APPENDIX C-2

VERIFICATION SURVEYS FOR AREAS 4, 4A, AND 4B

IOS Technology, Inc. DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

SURVEY # 342
C. HALLAM

SAMPLE DATE: 5-15-97
LOCATION: Praxair, Tonawanda, NY
BLDG 14 AREA 4 OVHD

RADIATION MEASUREMENT: Beta-Gamma
RESULTS REPORTED UNITS: dpm per 100cm2
MEASUREMENT TYPE: direct scaler measurements

GRID SURVEY KEY

A B
E
C D

LOOKING DOWN

N

FINAL SURVEY

TOTAL BACKGROUND COUNTS	72
BACKGROUND COUNT TIME (MIN)	1
SAMPLE COUNT TIME (MIN)	1

SAMPLE #	LOCATION CODE	LOCATION DESCRIPTION	GROSS SAMPLE COUNTS	NET SAMPLE COUNT RATE (CPM)	RESULTS (DPM/100CM2)	95% ERROR (DPM/100CM2)	MDA (DPM/100CM2)
1	B0/A	12" C-BEAM LEDGE	96 CPM	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2	B	CEILING	146	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
3	C		78	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	D	12" C-BEAM VERT	60	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
5	E	CEILING	74	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6	B2/A	10" IBEAM LEDGE	74	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
7	B	CEILING	118	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8	C	10" IBEAM VERT	59	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
9	D	CEILING	119	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
10	E	ANGLE IRON (HVAC SUPPORT)	94	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
11	A4/A	10" IBEAM LEDGE	68	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
12	B	CEILING	138	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
13	C	22" IBEAM VERT	54	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
14	D	22" IBEAM LEDGE	67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
15	E	CEILING	120	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
16	A5/A	CEILING	94	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
17	B		109	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
18	C	22" IBEAM VERT	66	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
19	D	22" IBEAM LEDGE	85	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
20	E	CEILING	129	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
21	B5/A	CEILING	80	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
22	B		115	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
23	C		137	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
24	D		94	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
25	E		118	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
26	B4/A	2" PIPE (TOP)	70	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
27	B	CEILING	115	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
28	C	10" IBEAM LEDGE	72	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
29	D	CEILING	145	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
30	E	CEILING	136	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
31	C4/A	3" PIPE (TOP)	95	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
32	B	CEILING	129	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
33	C	10" IBEAM VERT	108	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
34	D	ANGLE IRON / PIPE HANGERS	114	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
35	E	CEILING	120	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
36	A5/E	QC SURVEY PT # 20	156	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
37				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
38				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
39				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
40				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Instrument Model & s/n:	L2221 / D
Detector Model & s/n:	
Calibration Date:	
Efficiency	0.23 cpm / dpm based on S/Y90
Detector Area	15.5 cm2

REVIEW

ION Technology, Inc.

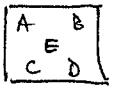
DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

SURVEY # 343
C. HAUMM / [illegible]
SAMPLE DATE: 5-15-97
LOCATION: Praxair, Tonawanda, NY
BLDG 14 AREA 4 OVHD

FINAL SURVEY

RADIATION MEASUREMENT: Beta-Gamma
RESULTS REPORTED UNITS: dpm per 100cm2
MEASUREMENT TYPE: direct scaler measurements

GRID SURVEY KEY



N

LOOKING DOWN

TOTAL BACKGROUND COUNTS	72
BACKGROUND COUNT TIME (MIN)	1
SAMPLE COUNT TIME (MIN)	1

SAMPLE #	LOCATION CODE	LOCATION DESCRIPTION	GROSS SAMPLE COUNTS	NET SAMPLE COUNT RATE (CPM)	RESULTS (DPM/100CM2)	95% ERROR (DPM/100CM2)	MDA (DPM/100CM2)
1	D4 / A	10" IBEAM LEDGE	91 CPM	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
2	B	CEILING	140	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
3	C	2" PIPE	101	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
4	D	CEILING	121	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
5	E		120	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6	F4 / A	22" IBEAM VERT	74	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
7	B	22" IBEAM LEDGE	70	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8	C	~~5" CBEAM / LITE SUPPORT~~ 12" IBEAM LEDGE	71	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
9	D	5" CBEAM / LITE SUPPORT	72	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
10	E	CEILING	126	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
11	F5 / A	22" IBEAM LEDGE	86	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
12	B	22" IBEAM VERT	80	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
13	C	5" CBEAM / LITE SUPPORT	62	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
14	D	5" CBEAM / LITE SUPPORT	89	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
15	E	CEILING	133	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
16	F6 / A	22" IBEAM LEDGE	93	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
17	B	10" IBEAM VERT	63	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
18	C	5" CBEAM (LITE SUPPORT)	89	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
19	D	10" IBEAM LEDGE	74	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
20	E	CEILING	134	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
21	E2 / A	10" I BEAM LEDGE	77	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
22	B	CEILING	134	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
23	C	10" IBEAM VERT	74	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
24	D	TOP OF CRANE IBEAM	71	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
25	E	ANGLE IRON / HVAC SUPPORT	81	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
26	D4 / E	QC SURVEY PT #5	108	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
27	E2 / E	QC SURVEY PT # 25	86	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
28				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
29				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
30				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
31				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
32				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
33				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
34				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
35				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
36				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
37				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
38				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
39				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
40				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Instrument Model & s/n:	L2221 / D
Detector Model & s/n:	
Calibration Date:	
Efficiency	0.23 cpm / dpm based on S/Y90
Detector Area	15.5 cm2

REVIEW [illegible]

ION TECHNOLOGY, INC. SURVEY # 344

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT

SAMPLE DATE: 5-15-97
ANALYSIS DATE:
LOCATION: Praxair, Tonawanda, NY
Bldg. 1A, Final Survey AREA 4 OVHD

C. HALLAM / CHalla

RADIATION MEASUREMENT: Alpha
RESULTS REPORTED UNITS: DPM per 100cm2
MEASUREMENT TYPE: Direct Scaler Measurements

SAMPLE#	~~LOCATION~~ CODE	LOCATION DESCRIPTION(1)	RADIATION TYPE	GROSS SAMPLE (COUNTS)	COUNT TIME (MIN)	MDCR (CPM)	NET SAMPLE COUNT RATE (CPM)	RADIATION TYPE	RESULTS (DPM/100CM2)		ERROR (95% LEVEL)	MDA (DPM/100CM2)
1	BZ A	I BEAM LEDGE (10")	A	1	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
2	B	CEILING	A	0	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
3	C	I BEAM VERT (10")	A	1	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
4	D	CEILING	A	0	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
5	E	ANGLE IRON (HVAC SUPPORT)	A	0	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
6	BZ A	10" I BEAM LEDGE	A	2	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
7	B	CEILING	A	0	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
8	C	10" I BEAM VERT	A	1	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
9	D	CEILING	A	0	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
10	E	ANGLE IRON / HVAC SUPPORT	A	0	1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
11			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
12			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
13			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
14			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
15			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
16			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
17			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
18			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
19			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
20			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
21			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
22			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
23			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
24			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
25			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
26			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
27			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
28			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
29			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
30			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
31			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
32			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
33			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
34			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
35			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
36			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
37			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
38			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
39			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!
40			A		1	#DIV/0!	#DIV/0!	A	#DIV/0!	##	#DIV/0!	#DIV/0!

Instrument Model & s/n:	ESP-1 s/n: 03027	
Detector Model & s/n:	43-5 s/n: 88087	
Calibration Date:	2/10/97	
Efficiency A (Alpha):	0.13	cpm / dpm based on Th230
Detector Area:	50	CM2

	Background	Counts	Ct Time (min)	Rb	Date
Alpha	1	1	1	###	5-15-97

REVIEW

ION TECHNOLOGY, INC.
SURVEY #395
C. HALLAM/MKM
ANALYSIS DATE: 5-19-97
LOCATION: Praxair, Tonawanda, NY
BLDG 14 (FINAL SURVEY) AREA 4 OVHD

SMEAR MEASUREMENT ANALYSIS REPORT

RADIATION MEASUREMENT: Alpha and Beta-gamma
RESULTS REPORTED UNITS: dpm per 100cm2
MEASUREMENT TYPE: Removable Contamination

SAMPLE #	LOCATION CODE	LOCATION DESCRIPTION	RADIATION TYPE	GROSS SAMPLE (COUNTS)	COUNT TIME (MIN)	MDCR (CPM)	NET SAMPLE COUNT RATE (CPM)	RADIATION TYPE	RESULTS (DPM/100CM2)	ERROR (95% LEVEL)	MDA (DPM/100CM2)
1	B0/A	C-BEAM LEDGE	A	0	1	#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
1	↓	↓	BG	60	↓	#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
2	B2/E	ANGLE IRON (HVAC SUPPORT)	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
2	↓	↓	BG	64		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
3	A4 ~~A5~~/B	CEILING	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
3	↓	↓	BG	55		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
4	A5/E	CEILING	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
4	↓	↓	BG	58		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
5	B5/C	CEILING	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
5	↓	↓	BG	60		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
6	B4/D	CEILING	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
6	↓	↓	BG	54		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
7	C4/D	HI PIPE HANGER SUPPORT	A	1		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
7	↓	↓	BG	61		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
8	D4/C	2" PIPE	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
8	↓	↓	BG	73		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
9	F4/E	CEILING	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
9	↓	↓	BG	52		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
10	E5/E	CEILING	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
10	↓	↓	BG	62		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
11	E6/A	22" I BEAM LEDGE	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
11	↓	↓	BG	57		#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
12	E2/B	CEILING	A	0		#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
12	↓	↓	BG	57	↓	#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
13			A			#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
13			BG			#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
14			A			#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
14			BG			#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
15			A			#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
15			BG			#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
16			A			#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
16			BG			#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
17			A			#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
17			BG			#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
18			A			#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
18			BG			#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
19			A			#DIV/0!	#DIV/0!	A	#DIV/0!	#DIV/0!	#DIV/0!
19			BG			#DIV/0!	#DIV/0!	BG	#DIV/0!	#DIV/0!	#DIV/0!
20											
20											

Instrument Model & s/n:	M.2929 s/n
Detector Model & s/n:	M.43-10-1 s/n
Calibration Date:	2-7-97
Efficiency BG (Beta/Gamma):	0.29 cpm / dpm based on S/Y90
Efficiency A (Alpha):	0.82 cpm / dpm based on Th230

Background	Counts	Ct Time (min)	Rb	Date
Alpha	1080	5143	#DIV/0!	5-19-97
Beta-Gamma	315891	5143	#DIV/0!	5-19-97

REVIEW MKMcfunns

SMEARBLK.XLS

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4086

43 FLOOR

Survey Date: 8/27/97
Location: B-14 AREA 4 A FLOOR
Description: VERIFICATION SURVEY

	alpha	beta-gamma
Instrument Model & s/n: 2221 / A	ESP-1 03027	L-2221
Detector Model,& s/n:	43-5	44-9
Calibration Date:	2-10-97	8-12-97
Efficiency [Tc99] [SY90] [Th230]	.13	.20
Detector Area (CM2)	50	15.5

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

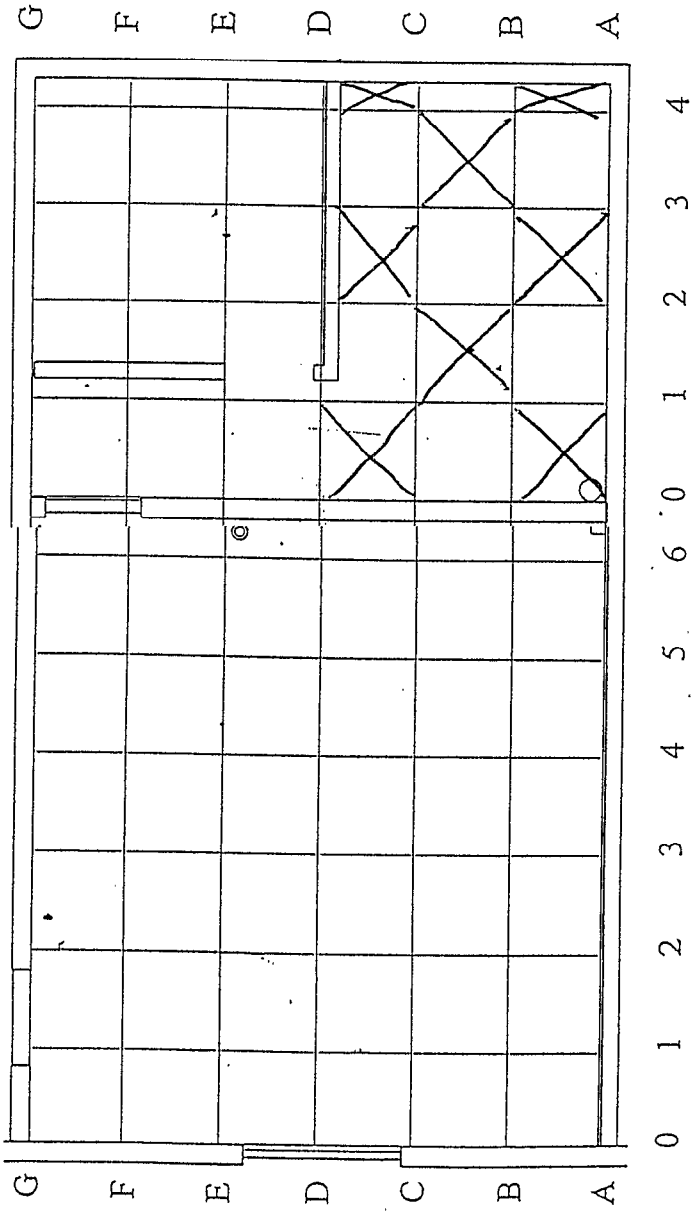
	alpha	beta-gamma
TOTAL BACKGROUND COUNTS	1	45
BACKGROUND COUNT TIME (MIN)	1 MIN	1 MIN
SAMPLE COUNT TIME (MIN)	1 MIN	1 MIN

RP Technician: Smallridge / RS

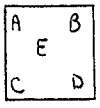
#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	A-0	FLOOR	A		66
2			B		72
3			C		61
4			D		73
5			E		76
6					
7	A-2	FLOOR	A		93
8			B		91
9			C		87
10			D		68
11			E		72
12					
13	A-4	FLOOR	A		78
14			B		62
15			C		67
16			D		52
17			E		74
18					
19	B-1	FLOOR			
20			A		83
21			B		78
22			C		103
23			D		94
24			E		97
25					
26	B-3	FLOOR	A		76
27			B		83
28			C		72
29			D		86
30			E		60
31					
32	C-0	FLOOR	A		72
33			B		68
34			C		75
35			D		73
36			E		69
37					
38	C-2	FLOOR	A		74
39			B		72
40			C		68
41			D		76
42			E		84
43					
44	C-4	FLOOR	A	0	83
45			B	0	75
46			C	1	89
47			D	0	90
48			E	1	101
49					
50					

Insert area map or sketch below

Entered MK B_A4_03



Note; Survey pattern



SURVEY01.XLS

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT

(scaler measurement)

4A + 4B

4087

Survey Date: 8-27-97
Location: AREA ~~4-B~~ FLOOR
Description: VERIFICATION

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
Instrument Model & s/n:	ESP-1 F	L-2221 C
Detector Model & s/n:	43-5	44-9
Calibration Date:	2-10-97	8-12-97
Efficiency [Tc99] [SY90] [Th230]	.13	.20
Detector Area (CM2)	50	15.5

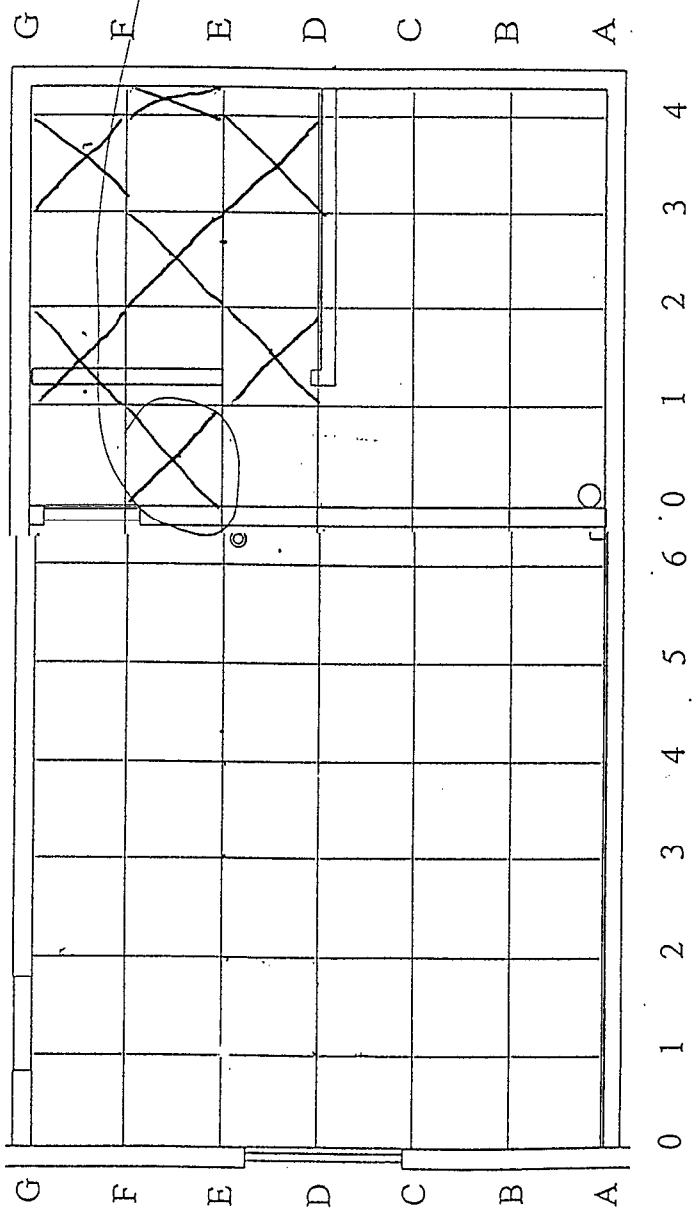
	alpha	beta-gamma
TOTAL BACKGROUND COUNTS	0	64
BACKGROUND COUNT TIME (MIN)	1 MIN	1 MIN
SAMPLE COUNT TIME (MIN)	1 MIN.	1 MIN

RP Technician: Mike Trigo

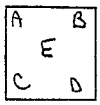
#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	D-1	FLOOR	A		52
2			B		70
3			C		67
4			D		73
5			E		85
6					
7	D-3	FLOOR	A	2	59
8			B	1	67
9			C	1	60
10			D	1	65
11			E	1	70
12					
13	E-0	FLOOR	A		77
14			B		56
15			C		71
16			D		69
17			E		62
18					
19	E-2	FLOOR	A		68
20			B		57
21			C		83
22			D		72
23			E		78
24					
25	E-4	FLOOR	A		74
26			B		71
27			C		60
28			D		54
29			E		62
30					
31	F-1	FLOOR	A		82
32			B		57
33			C		59
34			D		64
35			E		53
36					
37	F-3	FLOOR	A		54
38			B		61
39			C		67
40			D		59
41			E		57
42					
43					
44					
45					
46					
47					
48					
49					
50					

Insert area map or sketch below

Entered by
9/9/97
B + 4-04



Note; Survey pattern



SURVEY01.XLS

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4088

4

Survey Date: 8-28-97
Location: AREA-4 Floor
Description: VERIFICATION

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
Instrument Model & s/n:	ESP-1 "F"	L-7221 C
Detector Model & s/n:	43-5	44-9
Calibration Date:	2-10-97	8-12-97
Efficiency [Tc99] [SY90] [Th230]	.13	.20
Detector Area (CM2)	50	15.5

	alpha	beta-gamma
TOTAL BACKGROUND COUNTS	1	59
BACKGROUND COUNT TIME (MIN)	1 MIN.	1 MIN.
SAMPLE COUNT TIME (MIN)	1 MIN.	1 MIN.

RP Technician: mike Stjo

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	E-4	Floor	A		102
2			B		99
3			C		80
4			D		76
5			E		67
6					
7	E-6	Floor	A		77
8			B		82
9			C		71
10			D		79
11			E		50
12					
13	F-1	Floor	A		65
14			B		63
15			C		57
16			D		69
17			E		51
18					
19	F-3	Floor	A		53
20			B		73
21			C		67
22			D		71
23			E		73
24					
25	E-5	Floor	A	2	74
26			B	1	62
27			C	1	50
28			D	0	82
29			E	0	94
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
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46					
47					
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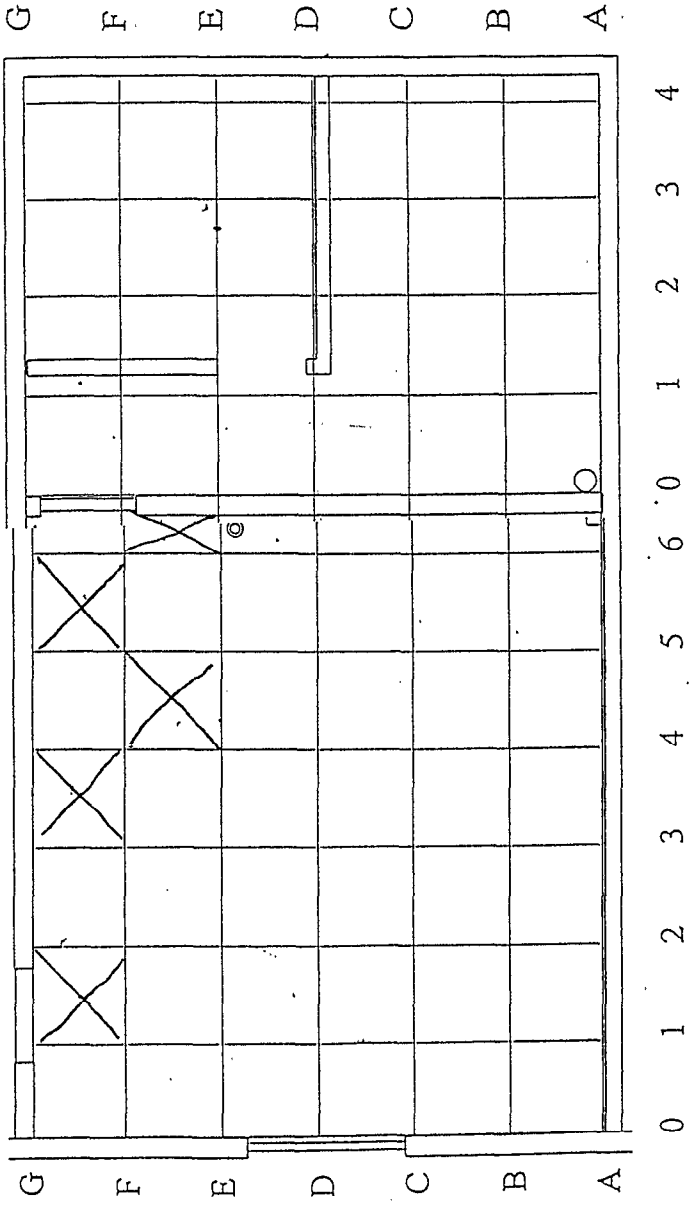
49					
50					

Insert area map or sketch below

Entered R.W.
9/9/97
BM-09



SURVEY01.XLS

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4

4089

Survey Date: 8-27-97
Location: AREA-4 Floor
Description: VERIFICATION

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scalar measurements

	alpha	beta-gamma
Instrument Model & s/n:	ESP-1 F	L-2221 C
Detector Model & s/n:	43-5	44-9
Calibration Date:	2-10-97	8-12-97
Efficiency [Tc99] [SY90] [Th230]	.13	.20
Detector Area (CM2)	50	15.5

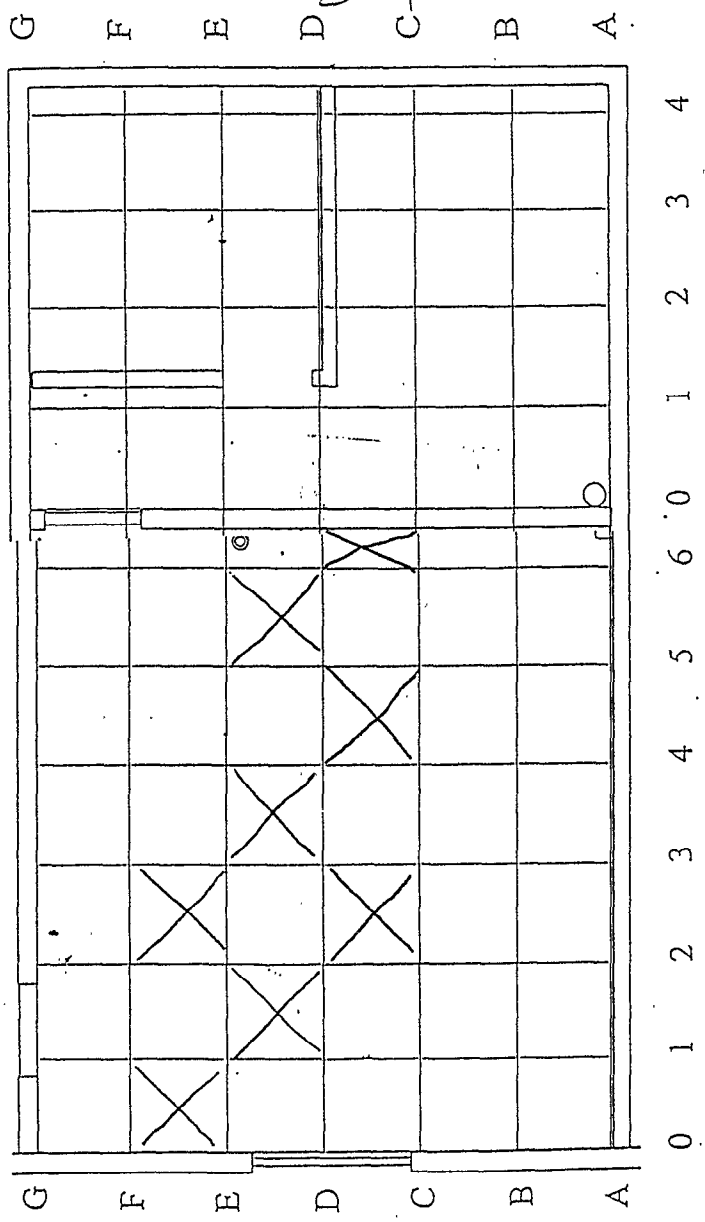
	alpha	beta-gamma
TOTAL BACKGROUND COUNTS	0	61
BACKGROUND COUNT TIME (MIN)	1 MIN.	1 MIN.
SAMPLE COUNT TIME (MIN)	1 MIN.	1 MIN.

RP Technician: Mike Virgo

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	C-2	Floor	A		58
2			B		52
3			C		62
4			D		74
5			E		65
6					
7	C-4	Floor	A		68
8			B		90
9			C		75
10			D		78
11			E		104
12					
13	C-6	Floor	A		76
14			B		70
15			C		58
16			D		65
17			E		63
18					
19	D-1	Floor	A		86
20			B		80
21			C		88
22			D		60
23			E		79
24					
25	D-3	Floor	A		70
26			B		63
27			C		64
28			D		95
29			E		89
30					
31	D-5	Floor	A		61
32			B		54
33			C		71
34			D		75
35			E		97
36					
37	E-0	Floor	A	0	100
38			B	0	93
39			C	1	96
40			D	0	66
41			E	1	75
42					
43	E-2	Floor	A		73
44			B		69
45			C		58
46			D		74
47			E		89
48					
49					
50					

Insert area map or sketch below

Entered
R.W.
9/9/97
BA4-06



SURVEY01.XLS

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4090

4

Survey Date: 8-27-97
Location: AREA H - FLOOR
Description: VERIFICATION

	alpha	beta-gamma
Instrument Model & s/n:	ESP-1 "F"	L-2221 "C"
Detector Model & s/n:	43-5	44-9
Calibration Date:	2-10-97	8-12-97
Efficiency [Tc99] [SY90] [Th230]	.13	.20
Detector Area (CM2)	50	15.5

RP Technician: Mike Zigo

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
TOTAL BACKGROUND COUNTS	1	63
BACKGROUND COUNT TIME (MIN)	1 MIN.	1 MIN.
SAMPLE COUNT TIME (MIN)	1 MIN	1 MIN.

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	A-0	FLOOR	A		62
2			B		66
3			C		78
4			D		74
5			E		69
6					
7	A-2	FLOOR	A		73
8			B		90
9			C		86
10			D		73
11			E		94
12					
13	A-4	FLOOR	A		66
14			B		71
15			C		74
16			D		59
17			E		61
18					
19	A-6	FLOOR	A		54
20			B		67
21			C		81
22			D		66
23			E		58
24					
25	B-1	FLOOR	A	0	71
26			B	1	58
27			C	1	51
28			D	0	63
29			E	2	77
30					
31	B-3	FLOOR	A		82
32			B		91
33			C		74
34			D		77
35			E		79
36					
37	B-5	FLOOR	A		91
38			B		93
39			C		76
40			D		74
41			E		59
42					
43	C-0	FLOOR	A		84
44			B		89
45			C		97
46			D		88
47			E		78
48					
49	~~B-6 mg~~				
50					

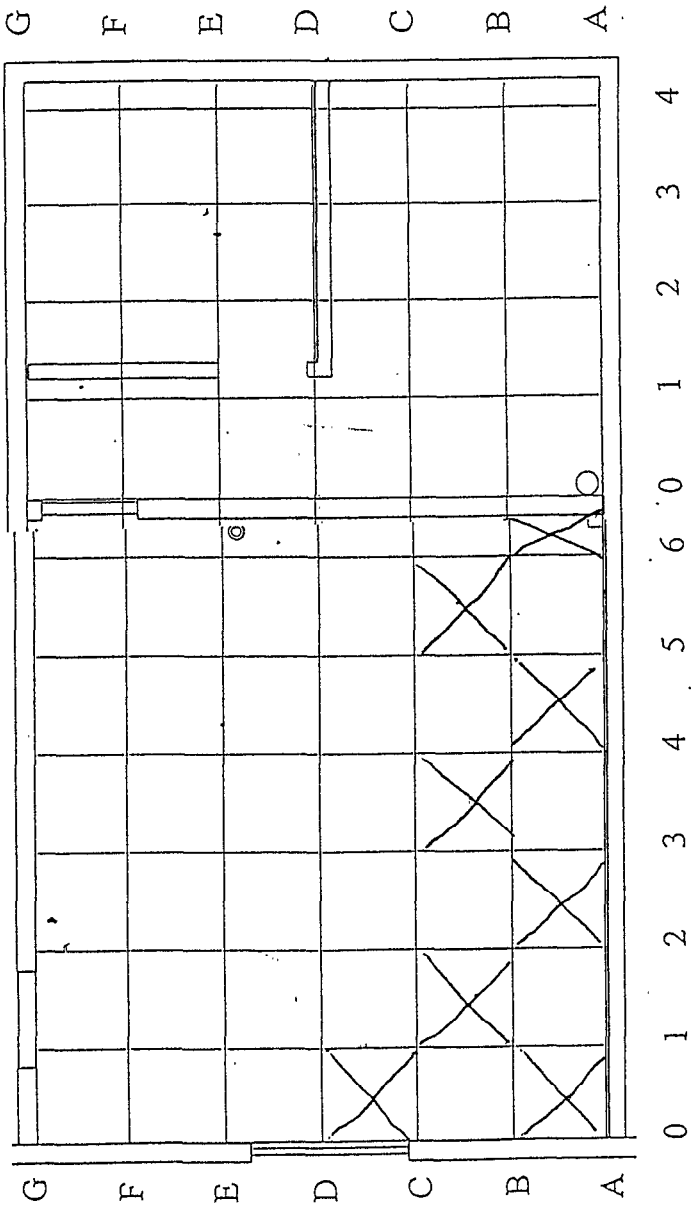
Note: Survey pattern

A		B
	E	
C		D

Insert area map or sketch below

ENTER R.W. 9/9/97

B A4 - 07



SURVEY01.XLS

4091

P. 1 of 2

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

H.P. Mizigo

SMEAR MEASUREMENT ANALYSIS REPORT

SAMPLE DATE: 8/28/97
ANALYSIS DATE: 8/28/97
LOCATION: BLDG 14 AREA 4 + 4B next pg

SMEARS Verification Survey

RADIATION MEASUREMENT: Alpha and Beta-gamma
RESULTS REPORTED UNITS: dpm per 100cm2
MEASUREMENT TYPE: Removable Contamination

AREA 4 MAIN RM

SAMPLE #	LOCATION CODE	LOCATION DESCRIPTION(1)	RADIATION TYPE	GROSS SAMPLE (COUNTS)	COUNT TIME (MIN)	MDCR (CPM)	NET SAMPLE COUNT RATE (CPM)	RADIATION TYPE	RESULTS (PER 100CM2)	ERROR (95% LEVEL)	MDA (PER 100CM2)
1	A-0	BLDG 14 AREA 4 MAIN	A	0	1						
1	↓	FLOOR	BG	73	1						
2	A-2	BLDG 14 AREA 4	A	0	1						
2	↓	FLOOR	BG	75	1						
3	A-4	BLDG 14 AREA 4	A	0	1						
3	↓	FLOOR	BG	60	1						
4	A-6	B-LDG 14 AREA 4	A	0	1						
4	↓	FLOOR	BG	71	1						
5	B-1	BLDG 14 AREA 4	A	2	1						
5	↓	FLOOR	BG	73	1						
6	B-3	BLDG 14 AREA 4	A	0	1						
6	↓	FLOOR	BG	85	1						
7	B-5	BLDG 14 AREA 4	A	0	1						
7	↓	FLOOR	BG	64	1						
8	C-0	BLDG 14 AREA 4	A	0	1						
8	↓	FLOOR	BG	64	1						
9	C-2	BLDG 14 AREA 4	A	1	1						
9	↓	FLOOR	BG	73	1						
10	C-4	BLDG 14 AREA 4	A	1	1						
10	↓	FLOOR	BG	46	1						
11	C-6	BLDG 14 AREA 4	A	0	1						
11	↓	FLOOR	BG	74	1						
12	D-1	BLDG 14 AREA 4	A	0	1						
12	↓	FLOOR	BG	66	1						
13	D-3	BLDG 14 AREA 4	A	0	1						
13	↓	FLOOR	BG	79	1						
14	D-5	BLDG 14 AREA 4	A	0	1						
14	↓	FLOOR	BG	66	1						
15	E-0	BLDG 14 AREA 4	A	1	1						
15	↓	FLOOR	BG	51	1						
16	E-2	BLDG 14 AREA 4	A	2	1						
16	↓	FLOOR	BG	71	1						
17	E-4	BLDG 14 AREA 4	A	0	1						
17	↓	FLOOR	BG	64	1						
18	E-6	BLDG 14 AREA 4	A	0	1						
18	↓	FLOOR	BG	67	1						
19	F-1	BLDG 14 AREA 4	A	0	1						
19	↓	FLOOR	BG	57	1						
20	F-3	BLDG 14 AREA 4	A	0	1						
20	↓	FLOOR	BG	55	1						

Instrument Model & s/n:	2929 / 91234	M.2929 s/n
Detector Model & s/n:	43-10-1 / 085270	M.43-10-1 s/n
Calibration Date:	2-7-98	
Efficiency BG (Beta/Gamma):	.28	.29 cpm / dpm based on
Efficiency A (Alpha):	.13	.30 cpm / dpm based on

Background	Counts	Ct Time (min)	Rb	Date
Alpha	5	30		
Beta-Gamma	1259	30		

SMEAR_AB.XLS

4091
p. 2 of 2

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

22

SMEAR MEASUREMENT ANALYSIS REPORT

H.P. M. Zigo
SAMPLE DATE: 8/28/97
ANALYSIS DATE: 8/28/97
LOCATION: BLDG 14 AREA 4 & AREA 4A → 4B

RADIATION MEASUREMENT: Alpha and Beta-gamma
RESULTS REPORTED UNITS: dpm per 100cm2
MEASUREMENT TYPE: Removable Contamination

AREA 4B

SAMPLE #	LOCATION CODE	LOCATION DESCRIPTION(1)	RADIATION TYPE	GROSS SAMPLE (COUNTS)	COUNT TIME (MIN)	MDCR (CPM)	NET SAMPLE COUNT RATE (CPM)	RADIATION TYPE	RESULTS (PER 100CM2)	ERROR (95% LEVEL)	MDA (PER 100CM2)
1	F-5	BLDG 14 AREA 4	A	0	1						
1	↓	FLOOR	BG	68	1						
2	F-6	BLDG 14 AREA 4	A	0	1						
2	↓	FLOOR	BG	66	1						
3	A-0	BLDG 14 AREA 4A B	A	0	1						
3	↓	FLOOR	BG	56	1						
4	A-2	BLDG 14 AREA 4A B	A	0	1						
4	↓	FLOOR	BG	66	1						
5	A-4	BLDG 14 AREA 4A B	A	1	1						
5	↓	FLOOR	BG	58	1						
6	B-1	BLDG 14 AREA 4A B	A	0	1						
6	↓	FLOOR	BG	57	1						
7	B-3	BLDG 14 AREA 4A B	A	0	1						
7	↓	FLOOR	BG	63	1						
8	C-0	BLDG 14 AREA 4A B	A	0	1						
8	↓	FLOOR	BG	54	1						
9	C-2	BLDG 14 AREA 4A B	A	1	1						
9	↓	FLOOR	BG	64	1						
10	C-4	BLDG 14 AREA 4A B	A	0	1						
10	↓	FLOOR	BG	62	1						
11			A		1						
11			BG		1						
12			A		1						
12			BG		1						
13			A		1						
13			BG		1						
14			A		1						
14			BG		1						
15			A		1						
15			BG		1						
16			A		1						
16			BG		1						
17			A		1						
17			BG		1						
18			A		1						
18			BG		1						
19			A		1						
19			BG		1						
20			A		1						
20			BG		1						

Instrument Model & s/n: Ludlum 2221 C
Detector Model & s/n: 44-9
Calibration Date: 12-27-96
Efficiency BG (Beta/Gamma): .28
Efficiency A (Alpha): .13

M.2929 s/n 91234
M.43-10-1 s/n 085270
.29 cpm / dpm based on 100 cm2
.30 cpm / dpm based on

Background	Counts	Ct Time (min)	Rb	Date
Alpha	5	30		
Beta-Gamma	1250	30		

SMEAR_AB.XLS

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

IDM Environmental
Bldg. 14, Praxair Site
Tonawanda, NY 14151

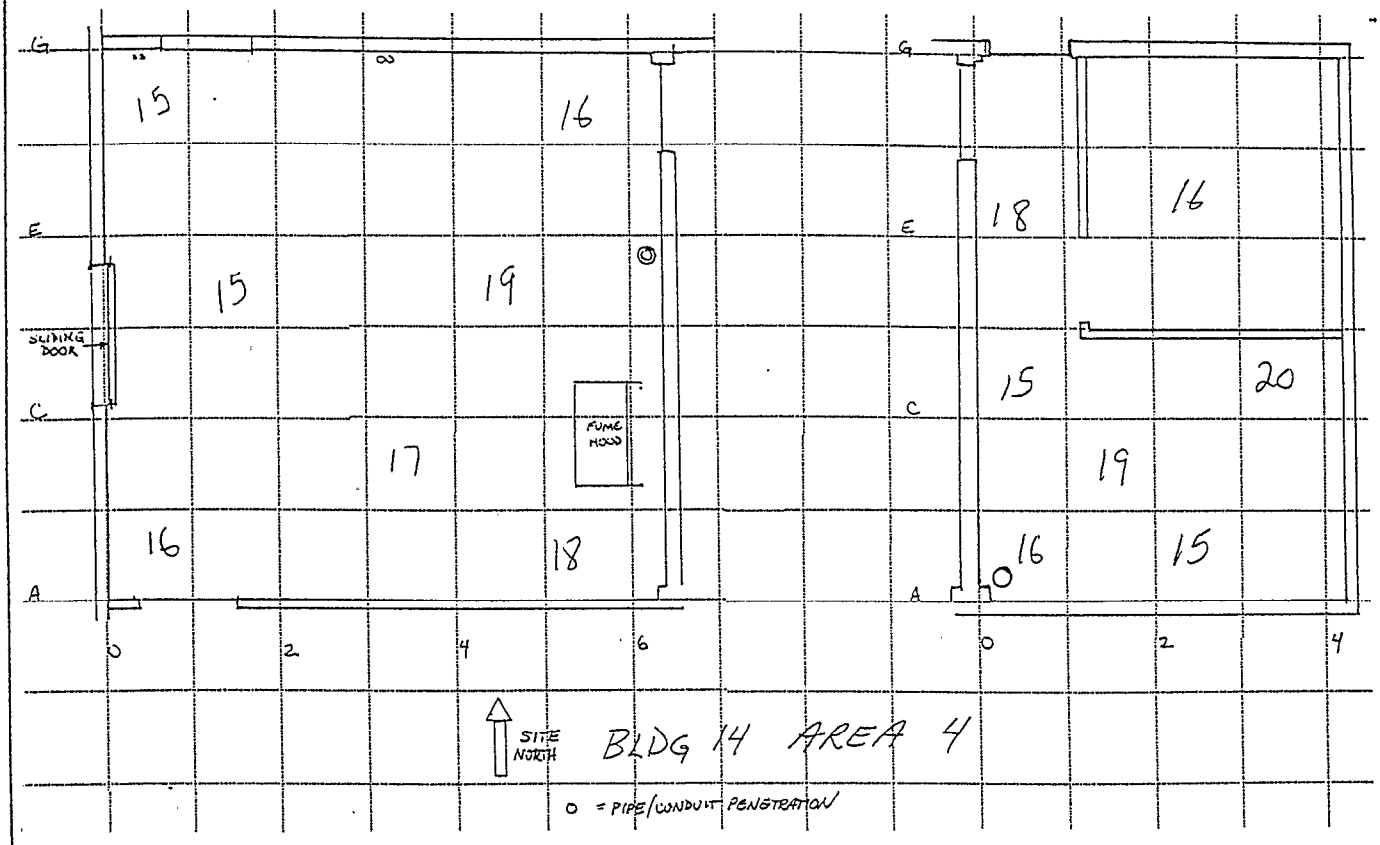
4092

Radiological Survey Form

Hilbert Associates, Inc
Radiological Consultants
640 Maple Ave
Saratoga Springs, NY 12866
Phone: 518-584-0166
Fax: 518-584-8529
Contract # 95012

Date / Time 9-12-97 @ 0300	Tech M. Bizjo	Instruments / sn Ludlum M-19 "G"
Location / Purpose Area 4 Radiation HR Survey.		Survey # / RWP # N/A

All Readings are in MR/HR @ 1 Meter.



Loc	Type	Description	Gross	A DPM	Gross	Beta DPM	Loc	Type	Description	Gross	A DPM	Gross	Beta DPM

Comments:	Scaler S/N		BKD	EFF	MDA
	CT =	Alpha:			
	Tech	Beta:			

Review _____

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4093

Survey Date: 4MA IN
Location: WEST WALL
Description:

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
Instrument Model & s/n: 2221 'B'		
Detector Model & s/n:		
Calibration Date:		
Efficiency [Tc99] [SY90] [Th230]		
Detector Area (CM2)		

B

	alpha	beta-gamma
TOTAL BACKGROUND COUNTS		~~400~~ 50
BACKGROUND COUNT TIME (MIN)	1 MIN	1 MIN
SAMPLE COUNT TIME (MIN)	1 MIN	1 MIN

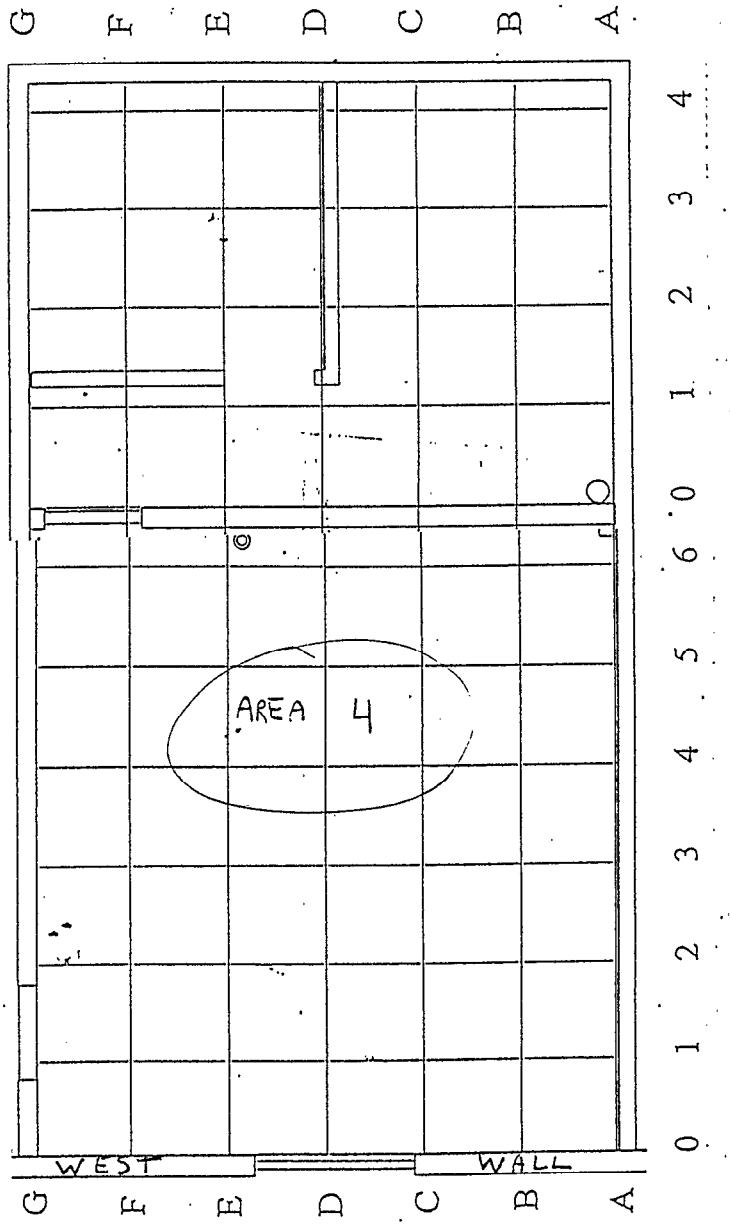
RP Technician: SMALLRIDGE / Z190

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	A-1 AA	VERIFICATION	A		87
2		WEST WALL	B		91
3			C		80
4			D		77
5			E		92
6	C-1 AA		A		75
7			B		48
8			C		80
9			D		53
10			E		57
11	E-1 AA		A		96
12			B		98
13			C		120
14			D		89
15			E		79
16	E1 AA	DUP	A		101
17		VERIFICATION	B		100
18		WEST WALL	C		93
19			D		95
20			E		86
21	B-2 BB		A		56
22			B		54
23			C		75
24			D		127
25			E		93
26	D-2 BB		A		74
27			B		68
28			C		63
29			D		74
30			E		70
31	F-2 BB		A		93
32			B		49
33			C		114
34			D		74
35			E		72
36	F-2 BB	DUP	A		100
37			B		88
38			C		113
39			D		78
40			E		76
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					

Insert area map or sketch below

Refer

Z WEST WALL B-14 A-4



SURVEY01.XLS

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4094

Survey Date: 9/2/97
Location: BLDG 14 AREA 4 MN
Description: VERIFICATION

4 Man North Wall

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
Instrument Model & s/n: 2221 'B'		
Detector Model & s/n:		
Calibration Date:		
Efficiency [Tc99] [SY90] [Th230]		
Detector Area (CM2)		

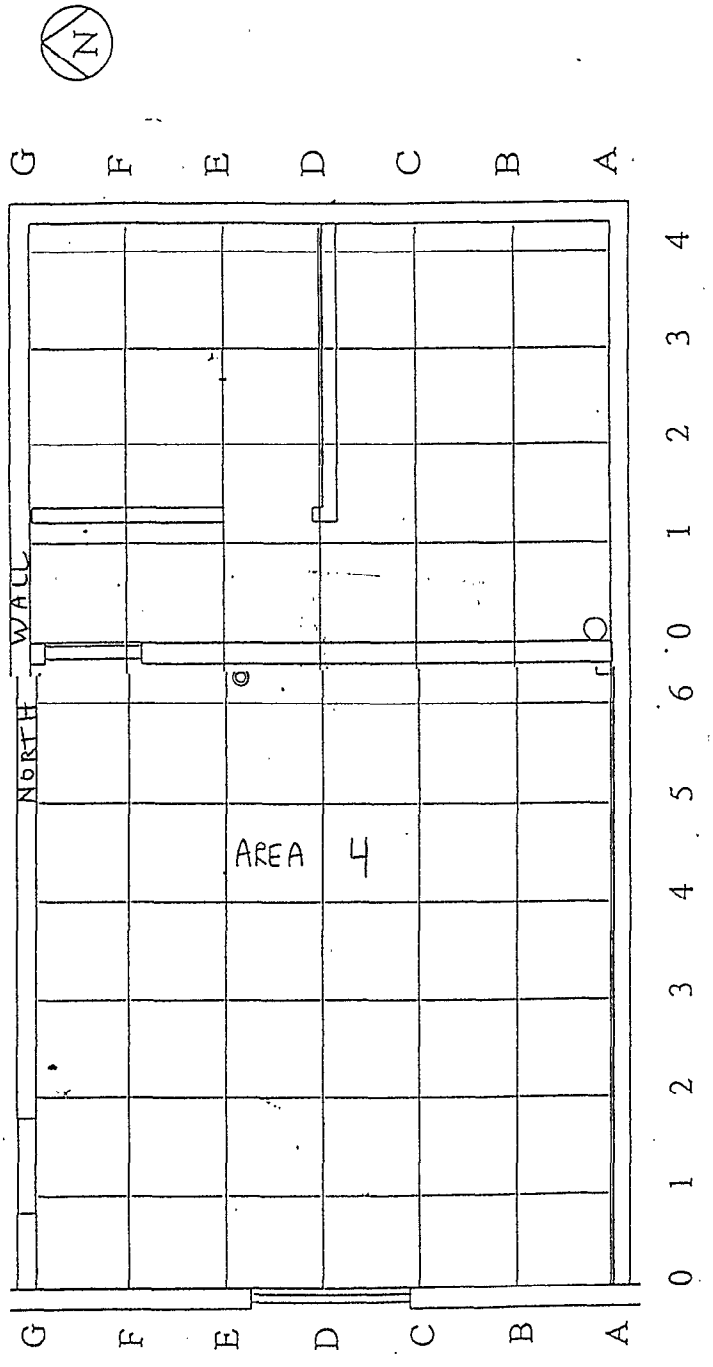
	alpha	beta-gamma
TOTAL BACKGROUND COUNTS		75 CPM
BACKGROUND COUNT TIME (MIN)		1 MIN
SAMPLE COUNT TIME (MIN)		1 MIN

RP Technician: SMALLRIDGE / Z190

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	F-1 AA	Verification	A		93
2		North WALL	B		61
3			C		48
4			D		105
5			E		86
6	F-3 AA		A		85
7			B		97
8			C		72
9			D		105
10			E		84
11	F-5 AA		A		121
12			B		104
13			C		100
14			D		105
15			E		84
16	F-5 AA	Dup	A		105
17		Verification	B		97
18		North WALL	C		101
19			D		105
20			E		91
21	F-7 AA		A		81
22			B		65
23			C		103
24			D		79
25			E		73
26	E-2 BB		A		43
27			B		98
28			C		49
29			D		81
30			E		75
31	E4 BB		A		91
32			B		73
33			C		87
34			D		70
35			E		77
36	E-6 BB		A		85
37			B		84
38			C		79
39			D		76
40			E		84
41	E6 BB	Dup	A		117
42			B		79
43			C		121
44			D		86
45			E		90
46					
47					
48					
49					
50					

Insert area map or sketch below

NORTH WALL B-14 A-4



SURVEY01.XLS

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4095

Survey Date: 9/2/97 MAIN 4 MAIN South wall
Location: BLDG 14 · AREA
Description: VERIFICATION

	alpha	beta-gamma
Instrument Model & s/n: 2221 'B'		
Detector Model & s/n:		
Calibration Date:		
Efficiency [Tc99] [SY90] [Th230]		
Detector Area (CM2)		

RP Technician: SMALLRIDGE/ZIGO

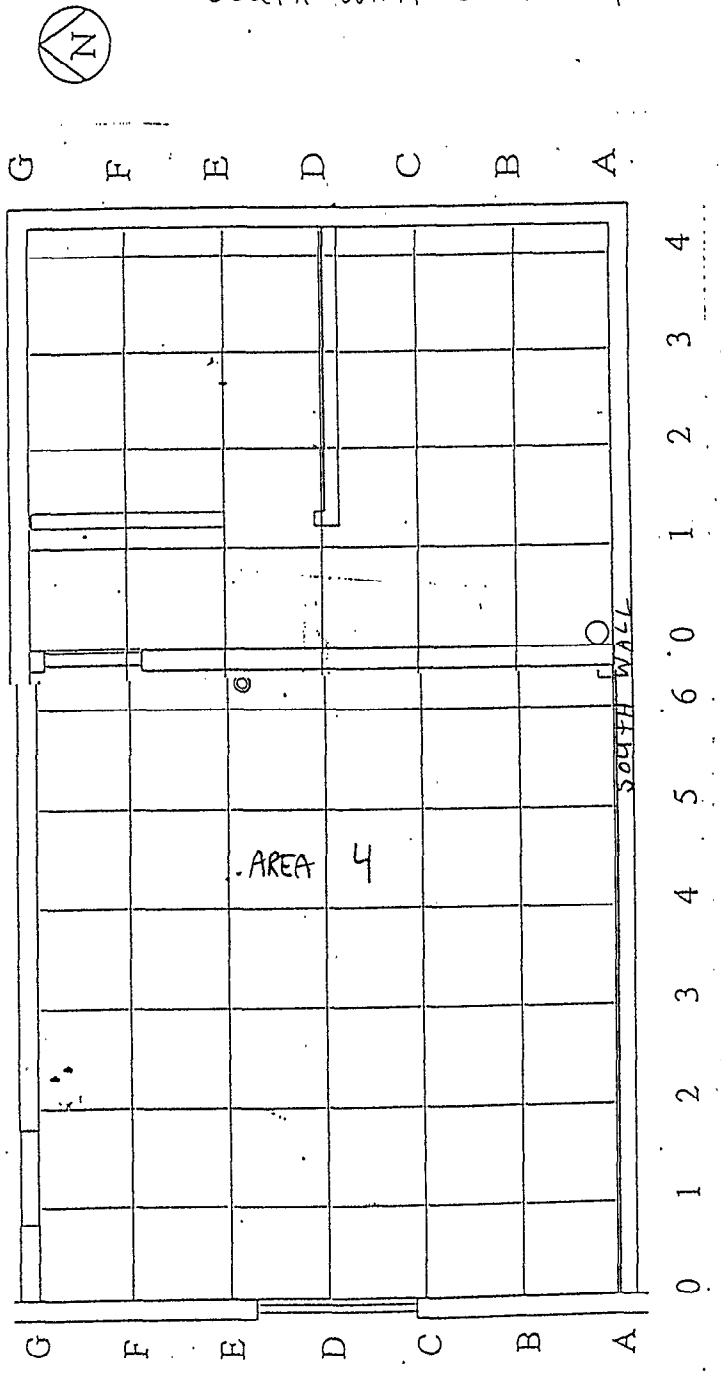
RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
TOTAL BACKGROUND COUNTS		50
BACKGROUND COUNT TIME (MIN)	1 MIN	1 MIN
SAMPLE COUNT TIME (MIN)	1 MIN	1 MIN

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	A-1 AA	VERIFICATION	A		72
2		South WALL	B		44
3			C		91
4			D		47
5			E		56
6	A-3 AA		A		85
7			B		87
8			C		79
9			D		83
10			E		84
11	A-5 AA		A		63
12			B		70
13			C		69
14			D		81
15			E		94
16	A-7 AA		A		91
17			B		84
18			C		71
19			D		90
20			E		85
21	A-7 AA	DUP	A		98
22		VERIFICATION	B		87
23		South WALL	C		73
24			D		98
25			E		83
26	B-2 BB		A		73
27			B		87
28			C		41
29			D		89
30			E		41
31	B-4 BB		A		69
32			B		93
33			C		66
34			D		68
35			E		90
36	B-6 BB		A		91
37			B		75
38			C		103
39			D		79
40			E		67
41	B-6 BB	DUP	A		85
42			B		65
43			C		105
44			D		77
45			E		72
46					
47					
48					
49					
50					

Insert area map or sketch below

South WALL B-14 A-4



SURVEY01.XLS

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

4MAW

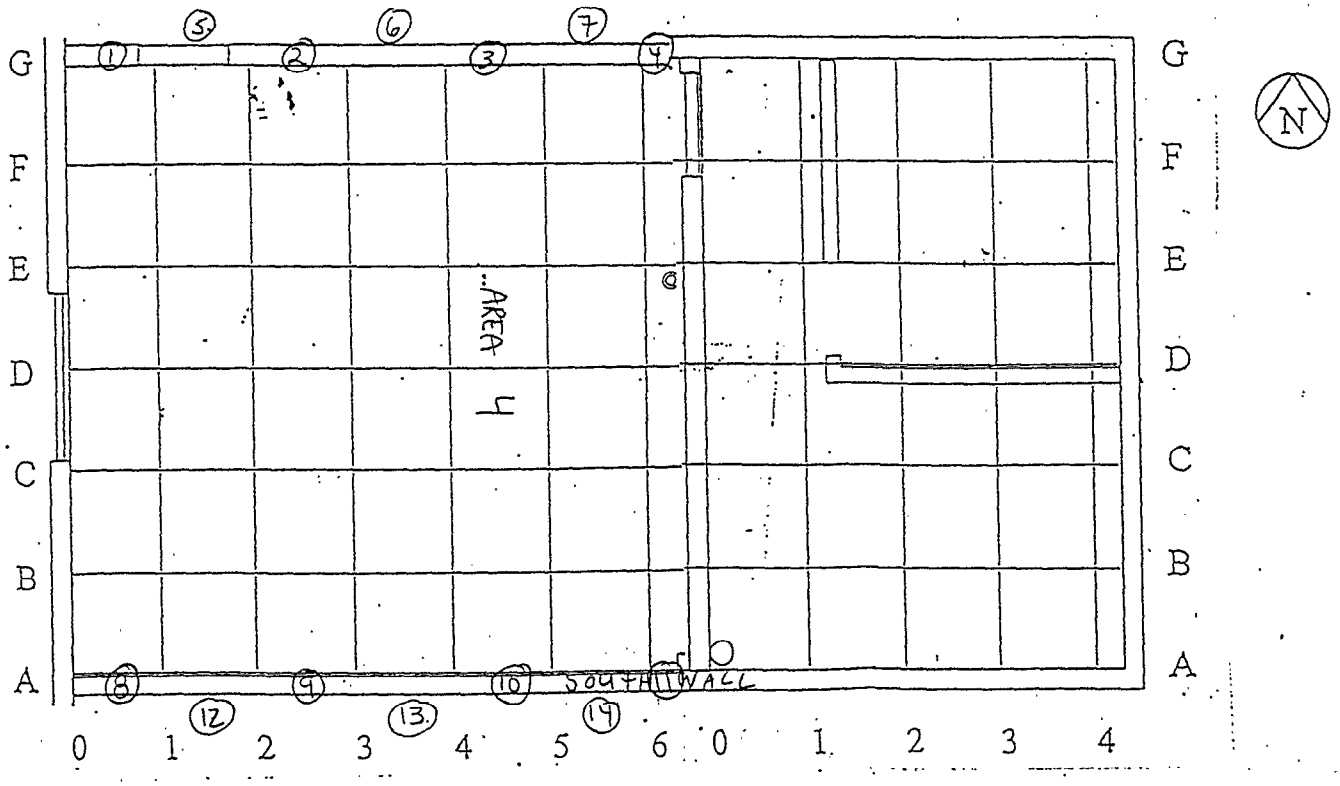
IDM Environmental
Bldg. 14, Praxair Site
Tonawanda, NY 14151

4096

Radiological Survey Form

Hilbert Associates, Inc
Radiological Consultants
640 Maple Ave
Saratoga Springs, NY 12866
Phone: 518-584-0166
Fax: 518-584-8529
Contract # 95012

Date / Time 9/3/97 / 300	Tech SMALLRIDGE
Location / Purpose BLDG 14 - AREA 4 / SMEAR Verification Survey	Instruments / sn 2221 'B'
	Survey #
	RWP # 02



BLDG 14 AREA 4 North & South WALL

Loc	Type	Description	Gross	A DPM	Gross	Beta DPM	Loc	Type	Description	Gross	A DPM	Gross	Beta DPM
1	S	VERIFICATION SMEAR SURVEY NORTH WALL	Ø		66		8	S	VERIFICATION SMEAR SURVEY SOUTH WALL	Ø		66	
2			Ø		58		9			1		58	
3			Ø		63		10			Ø		65	
4			Ø		68		11			Ø		45	
5			Ø		71		12			Ø		49	
6			1		72		13			Ø		63	
7			Ø		78		14			Ø		58	

Comments:

Scaler S/N 91234		BKG	EFF	MDA
CT # MIN	Alpha:	.18	.32	15
Tech	Beta:	61	.28	139

RW 9/8/97

Review

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

4 MAIN

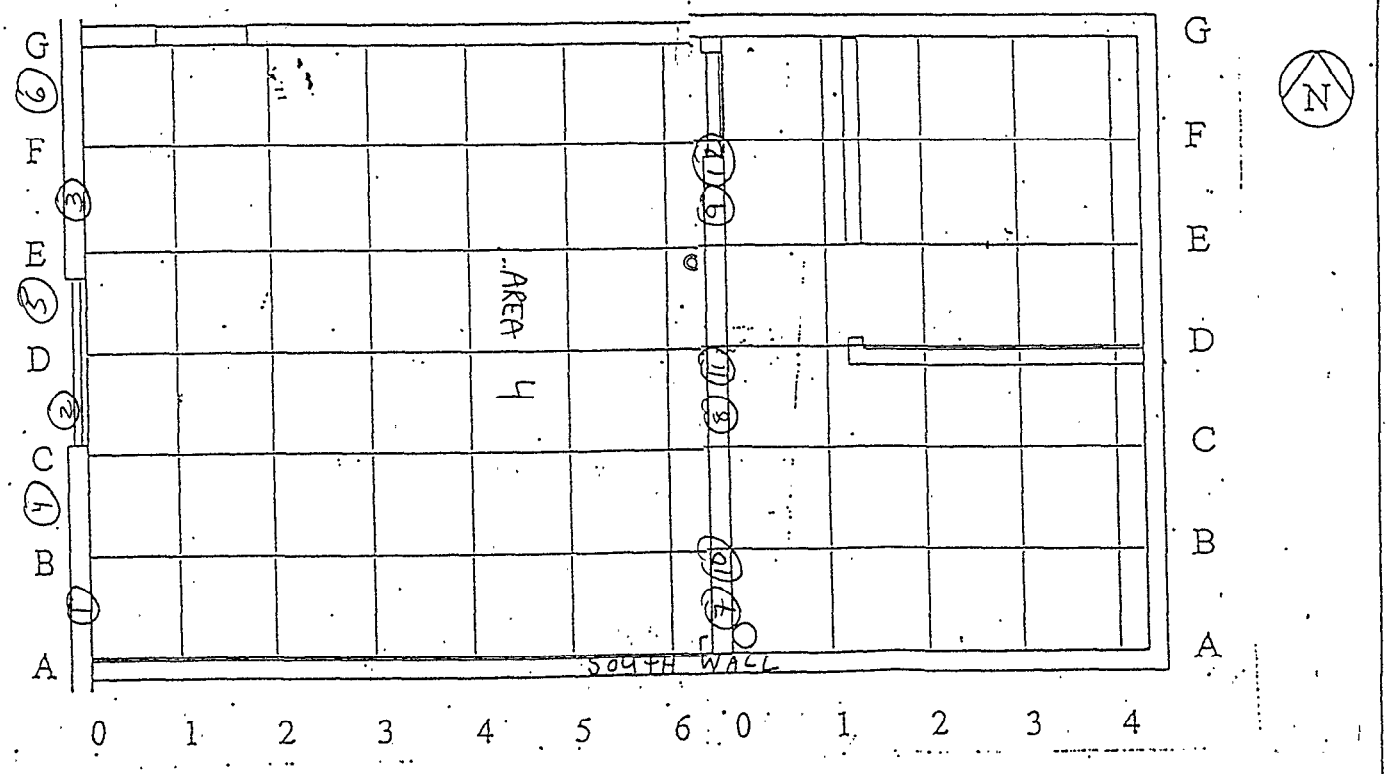
IDM Environmental
Bldg. 14, Praxair Site
Tonawanda, NY 14151

4097

Radiological Survey Form

Hilbert Associates, Inc
Radiological Consultants
640 Maple Ave
Saratoga Springs, NY 12866
Phone: 518-584-0166
Fax: 518-584-8529
Contract # 95012

Date / Time 9/3/97 / 315 — Tech SMALLRIDGE	Instruments / s/n 2221 'B'
Location / Purpose BLDG 14 AREA 4 / SMEAR VARIFICATION	Survey # — RWP # 02



BLDG 14 AREA 4 EAST & WEST

Loc	Type	Description	Gross	A DPM	Gross	Beta DPM	Loc	Type	Description	Gross	A DPM	Gross	Beta DPM
1	S	VERIFICATION SMEAR Survey West WALL	0		59		7	S	VARIFICATION SMEAR Survey EAST WALL	1		57	
2	|	|	0		62		8	|	|	0		51	
3	|	|	0		56		9	|	|	0		67	
4	|	|	0		50		10	|	|	0		65	
5	|	|	0		48		11	|	|	0		70	
6	|	↓	0		55		12	|	↓	0		61	

Comments:

Scaler S/N 91234	BKG	EFF	MDA
CT = 1 MIN Alpha:	.18	.32	15
Tech Beta:	.61	.28	139

Review

ION TECHNOLOGY, INC. (21)

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4098

4a N&S walls

Survey Date: 9/3/97 / RB
Location: (4A) ~~EAST & WEST WALLS~~ North & South WALLS
Description: VARIFICATION Survey

	alpha	beta-gamma
Instrument Model & s/n: 2221 'A'		2221 A
Detector Model & s/n:		44-9 48272
Calibration Date:		12/97
Efficiency [Tc99] [SY90] [Th230]		
Detector Area (CM2)		

86314

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
TOTAL BACKGROUND COUNTS		60
BACKGROUND COUNT TIME (MIN)		1 MIN
SAMPLE COUNT TIME (MIN)		1 MIN

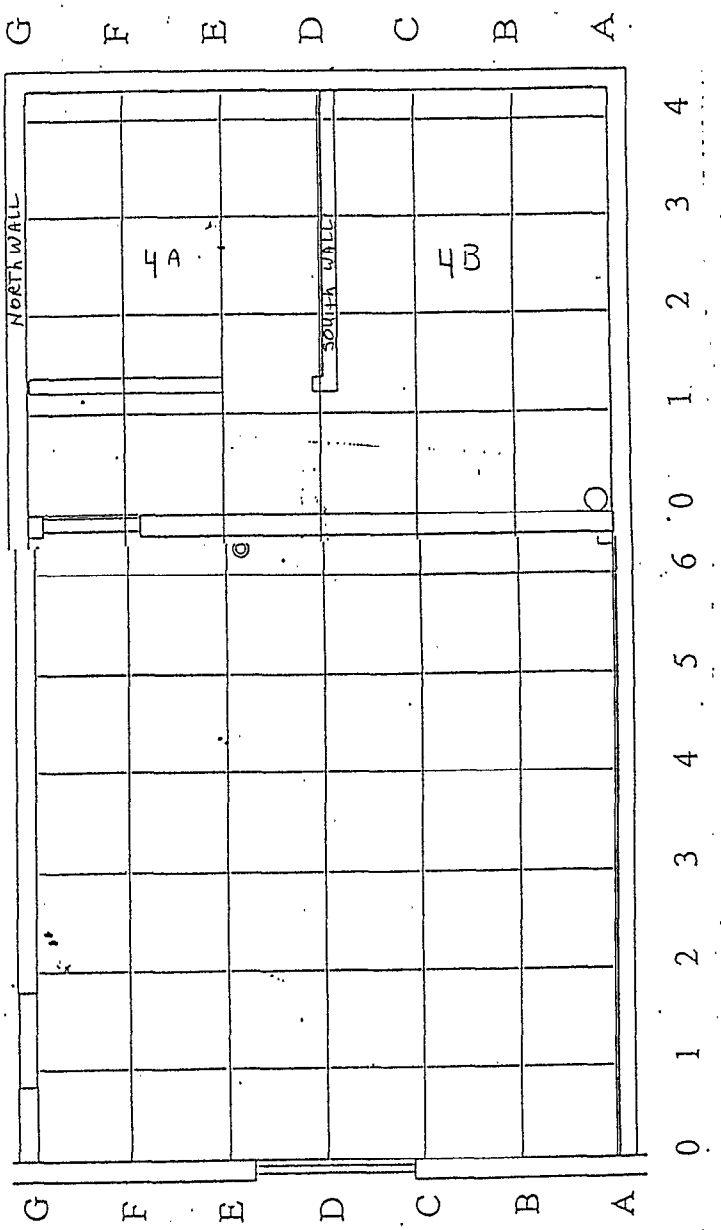
RP Technician: SMALLRIDGE / ZIGO

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	F7-AA	VARIFICATION	A		82
2	1	NORTH WALL	B		81
3			C		83
4			D		63
5			E		71
6	F4-AA		A		95
7	3		B		99
8			C		104
9			D		88
10			E		94
11	F3-AA		A		79
12	4		B		76
13			C		93
14			D		95
15			E		94
16	F8-AA		A		115
17	4		B		95
18			C		71
19			D		106
20			E		91
21	F8 AA	DUP	A		95
22	4		B		68
23			C		88
24			D		85
25			E		90
26	D2 AA	VARIFICATION	A		52
27	1	South WALL	B		63
28			C		67
29			D		69
30			E		55
31	D4 AA		A		72
32	3		B		53
33			C		62
34			D		65
35			E		70
36	D3-BB		A		64
37	2		B		54
38			C		59
39			D		54
40			E		64
41	D5 BB		A		65
42	4		B		74
43			C		70
44			D		65
45			E		71
46	D5 BB	DUP	A		76
47	4		B		81
48			C		63
49			D		58
50			E		78

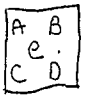
4a

Insert area map or sketch below

B-14 AREA 4A
North & South WALLS



NOTE: GRID PATTERN



SURVEY01.XLS

ION TECHNOLOGY, INC. (21)

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4099

Survey Date: 9/3/97
Location: 4A EAST & WEST WALLS
Description: VARIFICATION Survey

	alpha	beta-gamma
Instrument Model & s/n: 2221 'C'		2221 C
Detector Model & s/n:		44-9/48272
Calibration Date:		12/97
Efficiency [Tc99] [SY90] [Th230]		
Detector Area (CM2)		

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

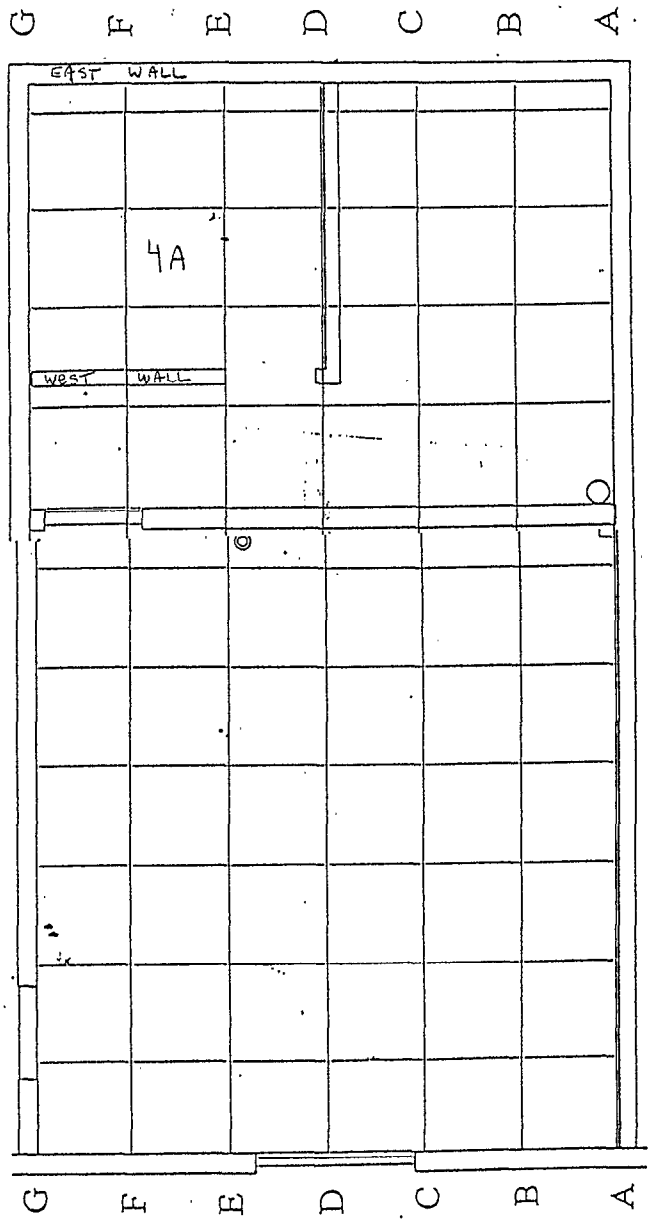
	alpha	beta-gamma
TOTAL BACKGROUND COUNTS		60
BACKGROUND COUNT TIME (MIN)		1 MIN
SAMPLE COUNT TIME (MIN)		1 MIN

RP Technician: SMALLRIDGE / ZIGO

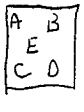
#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	D2 AA	VARIFICATION	A		51
2	D1	West WALL	B		53
3			C		42
4			D		61
5			E		50
6	F2 AA		A		54
7	F1		B		59
8			C		55
9			D		62
10			E		61
11	~~E2~~ BB		A		59
12	E1		B		64
13			C		42
14			D		50
15			E		59
16	~~E2~~ BB	DUP	A		57
17	E1		B		67
18			C		64
19			D		56
20			E		70
21	D4 AA	VARIFICATION	A		109
22		EAST WALL	B		74
23			C		79
24			D		81
25			E		83
26	F4 AA		A		87
27			B		101
28			C		112
29			D		75
30			E		86
31	E4 BB		A		96
32			B		98
33			C		80
34			D		89
35			E		80
36	E4 BB	DUP	A		101
37			B		97
38			C		71
39			D		94
40			E		102
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					

Insert area map or sketch below

B-14 AREA 4A
EAST & WEST WALLS.



NOTE: GRID PATTERN



SURVEY01.XLS

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

(21)

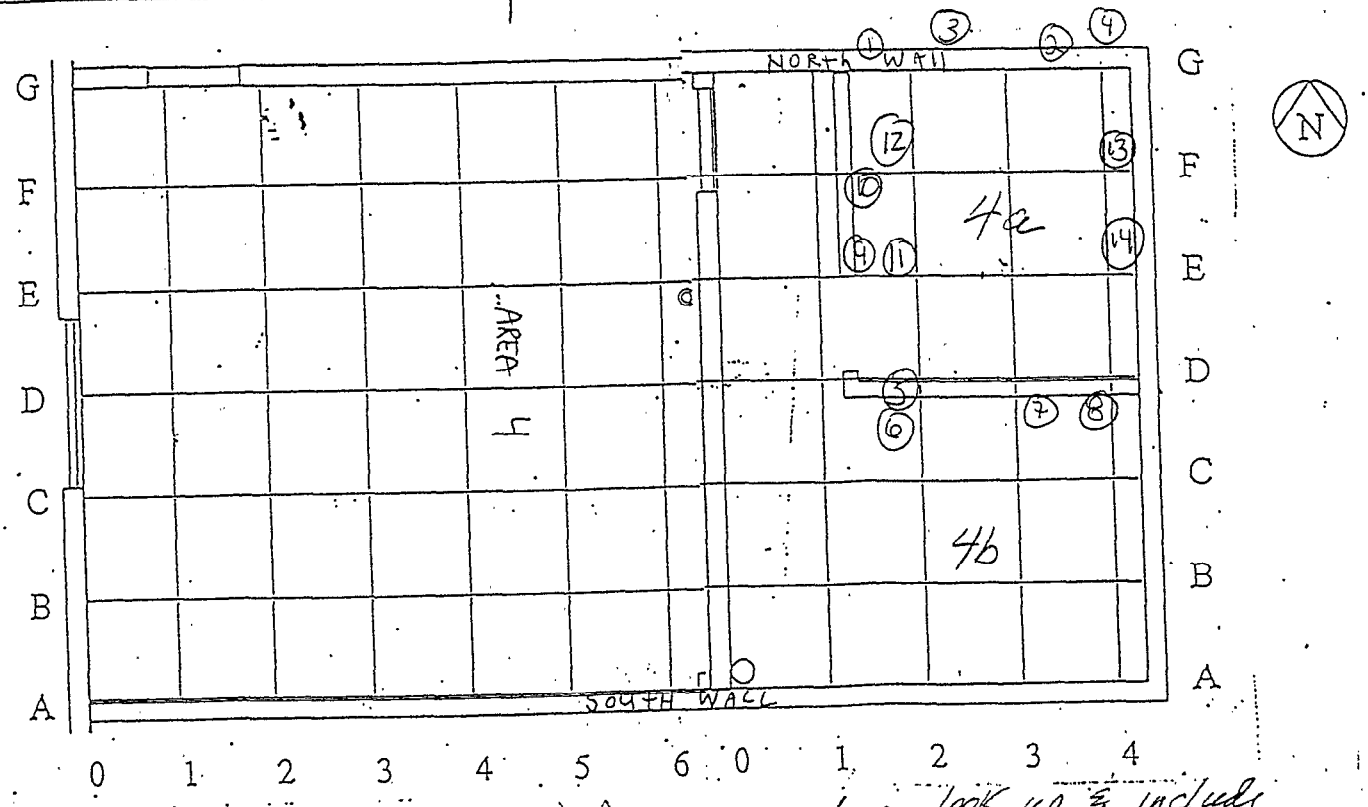
IDM Environmental
Bldg. 14, Praxair Site
Tonawanda, NY 14151

4100

Radiological Survey Form

Hilbert Associates, Inc
Radiological Consultants
640 Maple Ave
Saratoga Springs, NY 12866
Phone: 518-584-0166
Fax: 518-584-8529
Contract # 95012

Date / Time 9/4/97/0130 Tech SMALLRIDGE	Instruments / sn LUDLUM 2221 'C'
Location / Purpose B-14 AREA 4A WALLS	Survey # RWP # 02
VARIFICATION SMEAR SURVEY	



Petc-under description for SMEARS please look up & include grid ID for each location (eg) AREA 4a, North wall
4 smears #1-4 + dup for 4 verify
direct grids see top next pg
the greatest
Mark

Loc	Type	Description	Gross	A DPM	Gross	Beta DPM	Loc	Type	Description	Gross	A DPM	Gross	Beta DPM
1	S	verification Survey NORTH WALL	Ø		58		8	S	SouthWALL	1		66	
2		NORTH WALL	Ø		53		9		WestWALL	Ø		59	
3		NORTH WALL	2		68		10		westWALL	Ø		51	
4		NORTH WALL	Ø		68		11		WestWALL	Ø		60	
5		South WALL	Ø		65		12		EASTWALL	Ø		57	
6		South WALL	Ø		56		13		EASTWALL	Ø		61	
7		South WALL	3		59		14		EASTWALL	1		72	

			BKD	EFF	MDA
Comments:	Scaler S/N 91234				
	CT = 1 MIN	Alpha:	.18	.32	15
	Tech	Beta:	.61	.28	139

FW 9/8/97

Review

ION TECHNOLOGY, INC. (22) DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4101

Survey Date: 9/2/97 4A + 4B EAST/West Walls AGAIN
Location: BLDG 14 AREA 4
Description: Verification

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
Instrument Model & s/n: 2221 '81		
Detector Model & s/n:		
Calibration Date:		
Efficiency [Tc99] [SY90] [Th230]		
Detector Area (CM2)		

B
.19

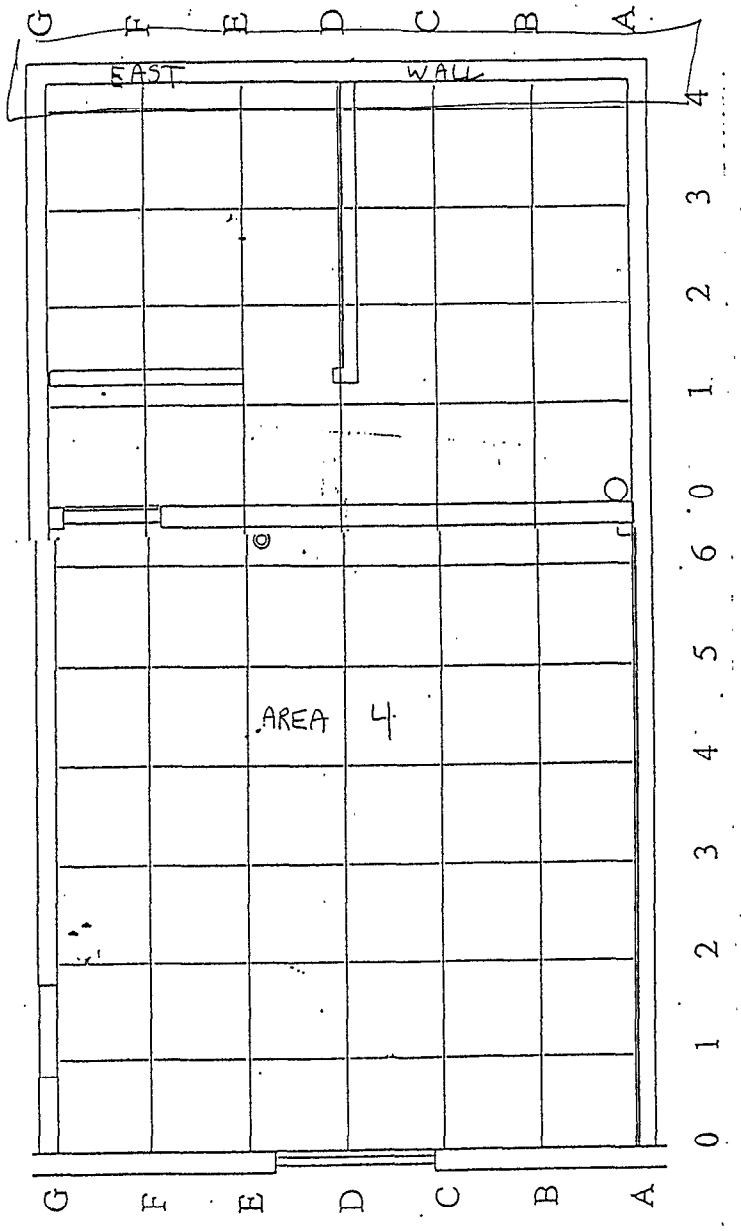
	alpha	beta-gamma
TOTAL BACKGROUND COUNTS		50
BACKGROUND COUNT TIME (MIN)	1 MIN	1 MIN
SAMPLE COUNT TIME (MIN)	1 MIN	1 MIN

RP Technician: SMALLRIDGE/ZIGO

Insert area map or sketch below

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	A-7 AA	Verification	A	4B	100
2	4	EAST WALL	B		82
3			C		62
4			D		85
5			E		53
6	C-7 AA		A	4B	81
7	4		B		93
8			C		88
9			D		81
10			E		83
11	E-7-AA		A	4A	70
12	4		B		97
13			C		88
14			D		85
15			E		88
16	E-7 AA	Dup	A	4A	66
17	4	Verification	B		93
18		EAST WALL	C		107
19			D		90
20			E		80
21	B-7 BB		A	4B	89
22	4		B		65
23			C		79
24			D		90
25			E		98
26	D-7 BB		A	4A	93
27	4		B		90
28			C		97
29			D		83
30			E		80
31	F-7 BB		A	4A	64
32	4		B		75
33			C		42
34			D		77
35			E		45
36	F-7 BB	Dup	A	4A	61
37	4		B		83
38			C		55
39			D		76
40			E		47
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					

EAST WALL B-14 A-4



SURVEY01.XLS

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

(22)

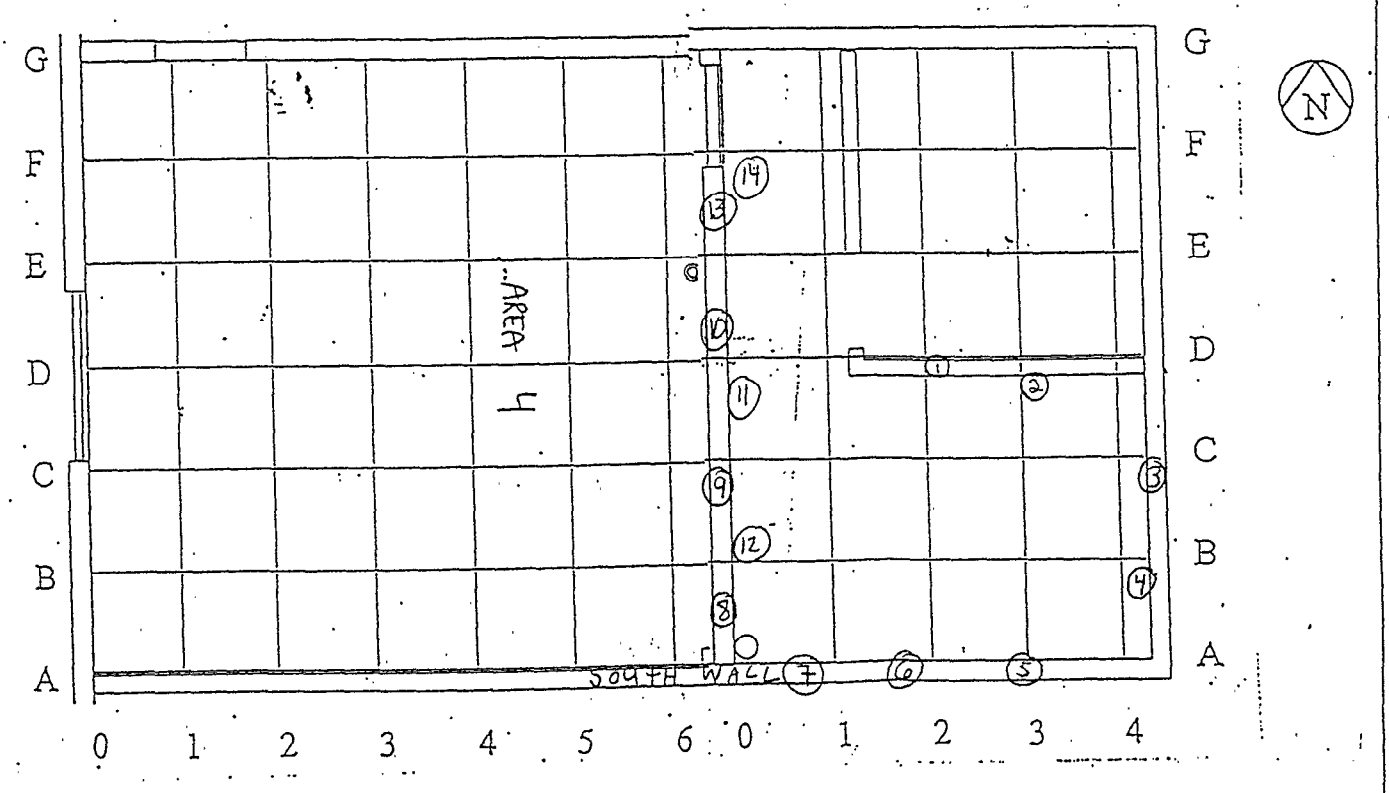
IDM Environmental
Bldg. 14, Praxair Site
Tonawanda, NY 14151

Radiological Survey Form

4102

Hilbert Associates, Inc
Radiological Consultants
640 Maple Ave
Saratoga Springs, NY 12866
Phone: 518-584-0166
Fax: 518-584-8529
Contract # 95012

Date / Time 9/4/97 / 0130 Tech SMALLRIDGE	Instruments / sn Ludlum 2221 'C'
Location / Purpose B-14 AREA 4A & 4B EAST/West Walls South	Survey # RWP # 02
VARIFICATION SMEAR Survey	



Loc	Type	Description	Gross	A DPM	Gross	Beta DPM	Loc	Type	Description	Gross	A DPM	Gross	Beta DPM
1	S	verification NORTH WALL	1		56		8	S	verification Survey west WALL	2		68	
2		NORTH WALL	0		58		9		west WALL	2		70	
3		EAST WALL	0		63		10		west WALL	0		54	
4		EAST WALL	2		60		11		west WALL	0		56	
5		South WALL	0		66		12		west WALL	0		50	
6		South WALL	0		52		13		west WALL	0		60	
7		South WALL	0		64		14		west WALL	0		67	

			BKG	EFF	MDA
Comments:	Scaler S/N 91234				
	CT = 1 MIN	Alpha:	.18	.32	15
RW. 9/8/97	Tech	Beta:	61	.28	134

Review

ION TECHNOLOGY, INC. (22)

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4103

4B FLOOR ← NAMED Wrong RM

Survey Date: 8/27/97
Location: B-14 AREA 4 A FLOOR
Description: VERIFICATION Survey

	alpha	beta-gamma
Instrument Model & s/n: 2221 / A	ESP-1 03027	L-2221
Detector Model & s/n:	43-5	44-9
Calibration Date:	2-10-97	8-12-97
Efficiency [Tc99] [SY90] [Th230]	.13	.20
Detector Area (CM2)	50	15.5

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

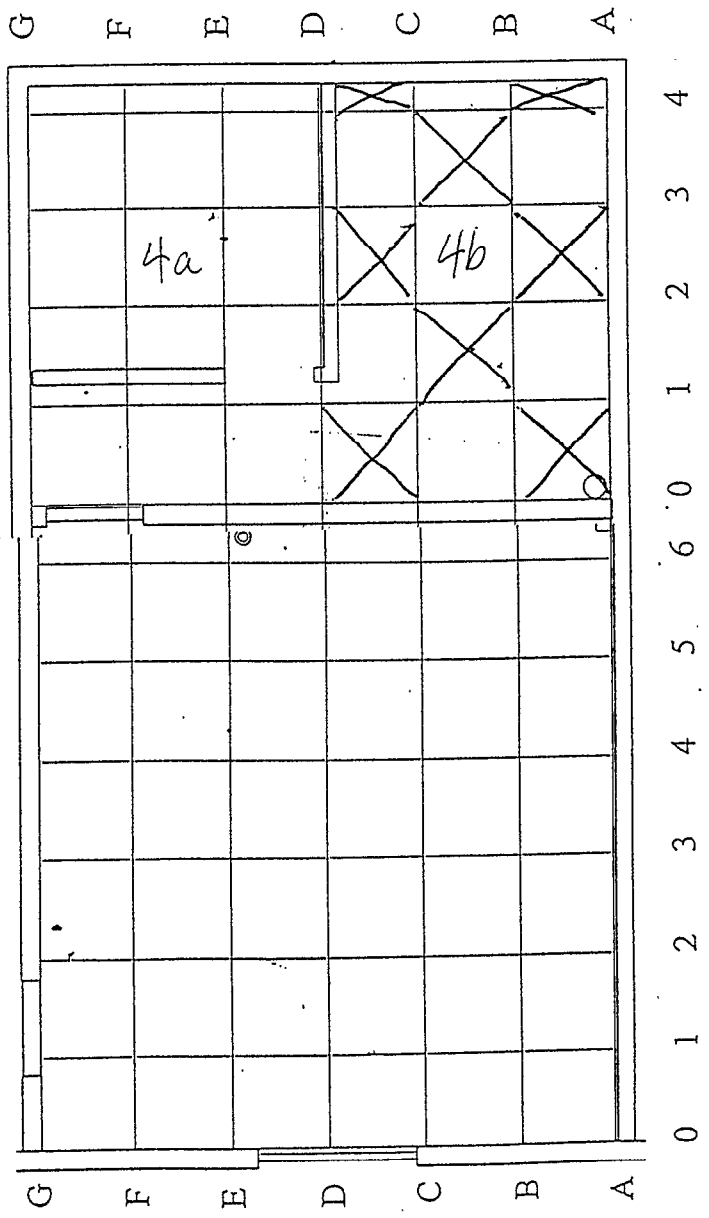
	alpha	beta-gamma
TOTAL BACKGROUND COUNTS	1	45
BACKGROUND COUNT TIME (MIN)	1 MIN	1 MIN
SAMPLE COUNT TIME (MIN)	1 MIN	1 MIN

RP Technician: Smallridge / RS

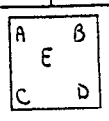
Insert area map or sketch below

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	A-0	FLOOR	A		66
2			B		72
3			C		61
4			D		73
5			E		76
6					
7	A-2	FLOOR	A		93
8			B		91
9			C		87
10			D		68
11			E		72
12					
13	A-4	FLOOR	A		78
14			B		62
15			C		67
16			D		52
17			E		74
18					
19	B-1	FLOOR			
20			A		83
21			B		78
22			C		103
23			D		94
24			E		97
25					
26	B-3	FLOOR	A		76
27			B		83
28			C		72
29			D		86
30			E		60
31					
32	C-0	FLOOR	A		72
33			B		68
34			C		75
35			D		73
36			E		69
37					
38	C-2	FLOOR	A		74
39			B		72
40			C		68
41			D		76
42			E		84
43					
44	C-4	FLOOR	A	0	83
45			B	0	75
46			C	1	89
47			D	0	90
48			E	1	101
49					
50					

Entered A/K B_A4_03



Note: Survey pattern



SURVEY01.XLS

ION TECHNOLOGY, INC. (22)

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4104

4A + 4B

Survey Date: 8-27-97
Location: AREA ~~4-B~~ FLOOR
Description: VERIFICATION

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scalar measurements

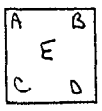
	alpha	beta-gamma
Instrument Model & s/n:	ESP-1 F	L-2221 C
Detector Model & s/n:	43-5	44-9
Calibration Date:	2-6-97	8-12-97
Efficiency [Tc99] [SY90] [Th230]	.13	.20
Detector Area (CM2)	50	15.5

	alpha	beta-gamma
TOTAL BACKGROUND COUNTS	0	64
BACKGROUND COUNT TIME (MIN)	1 MIN	1 MIN
SAMPLE COUNT TIME (MIN)	1 MIN.	1 MIN

RP Technician: Mike Tigo

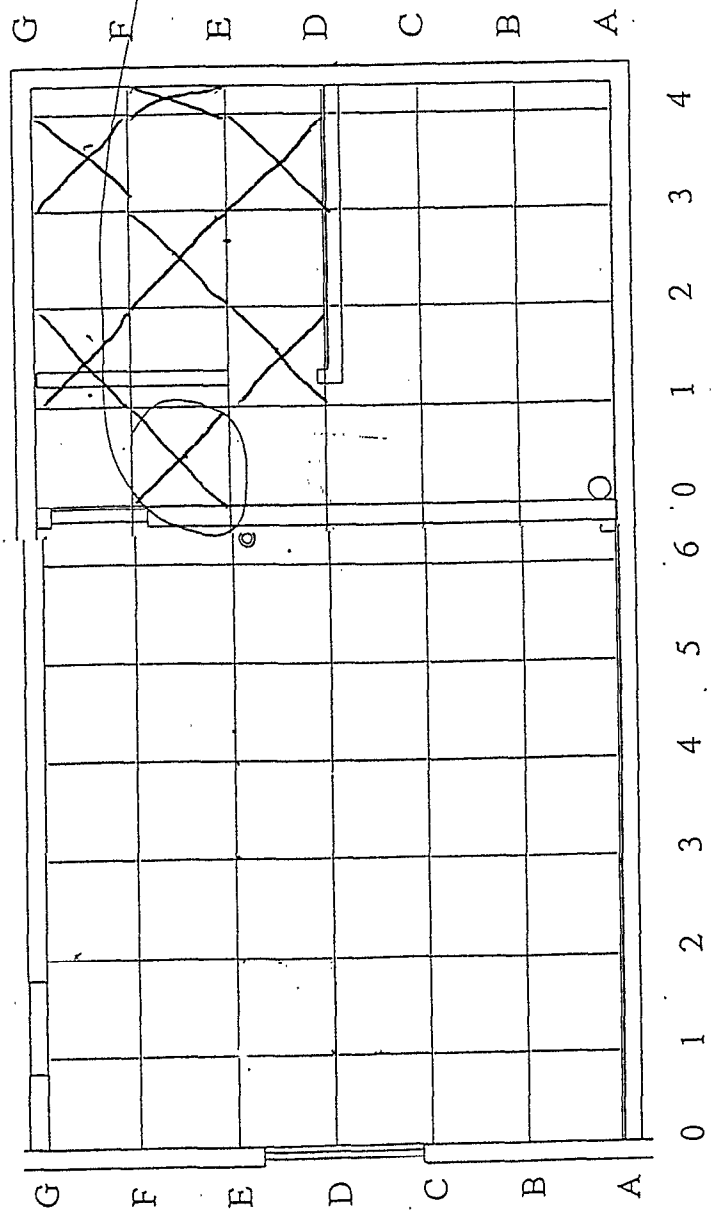
#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	D-1	FLOOR	A		52
2			B		70
3			C		67
4			D		73
5			E		85
6					
7	D-3	FLOOR	A	2	59
8			B	1	67
9			C	1	60
10			D	1	65
11			E	1	70
12					
13	E-0	FLOOR	A		77
14			B		56
15			C		71
16			D		69
17			E		62
18					
19	E-2	FLOOR	A		68
20			B		57
21			C		83
22			D		72
23			E		78
24					
25	E-4	FLOOR	A		74
26			B		71
27			C		60
28			D		54
29			E		62
30					
31	F-1	FLOOR	A		82
32			B		57
33			C		59
34			D		64
35			E		53
36					
37	F-3	FLOOR	A		54
38			B		61
39			C		67
40			D		59
41			E		57
42					
43					
44					
45					
46					
47					
48					
49					
50					

Note; Survey pattern



Insert area map or sketch below

Entered RW.
9/9/97
B 4-04



SURVEY01.XLS

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

(22)

H.P. Mzigo

SMEAR MEASUREMENT ANALYSIS REPORT

4105

SAMPLE DATE: 8/28/97
ANALYSIS DATE: 8/28/97
LOCATION: BLDG 14 AREA 4 + 4B next pg

RADIATION MEASUREMENT: Alpha and Beta-gamma
RESULTS REPORTED UNITS: dpm per 100cm2
MEASUREMENT TYPE: Removable Contamination

SMEARS Verification Survey

SAMPLE #	LOCATION CODE	LOCATION DESCRIPTION(1)	RADIATION TYPE	GROSS SAMPLE (COUNTS)	COUNT TIME (MIN)	MDCR (CPM)	NET SAMPLE COUNT RATE (CPM)	RADIATION TYPE	RESULTS (PER 100CM2)	ERROR (95% LEVEL)	MDA (PER 100CM2)
1	A-0	BLDG 14 AREA 4 MAIN	A	0	1						
1	↓	FLOOR	BG	73	1						
2	A-2	BLDG 14 AREA 4	A	0	1						
2	↓	FLOOR	BG	75	1						
3	A-4	BLDG 14 AREA 4	A	0	1						
3	↓	FLOOR	BG	60	1						
4	A-6	B-LDG 14 AREA 4	A	0	1						
4	↓	FLOOR	BG	71	1						
5	B-1	BLDG 14 AREA 4	A	2	1						
5	↓	FLOOR	BG	73	1						
6	B-3	BLDG 14 AREA 4	A	0	1						
6	↓	FLOOR	BG	85	1						
7	B-5	BLDG 14 AREA 4	A	0	1						
7	↓	FLOOR	BG	64	1						
8	C-0	BLDG 14 AREA 4	A	0	1						
8	↓	FLOOR	BG	64	1						
9	C-2	BLDG 14 AREA 4	A	1	1						
9	↓	FLOOR	BG	73	1						
10	C-4	BLDG 14 AREA 4	A	1	1						
10	↓	FLOOR	BG	46	1						
11	C-6	BLDG 14 AREA 4	A	0	1						
11	↓	FLOOR	BG	74	1						
12	D-1	BLDG 14 AREA 4	A	0	1						
12	↓	FLOOR	BG	66	1						
13	D-3	BLDG 14 AREA 4	A	0	1						
13	↓	FLOOR	BG	79	1						
14	D-5	BLDG 14 AREA 4	A	0	1						
14	↓	FLOOR	BG	66	1						
15	E-0	BLDG 14 AREA 4	A	1	1						
15	↓	FLOOR	BG	51	1						
16	E-2	BLDG 14 AREA 4	A	2	1						
16	↓	FLOOR	BG	71	1						
17	E-4	BLDG 14 AREA 4	A	0	1						
17	↓	FLOOR	BG	64	1						
18	E-6	BLDG 14 AREA 4	A	0	1						
18	↓	FLOOR	BG	67	1						
19	F-1	BLDG 14 AREA 4	A	0	1						
19	↓	FLOOR	BG	57	1						
20	F-3	BLDG 14 AREA 4	A	0	1						
20	↓	FLOOR	BG	55	1						

Instrument Model & s/n:	2929 / 91234	M.2929 s/r	
Detector Model & s/n:	43-10-1 / 085270	M.43-10-1 s/n	
Calibration Date:	2-7-98		
Efficiency BG (Beta/Gamma):	.28	.29	cpm / dpm based on
Efficiency A (Alpha):	.13	.30	cpm / dpm based on

Background	Counts	Ct Time (min)	Rb	Date
Alpha	5	30		
Beta-Gamma	1250	30		

SMEAR_AB.XLS

HILBERT ASSOCIATES INC
RADIOLOGICAL ENGINEERS

22

SMEAR MEASUREMENT ANALYSIS REPORT

4106

H.P. M. Zigo

SAMPLE DATE: 8/28/97
ANALYSIS DATE: 8/28/97
LOCATION: BLDG 14 AREA 4 & AREA 4A → 4B

RADIATION MEASUREMENT: Alpha and Beta-gamma
RESULTS REPORTED UNITS: dpm per 100cm2
MEASUREMENT TYPE: Removable Contamination

REA 4B

SAMPLE #	LOCATION CODE	LOCATION DESCRIPTION(1)	RADIATION TYPE	GROSS SAMPLE (COUNTS)	COUNT TIME (MIN)	MDCR (CPM)	NET SAMPLE COUNT RATE (CPM)	RADIATION TYPE	RESULTS (PER 100CM2)	ERROR (95% LEVEL)	MDA (PER 100CM2)
1	F-5	BLDG 14 AREA 4	A	0	1						
1	↓	FLOOR	BG	68	1						
2	F-6	BLDG 14 AREA 4	A	0	1						
2	↓	FLOOR	BG	66	1						
3	A-0	BLDG 14 AREA 4A B	A	0	1						
3	↓	FLOOR	BG	56	1						
4	A-2	BLDG 14 AREA 4AB	A	0	1						
4	↓	FLOOR	BG	66	1						
5	A-4	BLDG 14 AREA 4AB	A	1	1						
5	↓	FLOOR	BG	58	1						
6	B-1	BLDG 14 AREA 4AB	A	0	1						
6	↓	FLOOR	BG	57	1						
7	B-3	BLDG 14 AREA 4AB	A	0	1						
7	↓	FLOOR	BG	63	1						
8	C-0	BLDG 14 AREA 4AB	A	0	1						
8	↓	FLOOR	BG	54	1						
9	C-2	BLDG 14 AREA 4AB	A	1	1						
9	↓	FLOOR	BG	64	1						
10	C-4	BLDG 14 AREA 4AB	A	0	1						
10	↓	FLOOR	BG	62	1						
11			A		1						
11			BG		1						
12			A		1						
12			BG		1						
13			A		1						
13			BG		1						
14			A		1						
14			BG		1						
15			A		1						
15			BG		1						
16			A		1						
16			BG		1						
17			A		1						
17			BG		1						
18			A		1						
18			BG		1						
19			A		1						
19			BG		1						
20			A		1						
20			BG		1						

Instrument Model & s/n: Ludlum 2221 C — M.2929 s/n 91234
Detector Model & s/n: 44-9 — M.43-10-1 s/n 085270
Calibration Date: 12-27-96
Efficiency BG (Beta/Gamma): .28 — .29 cpm / dpm based on 100 cm2
Efficiency A (Alpha): .13 — .30 cpm / dpm based on 1

Background	Counts	Ct Time (min)	Rb	Date
Alpha	50	30		
Beta-Gamma	1250	30		

SMEAR_AB.XLS

ION TECHNOLOGY, INC. (23)

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4107

Survey Date: 9/3/97
Location: B-14 AREA 4B Walls N, E, S
Description: VARIFICATION Survey

	alpha	beta-gamma
Instrument Model & s/n:		2221 C
Detector Model & s/n:		44-9/48272
Calibration Date:		12/97
Efficiency [Tc99] [SY90] [Th230]		
Detector Area (CM2)		

RP Technician: SMALLRIDGE/ZIGO

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

	alpha	beta-gamma
TOTAL BACKGROUND COUNTS		50
BACKGROUND COUNT TIME (MIN)		1 MIN
SAMPLE COUNT TIME (MIN)		1 MIN

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS
1	C3 AA	VARIFICATION	A		53
2		North WALL	B		57
3			C		65
4			D		62
5			E		64
6	C-4 BB		A		67
7			B		65
8			C		69
9			D		55
10			E		65
11	B-5 AA	EAST WALL	A		103
12	74		B		102
13			C		74
14			D		66
15			E		105
16	A-5 BB		A		74
17	74		B		97
18			C		89
19			D		96
20			E		89
21	A3 AA	South WALL	A		99
22			B		105
23			C		78
24			D		83
25			E		95
26	A3 BB		A		66
27			B		81
28			C		79
29			D		81
30			E		82
31	A2 AA	South-WALL	A		74
32			B		90
33			C		111
34			D		112
35			E		87
36	A2 BB		A		99
37			B		89
38			C		68
39			D		76
40			E		81
41	A5 BB	DUP	A		79
42			B		101
43			C		87
44			D		84
45			E		81
46	A2-BB	DUP	A		94
47			B		99
48			C		77
49			D		63
50			E		78

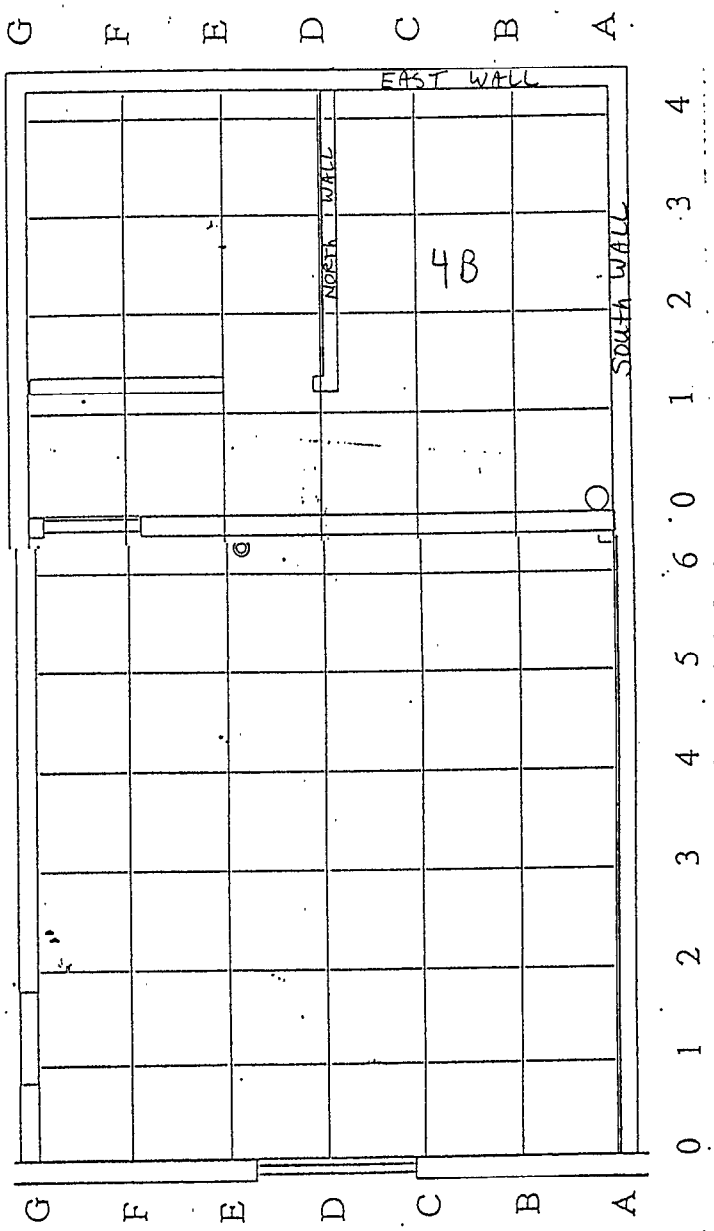
N

E

S

Insert area map or sketch below

B-14 AREA 4B
North/South/EAST WALLS



NOTE: GRID pattern [A B / C E D]

SURVEY01.XLS

ION TECHNOLOGY, INC.

DIRECT SURFACE MEASUREMENT ANALYSIS REPORT
(scaler measurement)

4108

Survey Date: 9/3/97
Location: B-14 AREA 4B. WALLS
Description: Verification Survey

	alpha	beta-gamma
Instrument Model & s/n:		2221 A
Detector Model & s/n:		44-4/48722
Calibration Date:		12/97
Efficiency [Tc99] [SY90] [Th230]		
Detector Area (CM2)		

RADIATION MEASUREMENT: Alpha & Beta-Gamma
RESULTS REPORTED UNITS: gross cpm per probe area
MEASUREMENT TYPE: direct scaler measurements

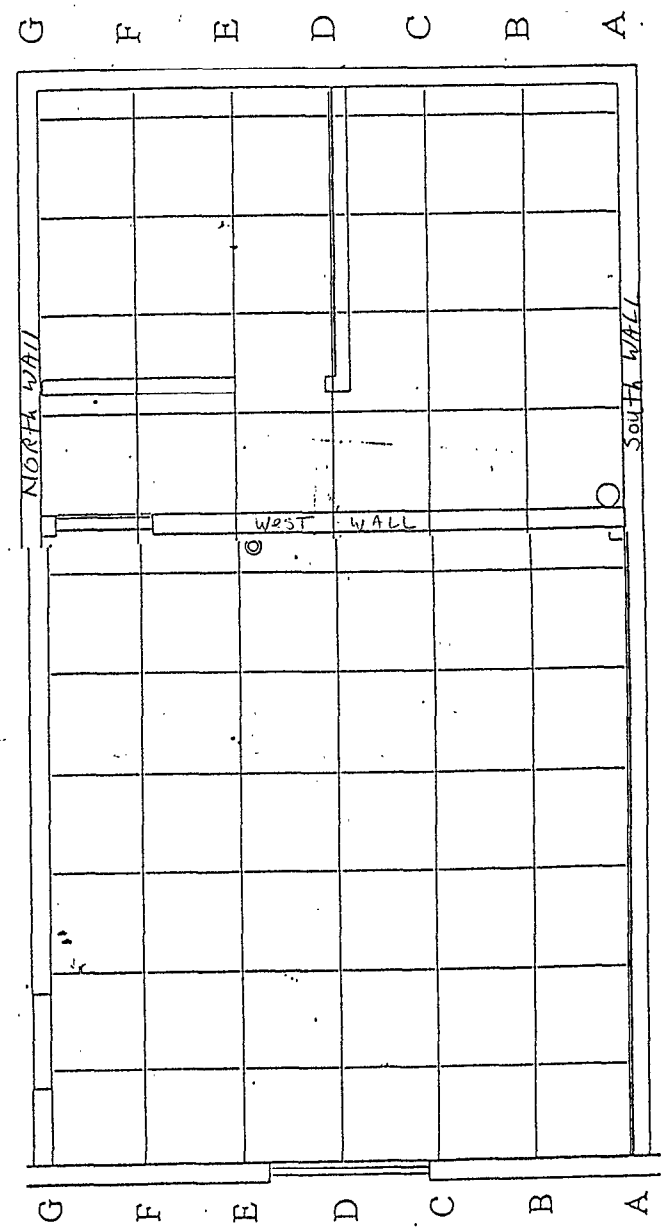
	alpha	beta-gamma
TOTAL BACKGROUND COUNTS		60
BACKGROUND COUNT TIME (MIN)		1 MIN
SAMPLE COUNT TIME (MIN)		1 MIN

RP Technician: SmallRidge

#	GRID	DESCRIPTION		alpha GROSS COUNTS	beta-gamma GROSS COUNTS	
1	A1-AA	VERIFICATION	A		78	
2		South WALL	B		87	S
3			C		121	
4			D		71	
5			E		89	
6	A1-BB		A		81	
7			B		84	
8			C		89	
9			D		74	
10			E		71	
11	C1-AA	WEST WALL	A		73	W
12			B		75	
13			C		91	
14			D		78	
15			E		69	
16	C1-BB		A		90	
17			B		97	
18			C		90	
19			D		92	
20			E		102	
21	C1-BB	DUP	A		89	
22			B		94	
23			C		90	
24			D		91	
25			E		98	
26	E1-AA	VARIFICATION	A		67	
27		WEST WALL	B		89	W
28			C		106	
29			D		86	
30			E		92	
31	E1 BB		A		86	
32			B		70	
33			C		84	
34			D		75	
35			E		88	
36	F1 AA	NORTH WALL	A		53	N
37			B		47	
38			C		48	
39			D		52	
40			E		56	
41	F1 BB		A		64	
42			B		51	
43			C		77	
44			D		74	
45			E		63	
46	F1 BB	DUP	A		46	
47			B		51	
48			C		65	
49			D		78	
50			E		64	

Insert area map or sketch below

B-14 AREA 4B
South / west / North walls



NOTE: GRID PATTERN [A B / C E D]

SURVEY01.XLS