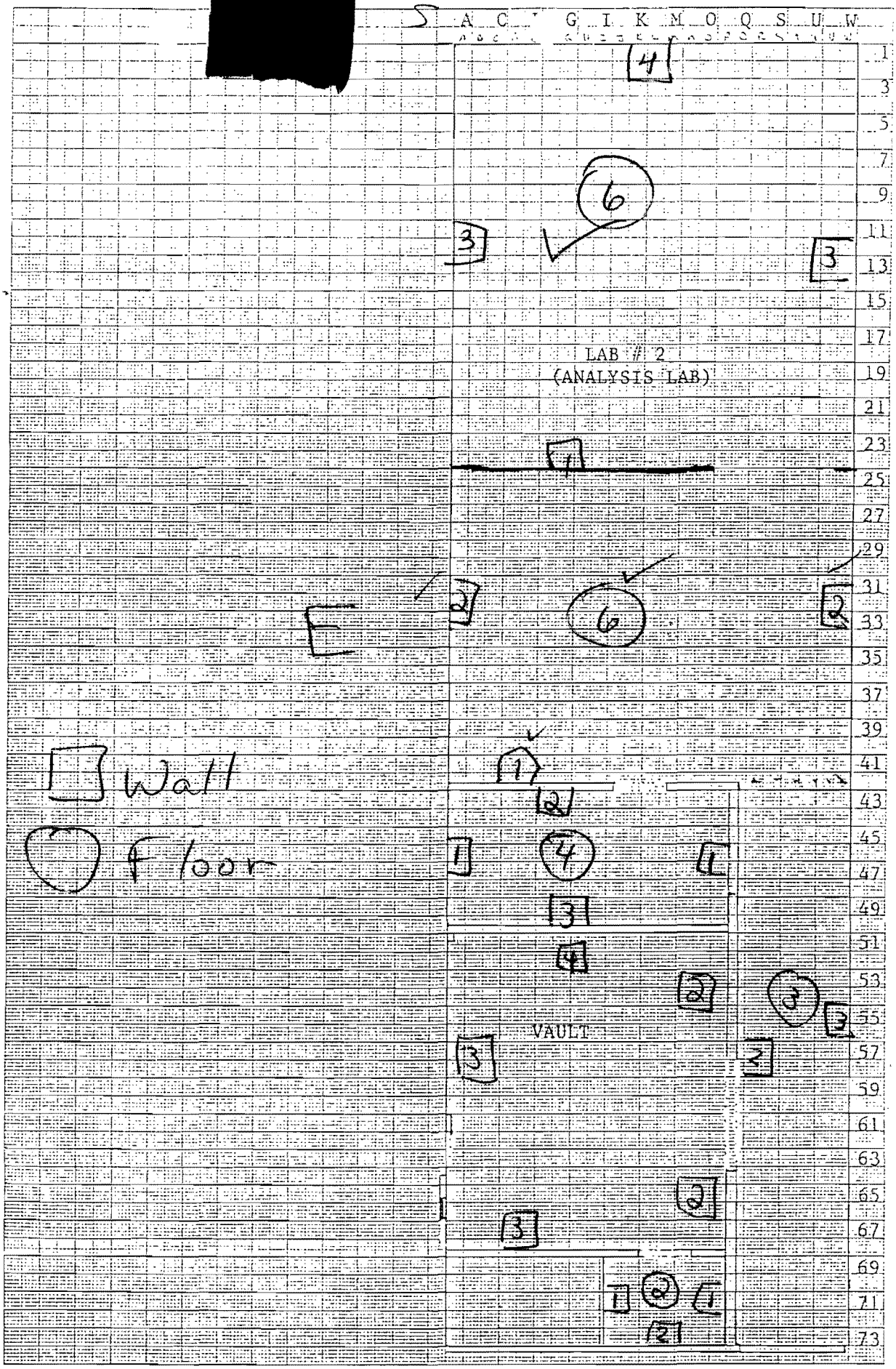
AREA Q (SECTION 1) - LABORATORY HALLWAY - CLASS 2



F-4

W 4 (2/wd)

[redacted]



NO XY 1104-SP2

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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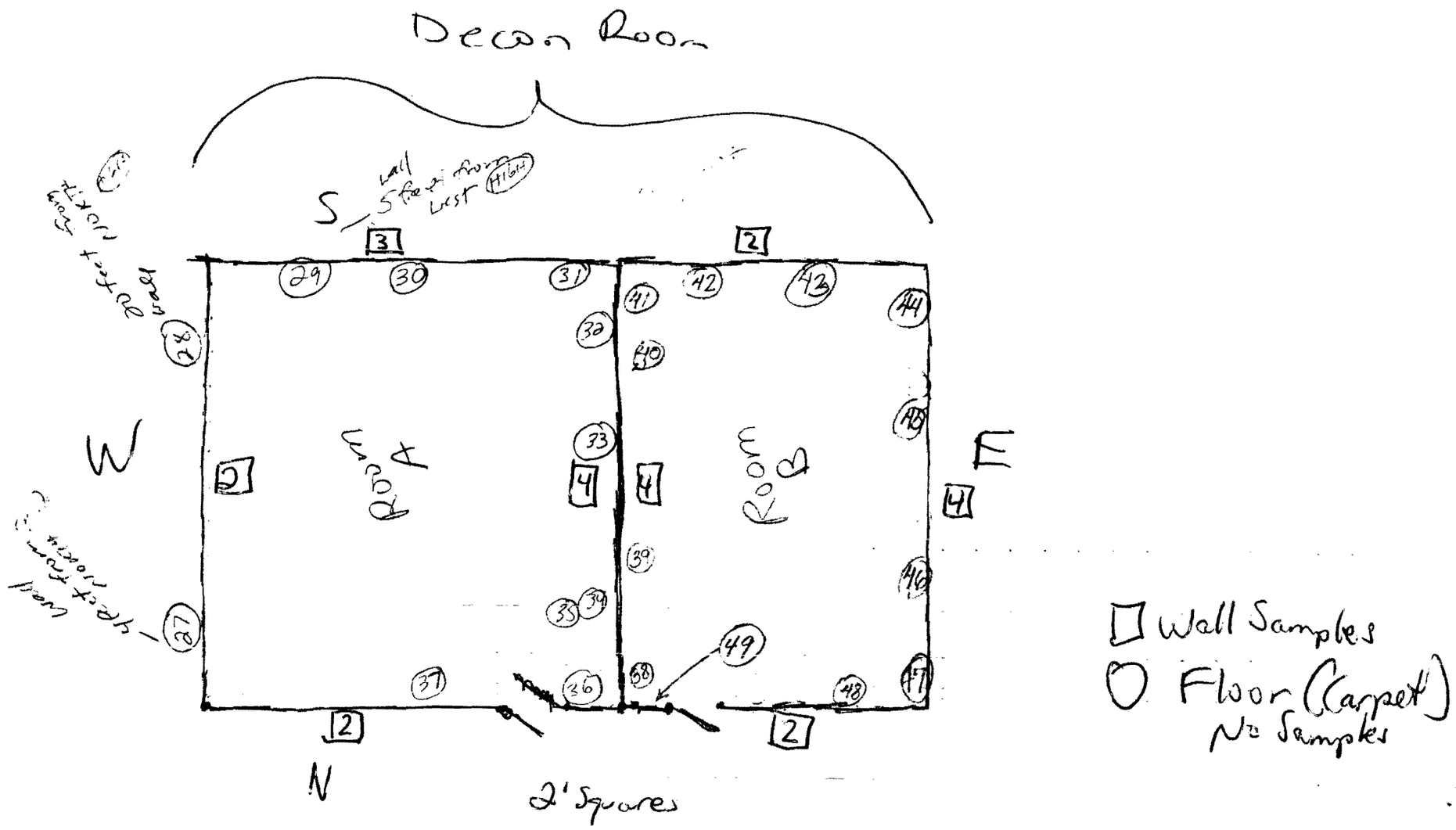
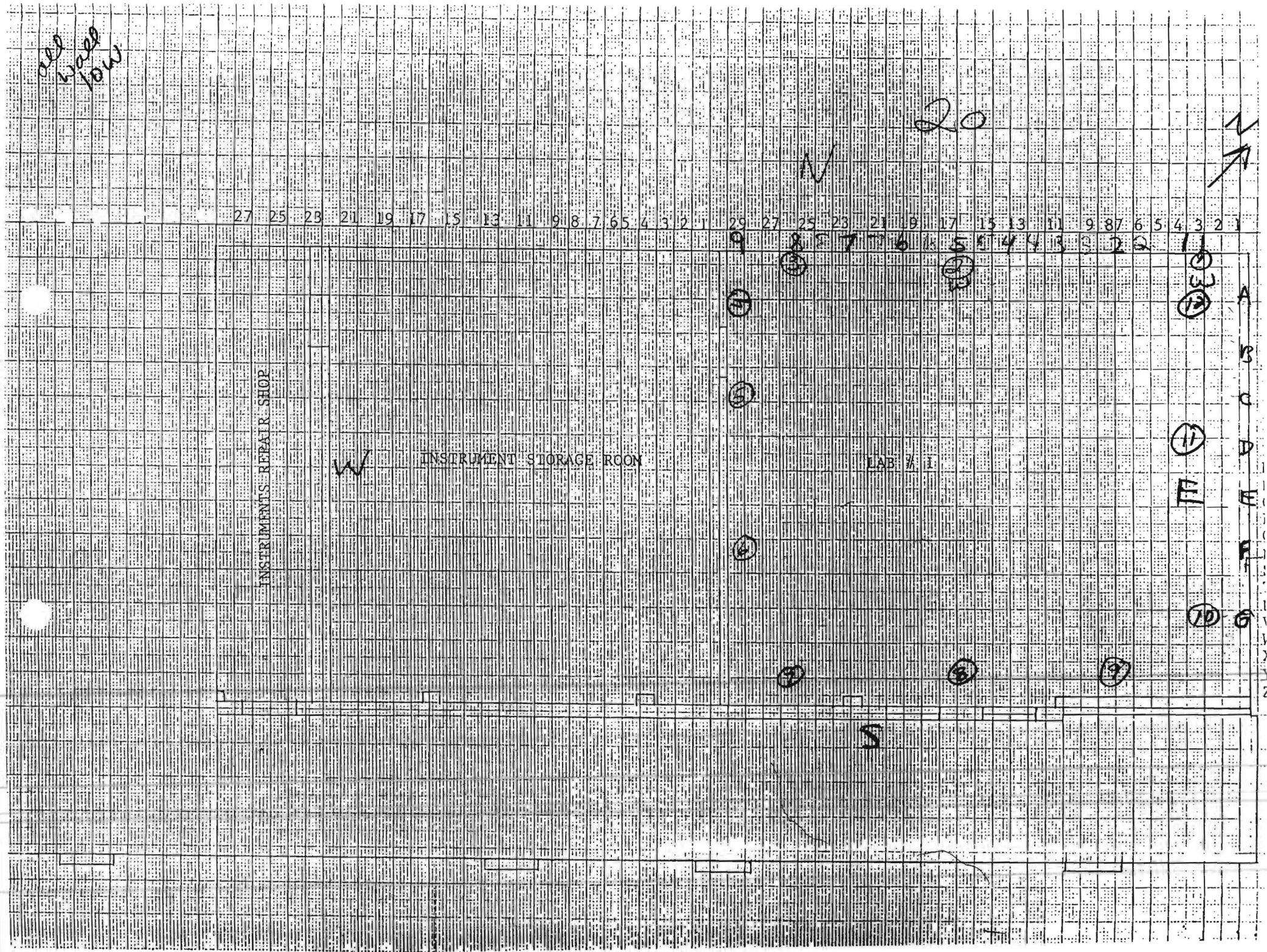
CLASSROOM

[redacted]


Decon Room
S
W
E
N
Room X
Room 2
2' Squares
Wall Samples
Floor (Carpet)
No Samples

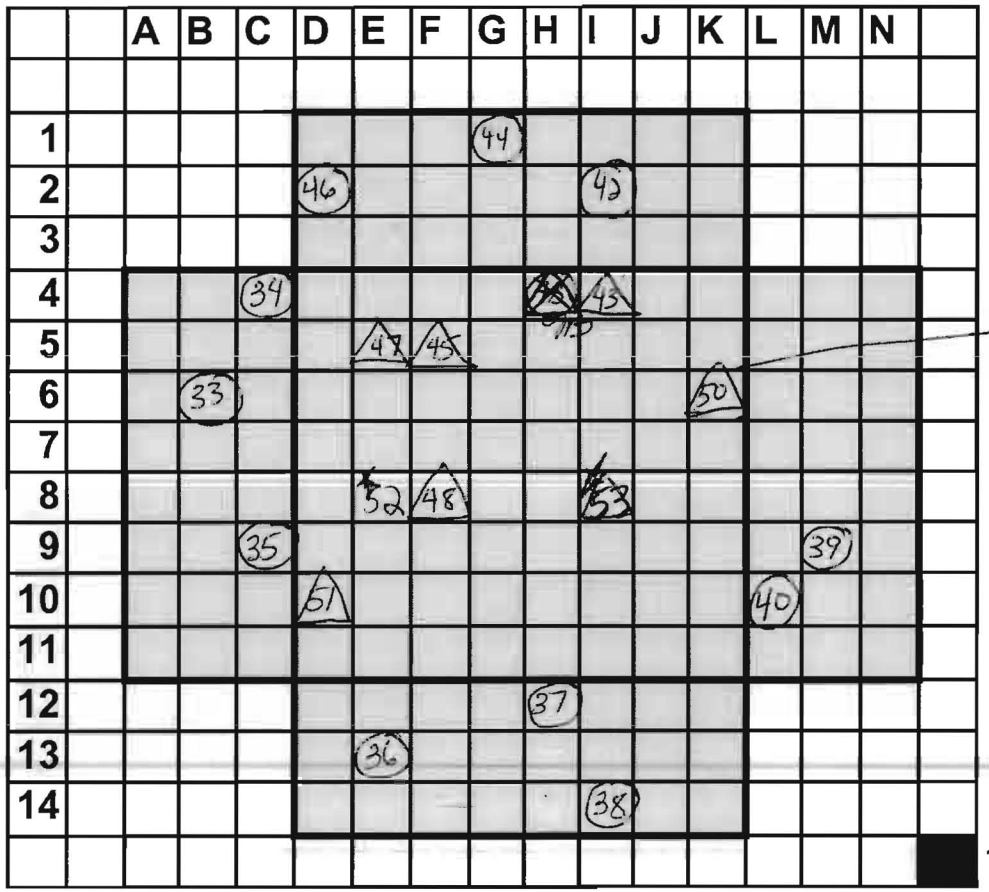

INSTRUMENTS REPAIR SHOP
INSTRUMENT STORAGE ROOM
LAB # 1
N
S
W
E
A
B
C
D
E
F
G

flor scan clear

N ↑

AREA R - PREP LABORATORY - RM 1011B - CLASS 1

F - 6
W - 12 (3/wall)
C - 3

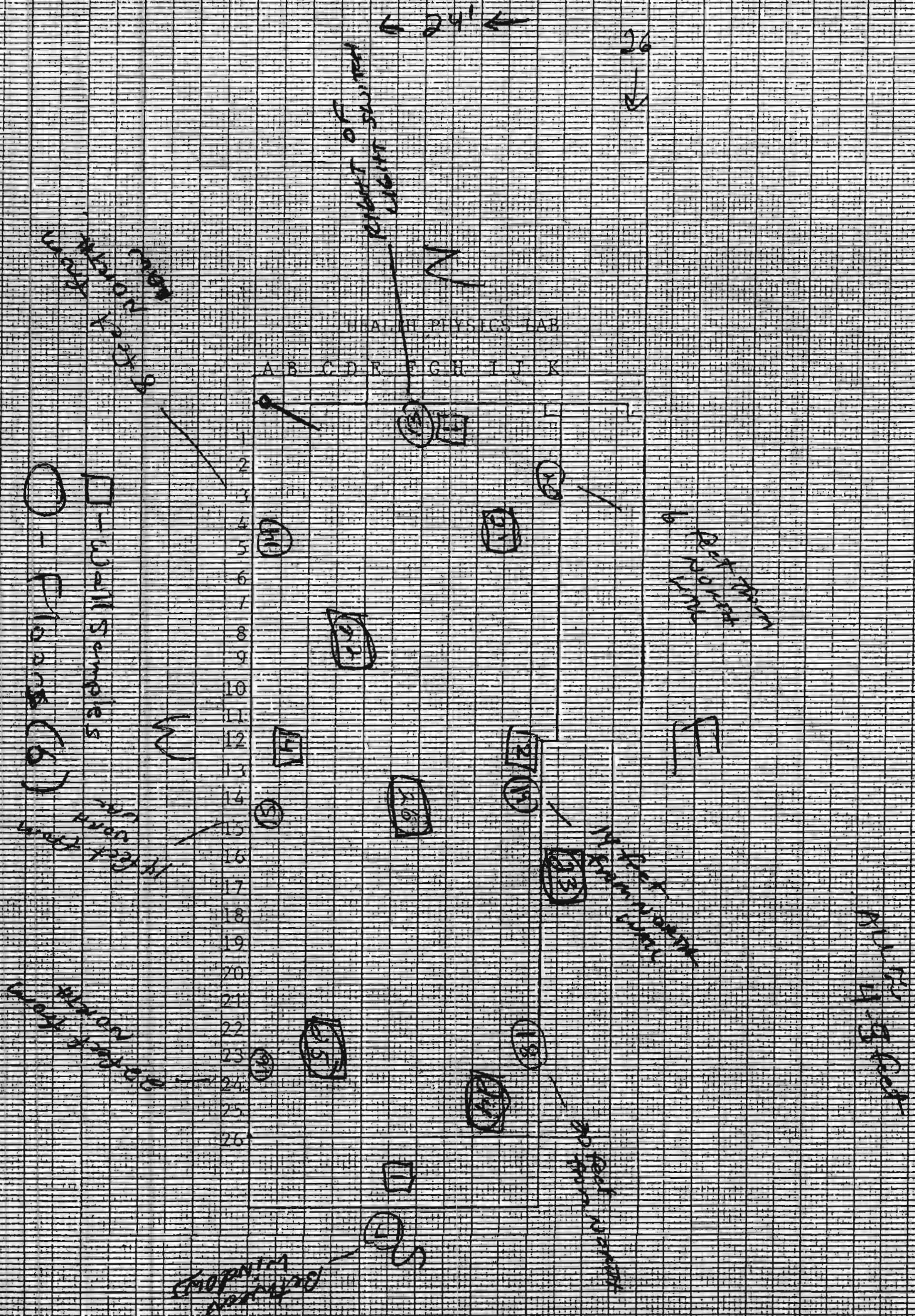


1 METER SQ.

* 6K ceiling

31 inside hood
32 surrounding hood floor

△ floor
* ceiling



24'
26
N
HEALTH PHYSICS LAB
A B C D E F G H I J K
1
2
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11
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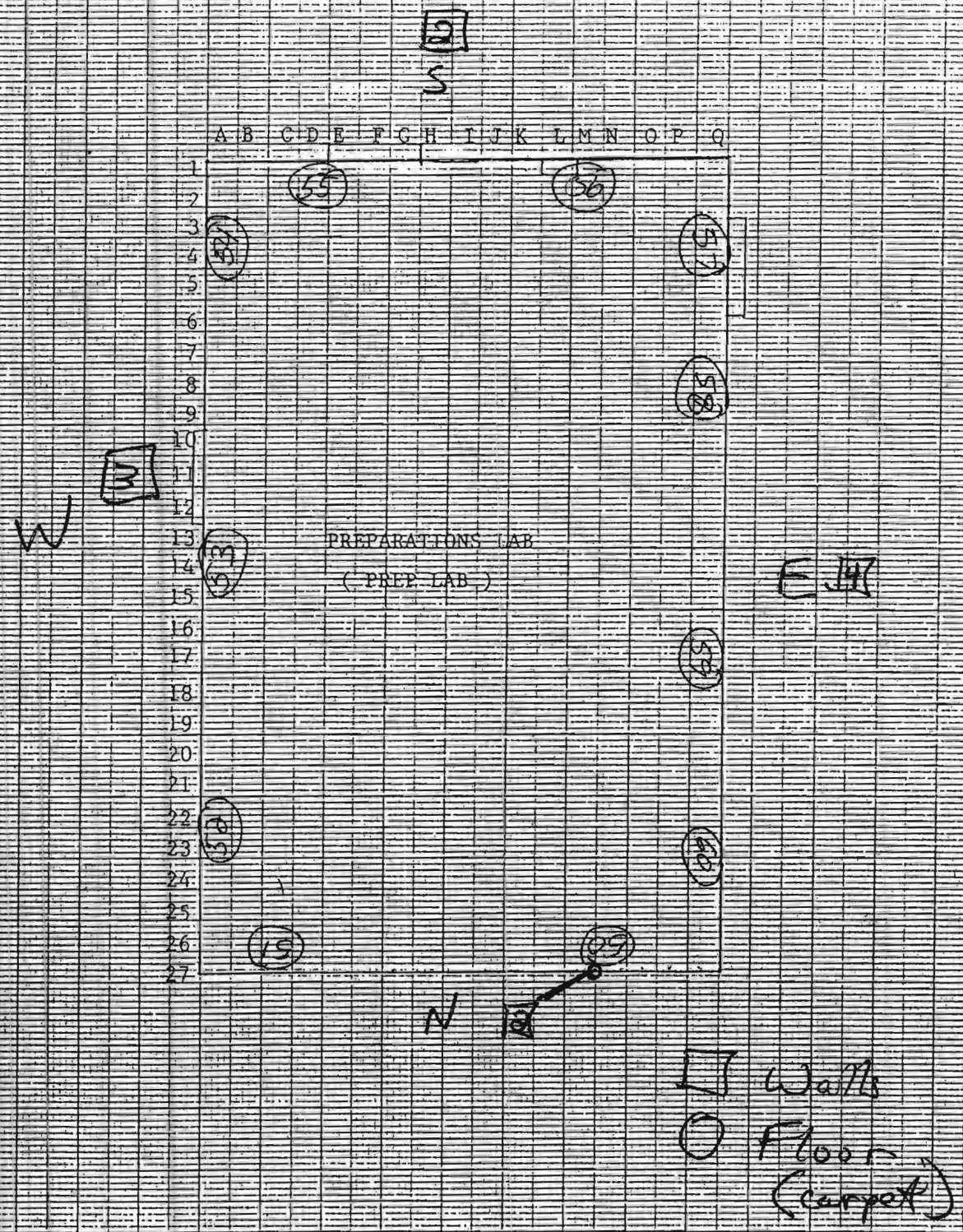
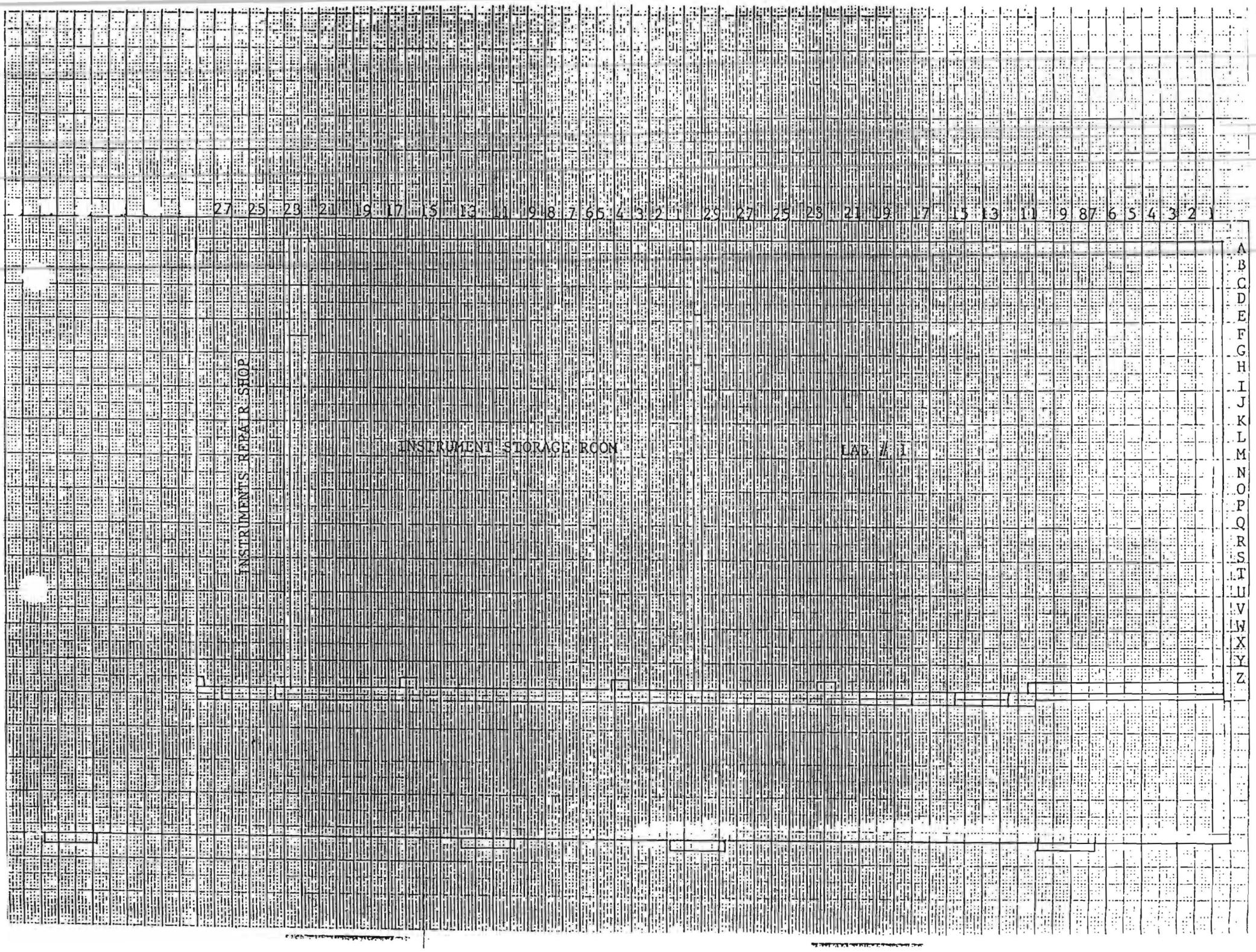
16
17
18
19
20
21
22
23
24
25
26
W
E
□ - Wall Samples

[redacted]


2
S
A B C D E F G H I J K L M N O P Q
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
55
56
54
57
58
63
PREPARATIONS LAB
(PREP LAB)
59
60
61
15
29
W
3
E 4
N
2
Walls
Floor
(carpet)


27 25 23 21 19 17 15 13 11 9 8 7 6 5 4 3 2 1 29 27 25 23 21 19 17 15 13 11 9 8 7 6 5 4 3 2 1
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
INSTRUMENTS REPAIR SHOP
INSTRUMENT STORAGE ROOM
LAB # 1

LAB # 4
(DECON LAB)

41
40
39
38
37
36
35
34
33
32
31
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28
27
26
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24
23
22
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14
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12
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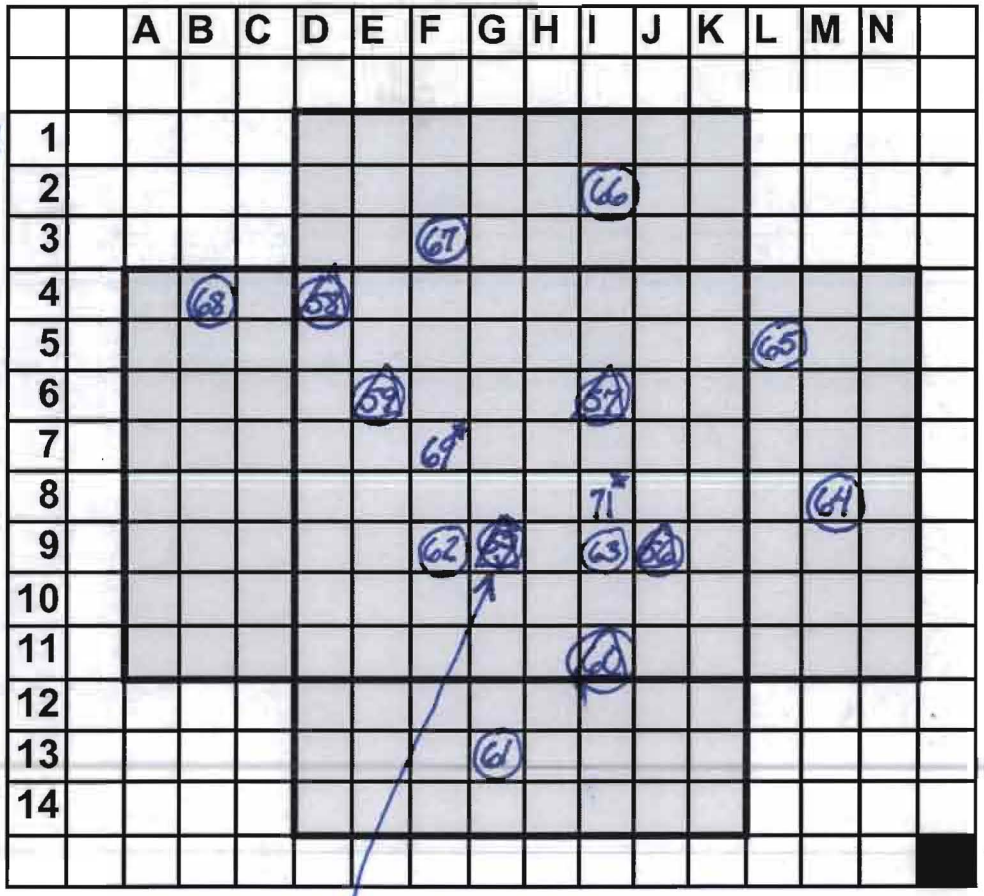
10
9
8
7
6
5
4
3
2
1

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

AREA V - VAULT - RM 1011C - CLASS 1

F- 6 ~~IIII~~ I
W- 8 (2/wall) IIII IIII
C- 3 III



1 METER SQ.

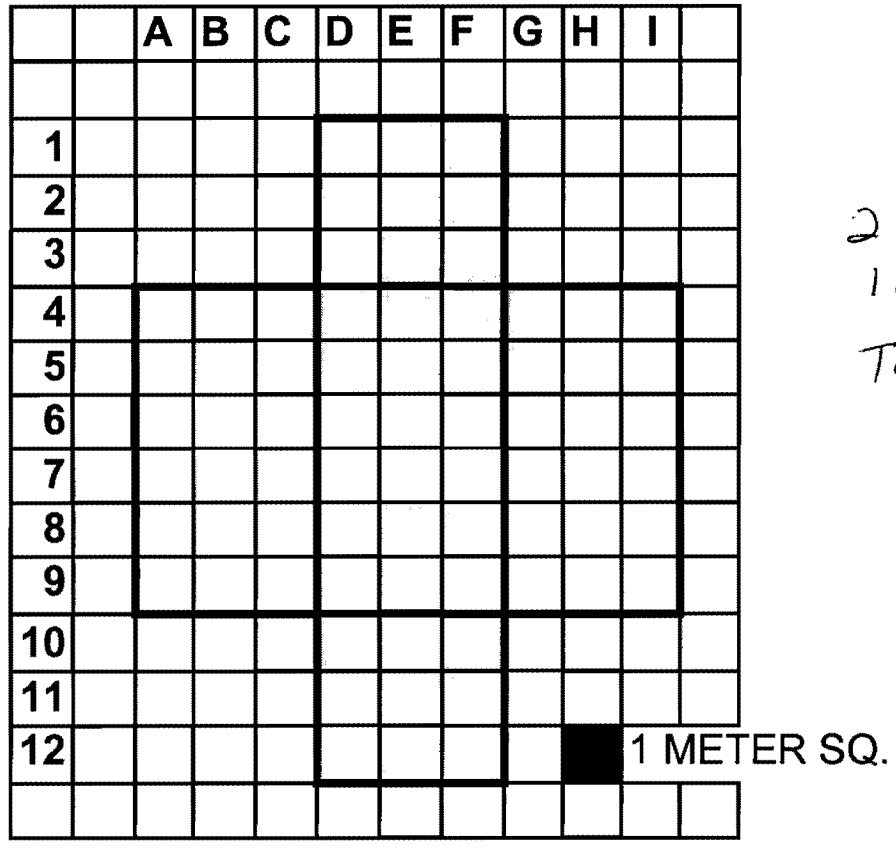
○ = wall

Ⓐ or Δ = floor

★ = ceiling

9-G 70*
inside return duct

AREA X - TANK ROOM - CLASS 1

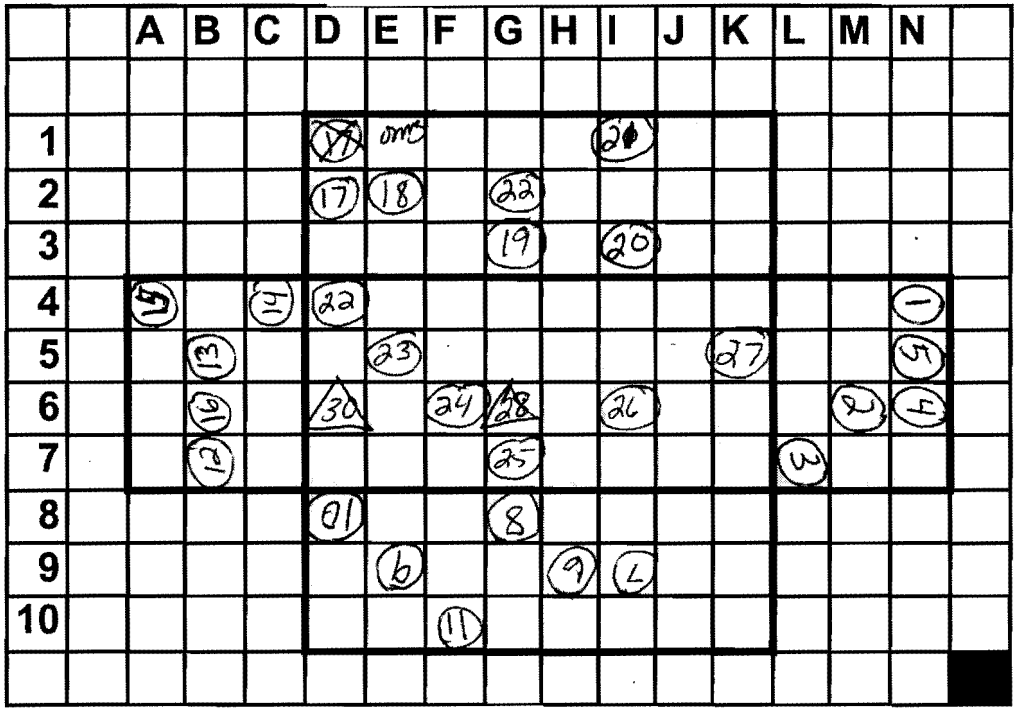


2 F
1/Wall

Tank Smear/Sample

N

AREA O - HPO LABORATORY - RM 1011A - CLASS 1



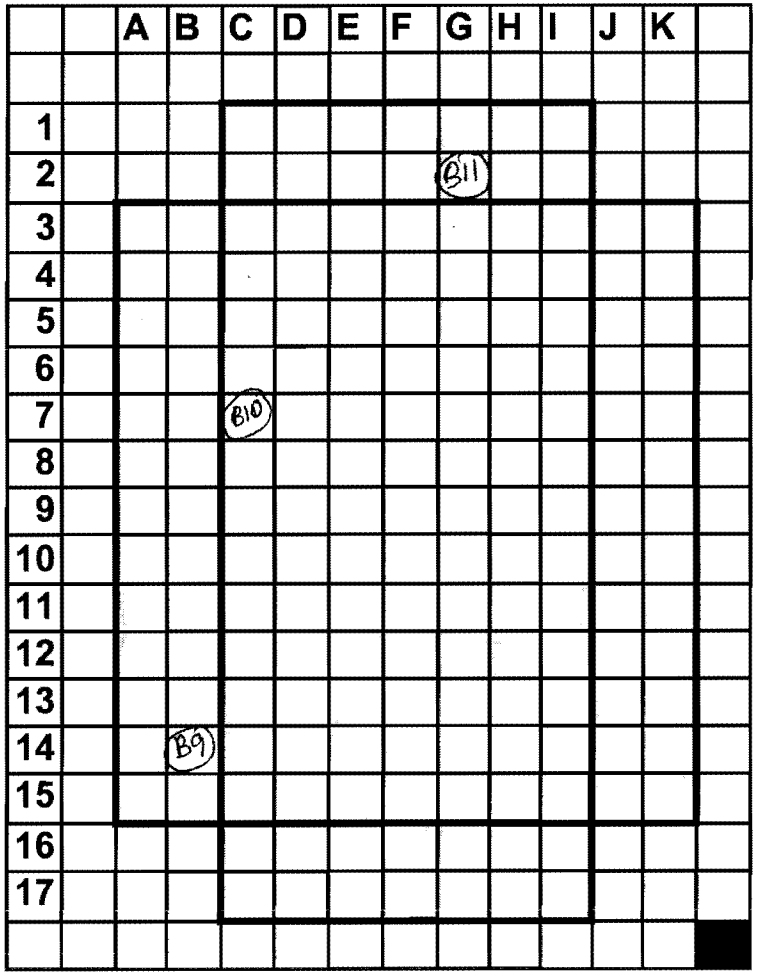
1 METER SQ.

floor monitor

AREA U - LABORATORY 5 - ROOM 1024 - CLASS 2

F-4

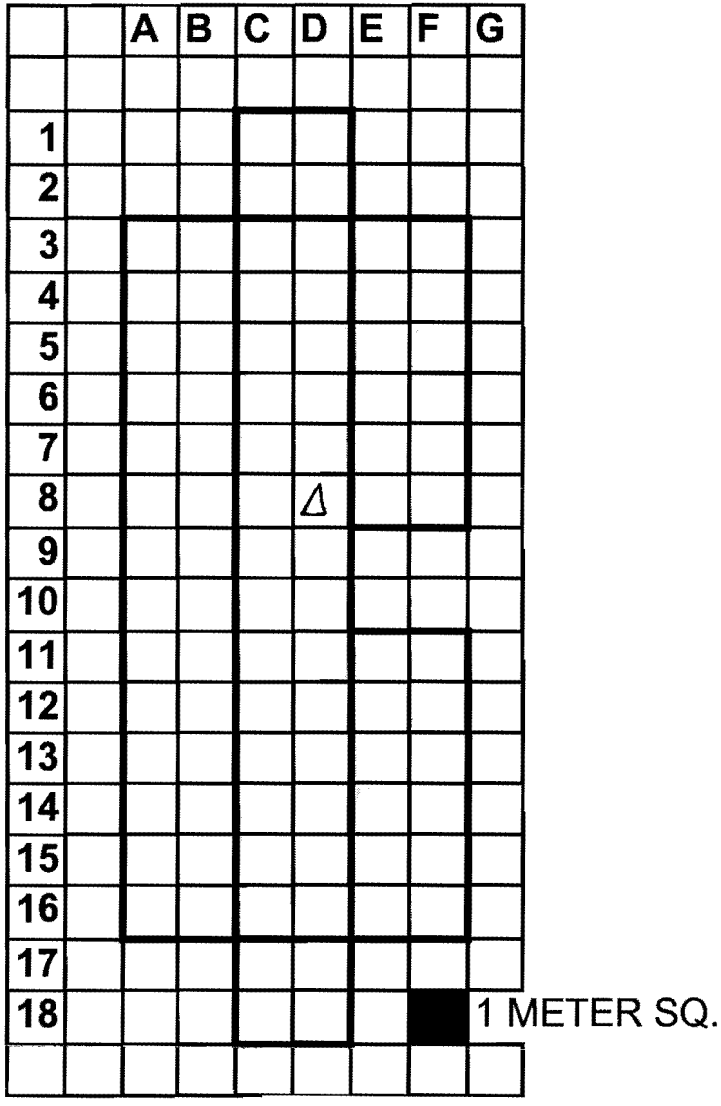
LW - 4 (2 [illegible])
SW - 2 (1 [illegible])



1 METER SQ.

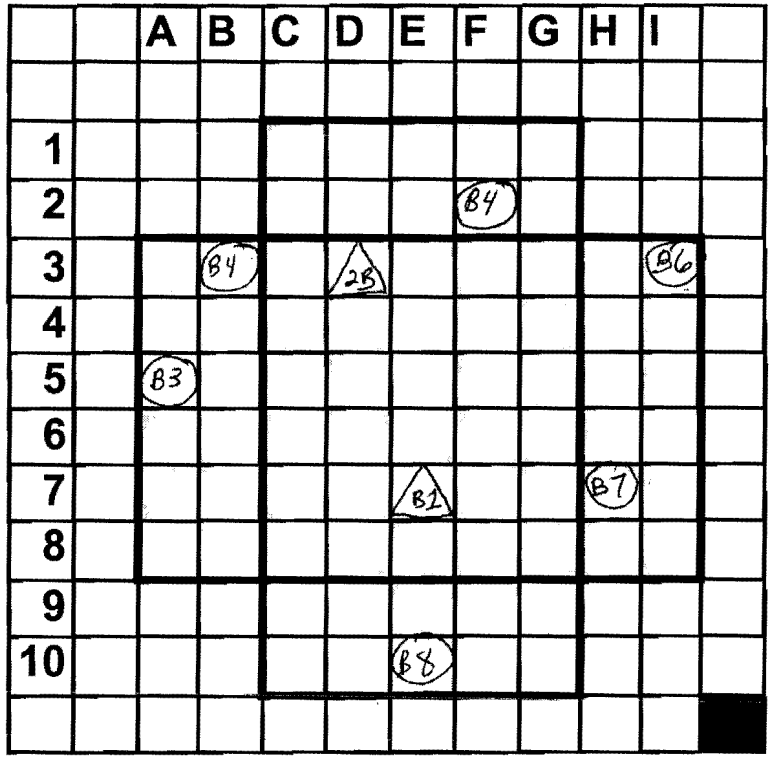
B-12 6L
B-13 13M
B-14 18H
B-15 14H floor
B-16 10J floor
B-17 7E floor
B-18 13E

AREA Q (SECTION 2) - LABORATORY HALLWAY - CLASS 2



AREA T, LABORATORY 4 - ROOM 1022 - CLASS 3

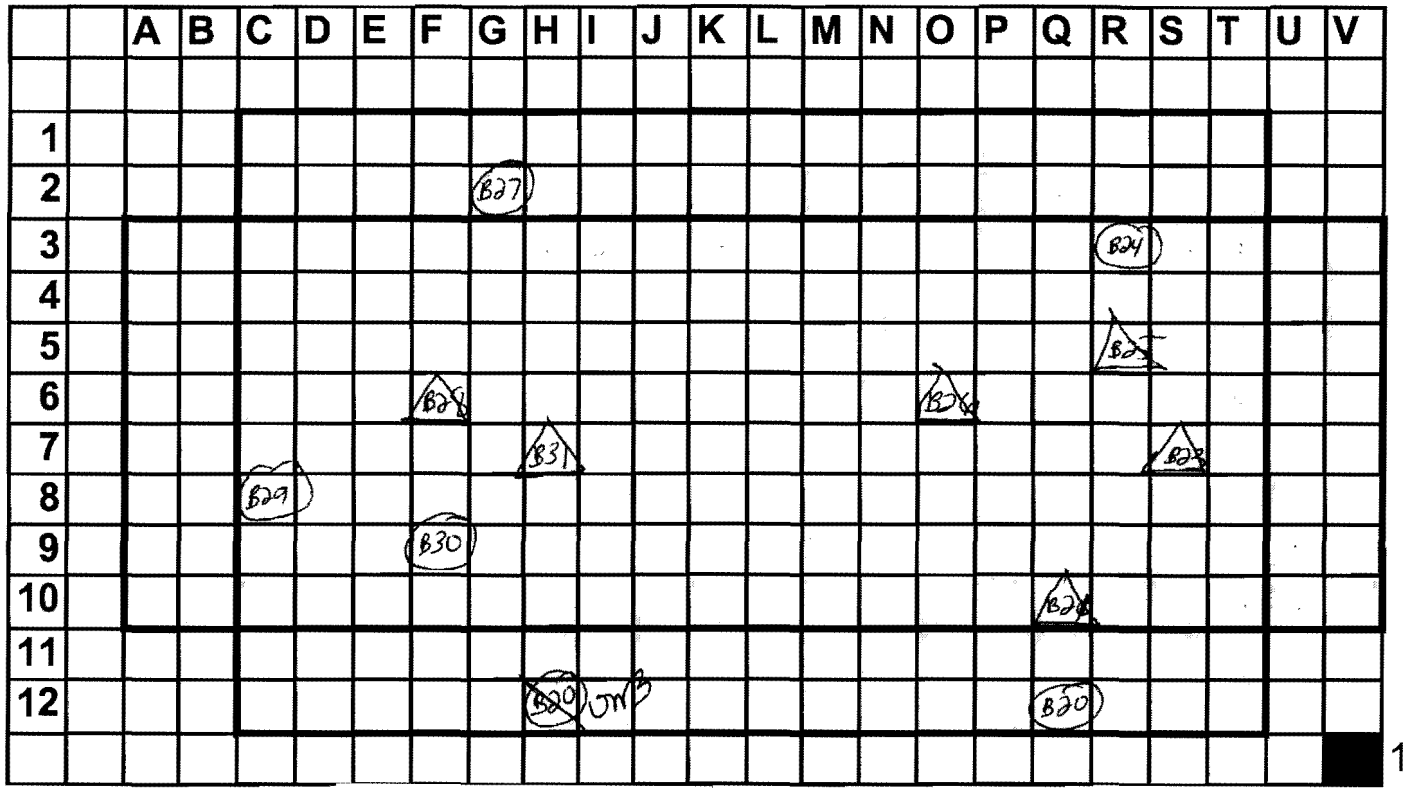
F - 2 ✓
LW - 4 (2/[illegible])
SW - 2 (1/[illegible])



1 METER SQ.

Lab 2

AREA W - LABORATORY 2 - ROOM 1020 - CLASS 2



1 METER SQ.

F-7

LW 4 (2 wall)

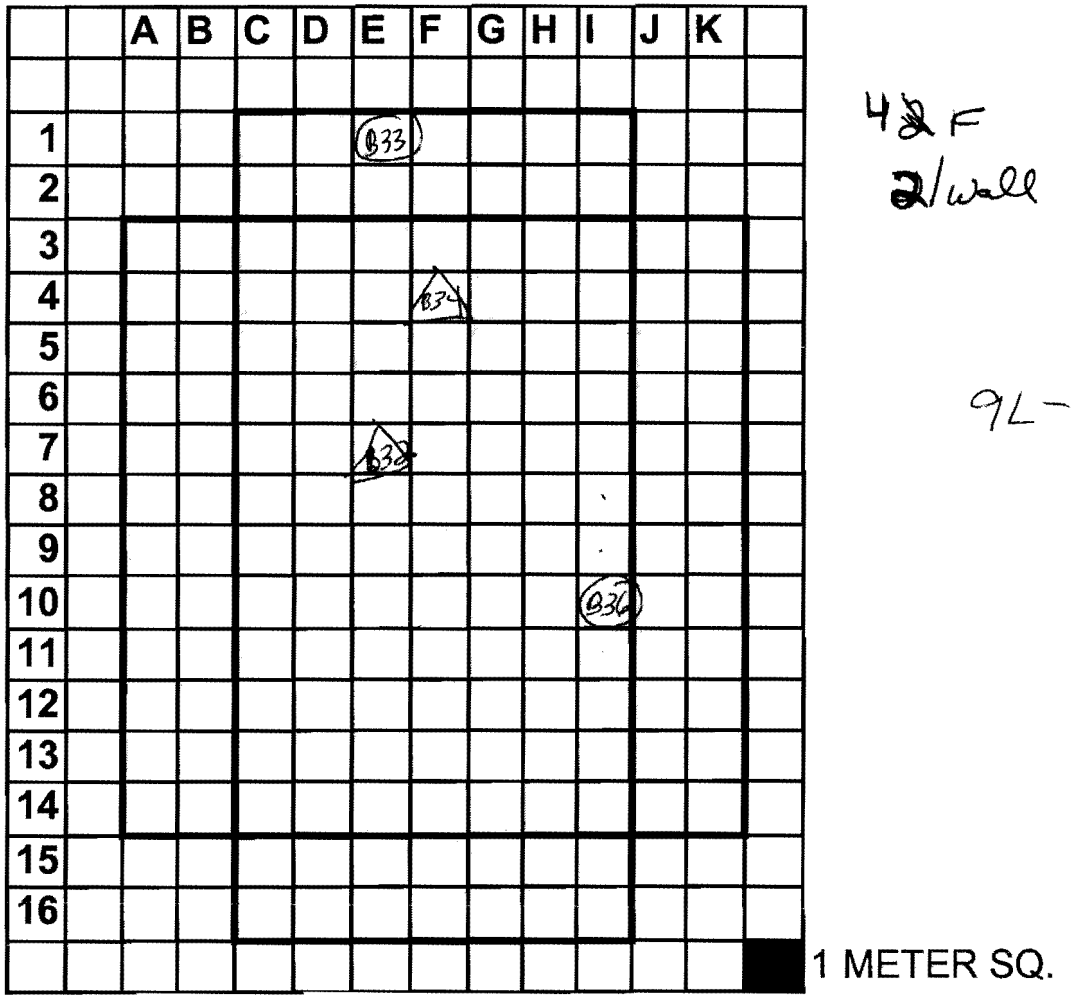
SW 4 (2 wall)

13F - B19

8W - B22

9F - B30

AREA F - LABORATORY 7 - ROOM 1017 - CLASS 3



4 F
2/wall

9L - B35

8/37

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Pelchat Parker

Inspector: Masnyk Bailey Henson	Date: 9/24/99
Licensee: Dept of The Army	Location: Ft McClellan
License No.: 01-02861-05	Docket No.: 030-17584
Report No.:	Survey Date(s):

Isotopes of Interest: _____

Survey Instrument

Type: Ludlum Model 19 uR	Probe: N/A
Serial No.: 91555	Serial No.:
NRC Tag No.: ✓	NRC Tag No.:
Calibration Date: 6/18/99	Size (S): cm²

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr 28

(1) 26	(2) 28	(3) 28	(4) 30	(5) 30	Avg.: 28

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
N/A	NRC-DI-014	Cs137	-8 μCi	3700 μR	on contact
				RI office	

Efficiency (E) = (M-B)/A

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Pelchat Parker

Inspector: Marsha Bailey Hinson	Date: 9/27/99
Licensee: Dept of the Army	Location: Ft McClellan
License No.: 01-02861-05	Docket No.: 030-17584
Report No.:	Survey Date(s):

Isotopes of Interest: Co-60, Cs-137, Sr 90

Survey Instrument

Type: Ludlum Model 19 uR	Probe:
Serial No.: 101770	Serial No.:
NRC Tag No.: 043988	NRC Tag No.:
Calibration Date: 6/20/99	Size (S): cm²

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr 11

(1) 10	(2) 12	(3) 12	(4) 10	(5) 10	Avg.: 11

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
N/A	NRC-DI-014	Cs137	~8 mCi	2800 mR on contact	KH offsite

Efficiency (E) = (M-B)/A

9/27/99 Cs-137 2800 mR/hr BKG 12 uR/hr (outside) 20 uR/hr (inside)

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
9/29	8:15	Bldg 1081	Cs137	2800			
9/30	8:00 am	↓	✓	3000			
↓	10:20	Bldg 2221	✓	3000			

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

Army Ft McClellan

License No.: 01-02861-05	Survey Date(s):

Survey Instrument

Type: Ludlum Model 19	Probe:
Serial No.: 91555	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
9/29	8:15	2081 Blk	Cs137	35 cw			
9/30	8:00	✓	✓	38 cw			
↓	10:30	2221 Blk	✓	34 cw			

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector: Jay Henson	Date: 9/27/99
Licensee: US Army	Location: Ft. McClellan
License No.:	Docket No.:
Report No.:	Survey Date(s): 9/27

Isotopes of Interest: Co-60, Cs-137, Sr-90

Survey Instrument

Type: Ludlum 2221 Gas Flow Proportional	Probe: Ludlum 43-68
Serial No.: 117632	Serial No.: PR 120554
NRC Tag No.: 056337	NRC Tag No.: 056340
Calibration Date: 8/10/99	Size (S): 100 cm^2

Background Determination (B)

Units: cpm ✓ mrem/hr _____ μRem/hr _____

(1) 488	(2) 483	(3) 515	(4) 488	(5) 553	Avg.: 505

Reference Source Measurements

M = Gross Count - Background Count

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
2898	022981	Tc-99	14168	4428-505 3923	27.72

Efficiency (E) = (M-B)/A

597 BKG

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (**X**): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(**X**/100) x **S** x **E**] + **B**

= [(_____/100) x _____ x _____] + _____ = _____ cpm

Average Release Criteria for Isotope of Interest (**Y**): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(**Y**/100) x **S** x **E**] + **B**

= [(_____/100) x _____ x _____] + _____ = _____ cpm

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
9/29	5:10pm	1081	Tc 99	4463			
9/30	8:10am	✓	—	4174			
9/30	10:30am	2002 —	Tc 99	4434			

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Pelchat Parker

Inspector: Masnyk Bailey Henson	Date: 9/23/99
Licensee: Dept of The Army	Location: Ft McClellan
License No.: 01-02861-05	Docket No.: 030-17584
Report No.:	Survey Date(s):

Isotopes of Interest: _____

Survey Instrument

Type: eberline ESP-2	Probe: SPA-3
Serial No.: 00782	Serial No.: N/A
NRC Tag No.: 026729	NRC Tag No.: 010322
Calibration Date: 6/4/99	Size (S): cm²

Background Determination (B)

Units: cpm _____ mrem/hr _____ μRem/hr 1.8 E4

(1) 1.88-04	(2) 1.60-04	(3) 1.83-04	(4) 1.72-04	(5) 1.72-04	Avg.:

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
N/A	NRC-OT-014	Cs137	16,038,000	~~7.79-04~~ mR/hr	.048
				~~77900 cpm~~	~~On contact~~

Efficiency (E) = (M-B)/A

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Parker Pelchat

Inspector: Masnyk Bailey Henson	Date: 9-23-99
Licensee: Dept of The Army	Location: Ft McClellan
License No.: 01-02861-05	Docket No.: 030-17584
Report No.:	Survey Date(s):

Isotopes of Interest: _____

Survey Instrument

Type: eberline ESP-2	Probe: HP-260
Serial No.: 00782	Serial No.: N/A
NRC Tag No.: 026729	NRC Tag No.: 026416
Calibration Date: 6/4/99	Size (S): 15 cm²

Background Determination (B)

Units: cpm 47 ~~mrem/hr~~ 47 cpm μRem/hr _____

(1) 56	(2) 48	(3) 38	(4) 47	(5) 46	Avg.: 47

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1126/87	N/A	Tc-99	14,300	193E3	.135
N/A	NMC-DI-014	Cs137	16,038,000	1.77E5	

Efficiency (E) = (M-B)/A

Wipe 1507 6m for Tc = .017
.193

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA
Scaler	1730 dpm/100cm²

Cs137 28,000 dpm/100cm²

$\frac{2.71 + 4.65\sqrt{47.1}}{1 \times .135 \times .15} = \frac{34.59}{.02} = 1730$

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (X): 28,000 dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(28,000 /100) x 15 x .135] + 47 = 614 cpm

Average Release Criteria for Isotope of Interest (Y): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

Nu2ch 137 for 1000 TC 99

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector: MAINYK BAILEY/HENDON/PARKER/PELCHAT	Date: 09/23/99
Licensee: ~~[illegible]~~ DEPT OF ARMY	Location: FT MCCLELLAN
License No.: 01-02861-05	Docket No.: 030-17584
Report No.:	Survey Date(s): 09/27-30/99

Isotopes of Interest: Cs-137 + Co-60

Survey Instrument

Type: ~~LUDLUM 2221~~ GASFLOW PROPORTIONAL	Probe: LUDLUM 43-68 ~~[illegible]~~
Serial No.: 117647	Serial No.: PR 120553
NRC Tag No.: 056338	NRC Tag No.: 056339
Calibration Date: 09/15/99	Size (S): 100 cm² (OPEN AREA) (126 cm² ACTIVE AREA)

Background Determination (B)

Units: cpm ✓ mrem/hr _____ μRem/hr _____

(1) 343	(2) 347	(3) 311	(4) 353	(5) 347	Avg.: 340

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
2898	022981	Tc-99	14,168	4,325	28%
2834	013533	Sr-90	12,100	5,450	42%

Efficiency (E) = (M-B)/A

BKG - Bldg

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

SEE ATTACHED CALCS

Mode	MDA
SCALER	316 dpm/100 cm^2
SCANNING	3,643 dpm/100 cm^2

Release Criteria Comparison

Cs-137

Maximum Release Criteria for Isotope of Interest (X): 28 E4 dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(28 E4 /100) x 100 x 0.28] + 340 = 8,180 cpm

Co-60

~~Average~~ MAXIMUM Release Criteria for Isotope of Interest (Y): 7.1 E3 dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(7.1 E3 /100) x 100 x 0.28] + 340 = 2,328 cpm

MDA

SCALER MODE

Tc-99

$$MDA = \frac{2.71 + 4.65\sqrt{B_R \times t}}{t \times E \times (A/100)} = \frac{2.71 + 4.65\sqrt{340 \times 1}}{1 \times 0.28 \times \left(\frac{100}{100}\right)}$$

$$= 316 \text{ dpm}/100\text{ cm}^2$$

SCANNING MODE

$$MDA = \frac{3 \times B_R}{E \times \left(\frac{A}{100}\right)} = \frac{3 \times 340}{0.28 \times \left(\frac{100}{100}\right)}$$

$$= 3{,}643 \text{ dpm}/100\text{ cm}^2$$

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

flow monitor

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable
9/27	1:30pm	Bldg 221	TC99	4587			
9/29	9:00am	Bldg 1081	TC99	4144	≈		
9/29	9:30am	Bldg 1081	TC99	4155			
9/29	1:40pm	↓	TC99	4157	~~327 blg~~ 277 blg		
9/30	8:00am	↓	✓	4109			
9/30	10:35am	Bldg 221	✓	4395			

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Parker Delchal

Inspector: Masmyk Bailey Henson	Date: 9/23/99
Licensee: Dept of The Army	Location: Ft McClellan
License No.: 01-02861-05	Docket No.: 030-17584
Report No.:	Survey Date(s):

Isotopes of Interest: Au198 Co60 Cs137 Ca45 Sr 90

Survey Instrument

Type: eberline ESP-2	Probe: eberline HP-260
Serial No.: 00783	Serial No.: N/A
NRC Tag No.: 026730	NRC Tag No.: 026731
Calibration Date: 6-2-99	Size (S): 15 cm²

Background Determination (B)

Units: (cpm) 46 mrem/hr _____ μRem/hr _____

(1) 54	(2) 46	(3) 35	(4) 47	(5) 46	Avg.: 46

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
1126/87	N/A	Tc-99	14,300	~~07~~ 5m	.166
				2.38 Kcnt	
N/A	NRC-DF-014	Cs137	16,038,000	~~56.6 Kcnt~~	
				~~169 Kcnt~~ 56,600	

Efficiency (E) = (M-B)/A

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA
Scaler	1376 dpm/100 cm^2

Release Criteria Comparison Cs 28,000 dpm/100 cm^2

~~Maximum~~ Release Criteria for Isotope of Interest (X): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(28,000 /100) x 15 x .166] + 46 = 743.2 cpm

Average Release Criteria for Isotope of Interest (Y): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

$\frac{2.71 + 4.65\sqrt{46 \cdot 1}}{1 \times .166 \times .15} = 1375.5$

$\frac{34.25}{.0249} =$

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Pelchat Parker

Inspector: Masnyk Bailey Hinson	Date: 9-23-99
Licensee: Dept of The Army	Location: Ft McClellan
License No.: 01-02864-05	Docket No.: 030-17584
Report No.:	Survey Date(s):

Isotopes of Interest: _____

Survey Instrument

Type: Eberline PRM-6	Probe: Zinc Sulfide
Serial No.: ~~013457~~ 918	Serial No.: N/A
NRC Tag No.: 013457	NRC Tag No.: 013447
Calibration Date: 1-4-99	Size (S): cm^2

Background Determination (B)

Units: (cpm) 0 mrem/hr _____ μRem/hr _____

(1) 0	(2) 0	(3) 0	(4) 0	(5) 0	Avg.: 0

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
7069	N/A	Pu 239	17,670	3200-	.215
				3800	

Efficiency (E) = (M-B)/A

59cm^2

Pu 239 for 2nd Nuke 17707 ~~.19~~ .259

NRC DI-043

REPORT OF CALIBRATION

Electroplated Alpha Source

Serial No. 7969

Description of Source:

Principal radionuclide Plutonium - 239

Electroplated on polished Nickel (type of metal) disc, approximately 0.79 mm thick.

Diameter, 2.54 cm active, 3.18 cm total.

Radioactive material permanently fixed to the disc by heat treatment, without any covering over the active surface.

Calibration Date: October 17, 1978

Measurement Method:

The 2π alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below, and at the operating voltage. Traceability to NBS has been demonstrated, the most recent intercomparison with NBS being June and July 1974 when the EIC–NBS agreement was within 0.2%.

Measurement Result:

The total number of alpha particles emitted from the surface of the disc per minute on the above date was

8,970 ± 180

The total disintegration rate, assuming 1.5% backscatter of alpha particles from the surface of the disc, was

17,670 ± 350
(0.0079 uCi)

The uncertainty of the measurement is 2%, which is the sum of random counting error at the 99% confidence level and the estimated upper limit of conceivable systematic error in this measurement.

Information on isotopic composition or radioactive impurities:

Calibrated by: J. Donald Rodriguez
(please print or type)

J. Donald Rodriguez
(signature)

eberline
Eberline Instrument Corporation
P.O. Box 3874
Albuquerque, New Mexico 87110

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (X): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

Average Release Criteria for Isotope of Interest (Y): _____ dpm/100 cm^2

Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(_____/100) x _____ x _____] + _____ = _____ cpm

DAILY SURVEY INSTRUMENT PERFORMANCE WORKSHEET

(Page ___ of ___)

License No.:	Survey Date(s):

Survey Instrument

Type:	Probe:
Serial No.:	Serial No.:

Daily Results (continued)

Date	Time	Location	Source	Gross	Background	Net	Acceptable

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET

Inspector: MASNYK BAILEY/HENSON/PACKER/PELCHAT	Date: 09/23/99
Licensee: Dept of Army	Location: Ft McClellan
License No.: 01-02861-05	Docket No.: 030-17584
Report No.:	Survey Date(s): 09/27-30/99

Isotopes of Interest: Cs-137 + Co-60

Survey Instrument

Type: LUDLUM 2221 GAS FLOW PROPORTIONAL FLOOR MONITOR	Probe: LUDLUM 43-37
Serial No.: 117632	Serial No.: PR 147969
NRC Tag No.: 056337	NRC Tag No.: 070513
Calibration Date: 08/10/99	Size (S): 430 cm² (OPEN AREA) (544 cm² ACTIVE AREA) (600 cm² TOTAL AREA)

Background Determination (B)

Units: cpm ✓ mrem/hr _____ μRem/hr _____

(1) 475	(2) 448	(3) 462	(4) 509	(5) 450	Avg.: 469

Reference Source Measurements

Source Serial No.	NRC Tag No.	Isotope	Current Activity (A) (dpm)	Meter Reading (M) (cpm or dose rate)	Efficiency (E)
2898	022981	Tc-99	14,168	2,829	17%
2834	013533	Sr-90	12,100	2,630	18%

Efficiency (E) = (M-B)/A

9/27 Cs 137 Gross 3200 μR/hr BKG 30 μR/hr (inside, block)

9/28 Tc99

PRE-INSPECTION SURVEY INSTRUMENT PERFORMANCE WORKSHEET
(Page 2)

Field Check Source Measurements Instrument Serial No.:_____ Probe Serial No.:_____

Source SN	NRC Tag No.	Isotope	Nominal Activity (dpm)	Meter Reading (cpm or dose rate)
(1)				
(2)				
(3)				
(4)				

Surface Activity Measurement Minimum Detectable Activity

MDA = activity level in dpm/100 cm^2
t = counting time in minutes
E = detector efficiency in counts/disintegration
* = multiply

B_R = background rate in cpm
t_c = meter time constant in minutes
A = active probe area in cm^2

Scaler Mode:

$$MDA = \frac{2.71 + 4.65\sqrt{B_R * t}}{t * E * (A/100)}$$

Ratemeter Mode:

$$MDA = \frac{4.65\sqrt{B_R / 2 * t_c}}{E * (A/100)}$$

Scanning Mode:

$$MDA = \frac{3 * B_R}{E * (A/100)}$$

Mode	MDA
SCALER	141 dpm/100 cm^2
SCANNING	1,825 dpm/100 cm^2

Release Criteria Comparison

Maximum Release Criteria for Isotope of Interest (X): 2.8E4 dpm/100 cm^2

Cs-137 Instrument Reading That Equals Maximum Release Criteria: [(X/100) x S x E] + B

= [(2.8E4 /100) x 430 x 0.17] + 469 = 20,937 cpm

~~Average~~ MAXIMUM Release Criteria for Isotope of Interest (Y): 7.1E3 dpm/100 cm^2

Co-60 Instrument Reading That Equals Maximum Release Criteria: [(Y/100) x S x E] + B

= [(7.1E3 /100) x 430 x 0.17] + 469 = 5,659 cpm

MDA

SCALER MODE

T_c-99

$$MDA = \frac{2.71 + 4.65\sqrt{B_R \times t}}{t \times E \times (A/100)} = \frac{2.71 + 4.65\sqrt{469 \times 1}}{1 \times 0.17 \times (430/100)}$$

$$= 141 \ dpm/100\ cm^2$$

SCANNING MODE

$$MDA = \frac{3 \times B_R}{E \times (A/100)} = \frac{3 \times 469}{0.17 \times (430/100)}$$

$$= 1,925 \ dpm/100\ cm^2$$

#C

CONFIRMATORY SURVEY RESULTS

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

Radionuclides of Interest: _____

Instrumentation:

55 49 52 48 61

52 49 55 69 58 → 57

Instrument #1		Instrument #2	
Type: ESP-2	Probe:	Type: E600	Probe:
S/N:	S/N:	S/N:	S/N:
NRC#: 026730	NRC#:	NRC#:	NRC#:
Calibration Due:	Size (S): cm²	Calibration Due:	Size (S): cm²
Efficiency (E): .15	Background:	Efficiency (E):	Background:
Check Source:	MDA:	Check Source:	MDA:

Survey Results

smear S

	Location Bldg 3185	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m ~~rem/hr~~	~~Net μ / m rem/hr~~
1	ladies room under sink		100	43	287	1911		3.7	
2	under sink o/s ladies room		59	2	13	89		10.7	
3	room #5 center room		50	-7	-47	-311		2.7	
4	mens bathroom under sink		126	69	460	3067		-.3	
5	Room 15 middle drain		66	9	60	400		-1.3	
6	mop closet (no sink) center room		62	5	33	222		2.7	
7	sink outside ladies room drain		64	7	47	311		.7	

(A)

Background Room I Office: 47.8 61.7
47.8 73.7
59.8

CONFIRMATORY SURVEY RESULTS

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

Radionuclides of Interest: _____

Instrumentation:

Instrument #1		Instrument #2	
Type: ESP-2	Probe:	Type:	Probe:
S/N: 00782	S/N:	S/N:	S/N:
NRC#: 026729	NRC#:	NRC#:	NRC#:
Calibration ~~Due~~: 5/26/10	Size (S): cm²	Calibration Due:	Size (S): cm²
Efficiency (E): .14	Background:	Efficiency (E):	Background:
Check Source:	MDA:	Check Source:	MDA:

(56)

Survey Results

Sovans

	Location BLDG 3182	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross ~~μ / m rem/hr~~	Net ~~μ / m rem/hr~~
A1	Room 6 J-2		73.7	16	114	762		2.7	
A-2	Room 6 I-2		58.8	1	4	24		-1.3	
A-3	Room 6 J-3		58.8	1	4	24		-.3	
A-4	Room 6 J-4		72.7	15	107	714		10.7	
A-5	Room 6 J-5		58.8	1	4	24		-1.3	
A-6	Room 6 I-4		60.7	3	21	143		-1.3	
A-7	Room 6 "The Hole"		84.6	27	193	1286		5.7	

(A)

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: _____

	Location BLDG 3182		Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ/m rem/hr Smear	Net μ/m rem/hr
A-8	Hallway	C-21		62.7	5	36	238		2	
A-9	Hallway	C-13		61.7	4	29	190		8.7	
A-10	Hallway	B-9		53.8	<4>	<29>	<190>		<.3>	
A-11	Hallway	D-3 (In front of Men's Room)		63.7	6	43	286		10.7	
A-12	Room 16	D-3		66.7	9	64	428		.7	
A-13	Room 16	C-4		50.8	<7>	<50>	<333>		-.3	
A-14	Room 16	B-6		55.8	<2>	<14>	<95>		2.7	
A-15	Room 16	H-6		52.8	<5>	<36>	<238>		2.7	
A-16	Room 16	G-4		54.8	<3>	<21>	<143>		-.3	
A-17	Room 16	H-3		64.7	7	50	333		4.7	
A-18	Room 2	(Center of Room)		68.7	11	79	524		9.7	
A-19	Room 3	Center of Room		60.7	3	21	238		3.7	
A-20	Room I	B-1		48.8	<9>	<64>	<428>		-1.3	
A-21	Room I	C-3		59.8	2	14	95		-.3	

D

CONFIRMATORY SURVEY RESULTS

BLDG 30

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

Radionuclides of Interest: _____

Instrumentation:

Instrument #1 E600		Instrument #2	
Type:	Probe:	Type:	Probe:
S/N:	S/N:	S/N:	S/N:
NRC#:	NRC#:	NRC#:	NRC#:
Calibration Due:	Size (S): cm^2	Calibration Due:	Size (S): cm^2
Efficiency (E): .46	Background:	Efficiency (E):	Background:
Check Source:	MDA:	Check Source:	MDA:

Survey Results

Smears

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm^2	Ins. No.	Gross μ / m rem/hr	~~Net~~ μ / m rem/hr
1	Bldg T837 downstairs bathroom under sink		39	9	19	125		.7	
2	↓ F-2		37	7	15	97		1.7	
3	↓ B-2		30	0	0	0		1.7	
4	↓ upstairs bathroom under sink		22	-8	-17	-111		-.3	
5	↓ upstairs laundry room center room		22	-8	-17	-111		.7	
6	Bldg T812 middle storage room		52	22	46	306		2.7	
7	↓ C-2		52	22	46	306		.7	

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: _____ Smith

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m rem/hr	Net μ / m rem/hr
8	Bldg T812 XE1		63	33	69	458		-1.3	
9	↓ F2 wall		41	11	23	153		1.7	
10	Bldg T812½ stairs midpoint		37	7	15	97		-.3	
11	Bldg T812 E1		47	17	35	236		3.7	
12	E2		34	4	8	53		1.7	
13	C2		45	15	31	208		2.7	
14	↓ storage room mid floor		44	14	29	194		1.7	
15	Bldg T810 C1		58	28	58	389		.7	
16	B2		51	21	44	292		-.3	
17	A2 (wall)		29	-1	-2	-14		1.7	
18	↓ E-1 bathroom		24	-6	-13	-83		.7	
	T-836 rubbleized walk over w NaI probes		(4-5w 0/5)						
	55-60 on parade.								

B

Bldg Room ROOM I office
67
55
58
51
73
BKDG
61

CONFIRMATORY SURVEY RESULTS

Licensee: _____ License No.: _____

Docket No.: _____

Inspectors: _____ Survey Date: _____

Radionuclides of Interest: _____

Instrumentation:

Instrument #1		Instrument #2	
Type: E600	Probe:	Type:	Probe:
S/N: 01876	S/N:	S/N:	S/N:
NRC#: 073470	NRC#:	NRC#:	NRC#:
Calibration ~~Due:~~	Size (S): cm²	Calibration Due:	Size (S): cm²
Efficiency (E): .48	Background:	Efficiency (E):	Background:
Check Source:	MDA:	Check Source:	MDA:

Survey Results

	Location Bldg 3180	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross μ / m ~~rem/hr~~	~~Net~~ μ / m rem/hr
B1	Room 11 B-3		98	37	77	514		.7	
2	↓ C-1		86	25	52	347		-.3	
3	Room 15 Ladies Room CENTER SINKS AGAINST WALL		109	48	100	667		3.7	
4	Room 13 MENS ROOM ↓		150	89	185	1236		-.3	
5	Room 12 center Room		73	12	25	167		1.7	
6	Room 14 center room		95	34	71	472		.7	
7	↓ N1 in sink		66	5	10	69		2.7	

B Page 1 of _____

B

CONFIRMATORY SURVEY RESULTS
(continuation page)

Licensee: _____ License No.: _____

_____ Docket No.: _____

Inspectors: _____ Survey Date: _____

	Location	Ins. No.	Gross cpm	Net cpm	Net dpm	dpm / 100 cm²	Ins. No.	Gross µ / m rem/hr	Net µ / m rem/hr
	Bldg 3182								
8	Room 10 C-2		73	12	25	167		-1.3	
9	↓ B-2		67	6	13	83		-.3	
10	Room 5 B-2		93	32	67	444		3.7	
11	↓ A-4 wall		103	42	88	583		9.7	
12	Room 4 B-2		45	-16	-33	-222		8.7	
13	D-5		69	8	-17	-111		-.3	
14	E-3		53	-8	-17	-111		5.7	
15	G-[illegible]		57	-4	-8	-56		5.7	
16	H-3		46	-15	-15	-103		-.3	
17	↓ D2		43	-18	-38	-250		2.7	

Room 4 100 m² floor
25 wall

B Page 2 of ____