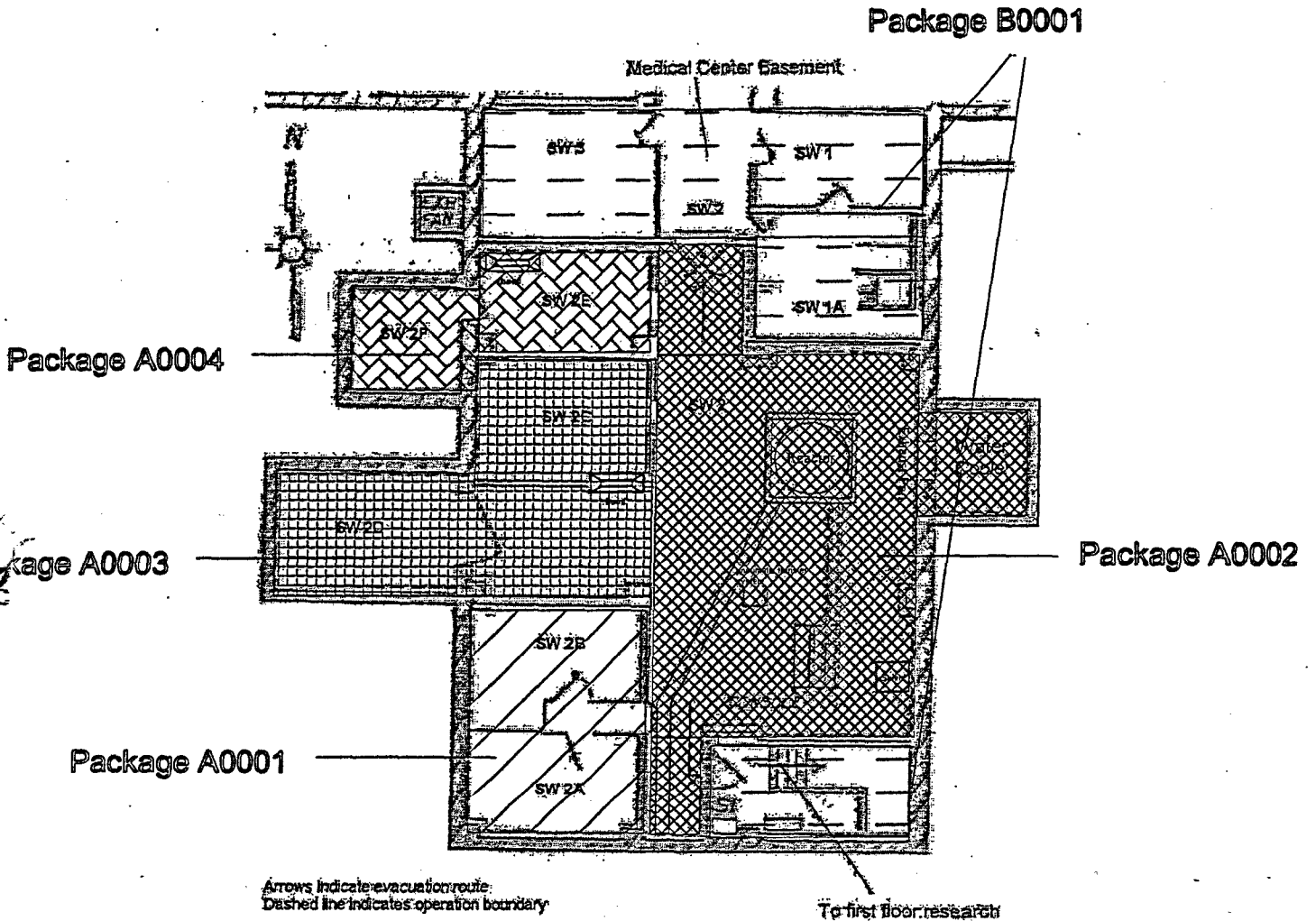


**Alan J. Blotcky Reactor Facility
Omaha Veterans Administration Medical Center
Omaha, Nebraska**

Characterization Survey Data Packages

APPENDIX B





**Alan J. Blotcky Nuclear Reactor Characterization (EXAMPLE)
40 Character Code Example Sheet for Model 2350-1**

L1 Package ID	L2 Surface Category	L3 Survey Class/Reason	L4 Detector Type	L5 Survey Count Type	L6 Material Code	L7 Survey Location ID	L8 Location Number
Example	Example	Example	Example	Example	Example	Example	Example
A 0 2 0 2	0 1 W 0 1	T A T 0 1	0 2 2 0 0	F L D C T	B 0 0 0 1	Z Z Z Z Z	0 0 0 0 1
<p><i>P1 - A 1 character code to identify the survey group. e.g.</i></p> <p>A - Impacted - Class 1 B - Impacted - Class 2 C - Impacted - Class 3 D - Systems E - Environs</p> <p><i>P2,3 A 2 character code to identify the survey area. e.g.</i></p> <p>A02 - Reactor Building Basement A03 - Reactor Building 1st Floor A04 - Reactor Building 2nd Floor and above A06 - Reactor Building Exhaust & Stack Fan Room B01 - Facility Office Structure</p> <p><i>P4,5 - A 2 character code to identify the Package #, e.g.</i></p> <p>A0101 - Package 01.</p>	<p><i>P1,2 - A 2 character code to identify the survey unit. e.g.</i></p> <p>01... - 2nd Floor General Area. 02... - Control Room.</p> <p><i>P3,4,5 - A 3 character code to identify the survey surface. e.g.</i></p> <p>F0x - Interior Floor Fex - Exterior Floor W0x - Wall C0x - Ceiling T0x - Trench EQx - Equipment OHx - Overhead above 2 meters V0x - Vent S0x - Structure L0x - Open Land Area</p> <p><i>The L2 code is also used to designate the source number during Source Checks. e.g.</i></p> <p>FD179 - Duratek assigned source number</p>	<p><i>P1,2 - A 2 character code to identify the local area background subtract method for systems. e.g.</i></p> <p>TS - Single background per reading TA - or ZZ Average background</p> <p><i>P3,4,5 - A 3 character code to identify the survey reason. E.g.</i></p> <p>Bxx - Background Survey Cxx - Characterization Fxx - Information Gxx - Investigation</p> <p>Xx will be a numeric sequence starting with 01.</p>	<p><i>A 5 character code to identify the survey detector. e.g.</i></p> <p>01200 - 43-68 & 43-106 Alpha 02000 - 44-40 Beta 02200 - 43-68 & 43-106 Beta 02210 - 43-37 02500 - PSL-3R Pipe Detector 02302 - 43-94 Pipe Detector 03300 - 44-10 NaI Gamma</p>	<p><i>A 5 character code to identify the type of count. e.g.</i></p> <p>Field Count Types: FLDBK - Field Bkg FLDCT - Field Count FLDSN - Field Scan</p> <p>Source Count Types: PRBBK - Pre Beta Bkg PRB00 - Pre Beta S/C (all positions) For Post Source Checks replace PR with PT. e.g. PTB00 - Post Beta S/C For Gamma Response Checks, replace B with G, and follow with distance from source. e.g. PRGBK - Pre Gamma R/C Bkg PRG00 - Pre Gamma R/C with source PTGBK - Post Gamma R/C Bkg PTG00 - Pre Gamma R/C with source</p>	<p><i>5 character code to identify the type of Material e.g.</i></p> <p>B0001 - Painted Concrete B0002 - Bare Concrete B0003 - Sealed Concrete B0004 - Painted Concrete Block B0005 - Asphalt B0006 Beige Glazed Tile B0007 Beige Granite Style Block B0008 -1'x1' Painted Brick B0009 - -2"x8" Painted Brick B0010 - -2"x8" Unpainted Brick B0011 - White 2'x2' drop ceiling B0012 - Water B0016 - Soil Samples B9999 - Misc. Material</p> <p>This code would be used if background activity from structural materials is to be subtracted from results. Requires that a background study be performed.</p>	<p><i>5 character code to designate the survey grid location.</i></p> <p>This block of codes may be used to designate system components, or row number as needed. If not used, enter ZZZZ.</p>	<p><i>5 character counter to track sample numbers or grid numbers as required.</i></p>

Alan J. Blotcky Research Reactor

Characterization Survey Package A0001

Rooms SW2A and SW2B

Alan J. Blotcky Reactor Facility
CHARACTERIZATION SURVEY PACKAGE A0001
(Rooms SW2A and SW2B)

TABLE OF CONTENTS

1.0	Survey Package Worksheet Rooms SW2A and SW2B of the Reactor Controlled Area.....	3
2.0	Map of the Survey Area.....	8
3.0	M2350 Download Beta Report(s).....	11
4.0	M2350 Download Alpha Report(s).....	17
5.0	Removable Alpha/Beta Activity Laboratory Report(s).....	23
6.0	H-3 Removable Beta Contamination Laboratory Report(s).....	33
7.0	Photos of the Survey Areas.....	36

Section 1

**Survey Package Worksheet Rooms SW2A and
SW2B of the Reactor Controlled Area**

ATTACHMENT 6.2
CHARACTERIZATION SURVEY PACKAGE WORKSHEET

PACKAGE ID NO.: A0001	PREPARED BY: Paul Jones	DATE: 11/12/02
LOCATION: Veterans Affairs Medical Center	APPROVED BY: Betsy Langille	DATE: 11/13/02
FLOOR/ELEVATION: Basement	BUILDING: Research	AREA: Rooms SW2A and SW2B

Area Description

This package is for the dark room(SW2B) and the electron microscope room(SW2A) located in the Southwest corner of the reactor facility.

Historical Information

The Alan J. Blotcky Reactor was used to support nuclear medicine and research programs conducted at the medical center. The total reactor operation was approximately 515,000 kilowatt hours from 1959 to 2001.

Iodine-125 tracer experiments utilized the darkroom during 1980's and early 1990's. Other than Iodine-125 radioactive materials were seldom used in this area. Mostly research personnel for non-radioactive studies used the area. The room was completely refurbished to house a FACS SCANNER (high speed cell sorter) used in cancer research during 1999. In the spring of 2002 the FACS-SCANNER was moved to a new location in anticipation of decommissioning.

Survey Instructions

For the survey, perform measurements according to the Final Survey Plan Section 5.0 and applicable project procedures.

Class I Survey Units

1. Perform a scan over 100% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument.
2. Grid the area as show in the attached drawing(s) for survey locations.
3. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
4. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.

Survey performance (Initial and date as each survey is complete)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross Bq	Smear H-3	Other
L1	L2	L3	L7	L8									
Reactor Building Rooms SW2A and SW2B													
A0001	01F01	TAC01	A thru G	1 thru 5	Floor	Impacted Class I	34 807 "1/18				34 807 "1/18	3 807 12/3	
A0001	01W01	TAC01	A thru B	1 thru 8	Wall 1	Impacted Class I	15 807 "1/18				15 807 "1/18	2 807 12/3	
A0001	01W02	TAC01	A thru B	1 thru 7	Wall 2	Impacted Class I	14 807 "1/18				14 807 "1/18	2 807 12/3	
A0001	01W03	TAC01	A thru B	1 thru 5	Wall 3	Impacted Class I	10 807 "1/18				10 807 "1/18	1 807 12/3	
A0001	01W04	TAC01	A thru B	1 thru 12	Wall 4	Impacted Class I	19 807 "1/18				19 807 "1/18	2 807 12/3	
A0001	01S01	TAC01	ZZZZZ	1 thru 5	Structure 1	Impacted Class I	5 807 "1/18	N/A			5 807 "1/18	1 807 12/3	
A0001	01S02	TAC01	ZZZZZ	1 thru 10	Structure 2	Impacted Class I	10 807 "1/18	N/A			10 807 "1/18	1 807 12/3	
A0001	01S03	TAC01	ZZZZZ	1 thru 5	Structure 3	Impacted Class I	5 807 "1/18	N/A			5 807 "1/18	1 807 12/3	

Summer from 10-12 until the

Survey Instructions (continued)

Class III Survey Units

1. Perform a scan over approximately 10% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument. All areas of elevated activity should be identified for further investigation and potential decontamination.
2. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
3. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.
4. Mark the location of the direct beta measurements and smear with a paint stick or equivalent on the surfaces of the survey unit.

General Survey Instructions (Class I, II, and III)

1. Use LMI Data Logger M2350-1 with M43-68 style Gas Flow Proportional for direct beta survey measurements.
2. Perform one 5 minute pre-survey shielded background and one 5 minute post-survey shielded background for each detector used for the survey.
3. Verify that the direct measurement MDA is less than 25% of the expected DCGL (<1,250 dpm/100cm²) for direct beta measurements. If the field background is less than 1000 CPM, use 10-second count time for each direct beta measurement. If the field background is greater than 1000 CPM, obtain further directions from the Project Manager or designee.
4. Download each M2350-1 at completion of the survey, shift and/or prior to performing surveys in another survey area (before changing L1 codes).
5. Use location codes provided below for direct beta measurements, as appropriate.
6. Use the Package L1, L2, and L8 codes when labeling smears samples for counting.
7. When all measurements, samples or scans are collected, initial and date the "MEASUREMENT TYPE" block on the survey package to indicate the measurements or samples were collected.
8. Note any problems, comments, or other information pertinent to the data or sample collection under the "NOTES" section.



Package Review

Date Package Completed

12/21/02

Package Reviewed by and Date

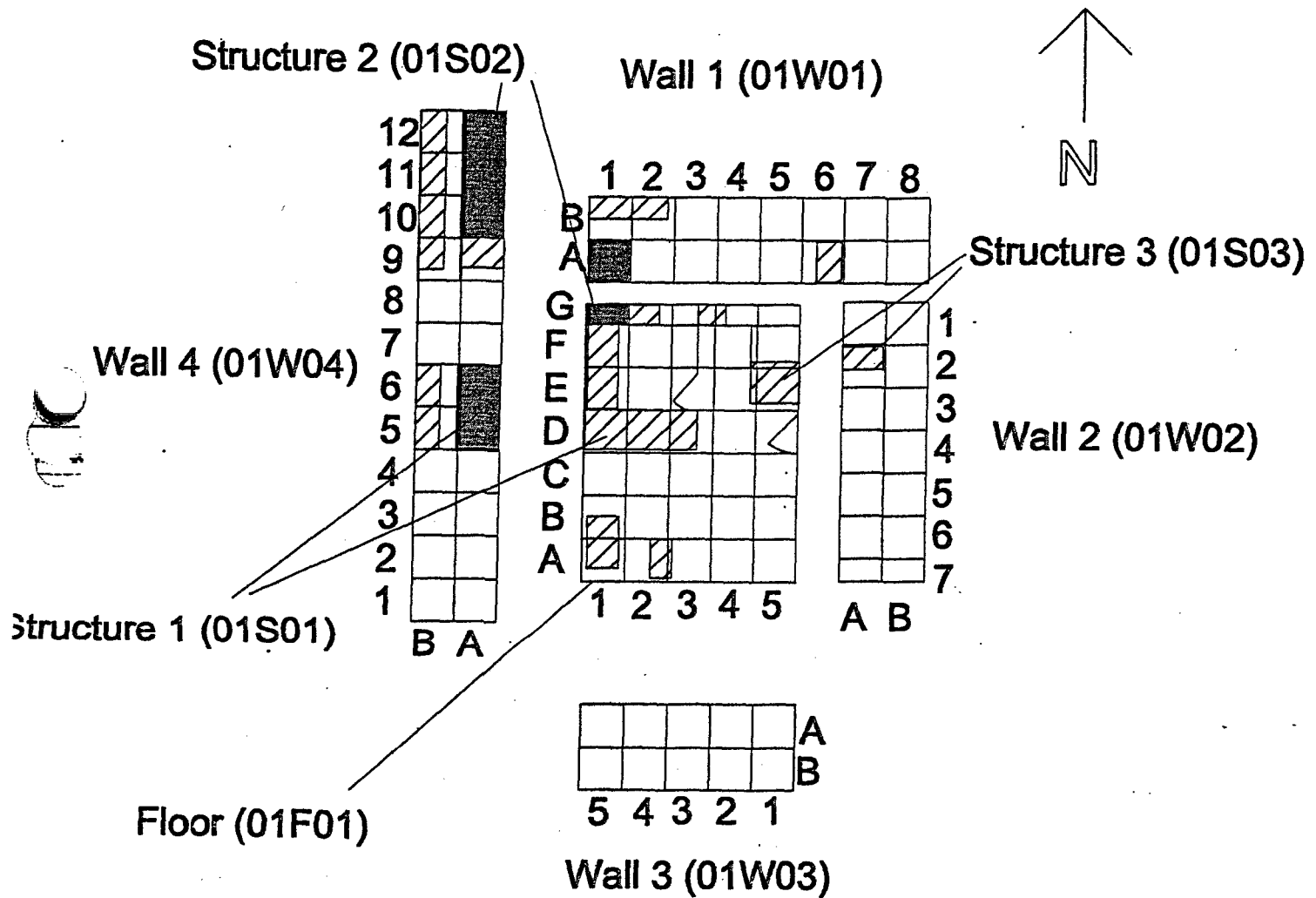
PLAges 1/24/03

Notes

Section 2

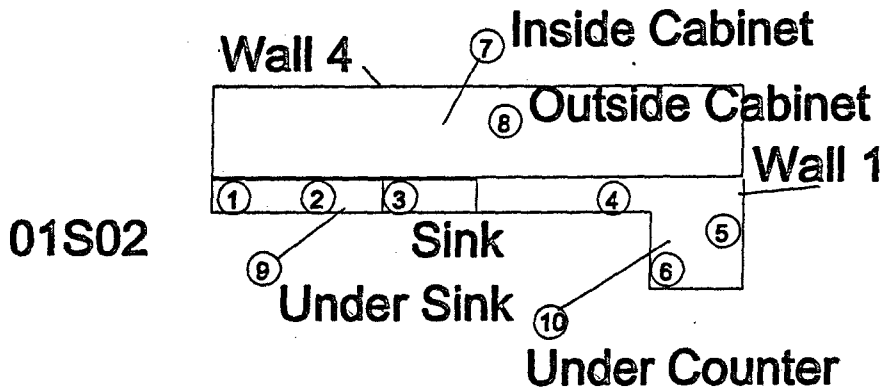
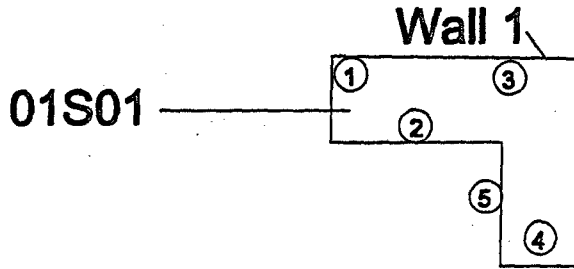
Maps of the Survey Areas

Package A0001 Rooms 2A & 2B

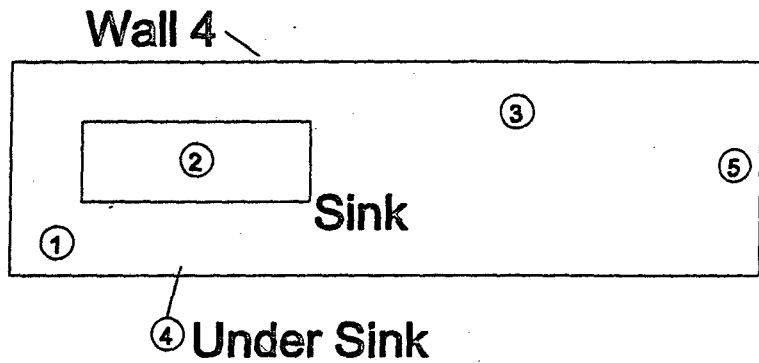


- - Denotes 1 Square Meter Grid
- ▨ - Denotes Partially Obstructed Grid Area
- - Denotes Fully Obstructed Grid Area

Package A0001 Structures



01S03



Ⓢ Denotes Survey Measurement Location (See L8 Code)

Note: This drawing not to scale.

Section 3

M2350 Download Beta Report(s)



M2350-1 Download BETA Report

File Name : 00000018		Survey Description :Pkg.A0001/Rms.2A&2B/Floor,Walls,& Structures	
Survey Reason : Characterization			
User ID : LCF0451		Technician Name : Linda Finn	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68B	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : BETA	Detector Type : 02200 : 126 cm2 Gas Proportional Detector		
Detector Area : 126	Efficiency : 0.228	Survey Date : 11/18/02	

Linda Finn Print Name	<i>L.B. Finn</i> Signature	11/18/02 Date
N/A Print Name	N/A Signature	N/A Date

Comments:

Extra data point taken on OI/01. This point was taken for 30 sec instead of 10 sec. This was replaced with a 0 Bq count.

207

Sign-Off PAUL JONES *Paul Jones* 11/26/02
 Print Name Signature Date

Duratek Beta Survey Report

Download File Name: 00000018

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0001	01F01	5	186.0	30	FLDCT	B9999	0000A	1	302	244
A0001	01F01	6	66.0	10	FLDCT	B9999	0000A	1	302	327
A0001	01F01	7	62.0	10	FLDCT	B9999	0000A	2	302	244
A0001	01F01	8	54.0	10	FLDCT	B9999	0000A	3	302	77
A0001	01F01	9	52.0	10	FLDCT	B9999	0000A	4	302	35
A0001	01F01	10	59.0	10	FLDCT	B9999	0000A	5	302	181
A0001	01F01	11	58.0	10	FLDCT	B9999	0000B	1	302	160
A0001	01F01	12	72.0	10	FLDCT	B9999	0000B	2	302	453
A0001	01F01	13	64.0	10	FLDCT	B9999	0000B	3	302	285
A0001	01F01	14	63.0	10	FLDCT	B9999	0000B	4	302	265
A0001	01F01	15	62.0	10	FLDCT	B9999	0000B	5	302	244
A0001	01F01	16	65.0	10	FLDCT	B9999	0000C	1	302	306
A0001	01F01	17	51.0	10	FLDCT	B9999	0000C	2	302	14
A0001	01F01	18	59.0	10	FLDCT	B9999	0000C	3	302	181
A0001	01F01	19	59.0	10	FLDCT	B9999	0000C	4	302	181
A0001	01F01	20	68.0	10	FLDCT	B9999	0000C	5	302	369
A0001	01F01	21	47.0	10	FLDCT	B9999	0000D	1	302	-70
A0001	01F01	22	56.0	10	FLDCT	B9999	0000D	2	302	118
A0001	01F01	23	75.0	10	FLDCT	B9999	0000D	3	302	515
A0001	01F01	24	59.0	10	FLDCT	B9999	0000D	4	302	181
A0001	01F01	25	69.0	10	FLDCT	B9999	0000D	5	302	390
A0001	01F01	26	70.0	10	FLDCT	B9999	0000E	1	302	411
A0001	01F01	27	42.0	10	FLDCT	B9999	0000E	2	302	-174
A0001	01F01	28	70.0	10	FLDCT	B9999	0000E	3	302	411
A0001	01F01	29	45.0	10	FLDCT	B9999	0000E	4	302	-111
A0001	01F01	30	74.0	10	FLDCT	B9999	0000E	5	302	494
A0001	01F01	31	47.0	10	FLDCT	B9999	0000F	1	302	-70
A0001	01F01	32	73.0	10	FLDCT	B9999	0000F	2	302	473
A0001	01F01	33	55.0	10	FLDCT	B9999	0000F	3	302	97
A0001	01F01	34	71.0	10	FLDCT	B9999	0000F	4	302	432
A0001	01F01	35	68.0	10	FLDCT	B9999	0000F	5	302	369
A0001	01F01	36	64.0	10	FLDCT	B9999	0000G	2	302	285
A0001	01F01	37	81.0	10	FLDCT	B9999	0000G	3	302	640
A0001	01F01	38	67.0	10	FLDCT	B9999	0000G	4	302	348
A0001	01F01	39	57.0	10	FLDCT	B9999	0000G	5	302	139
A0001	01W01	42	41.0	10	FLDCT	B9999	0000A	2	302	-185
A0001	01W01	43	53.0	10	FLDCT	B9999	0000A	3	302	56
A0001	01W01	44	50.0	10	FLDCT	B9999	0000A	4	302	-7
A0001	01W01	45	54.0	10	FLDCT	B9999	0000A	5	302	77

<p>Beta Flag</p> <p>Beta Max Flag</p>

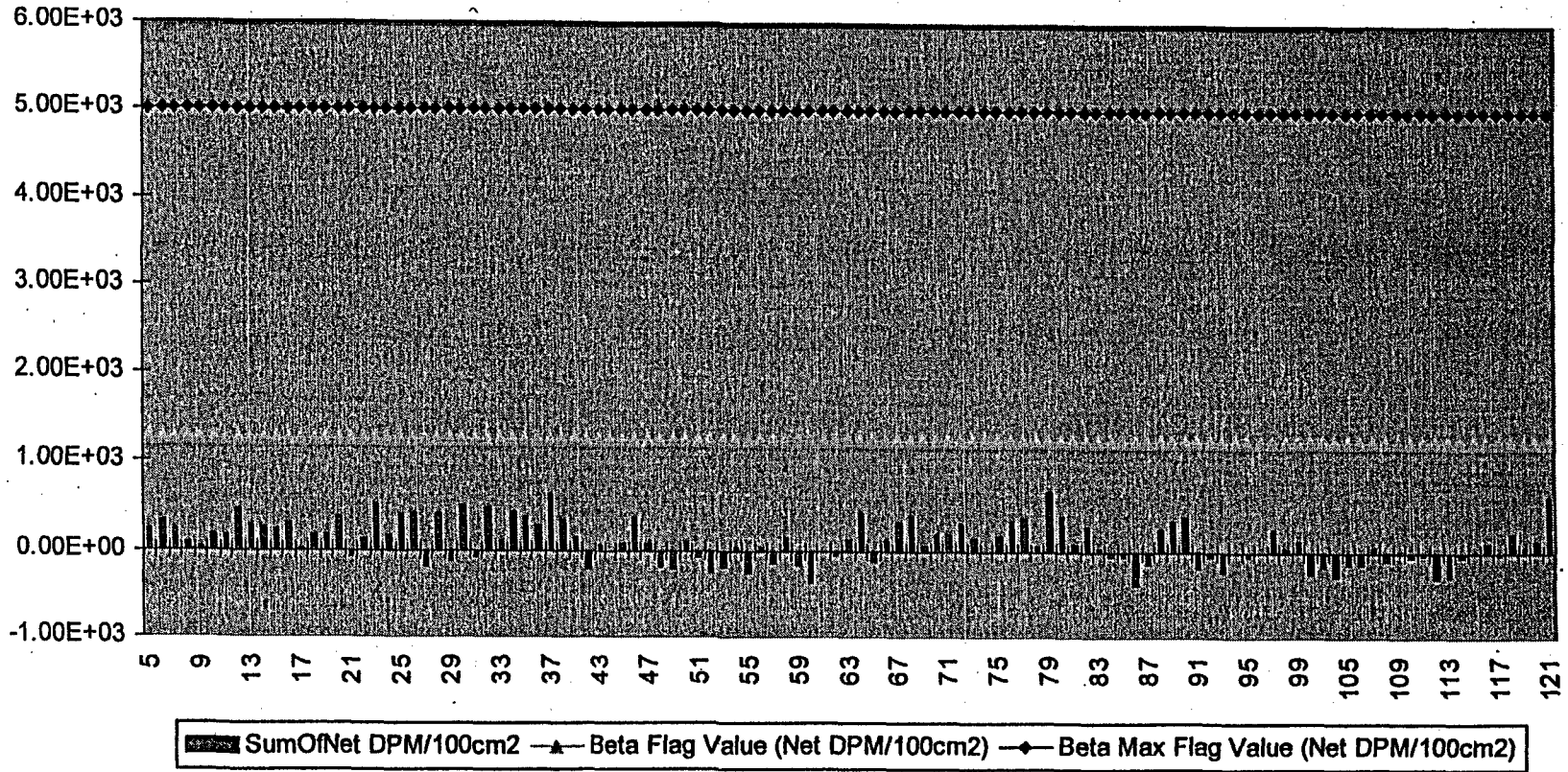
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0001	01W01	46	68.0	10	FLDCT	B9999	0000A	6	302	369
A0001	01W01	47	54.0	10	FLDCT	B9999	0000A	7	302	77
A0001	01W01	48	42.0	10	FLDCT	B9999	0000A	8	302	-174
A0001	01W01	49	40.0	10	FLDCT	B9999	0000B	1	302	-216
A0001	01W01	50	55.0	10	FLDCT	B9999	0000B	2	302	67
A0001	01W01	51	47.0	10	FLDCT	B9999	0000B	3	302	-70
A0001	01W01	52	38.0	10	FLDCT	B9999	0000B	4	302	-258
A0001	01W01	53	42.0	10	FLDCT	B9999	0000B	5	302	-174
A0001	01W01	54	52.0	10	FLDCT	B9999	0000B	6	302	35
A0001	01W01	55	38.0	10	FLDCT	B9999	0000B	7	302	-258
A0001	01W01	56	52.0	10	FLDCT	B9999	0000B	8	302	35
A0001	01W02	57	44.0	10	FLDCT	B0001	0000A	1	302	-132
A0001	01W02	58	57.0	10	FLDCT	B0001	0000A	2	302	139
A0001	01W02	59	43.0	10	FLDCT	B0001	0000A	3	302	-153
A0001	01W02	60	33.0	10	FLDCT	B9999	0000A	4	302	-362
A0001	01W02	61	50.0	10	FLDCT	B0001	0000A	5	302	-7
A0001	01W02	62	48.0	10	FLDCT	B0001	0000A	6	302	-49
A0001	01W02	63	56.0	10	FLDCT	B0001	0000A	7	302	118
A0001	01W02	64	71.0	10	FLDCT	B0001	0000B	1	302	432
A0001	01W02	65	45.0	10	FLDCT	B0001	0000B	2	302	-111
A0001	01W02	66	56.0	10	FLDCT	B0001	0000B	3	302	118
A0001	01W02	67	66.0	10	FLDCT	B9999	0000B	4	302	327
A0001	01W02	68	69.0	10	FLDCT	B0001	0000B	5	302	390
A0001	01W02	69	53.0	10	FLDCT	B0001	0000B	6	302	56
A0001	01W02	70	60.0	10	FLDCT	B0001	0000B	7	302	202
A0001	01W03	71	60.0	10	FLDCT	B0001	0000A	1	302	202
A0001	01W03	72	65.0	10	FLDCT	B0001	0000A	2	302	306
A0001	01W03	73	57.0	10	FLDCT	B0001	0000A	3	302	139
A0001	01W03	74	50.0	10	FLDCT	B0001	0000A	4	302	-7
A0001	01W03	75	59.0	10	FLDCT	B0001	0000A	5	302	181
A0001	01W03	76	67.0	10	FLDCT	B0001	0000B	1	302	348
A0001	01W03	77	68.0	10	FLDCT	B0001	0000B	2	302	369
A0001	01W03	78	53.0	10	FLDCT	B0001	0000B	3	302	56
A0001	01W03	79	83.0	10	FLDCT	B0001	0000B	4	302	682
A0001	01W03	80	69.0	10	FLDCT	B0001	0000B	5	302	390
A0001	01W04	81	54.0	10	FLDCT	B0001	0000A	1	302	77
A0001	01W04	82	64.0	10	FLDCT	B0001	0000A	2	302	285
A0001	01W04	83	52.0	10	FLDCT	B9999	0000A	3	302	35
A0001	01W04	84	48.0	10	FLDCT	B9999	0000A	4	302	-49
A0001	01W04	85	48.0	10	FLDCT	B9999	0000A	7	302	-49
A0001	01W04	86	32.0	10	FLDCT	B9999	0000A	8	302	-383
A0001	01W04	87	44.0	10	FLDCT	B0001	0000A	9	302	-132
A0001	01W04	88	63.0	10	FLDCT	B0001	0000B	1	302	265
A0001	01W04	89	67.0	10	FLDCT	B0001	0000B	2	302	348

Beta Flag
Beta Max Flag

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0001	01W04	90	69.0	10	FLDCT	B9999	0000B	3	302	390
A0001	01W04	91	42.0	10	FLDCT	B9999	0000B	4	302	-174
A0001	01W04	92	48.0	10	FLDCT	B9999	0000B	5	302	-49
A0001	01W04	93	39.0	10	FLDCT	B9999	0000B	6	302	-237
A0001	01W04	94	50.0	10	FLDCT	B9999	0000B	7	302	-7
A0001	01W04	95	48.0	10	FLDCT	B9999	0000B	8	302	-49
A0001	01W04	96	50.0	10	FLDCT	B0001	0000B	9	302	-7
A0001	01W04	97	63.0	10	FLDCT	B0001	0000B	10	302	265
A0001	01W04	98	52.0	10	FLDCT	B0001	0000B	11	302	35
A0001	01W04	99	56.0	10	FLDCT	B0001	0000B	12	302	118
A0001	01S03	102	38.0	10	FLDCT	B9999	ZZZZ	1	302	-258
A0001	01S03	103	43.0	10	FLDCT	B9999	ZZZZ	2	302	-153
A0001	01S03	104	37.0	10	FLDCT	B9999	ZZZZ	3	302	-278
A0001	01S03	105	44.0	10	FLDCT	B9999	ZZZZ	4	302	-132
A0001	01S03	106	44.0	10	FLDCT	B9999	ZZZZ	5	302	-132
A0001	01S02	107	53.0	10	FLDCT	B9999	ZZZZ	1	302	56
A0001	01S02	108	46.0	10	FLDCT	B9999	ZZZZ	2	302	-91
A0001	01S02	109	51.0	10	FLDCT	B9999	ZZZZ	3	302	14
A0001	01S02	110	48.0	10	FLDCT	B9999	ZZZZ	4	302	-49
A0001	01S02	111	49.0	10	FLDCT	B9999	ZZZZ	5	302	-28
A0001	01S02	112	36.0	10	FLDCT	B9999	ZZZZ	6	302	-299
A0001	01S02	113	37.0	10	FLDCT	B9999	ZZZZ	7	302	-278
A0001	01S02	114	48.0	10	FLDCT	B9999	ZZZZ	8	302	-49
A0001	01S02	115	51.0	10	FLDCT	B9999	ZZZZ	9	302	14
A0001	01S02	116	55.0	10	FLDCT	B9999	ZZZZ	10	302	97
A0001	01S01	117	49.0	10	FLDCT	B9999	ZZZZ	1	302	-28
A0001	01S01	118	61.0	10	FLDCT	B9999	ZZZZ	2	302	223
A0001	01S01	119	53.0	10	FLDCT	B9999	ZZZZ	3	302	56
A0001	01S01	120	56.0	10	FLDCT	B9999	ZZZZ	4	302	118
A0001	01S01	121	81.0	10	FLDCT	B9999	ZZZZ	5	302	640

Beta Flag
Beta Max Flag

M2350-1 Sample Results



Section 4

M2350 Download Alpha Report(s)

Duratek Alpha Survey Report

Download File Name: 00000035

Package ID(L1)	Surface (L2)	Sampl e#	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0001	01F01	5	3.0	20	FLDCT	B9999	0000A	1	2.7	26
A0001	01F01	6	1.0	20	FLDCT	B9999	0000A	2	2.7	1
A0001	01F01	7	1.0	20	FLDCT	B9999	0000A	3	2.7	1
A0001	01F01	8	1.0	20	FLDCT	B9999	0000A	4	2.7	1
A0001	01F01	9	3.0	20	FLDCT	B9999	0000A	5	2.7	26
A0001	01F01	10	0.0	20	FLDCT	B9999	0000B	1	2.7	-11
A0001	01F01	11	3.0	20	FLDCT	B9999	0000B	2	2.7	26
A0001	01F01	12	2.0	20	FLDCT	B9999	0000B	3	2.7	14
A0001	01F01	13	1.0	20	FLDCT	B9999	0000B	4	2.7	1
A0001	01F01	14	0.0	20	FLDCT	B9999	0000B	5	2.7	-11
A0001	01F01	15	1.0	20	FLDCT	B9999	0000C	1	2.7	1
A0001	01F01	16	2.0	20	FLDCT	B9999	0000C	2	2.7	14
A0001	01F01	17	1.0	20	FLDCT	B9999	0000C	3	2.7	1
A0001	01F01	18	2.0	20	FLDCT	B9999	0000C	4	2.7	14
A0001	01W03	19	0.0	20	FLDCT	B0001	0000A	1	2.7	-11
A0001	01W03	20	1.0	20	FLDCT	B0001	0000A	2	2.7	1
A0001	01W03	21	2.0	20	FLDCT	B0001	0000A	3	2.7	14
A0001	01W03	22	1.0	20	FLDCT	B0001	0000A	4	2.7	1
A0001	01W03	23	2.0	20	FLDCT	B0001	0000A	5	2.7	14
A0001	01W03	24	0.0	20	FLDCT	B0001	0000B	1	2.7	-11
A0001	01W03	25	0.0	20	FLDCT	B0001	0000B	2	2.7	-11
A0001	01W03	26	2.0	20	FLDCT	B0001	0000B	3	2.7	14
A0001	01W03	27	1.0	20	FLDCT	B0001	0000B	4	2.7	1
A0001	01W03	28	0.0	20	FLDCT	B0001	0000B	5	2.7	-11
A0001	01F01	29	1.0	20	FLDCT	B9999	0000D	1	2.7	1
A0001	01F01	30	0.0	20	FLDCT	B9999	0000D	2	2.7	-11
A0001	01F01	31	1.0	20	FLDCT	B9999	0000D	3	2.7	1
A0001	01F01	32	1.0	20	FLDCT	B9999	0000D	4	2.7	1
A0001	01F01	33	2.0	20	FLDCT	B9999	0000D	5	2.7	14
A0001	01F01	34	1.0	20	FLDCT	B9999	0000E	1	2.7	1
A0001	01F01	35	1.0	20	FLDCT	B9999	0000E	2	2.7	1
A0001	01F01	36	0.0	20	FLDCT	B9999	0000E	3	2.7	-11
A0001	01F01	37	0.0	20	FLDCT	B9999	0000E	4	2.7	-11
A0001	01F01	38	2.0	20	FLDCT	B9999	0000E	5	2.7	14
A0001	01F01	39	3.0	20	FLDCT	B9999	0000F	1	2.7	26
A0001	01F01	40	0.0	20	FLDCT	B9999	0000F	2	2.7	-11
A0001	01F01	41	5.0	20	FLDCT	B9999	0000F	3	2.7	51
A0001	01F01	42	2.0	20	FLDCT	B9999	0000F	4	2.7	14

Alpha Flag	80
Alpha Max Flag	200

Package ID(L1)	Surface (L2)	Sampl e #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0001	01F01	43	0.0	20	FLDCT	B9999	0000F	5	2.7	-11
A0001	01F01	44	5.0	20	FLDCT	B9999	0000G	2	2.7	51
A0001	01F01	45	2.0	20	FLDCT	B9999	0000G	3	2.7	14
A0001	01F01	46	1.0	20	FLDCT	B9999	0000G	4	2.7	1
A0001	01F01	47	0.0	20	FLDCT	B9999	0000G	5	2.7	-11
A0001	01W01	48	2.0	20	FLDCT	B9999	0000A	2	2.7	14
A0001	01W01	49	2.0	20	FLDCT	B9999	0000A	3	2.7	14
A0001	01W01	50	1.0	20	FLDCT	B9999	0000A	4	2.7	1
A0001	01W01	51	1.0	20	FLDCT	B9999	0000A	5	2.7	1
A0001	01W01	52	2.0	20	FLDCT	B9999	0000A	6	2.7	14
A0001	01W01	53	0.0	20	FLDCT	B9999	0000A	7	2.7	-11
A0001	01W01	54	2.0	20	FLDCT	B9999	0000A	8	2.7	14
A0001	01W01	55	1.0	20	FLDCT	B9999	0000B	1	2.7	1
A0001	01W01	56	2.0	20	FLDCT	B9999	0000B	2	2.7	14
A0001	01W01	57	0.0	20	FLDCT	B9999	0000B	3	2.7	-11
A0001	01W01	58	1.0	20	FLDCT	B9999	0000B	4	2.7	1
A0001	01W01	59	2.0	20	FLDCT	B9999	0000B	5	2.7	14
A0001	01W01	60	1.0	20	FLDCT	B9999	0000B	6	2.7	1
A0001	01W01	61	0.0	20	FLDCT	B9999	0000B	7	2.7	-11
A0001	01W01	62	1.0	20	FLDCT	B9999	0000B	8	2.7	1
A0001	01W02	63	1.0	20	FLDCT	B0001	0000A	1	2.7	1
A0001	01W02	64	2.0	20	FLDCT	B0001	0000A	2	2.7	14
A0001	01W02	65	1.0	20	FLDCT	B0001	0000A	3	2.7	1
A0001	01W02	66	1.0	20	FLDCT	B0001	0000A	4	2.7	1
A0001	01W02	67	0.0	20	FLDCT	B0001	0000A	5	2.7	-11
A0001	01W02	68	2.0	20	FLDCT	B0001	0000A	6	2.7	14
A0001	01W02	69	0.0	20	FLDCT	B0001	0000A	7	2.7	-11
A0001	01W02	70	0.0	20	FLDCT	B0001	0000B	1	2.7	-11
A0001	01W02	71	1.0	20	FLDCT	B0001	0000B	2	2.7	1
A0001	01W02	72	1.0	20	FLDCT	B0001	0000B	3	2.7	1
A0001	01W02	73	3.0	20	FLDCT	B0001	0000B	4	2.7	26
A0001	01W02	74	1.0	20	FLDCT	B0001	0000B	5	2.7	1
A0001	01W02	75	2.0	20	FLDCT	B0001	0000B	6	2.7	14
A0001	01W02	76	3.0	20	FLDCT	B0001	0000B	7	2.7	26
A0001	01W04	77	1.0	20	FLDCT	B0001	0000A	1	2.7	1
A0001	01W04	78	1.0	20	FLDCT	B0001	0000A	2	2.7	1
A0001	01W04	79	0.0	20	FLDCT	B0001	0000A	3	2.7	-11
A0001	01W04	80	0.0	20	FLDCT	B0001	0000A	4	2.7	-11
A0001	01W04	81	0.0	20	FLDCT	B0001	0000A	5	2.7	-11
A0001	01W04	82	2.0	20	FLDCT	B0001	0000A	6	2.7	14
A0001	01W04	83	4.0	20	FLDCT	B0001	0000A	7	2.7	38
A0001	01W04	84	2.0	20	FLDCT	B0001	0000B	1	2.7	14

Alpha Flag 80 - _____
Alpha Max Flag 200 

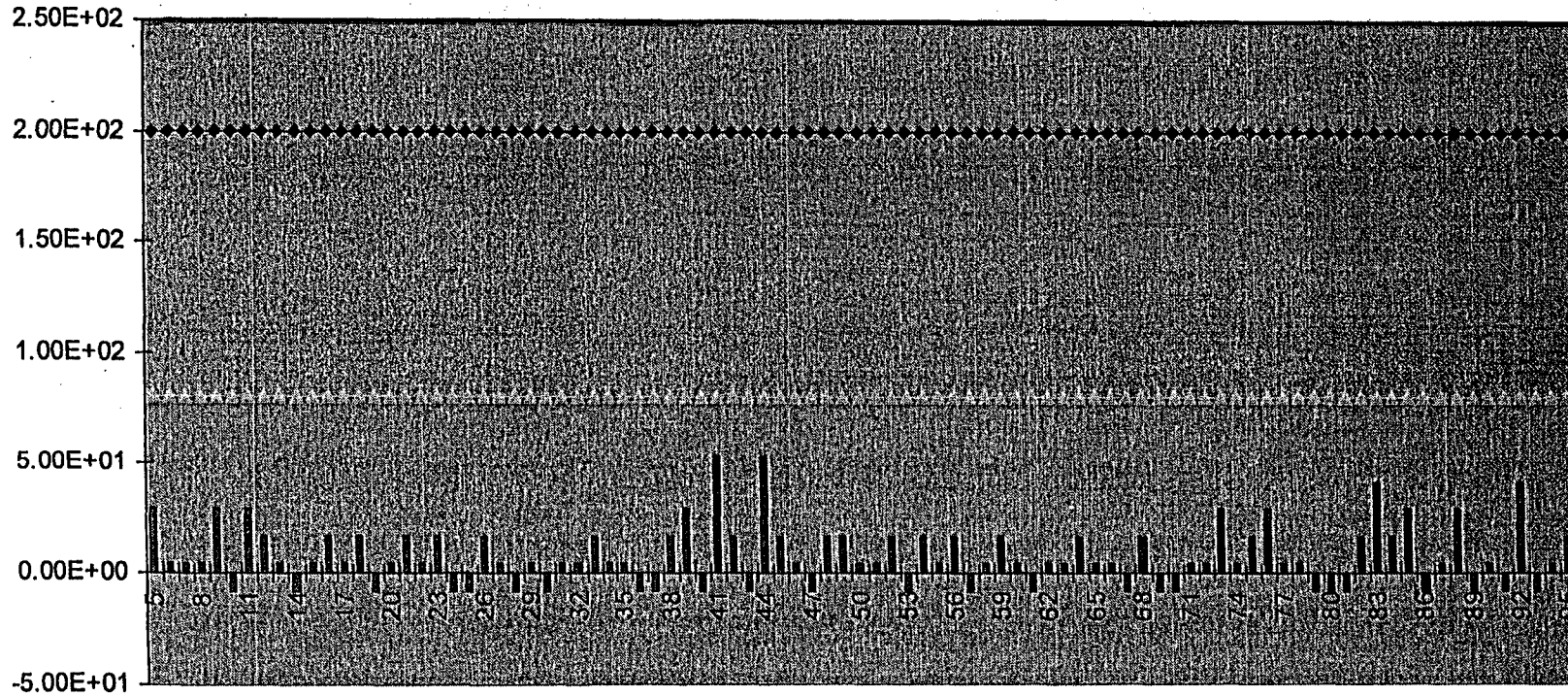
<i>Package ID(L1)</i>	<i>Surface (L2)</i>	<i>Sampl e #</i>	<i>Counts</i>	<i>Time (sec)</i>	<i>Count Type (L5)</i>	<i>Material Type (L6)</i>	<i>Grid ID(L7)</i>	<i>Location # (L8)</i>	<i>Bkgd</i>	<i>Net DPM/100cm2</i>
A0001	01W04	85	3.0	20	FLDCT	B0001	0000B	2	2.7	26
A0001	01W04	86	0.0	20	FLDCT	B0001	0000B	3	2.7	-11
A0001	01W04	87	1.0	20	FLDCT	B0001	0000B	4	2.7	1
A0001	01W04	88	3.0	20	FLDCT	B0001	0000B	5	2.7	26
A0001	01W04	89	0.0	20	FLDCT	B0001	0000B	6	2.7	-11.
A0001	01W04	90	1.0	20	FLDCT	B0001	0000B	7	2.7	1
A0001	01W04	91	0.0	20	FLDCT	B0001	0000B	8	2.7	-11
A0001	01W04	92	4.0	20	FLDCT	B0001	0000B	9	2.7	38
A0001	01W04	93	0.0	20	FLDCT	B0001	0000B	10	2.7	-11
A0001	01W04	94	1.0	20	FLDCT	B0001	0000B	11	2.7	1
A0001	01W04	95	2.0	20	FLDCT	B0001	0000B	12	2.7	14

<i>Alpha Flag</i>	80	
<i>Alpha Max Flag</i>	200	

Download Name: 00000035

Survey Description: A0001 W01-04, F01 Pre S/C

M2350-1 Sample Results



SumOfNet DPM/100cm2 ▲ Alpha Flag Value (Net DPM/100cm2) ◆ Alpha Max Flag Value (Net DPM/100cm2)

Page ~~4 of 4~~ 5 of 5 ³⁰⁴
1-10-03

Section 5

**Removable Alpha/Beta Activity Laboratory
Report(s)**

Omni V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002

9:15:00

Batch ID: VA Smear Analysis - 200212040825

Acquisition Date: 12/4/2002

Alpha Bkg 0.25 cpm

Group: A Sample Location: *A000101 Fol*

Batch Key 6,527

Beta Bkg 1.95 cpm

Device: LB-5100 #15632

Operating Voltage: 1,417.0

Alpha Efficiency 0.2540

Selected Geometry: Swipe/Smear

Alpha to Beta Crosstalk 0.00

Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204082509-A1	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204082649-A2	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204082819-A3	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204082939-A4	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204083109-A5	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204083229-A6	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204083359-A7	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204083519-A8	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204083649-A9	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204083810-A10	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204083940-A11	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204084100-A12	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204084230-A13	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204084400-A14	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204084520-A15	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204084650-A16	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204084810-A17	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204084940-A18	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204085100-A19	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204085230-A20	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204085350-A21	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204085520-A22	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204085640-A23	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204085811-A24	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204085931-A25	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204090101-A26	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204090221-A27	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204090351-A28	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204090511-A29	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA

Performed By: *D. Schuman*

Date: *12/4/02*

A0001 01 F01

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
9:15:30

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021204090641-A30	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204090801-A31	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204090931-A32	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204091051-A33	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204091221-A34	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: D. Schumacher Date 12/4/02

Omni V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
9:35:00

Batch ID: VA Smear Analysis - 200212040832

Acquisition Date: 12/4/2002

Alpha Bkg 0.25 cpm

Group: B Sample Location: *A0001 01 W01*

Batch Key 6,535

Beta Bkg 1.95 cpm

Device: LB-5100 #15632

Operating Voltage: 1,417.0

Alpha Efficiency 0.2540

Selected Geometry: Swipe/Smear

Alpha to Beta Crosstalk 0.00

Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204083206-B35	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204091508-B36	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204091638-B37	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204091758-B38	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204091928-B39	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204092048-B40	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204092218-B41	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204092338-B42	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204092509-B43	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204092639-B44	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204092759-B45	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204092929-B46	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204093049-B47	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204093219-B48	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204093339-B49	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA

Performed By: D. Schumaker Date 12/4/02

Omni V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002

9:55 AM

Batch ID:	VA Smear Analysis - 200212040837	Acquisition Date:	12/4/2002	Alpha Bkg	0.25 cpm
Group:	C Sample Location: <i>A0001 01 W02</i>	Batch Key	6,536	Beta Bkg	1.95 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204083725-C50	1.00	0.75	2.96	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204093628-C51	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204093758-C52	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204093929-C53	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204094049-C54	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204094219-C55	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204094339-C56	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204094509-C57	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204094629-C58	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204094759-C59	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204094919-C60	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204095049-C61	1.00	1.75	6.90	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204095209-C62	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204095339-C63	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: *D. Schumaker* Date *12/4/02*

P27

Omar V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
10:09:11

Batch ID: VA Smear Analysis - 200212040837	Acquisition Date: 12/4/2002	Alpha Bkg 0.25 cpm
Group: D Sample Location: <i>A000101 W03</i>	Batch Key 6,538	Beta Bkg 1.95 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204083736-D64	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204095630-D65	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204095750-D66	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204095920-D67	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204100040-D68	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204100210-D69	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204100330-D70	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204100500-D71	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204100630-D72	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204100750-D73	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA

Performed By: *D. Schumann* Date *12/4/02*

Omnivision V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
10:30:14

Batch ID:	VA Smear Analysis - 200212040844	Acquisition Date:	12/4/2002	Alpha Bkg	0.25 cpm
Group:	E Sample Location: <i>A0001 01 W04</i>	Batch Key	6,540	Beta Bkg	1.95 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204084418-E74	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204101043-E75	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204101213-E76	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204101333-E77	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204101503-E78	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204101623-E79	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204101753-E80	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204101914-E81	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204102044-E82	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204102204-E83	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204102334-E84	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204102454-E85	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204102624-E86	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204102744-E87	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204102914-E88	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204103034-E89	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204103204-E90	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204103324-E91	1.00	0.75	2.96	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204103454-E92	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA

Performed By: D. Schamner Date 12/4/02

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
10:43:51

Batch ID:	VA Smear Analysis - 200212040848	Acquisition Date:	12/4/2002	Alpha Bkg	0.25 cpm
Group:	F Sample Location: <i>A000101501</i>	Batch Key	6,541	Beta Bkg	1.95 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021204084854-F1	1.00	0.75	2.96	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204103750-F2	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204103910-F3	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204104040-F4	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204104200-F5	1.00	-0.25	-0.99	17.32	<MDA	3.05	12.89	31.33	<MDA

Performed By: D. Schumaker Date 12/4/02

P30

Omicron V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
10:57:51

Batch ID: VA Smear Analysis - 200212040849

Acquisition Date: 12/4/2002

Alpha Bkg 0.25 cpm

Group: G Sample Location: *A000101S02*

Batch Key 6,542

Beta Bkg 1.95 cpm

Device: LB-5100 #15632

Operating Voltage: 1,417.0

Alpha Efficiency 0.2540

Selected Geometry: Swipe/Smear

Alpha to Beta Crosstalk 0.00

Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204084903-G6	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204104500-G7	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204104620-G8	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204104750-G9	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204104910-G10	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204105040-G11	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204105200-G12	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204105330-G13	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204105450-G14	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204105620-G15	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA

Performed By: *D. S. [Signature]* Date *12/4/02*

On V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
11:37 AM

Batch ID: VA Smear Analysis - 200212040849	Acquisition Date: 12/4/2002	Alpha Bkg 0.25 cpm
Group: H Sample Location: <i>A000101503</i>	Batch Key 6,543	Beta Bkg 1.95 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021204084911-H16	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204105908-H17	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204110038-H18	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204110158-H19	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204110328-H20	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA

Performed By: *D. Schumaker* Date *12/4/02*

P32

Section 6

**H-3 Removable Beta Contamination
Laboratory Report(s)**

LABORATORY ANALYSIS FORM

P34

Laboratory Sample No.: RC- 0204818
 Survey No.:
 HRWP No.:

1. URGENT ROUTINE (circle one) >100 cpm + Bkg Y/N if yes: ncpm / uR/hr/

Sample Location / Description: Omaha, NE VA Project, A000101 F01, W01-W04, S01-S03

Sample Type (circle one): smears, no.: 13 soil water leachate other

Sampled By: L. Finn Date 12-3-02 Time 1600

2. Analysis Requested (circle)

Gross Beta Gross Alpha HTO Gamma-quantitative Gamma-qualitative Other

3. Unconditional Release Yes / No If Yes, is sample representative of entire contents? Yes / No

Analysis (nuclide)	Result	+ or -	Units	MDA (if required)	Comments	Analysis Date
<u>Smear 1-3 / HTO</u>	<u>< MOA</u>	<u>N/A</u>	<u>dpm</u>	<u>max 59</u>	<u>A000101 F01 #1-3</u>	<u>12-10-02</u>
<u>4-5</u>				<u>max 53</u>	<u>A000101 W01 #1+2</u>	
<u>6-7</u>				<u>max 53</u>	<u>A000101 W02 #1+2</u>	
<u>8</u>				<u>53</u>	<u>A000101 W03 #1</u>	
<u>9-10</u>				<u>max 53</u>	<u>A000101 W04 #1+2</u>	
<u>11</u>				<u>57</u>	<u>A000101 S01 #1</u>	
<u>12</u>				<u>66</u>	<u>A000101 S02 #1</u>	
<u>13</u>				<u>56</u>	<u>A000101 S03 #1</u>	
<div style="display: flex; justify-content: space-around; align-items: center;"> N A </div>						

Completed By: Nancy Proctor (Lab Tech.) Date: 12-11-02

Approved By: Nancy Proctor (Lab Supervisor or designee) Date: 12-11-02

Results Received By: R.A. Jones (Technician / Sampler) Date: 12-30-01

Reviewed By: LL. Finn (HRSO or designee) Date: 1-8-02

LABORATORY ANALYSIS FORM

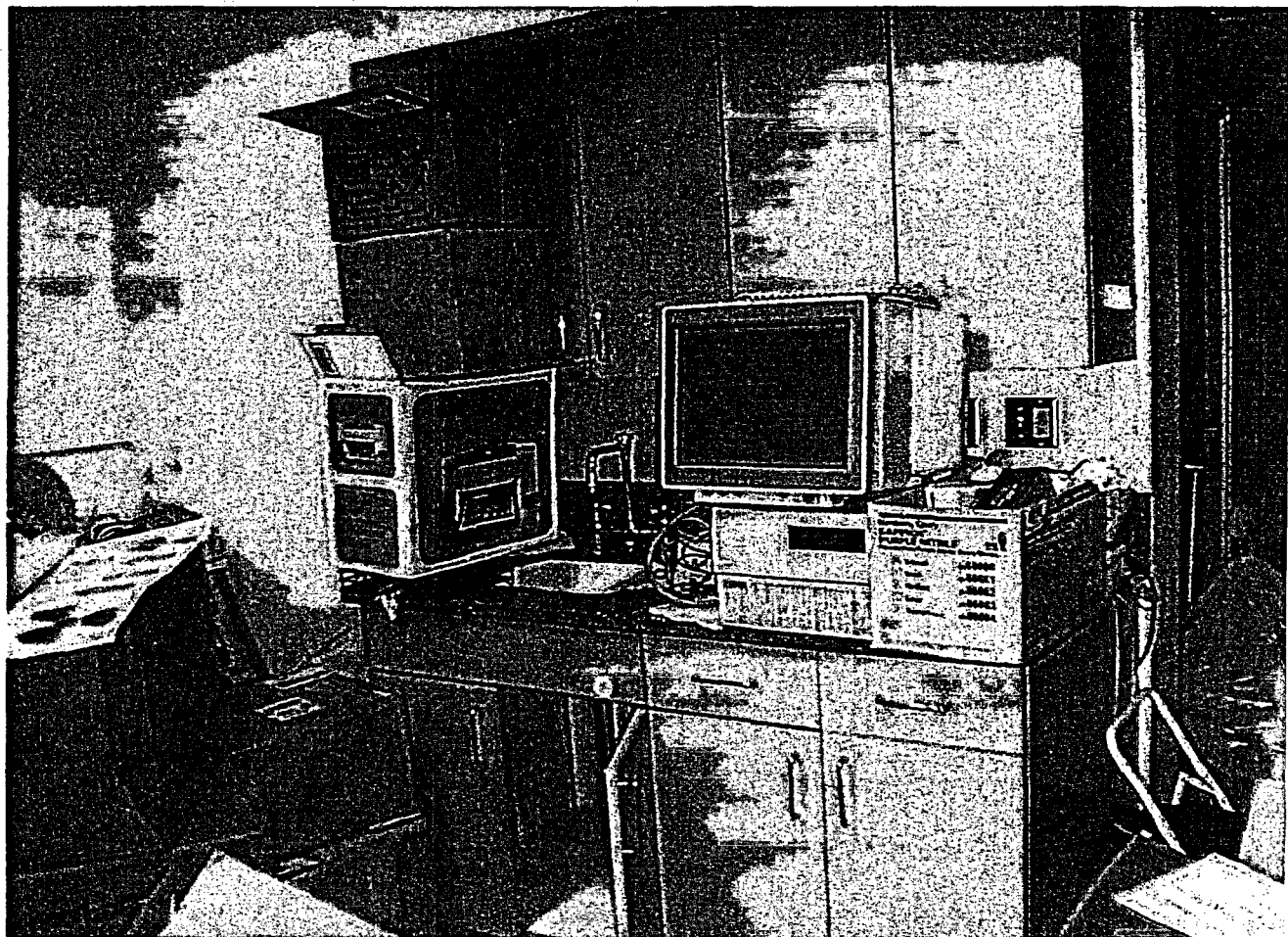
P35

✓	Instrument Used	Serial #	Cal. Due Date
✓ Φ	Packard Tri-Carb 2550	401663	6-2-03
	Genie Gamma Spec (Det. 4)	6922910	2-25-03*
	Protean IPC 9025	721052	11-26-03

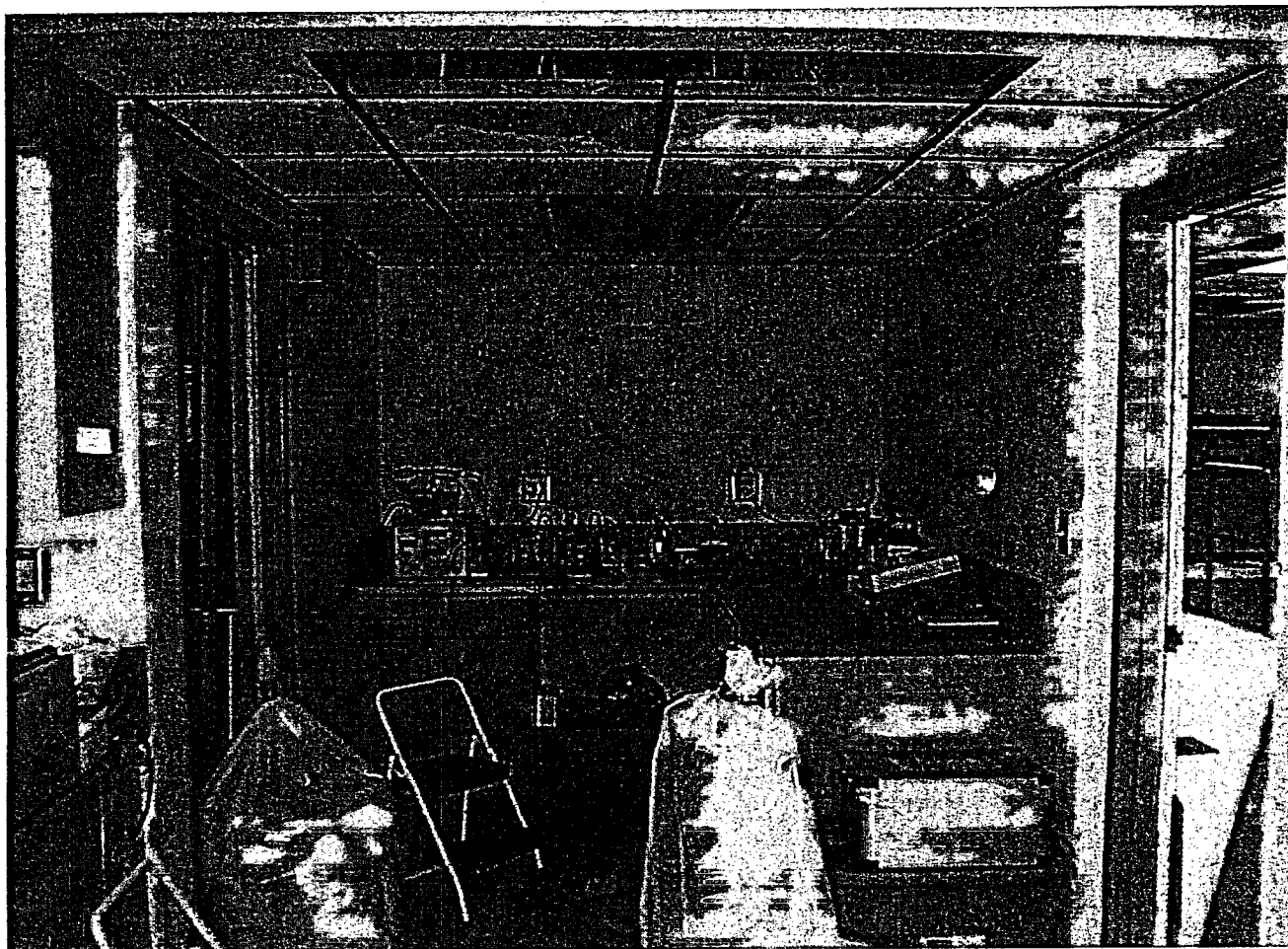
* As needed

Section 7

Photos of the Survey Area



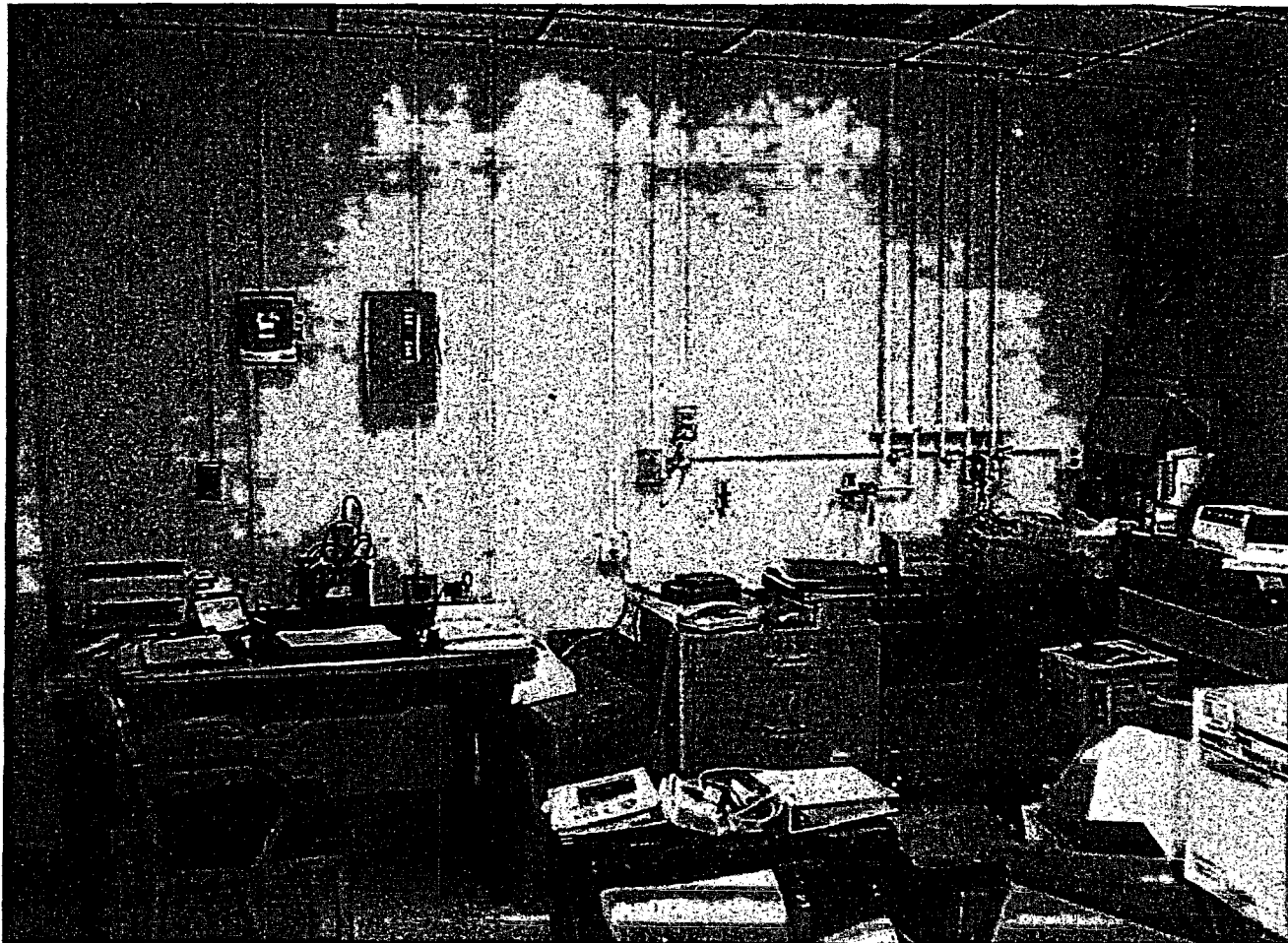
dec13_05



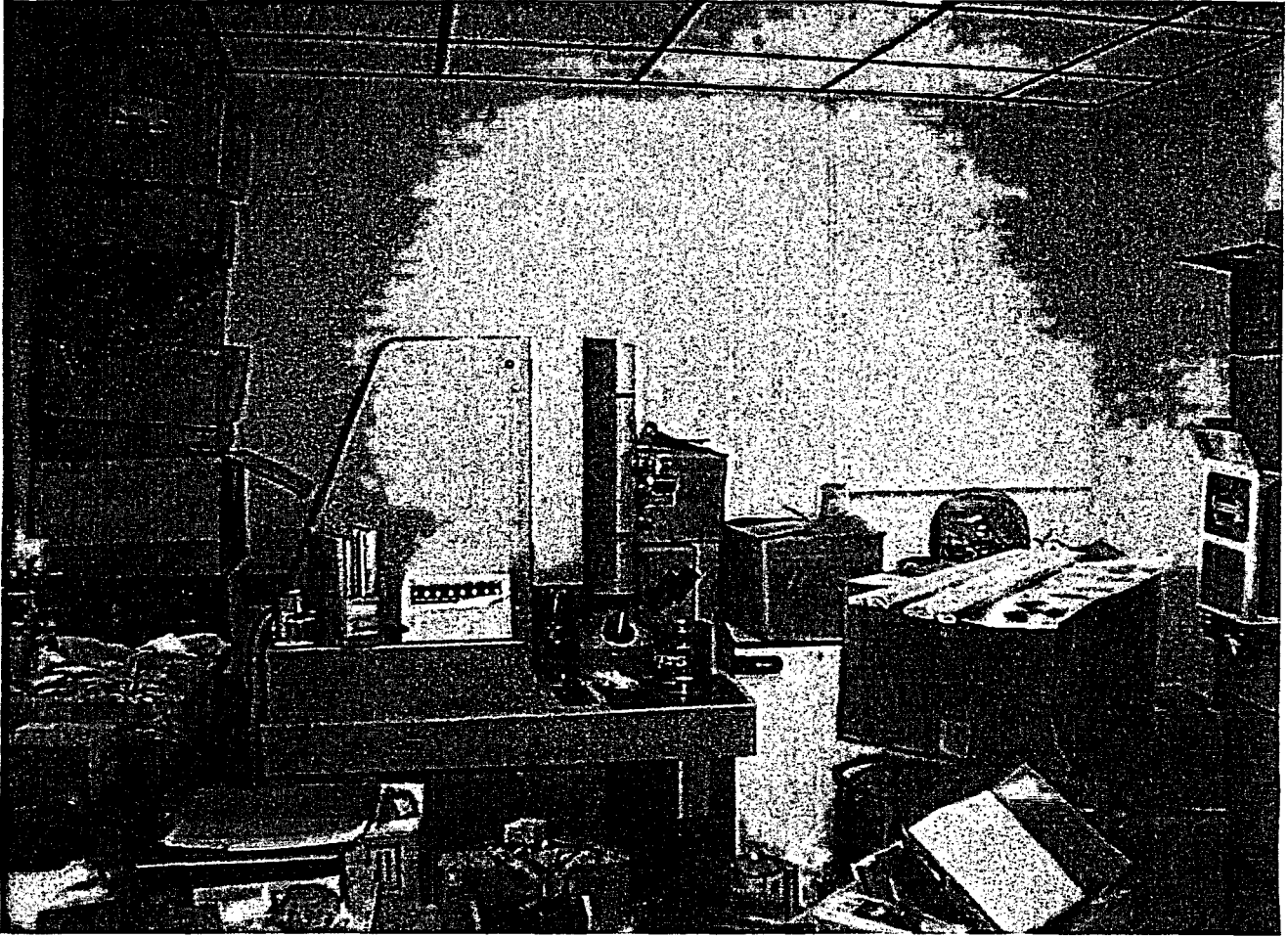
dec13_06



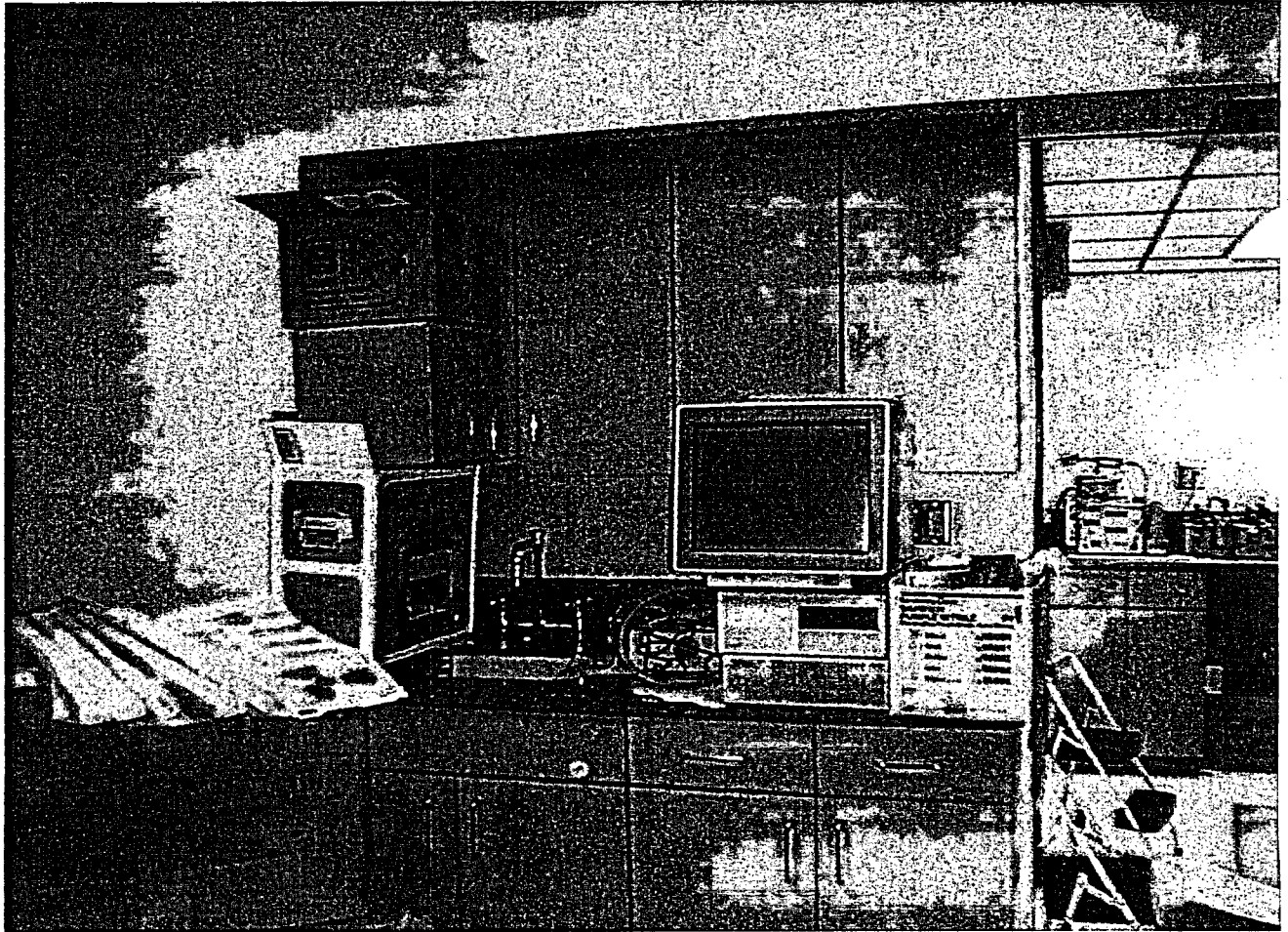
dec13_07



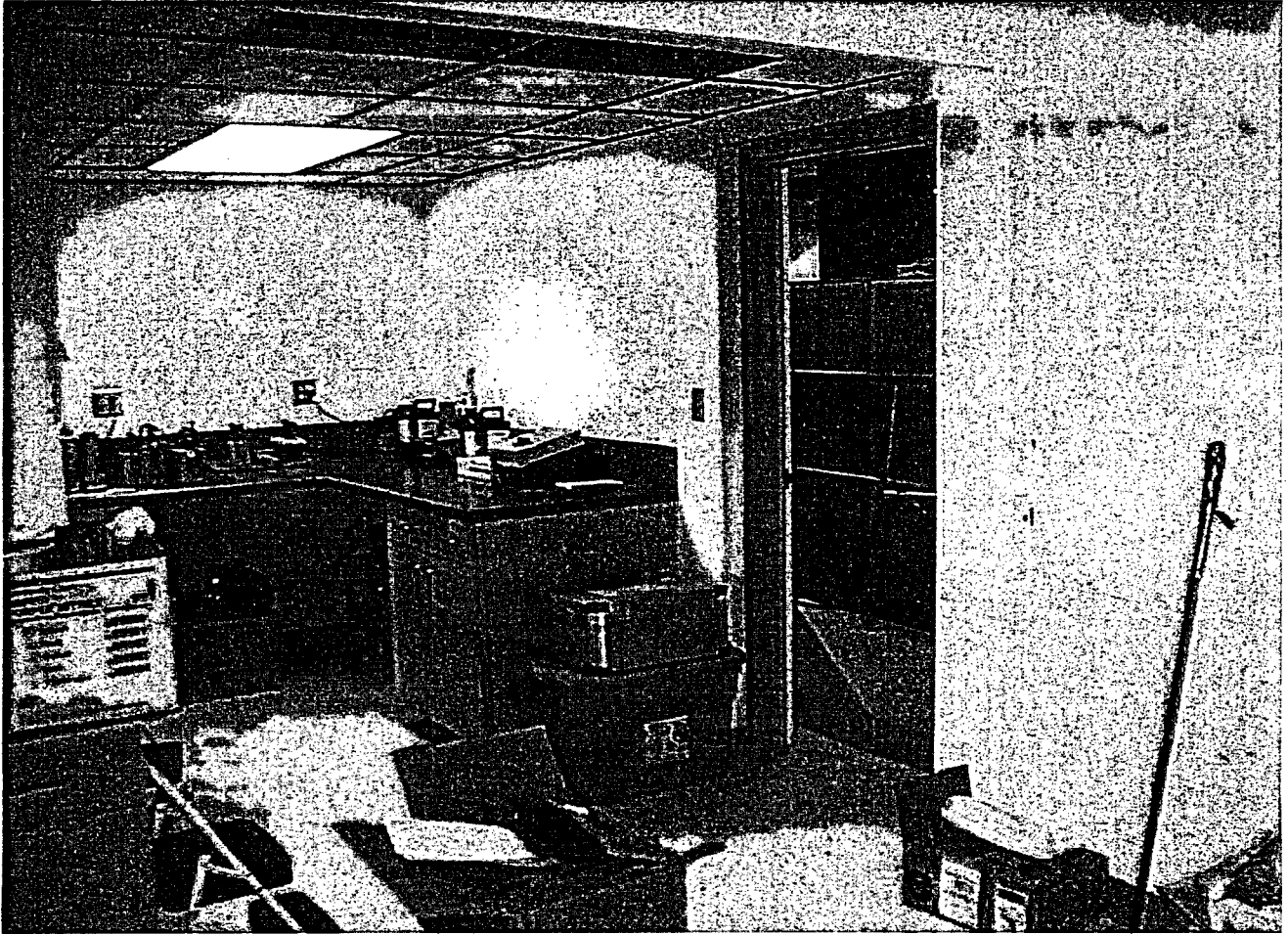
dec13_08



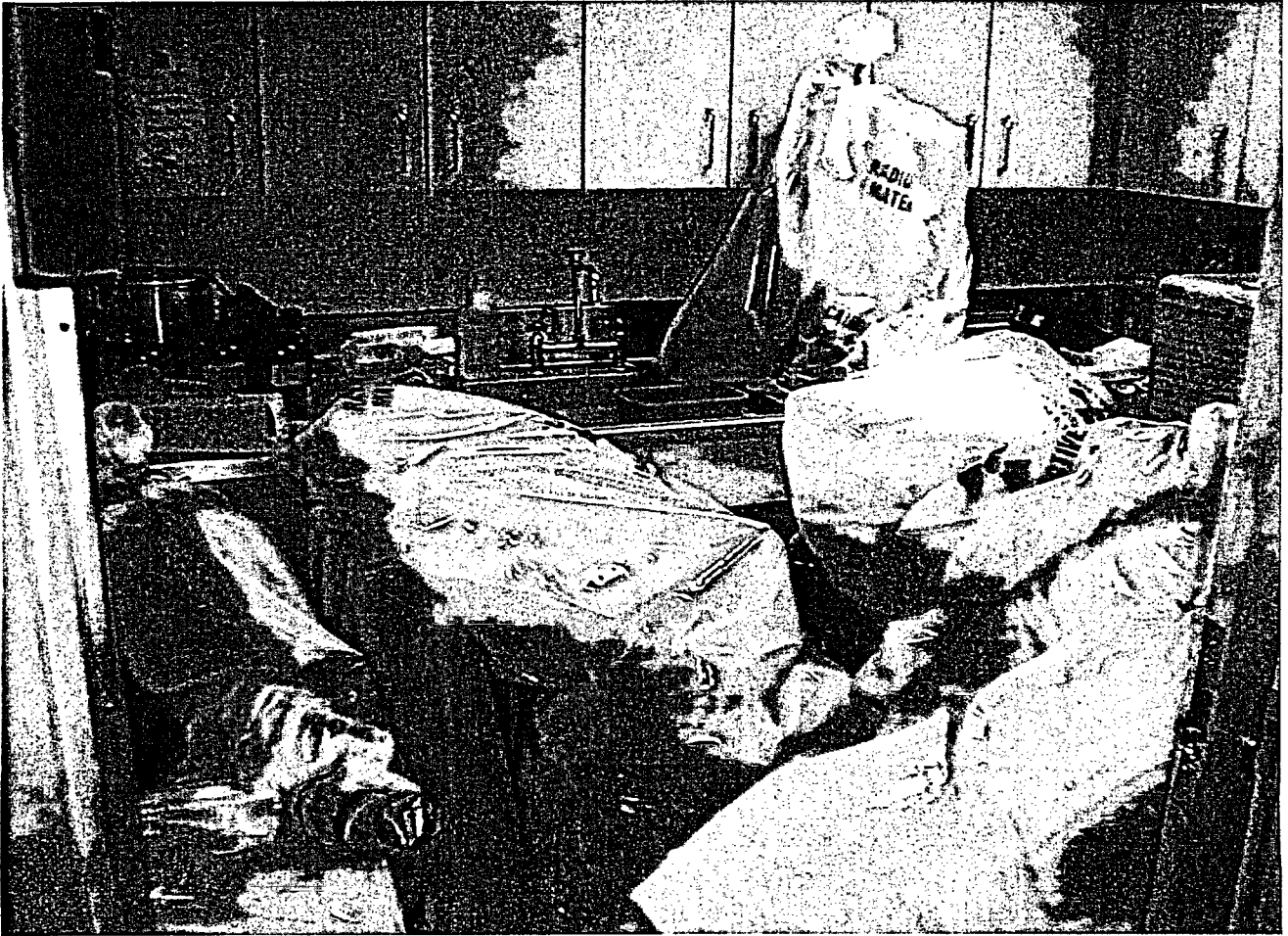
dec13_09



dec13_10



dec13_11



dec13_12

Alan J. Blotcky Research Reactor

Characterization Survey Package A0002

Room SW2

Alan J. Blotcky Reactor Facility
CHARACTERIZATION SURVEY PACKAGE A0002
(Room SW2)

TABLE OF CONTENTS

1.0	Survey Package Worksheet Room SW2 of the Reactor Controlled Area.....	3
2.0	Map(s) of the Survey Area.....	8
3.0	M2350 Download Beta Report(s).....	13
4.0	M2350 Download Alpha Report(s).....	27
5.0	Removable Alpha/Beta Activity Laboratory Report(s).....	35
6.0	H-3 Removable Beta Contamination Laboratory Report(s).....	50
7.0	Gamma Spectrum Analysis.....	53
8.0	Photos of the Survey Areas.....	69

Section 1

**Survey Package Worksheet Room SW2 of the
Reactor Controlled Area**

ATTACHMENT 6.2
CHARACTERIZATION SURVEY PACKAGE WORKSHEET

PACKAGE ID NO.: A0002	PREPARED BY: Paul Jones	DATE: 11/17/02
LOCATION: Veterans Affairs Medical Center	APPROVED BY: Doug Schult	DATE: 11/19/02
FLOOR/ELEVATION: Basement	BUILDING: Research	AREA: Room SW2

Area Description

This package is for the reactor room console area.

Historical Information

The Alan J. Blotcky Reactor was used to support nuclear medicine and research programs conducted at the medical center. The total reactor operation was approximately 515,000 kilowatt hours from 1959 to 2001.

This area provided access to the reactor, back stairwell, and reactor console. This area was primarily used for reactor operations and maintenance. The area served as the reactor manager's office, research office and records retention area. The pneumatic tube system is located in this area.

The majority of irradiations performed in this area consisted of various isotopes with half-lives of less than 10 minutes. Samples that were irradiated were prepared in adjoining rooms and counted in the shield located in the Southeast corner of the room.

Survey Instructions

For the survey, perform measurements according to the Final Survey Plan Section 5.0 and applicable project procedures.

Class I Survey Units

1. Perform a scan over 100% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument.
2. Grid the area as show in the attached drawing(s) for survey locations.
3. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
4. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.

Survey Instructions (continued)

Class III Survey Units

1. Perform a scan over approximately 10% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument. All areas of elevated activity should be identified for further investigation and potential decontamination.
2. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
3. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.
4. Mark the location of the direct beta measurements and smear with a paint stick or equivalent on the surfaces of the survey unit.

General Survey Instructions (Class I, II, and III)

1. Use LMI Data Logger M2350-1 with M43-68 style Gas Flow Proportional for direct beta survey measurements.
2. Perform one 5 minute pre-survey shielded background and one 5 minute post-survey shielded background for each detector used for the survey.
3. Verify that the direct measurement MDA is less than 25% of the expected DCGL (<1,250 dpm/100cm²) for direct beta measurements. If the field background is less than 1000 CPM, use 10-second count time for each direct beta measurement. If the field background is greater than 1000 CPM, obtain further directions from the Project Manager or designee.
4. Download each M2350-1 at completion of the survey, shift and/or prior to performing surveys in another survey area (before changing L1 codes).
5. Use location codes provided below for direct beta measurements, as appropriate.
6. Use the Package L1, L2, and L8 codes when labeling smears samples for counting.
7. When all measurements, samples or scans are collected, initial and date the "MEASUREMENT TYPE" block on the survey package to indicate the measurements or samples were collected.
8. Note any problems, comments, or other information pertinent to the data or sample collection under the "NOTES" section.

Survey performance (Initial and date as each survey is complete)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross Bq	Smear H-3	Other
L1	L2	L3	L7	L8									
Reactor Building Rooms SW2													
A000	01F01	TAC01	A thru Q	1 thru 7	Floor	Impacted Class I	92 xcx 11/20/02		xcx 11/20/02	11/20	92 xcx 11/21/02	9 12/3	
A000	01W01	TAC01	A thru B	1 thru 10	Wall 1	Impacted Class I	18 xcx 11/20/02		xcx 11/20/02	11/24	18 xcx 11/21/02	2 12/3	
A000	01W02	TAC01	A thru B	1 thru 11	Wall 2	Impacted Class I	22 xcx 11/20/02		xcx 11/20/02	11/26	20 xcx 11/21/02	2 12/3	
A000	01W03	TAC01	A thru B	1 thru 11	Wall 3	Impacted Class I	22 xcx 11/20/02		xcx 11/20/02	11/26	22 xcx 11/21/02	2 12/3	
A000	01W04	TAC01	A thru B	1 thru 17	Wall 4	Impacted Class I	26 xcx 11/20/02		xcx 11/20/02	11/26	26 xcx 11/21/02	3 12/3	
A000	01S01	TAC01	ZZZZ	1 thru 5	Structure 1	Impacted Class I	5 xcx 11/20/02	NA	xcx 11/20/02	11/26	5 xcx 11/21/02	1 12/3	
A000	01S02	TAC01	ZZZZ	1 thru 5	Structure 2	Impacted Class I	5 xcx 11/20/02	N/A	xcx 11-20-02	11/26	5 xcx 11/21/02	1 12/3	
A000	01S03	TAC01	ZZZZ	1 thru 10	Structure 3	Impacted Class I	10 xcx 11/20/02	N/A	xcx 11-20-02	11/26	10 xcx 11/21/02	1 12/3	
A000	01T01	TAC01	ZZZZ	1 thru 10	Trench 1 (pool subfloor)	Impacted Class I	10 xcx 11/20/02	N/A	xcx 11/20/02	11/26	10 xcx 11/21/02	1 12/3	
A000	01T02	TAC01	ZZZZ	1 thru 10	Trench 2 (conduit)	Impacted Class I	10 xcx 11/20/02	N/A	xcx 11/20/02	11/26	10 xcx 11/21/02	1 12/3	
A0002	01S04	TSC01	ZZZZ	1 thru 30	Structure 4 Cooling Pit	Impacted Class I	30 11/20/02	N/A	xcx 11/20/02	11/26	30 11/21/02	3 12/6/02	

2 19 11/20/02

Gamma from 10 - 12 within

⊗ - See notes section.

Package Review

Date Package Completed

12/21/03

Package Reviewed by and Date

Pat O. Jones 1/24/05

Notes

① all elevated measurement locations for O1F01 were taken within pool perimeter. RC7 11/26/02

② Direct beta measurements for O1F01 grids R4, R5, L4, L5 were taken on grating only. RC7 11/26/02

*① Scans performed in accessible areas of trenches only. The pneumatic tubes prevented access to approximately 50% of trenches.

③ Smear missing from O1F01 GRID # 03

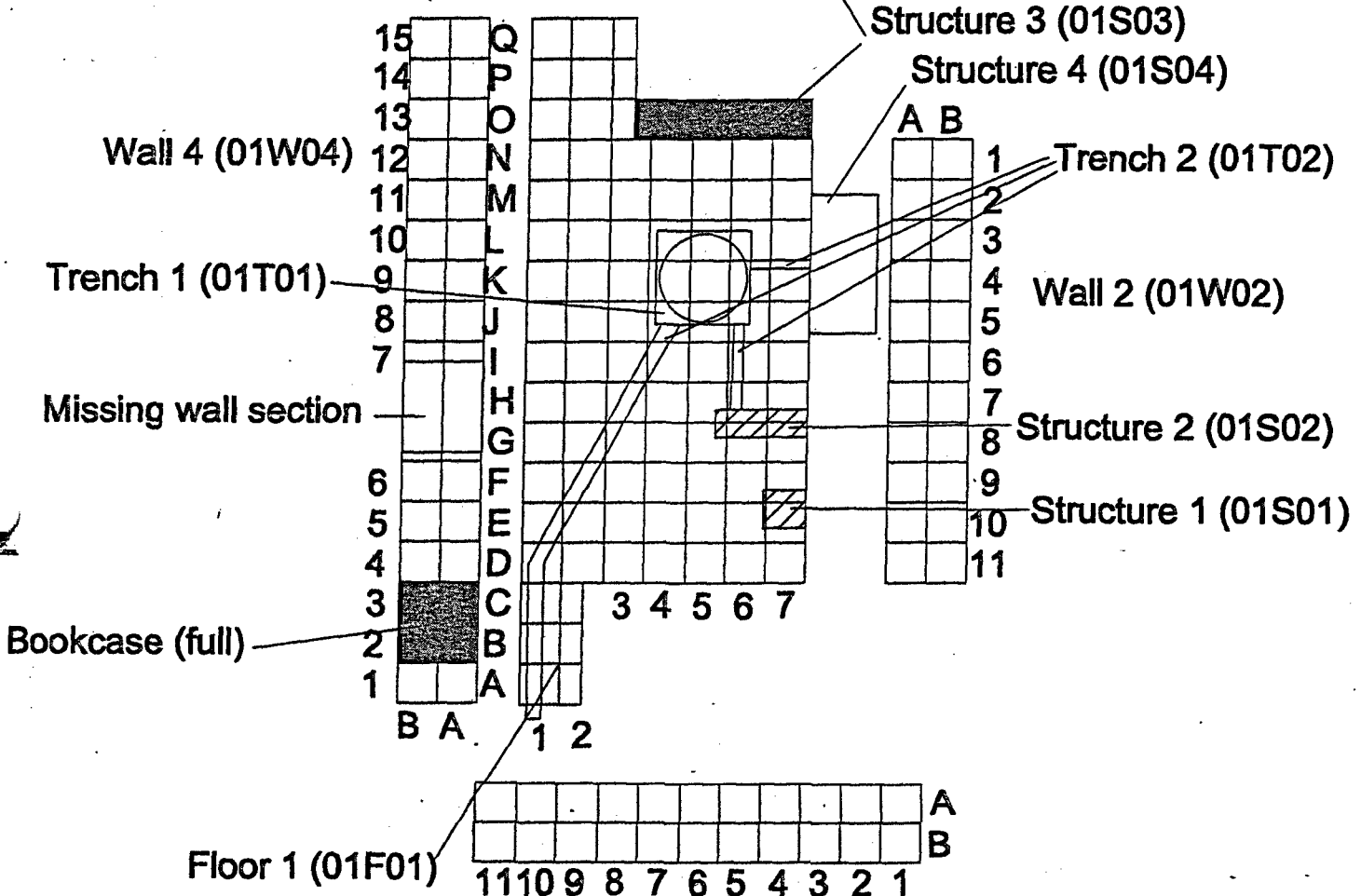
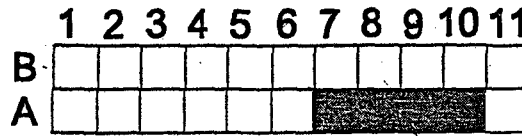
④ Smear missing from O1W01 GRID A-11

Section 2

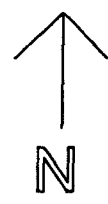
Maps of the Survey Areas

Package A0002

Wall 1 (01W01)

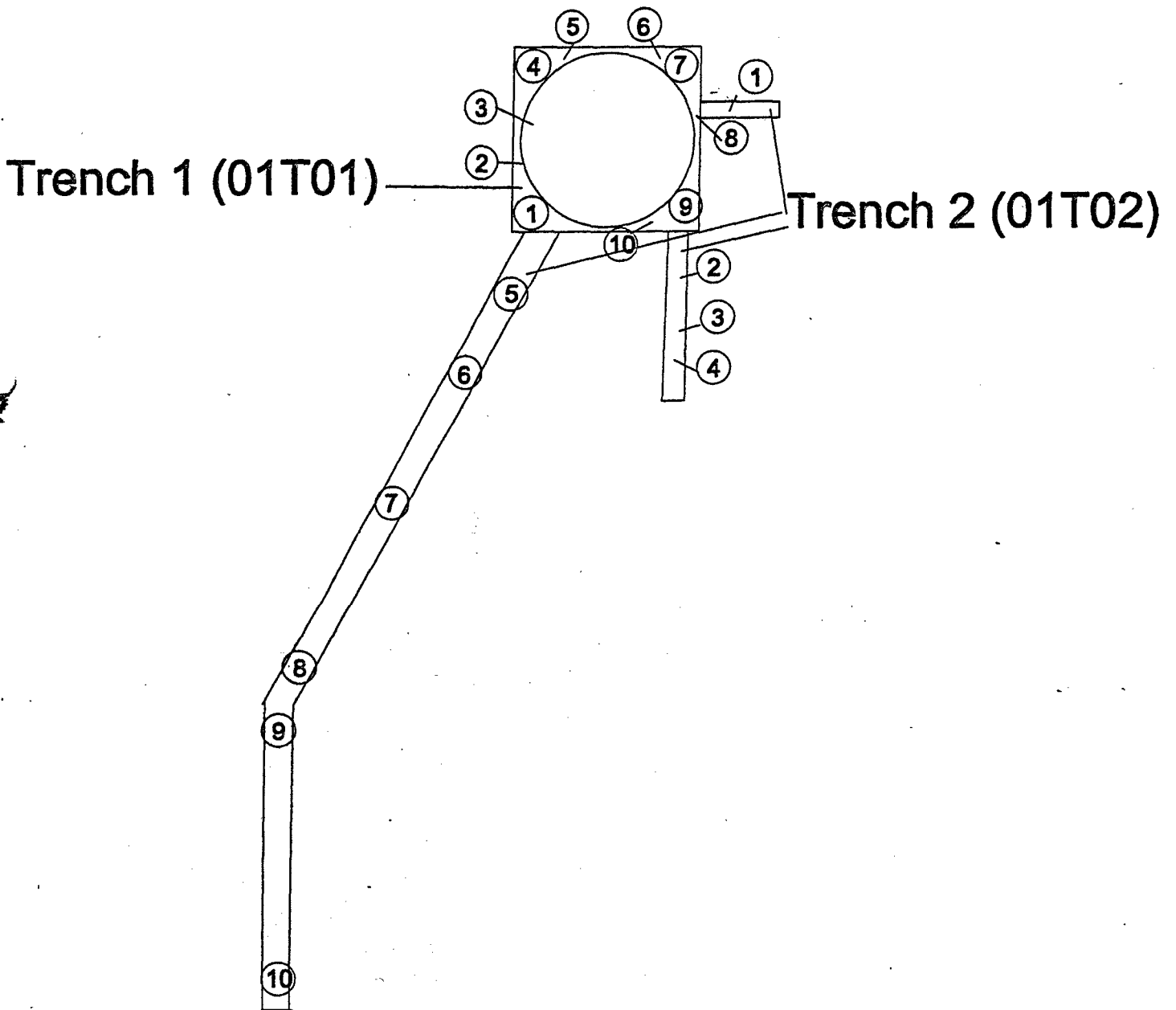


- Denotes 1 Square Meter Grid
- Denotes Partially Obstructed Grid Area
- Denotes Fully Obstructed Grid Area

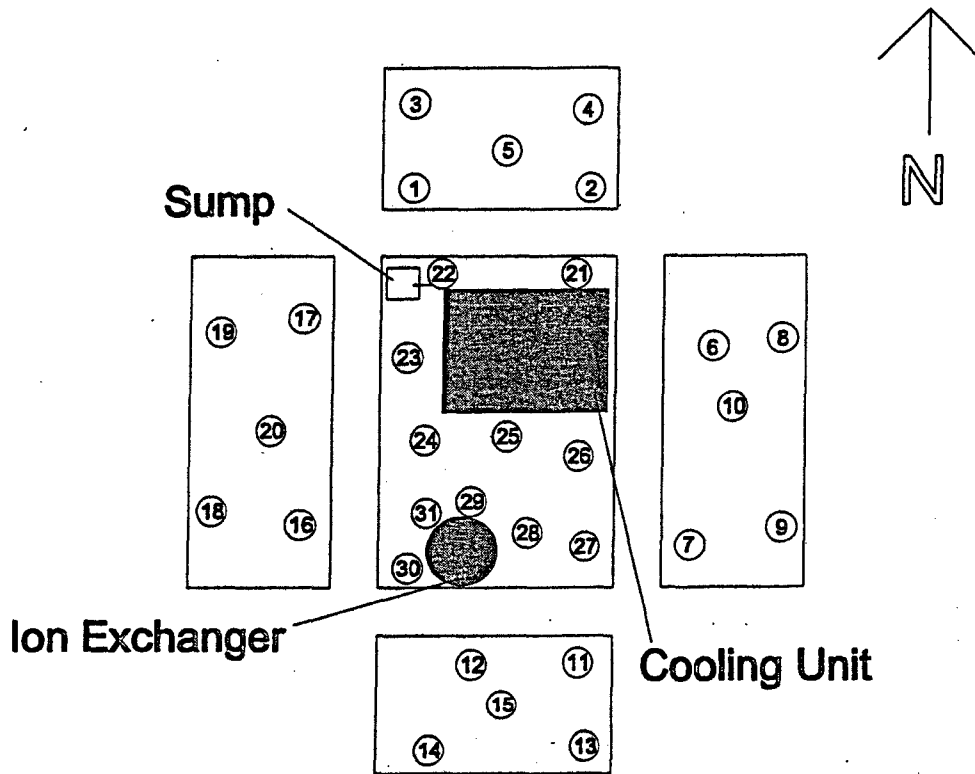


Package A0002

Trenches



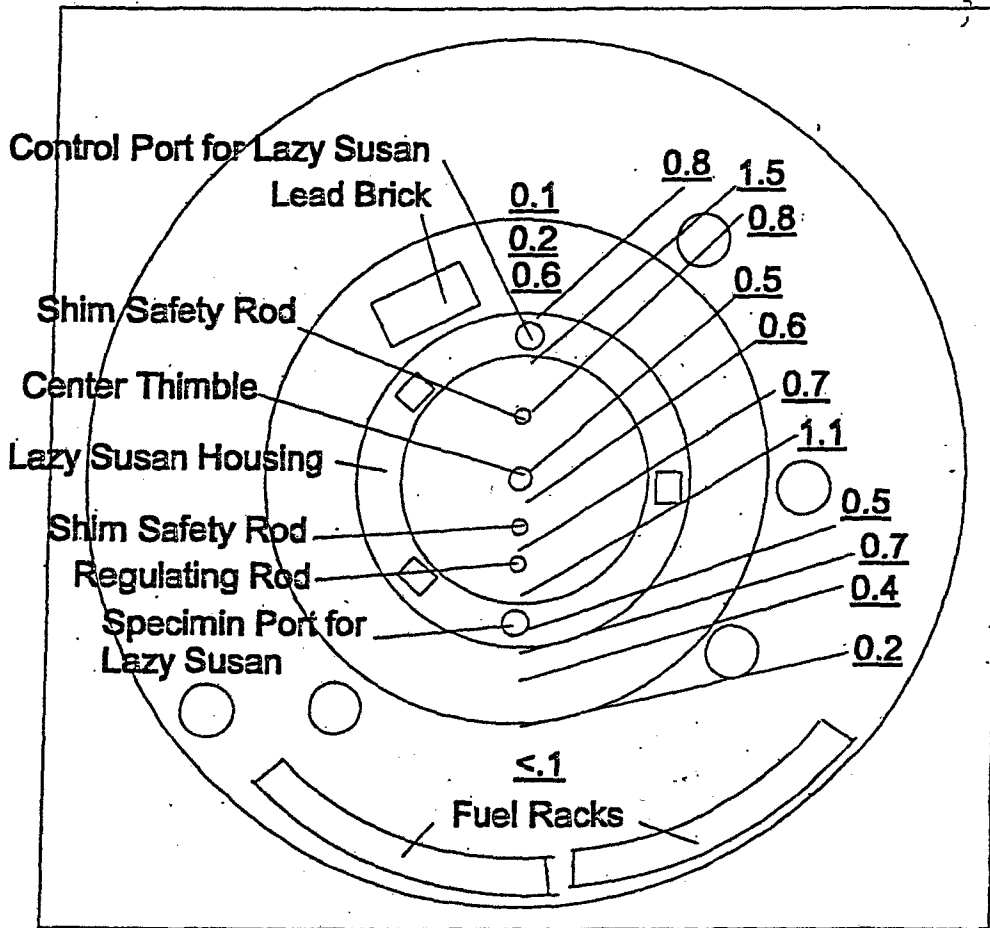
Package A0002 East Cooling Pit (01S04)



⊙ Denotes Survey Measurement Location

Note: Drawing not to scale

Package A0002 Reactor Core Profile



Gamma Dose Rate in R/hr

Section 3

M2350 Download Beta Report(s)



M2350-1 Download BETA Report

File Name : 00000021		Survey Description :Pkg. A0002 / Floor,Walls,Structures 1,2,3 / Pre &	
Survey Reason : Characterization			
User ID : LCF0451		Technician Name : Linda Finn	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68B	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : BETA	Detector Type : 02200 : 126 cm2 Gas Proportional Detector		
Detector Area : 126	Efficiency : 0.222	Survey Date : 11/20/02	

Linda Finn _____ 11/20/02
 Print Name Signature Date

 Print Name Signature Date

Comments:

Note: Elevated readings, were taken at highest reading found on grid. See map for general location on Grid K.

Sign-Off PAUL JONES _____ 11/26/02
 Print Name Signature Date

Duratek Beta Survey Report

Download File Name: 0000021

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0002	01W04	5	48.0	10	FLDCT	B0006	0000A	1	283	18
A0002	01W04	6	40.0	10	FLDCT	B9999	0000A	4	283	-154
A0002	01W04	7	39.0	10	FLDCT	B0006	0000A	5	283	-175
A0002	01W04	8	53.0	10	FLDCT	B0006	0000A	6	283	125
A0002	01W04	9	49.0	10	FLDCT	B0006	0000A	7	283	39
A0002	01W04	10	46.0	10	FLDCT	B0007	0000A	8	287	-39
A0002	01W04	11	59.0	10	FLDCT	B0007	0000A	9	287	240
A0002	01W04	12	34.0	10	FLDCT	B9999	0000A	10	283	-282
A0002	01W04	13	59.0	10	FLDCT	B0007	0000A	11	290	229
A0002	01W04	14	80.0	10	FLDCT	B0001	0000A	12	283	704
A0002	01W04	15	47.0	10	FLDCT	B9999	0000A	13	283	-4
A0002	01W04	16	39.0	10	FLDCT	B9999	0000A	14	283	-175
A0002	01W04	17	60.0	10	FLDCT	B9999	0000A	15	283	275
A0002	01W04	20	41.0	10	FLDCT	B0007	0000B	1	287	-147
A0002	01W04	21	38.0	10	FLDCT	B9999	0000B	4	283	-197
A0002	01W04	22	51.0	10	FLDCT	B9999	0000B	5	283	82
A0002	01W04	23	48.0	10	FLDCT	B9999	0000B	6	283	18
A0002	01W04	24	38.0	10	FLDCT	B9999	0000B	7	283	-197
A0002	01W04	25	47.0	10	FLDCT	B0007	0000B	8	287	-18
A0002	01W04	26	55.0	10	FLDCT	B0007	0000B	9	287	154
A0002	01W04	27	40.0	10	FLDCT	B9999	0000B	10	283	-154
A0002	01W04	28	66.0	10	FLDCT	B0007	0000B	11	290	379
A0002	01W04	29	79.0	10	FLDCT	B0006	0000B	12	283	683
A0002	01W04	30	63.0	10	FLDCT	B9999	0000B	13	283	340
A0002	01W04	31	37.0	10	FLDCT	B9999	0000B	14	283	-218
A0002	01W04	32	47.0	10	FLDCT	B9999	0000B	15	283	-4
A0002	01W01	33	44.0	10	FLDCT	B9999	0000A	1	283	-68
A0002	01W01	34	57.0	10	FLDCT	B9999	0000A	2	283	211
A0002	01W01	35	70.0	10	FLDCT	B0008	0000A	3	290	465
A0002	01W01	36	78.0	10	FLDCT	B0008	0000A	4	290	636
A0002	01W01	37	70.0	10	FLDCT	B0008	0000A	5	290	465
A0002	01W01	38	65.0	10	FLDCT	B0008	0000A	6	290	358
A0002	01W01	39	82.0	10	FLDCT	B0008	0000A	11	283	747
A0002	01W01	40	44.0	10	FLDCT	B9999	0000B	1	283	-68
A0002	01W01	41	47.0	10	FLDCT	B9999	0000B	2	283	-4
A0002	01W01	42	74.0	10	FLDCT	B0008	0000B	3	290	551
A0002	01W01	43	50.0	10	FLDCT	B9999	0000B	4	283	61
A0002	01W01	44	81.0	10	FLDCT	B0008	0000B	5	290	701
A0002	01W01	45	65.0	10	FLDCT	B0008	0000B	6	290	358

Beta Flag	1250	-	_____
Beta Max Flag	5000		██████████

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0002	01W01	46	76.0	10	FLDCT	B0008	0000B	7	290	593
A0002	01W01	47	78.0	10	FLDCT	B0008	0000B	8	290	636
A0002	01W01	48	60.0	10	FLDCT	B0008	0000B	9	290	250
A0002	01W01	49	70.0	10	FLDCT	B0008	0000B	10	283	490
A0002	01W01	50	64.0	10	FLDCT	B0008	0000B	11	283	361
A0002	01W02	52	53.0	10	FLDCT	B0001	0000A	1	283	125
A0002	01W02	53	48.0	10	FLDCT	B0001	0000A	2	245	154
A0002	01W02	54	66.0	10	FLDCT	B0001	0000A	3	245	540
A0002	01W02	55	54.0	10	FLDCT	B0001	0000A	4	245	282
A0002	01W02	56	70.0	10	FLDCT	B0001	0000A	5	245	626
A0002	01W02	57	75.0	10	FLDCT	B0001	0000A	6	245	733
A0002	01W02	58	73.0	10	FLDCT	B0001	0000A	7	245	690
A0002	01W02	59	48.0	10	FLDCT	B0001	0000A	8	245	154
A0002	01W02	60	47.0	10	FLDCT	B0001	0000A	9	245	132
A0002	01W02	61	43.0	10	FLDCT	B0001	0000A	10	245	46
A0002	01W02	62	51.0	10	FLDCT	B0001	0000A	11	245	218
A0002	01W02	63	50.0	10	FLDCT	B0001	0000A	12	283	61
A0002	01W02	64	55.0	10	FLDCT	B0001	0000B	1	245	304
A0002	01W02	65	61.0	10	FLDCT	B0001	0000B	2	283	297
A0002	01W02	66	73.0	10	FLDCT	B0001	0000B	3	245	690
A0002	01W02	67	64.0	10	FLDCT	B0001	0000B	4	245	497
A0002	01W02	68	70.0	10	FLDCT	B0001	0000B	5	245	626
A0002	01W02	69	58.0	10	FLDCT	B0001	0000B	6	245	368
A0002	01W02	70	50.0	10	FLDCT	B0001	0000B	7	245	197
A0002	01W02	71	47.0	10	FLDCT	B0001	0000B	8	245	132
A0002	01W02	72	44.0	10	FLDCT	B9999	0000B	9	283	-68
A0002	01W02	73	61.0	10	FLDCT	B0001	0000B	10	245	433
A0002	01W02	74	67.0	10	FLDCT	B0001	0000B	11	245	561
A0002	01W02	75	70.0	10	FLDCT	B0001	0000B	12	283	490
A0002	01W03	77	75.0	10	FLDCT	B0009	0000A	1	329	433
A0002	01W03	78	63.0	10	FLDCT	B0009	0000A	2	283	340
A0002	01W03	79	60.0	10	FLDCT	B0009	0000A	3	329	111
A0002	01W03	80	71.0	10	FLDCT	B0009	0000A	4	329	347
A0002	01W03	81	74.0	10	FLDCT	B0009	0000A	5	329	411
A0002	01W03	82	62.0	10	FLDCT	B0008	0000A	6	290	293
A0002	01W03	83	70.0	10	FLDCT	B0008	0000A	7	290	465
A0002	01W03	84	43.0	10	FLDCT	B9999	0000A	8	283	-89
A0002	01W03	85	67.0	10	FLDCT	B0009	0000A	9	329	261
A0002	01W03	86	70.0	10	FLDCT	B0009	0000A	10	329	325
A0002	01W03	87	58.0	10	FLDCT	B0001	0000A	11	245	368
A0002	01W03	88	61.0	10	FLDCT	B0009	0000B	1	329	132
A0002	01W03	89	73.0	10	FLDCT	B0009	0000B	2	283	554
A0002	01W03	90	83.0	10	FLDCT	B0009	0000B	3	329	604
A0002	01W03	91	81.0	10	FLDCT	B0009	0000B	4	329	561


Beta Flag

1250 - _____

Beta Max Flag

5000 ██████████

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0002	01W03	92	78.0	10	FLDCT	B0009	0000B	5	329	497
A0002	01W03	93	63.0	10	FLDCT	B9999	0000B	6	283	340
A0002	01W03	94	86.0	10	FLDCT	B0008	0000B	7	290	808
A0002	01W03	95	41.0	10	FLDCT	B9999	0000B	8	283	-132
A0002	01W03	96	60.0	10	FLDCT	B0009	0000B	9	329	111
A0002	01W03	97	67.0	10	FLDCT	B0009	0000B	10	329	261
A0002	01W03	98	71.0	10	FLDCT	B0001	0000B	11	245	647
A0002	01F01	99	60.0	10	FLDCT	B9999	0000A	1	283	275
A0002	01F01	100	67.0	10	FLDCT	B9999	0000A	2	283	425
A0002	01F01	101	49.0	10	FLDCT	B9999	0000B	1	283	39
A0002	01F01	102	50.0	10	FLDCT	B9999	0000B	2	283	61
A0002	01F01	103	49.0	10	FLDCT	B9999	0000C	1	283	39
A0002	01F01	104	48.0	10	FLDCT	B9999	0000C	2	283	18
A0002	01F01	105	59.0	10	FLDCT	B9999	0000D	1	283	254
A0002	01F01	106	49.0	10	FLDCT	B9999	0000D	2	283	39
A0002	01F01	107	54.0	10	FLDCT	B9999	0000D	3	283	147
A0002	01F01	108	58.0	10	FLDCT	B9999	0000D	4	283	232
A0002	01F01	109	48.0	10	FLDCT	B9999	0000D	5	283	18
A0002	01F01	110	62.0	10	FLDCT	B9999	0000D	6	283	318
A0002	01F01	111	51.0	10	FLDCT	B9999	0000D	7	283	82
A0002	01F01	112	46.0	10	FLDCT	B9999	0000E	1	283	-25
A0002	01F01	113	35.0	10	FLDCT	B9999	0000E	2	283	-261
A0002	01F01	114	58.0	10	FLDCT	B9999	0000E	3	283	189
A0002	01F01	115	53.0	10	FLDCT	B9999	0000E	4	283	125
A0002	01F01	116	53.0	10	FLDCT	B9999	0000E	5	283	125
A0002	01F01	117	37.0	10	FLDCT	B9999	0000E	6	283	-218
A0002	01F01	118	58.0	10	FLDCT	B9999	0000E	7	283	232
A0002	01F01	119	46.0	10	FLDCT	B9999	0000F	1	283	-25
A0002	01F01	120	54.0	10	FLDCT	B9999	0000F	2	283	147
A0002	01F01	121	54.0	10	FLDCT	B9999	0000F	3	283	147
A0002	01F01	122	58.0	10	FLDCT	B9999	0000F	4	283	232
A0002	01F01	123	46.0	10	FLDCT	B9999	0000F	5	283	-25
A0002	01F01	124	37.0	10	FLDCT	B9999	0000F	6	283	-218
A0002	01F01	125	43.0	10	FLDCT	B9999	0000F	7	283	-89
A0002	01F01	126	51.0	10	FLDCT	B9999	0000G	1	283	82
A0002	01F01	127	49.0	10	FLDCT	B9999	0000G	2	283	39
A0002	01F01	128	55.0	10	FLDCT	B9999	0000G	3	283	168
A0002	01F01	129	36.0	10	FLDCT	B9999	0000G	4	283	-240
A0002	01F01	130	46.0	10	FLDCT	B9999	0000G	5	283	-25
A0002	01F01	131	26.0	10	FLDCT	B9999	0000G	6	283	-454
A0002	01F01	132	48.0	10	FLDCT	B9999	0000G	7	283	18
A0002	01F01	133	53.0	10	FLDCT	B9999	0000H	1	283	125
A0002	01F01	134	53.0	10	FLDCT	B9999	0000H	2	283	125
A0002	01F01	135	51.0	10	FLDCT	B9999	0000H	3	283	82

Beta Flag	1250 - _____
Beta Max Flag	5000 

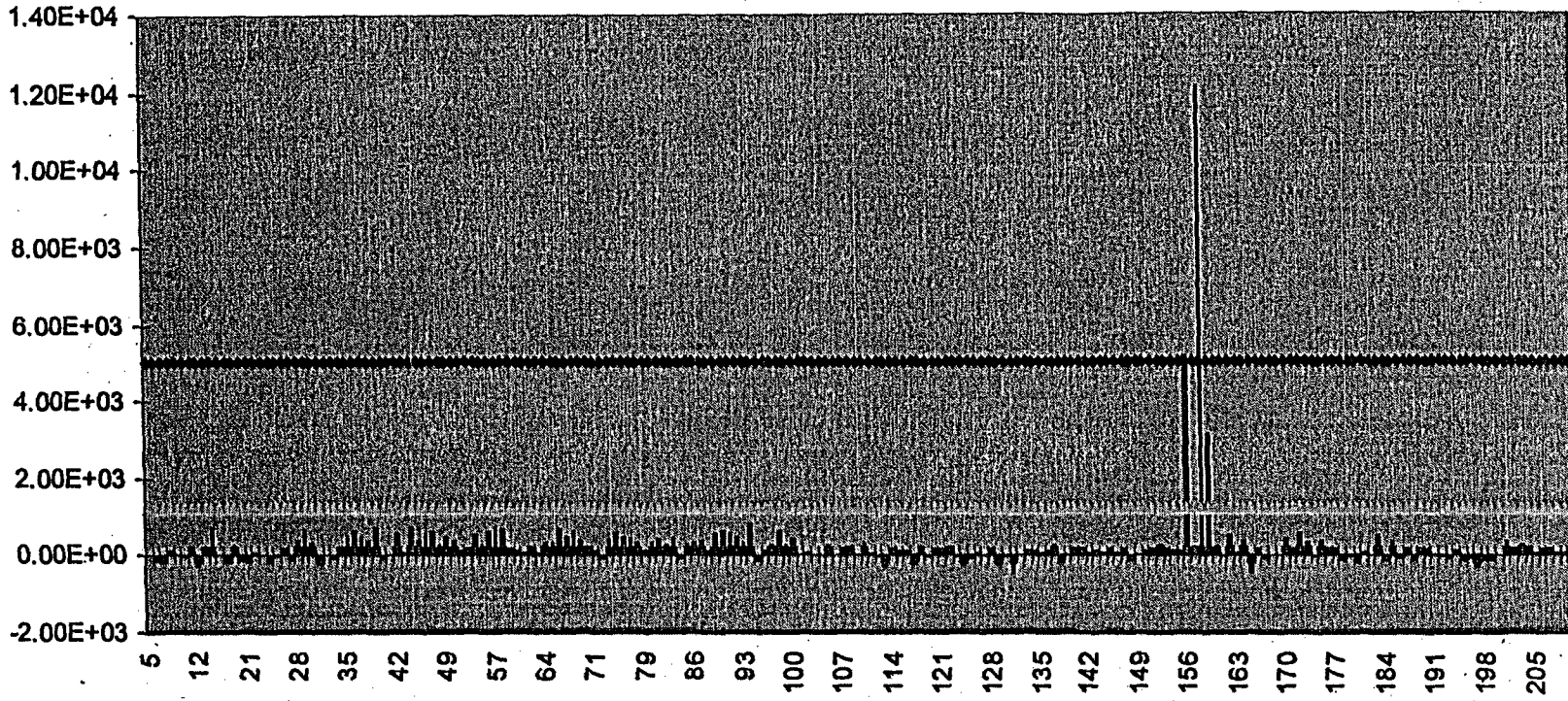
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0002	01F01	136	53.0	10	FLDCT	B9999	0000H	4	283	125
A0002	01F01	137	60.0	10	FLDCT	B9999	0000H	5	283	275
A0002	01F01	138	38.0	10	FLDCT	B9999	0000H	6	283	-197
A0002	01F01	139	47.0	10	FLDCT	B9999	0000H	7	283	-4
A0002	01F01	140	54.0	10	FLDCT	B9999	0000I	1	283	147
A0002	01F01	141	55.0	10	FLDCT	B9999	0000I	2	283	168
A0002	01F01	142	51.0	10	FLDCT	B9999	0000I	3	283	82
A0002	01F01	143	53.0	10	FLDCT	B9999	0000I	4	283	125
A0002	01F01	144	51.0	10	FLDCT	B9999	0000I	5	283	82
A0002	01F01	145	55.0	10	FLDCT	B9999	0000I	6	283	168
A0002	01F01	146	51.0	10	FLDCT	B9999	0000I	7	283	82
A0002	01F01	147	56.0	10	FLDCT	B9999	0000J	1	283	189
A0002	01F01	148	41.0	10	FLDCT	B9999	0000J	2	283	-132
A0002	01F01	149	47.0	10	FLDCT	B9999	0000J	3	283	-4
A0002	01F01	150	52.0	10	FLDCT	B9999	0000J	4	283	104
A0002	01F01	151	56.0	10	FLDCT	B9999	0000J	5	283	189
A0002	01F01	152	60.0	10	FLDCT	B9999	0000J	6	283	275
A0002	01F01	153	56.0	10	FLDCT	B9999	0000J	7	283	189
A0002	01F01	154	52.0	10	FLDCT	B9999	0000K	1	283	104
A0002	01F01	155	52.0	10	FLDCT	B9999	0000K	2	283	104
A0002	01F01	156	288.0	10	FLDCT	B9999	0000K	3	283	168
A0002	01F01	157	57.0	10	FLDCT	B9999	0000K	4	283	211
A0002	01F01	158	612.0	10	FLDCT	B9999	0000K	5	283	1215
A0002	01F01	159	194.0	10	FLDCT	B9999	0000K	6	283	3150
A0002	01F01	160	57.0	10	FLDCT	B9999	0000K	7	283	211
A0002	01F01	161	46.0	10	FLDCT	B9999	0000L	1	283	-25
A0002	01F01	162	72.0	10	FLDCT	B9999	0000L	2	283	533
A0002	01F01	163	51.0	10	FLDCT	B9999	0000L	3	283	82
A0002	01F01	164	64.0	10	FLDCT	B9999	0000L	4	283	361
A0002	01F01	165	27.0	10	FLDCT	B9999	0000L	5	283	-433
A0002	01F01	166	55.0	10	FLDCT	B9999	0000L	6	283	168
A0002	01F01	167	44.0	10	FLDCT	B9999	0000L	7	283	-68
A0002	01F01	168	48.0	10	FLDCT	B9999	0000M	1	283	39
A0002	01F01	169	47.0	10	FLDCT	B9999	0000M	2	283	-4
A0002	01F01	170	66.0	10	FLDCT	B9999	0000M	3	283	404
A0002	01F01	171	55.0	10	FLDCT	B9999	0000M	4	283	168
A0002	01F01	172	73.0	10	FLDCT	B9999	0000M	5	283	554
A0002	01F01	173	62.0	10	FLDCT	B9999	0000M	6	283	318
A0002	01F01	174	46.0	10	FLDCT	B9999	0000M	7	283	-25
A0002	01F01	175	64.0	10	FLDCT	B9999	0000N	1	283	361
A0002	01F01	176	55.0	10	FLDCT	B9999	0000N	2	283	168
A0002	01F01	177	54.0	10	FLDCT	B9999	0000N	3	283	147
A0002	01F01	178	42.0	10	FLDCT	B9999	0000N	4	283	-111
A0002	01F01	179	45.0	10	FLDCT	B9999	0000N	5	283	-46

Beta Flag	1250	-	_____
Beta Max Flag	5000		_____

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0002	01F01	180	39.0	10	FLDCT	B9999	0000N	6	283	-175
A0002	01F01	181	51.0	10	FLDCT	B9999	0000N	7	283	82
A0002	01F01	182	47.0	10	FLDCT	B9999	0000O	1	283	-4
A0002	01F01	183	71.0	10	FLDCT	B9999	0000O	2	283	511
A0002	01F01	184	42.0	10	FLDCT	B9999	0000O	3	283	-111
A0002	01F01	185	64.0	10	FLDCT	B9999	0000P	1	283	361
A0002	01F01	186	43.0	10	FLDCT	B9999	0000P	2	283	-89
A0002	01F01	187	56.0	10	FLDCT	B9999	0000P	3	283	189
A0002	01F01	188	42.0	10	FLDCT	B9999	0000Q	1	283	-111
A0002	01F01	189	56.0	10	FLDCT	B9999	0000Q	2	283	189
A0002	01F01	190	56.0	10	FLDCT	B9999	0000Q	3	283	189
A0002	01S01	191	47.0	10	FLDCT	B9999	ZZZZZ	1	283	-4
A0002	01S01	192	46.0	10	FLDCT	B9999	ZZZZZ	2	283	-25
A0002	01S01	193	44.0	10	FLDCT	B9999	ZZZZZ	3	283	-68
A0002	01S01	194	53.0	10	FLDCT	B9999	ZZZZZ	4	283	125
A0002	01S01	195	42.0	10	FLDCT	B9999	ZZZZZ	5	283	-111
A0002	01S02	196	44.0	10	FLDCT	B9999	ZZZZZ	1	283	-68
A0002	01S02	197	34.0	10	FLDCT	B9999	ZZZZZ	2	283	-282
A0002	01S02	198	42.0	10	FLDCT	B9999	ZZZZZ	3	283	-111
A0002	01S02	199	42.0	10	FLDCT	B9999	ZZZZZ	4	283	-111
A0002	01S02	200	49.0	10	FLDCT	B9999	ZZZZZ	5	283	39
A0002	01S03	201	64.0	10	FLDCT	B9999	ZZZZZ	1	283	361
A0002	01S03	202	54.0	10	FLDCT	B9999	ZZZZZ	2	283	147
A0002	01S03	203	59.0	10	FLDCT	B9999	ZZZZZ	3	283	254
A0002	01S03	204	57.0	10	FLDCT	B9999	ZZZZZ	4	283	211
A0002	01S03	205	50.0	10	FLDCT	B9999	ZZZZZ	5	283	61
A0002	01S03	206	55.0	10	FLDCT	B9999	ZZZZZ	6	283	168
A0002	01S03	207	55.0	10	FLDCT	B9999	ZZZZZ	7	283	168
A0002	01S03	208	51.0	10	FLDCT	B9999	ZZZZZ	8	283	82
A0002	01S03	209	50.0	10	FLDCT	B9999	ZZZZZ	9	283	61
A0002	01S03	210	41.0	10	FLDCT	B9999	ZZZZZ	10	283	-132

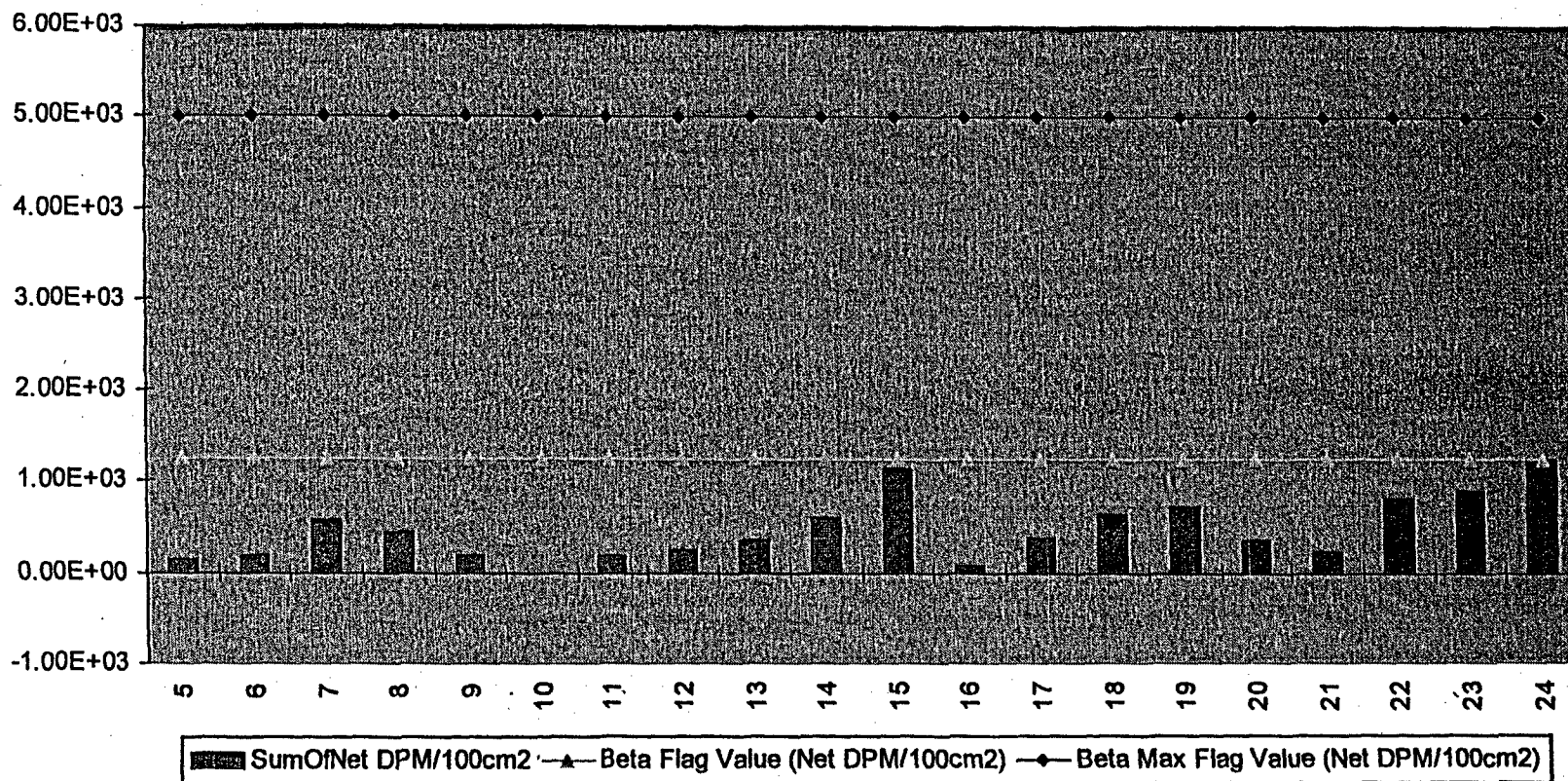
Beta Flag	1250	-	_____
Beta Max Flag	5000		██████████

M2350-1 Sample Results



SumOfNet DPM/100cm2 ▲ Beta Flag Value (Net DPM/100cm2) ◆ Beta Max Flag Value (Net DPM/100cm2)

M2350-1 Sample Results



Page 3 of 3

Duratek Beta Survey Report

Download File Name: 00000037

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0002	01T01	5	177.0	300	FLDCT	B9999	////	1	33	142
A0002	01T01	6	180.0	300	FLDCT	B9999	////	2	33	178
A0002	01T01	7	213.0	300	FLDCT	B9999	////	3	33	568
A0002	01T01	8	202.0	300	FLDCT	B9999	////	4	33	438
A0002	01T01	9	181.0	300	FLDCT	B9999	////	5	33	189
A0002	01T01	10	164.0	300	FLDCT	B9999	////	6	33	-12
A0002	01T01	11	181.0	300	FLDCT	B9999	////	7	33	189
A0002	01T01	12	186.0	300	FLDCT	B9999	////	8	33	249
A0002	01T01	13	196.0	300	FLDCT	B9999	////	9	33	367
A0002	01T01	14	216.0	300	FLDCT	B9999	////	10	33	604
A0002	01T02	15	261.0	300	FLDCT	B9999	////	1	33	1,138
A0002	01T02	16	171.0	300	FLDCT	B9999	////	2	33	71
A0002	01T02	17	197.0	300	FLDCT	B9999	////	3	33	379
A0002	01T02	18	220.0	300	FLDCT	B9999	////	4	33	651
A0002	01T02	19	226.0	300	FLDCT	B9999	////	5	33	722
A0002	01T02	20	196.0	300	FLDCT	B9999	////	6	33	367
A0002	01T02	21	184.0	300	FLDCT	B9999	////	7	33	225
A0002	01T02	22	234.0	300	FLDCT	B9999	////	8	33	817
A0002	01T02	23	242.0	300	FLDCT	B9999	////	9	33	912
A0002	01T02	24	270.0	300	FLDCT	B9999	////	10	33	1,243

Beta Flag

1250 - _____

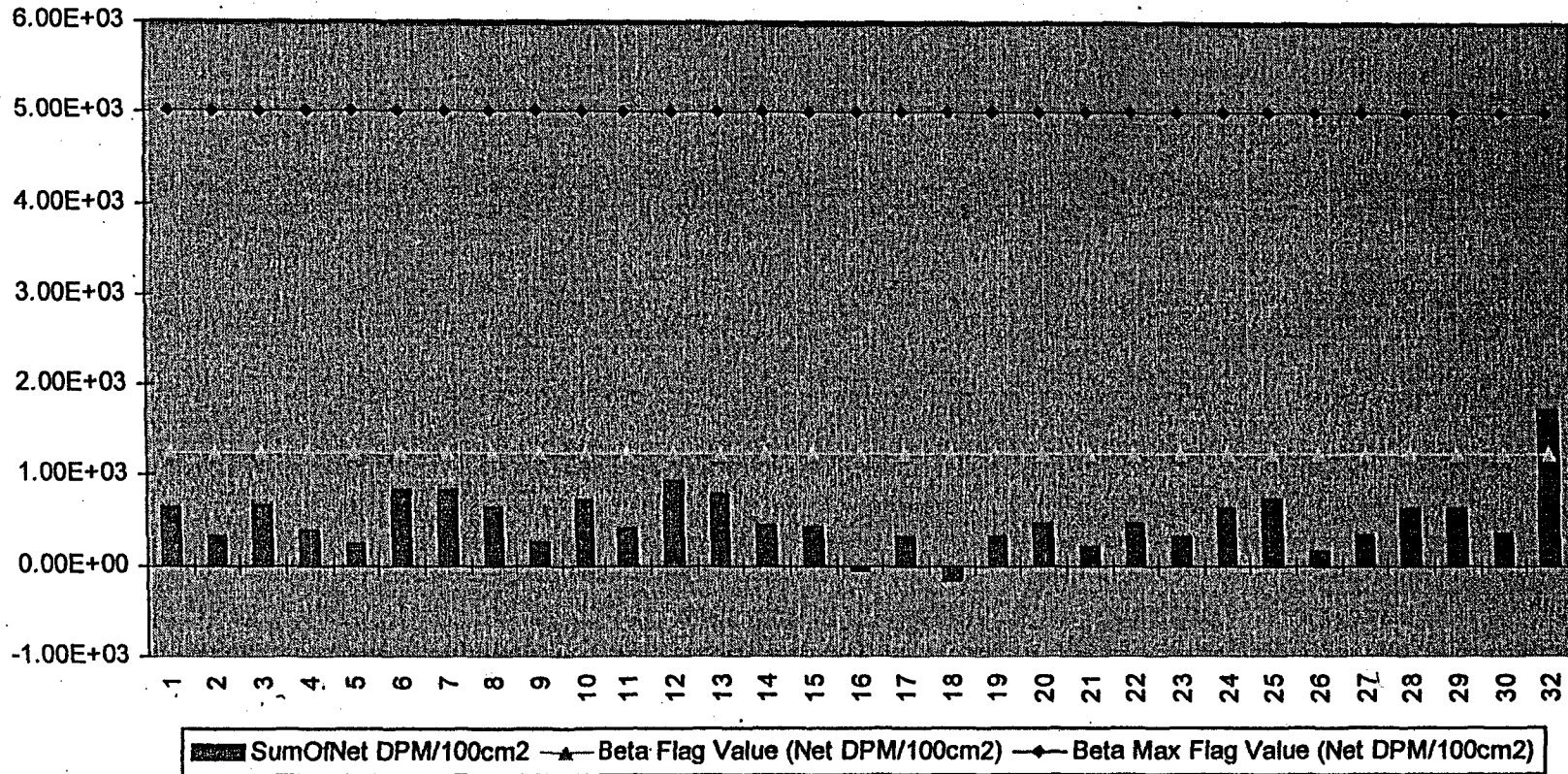
Beta Max Flag

5000

Download Name: 00000049

Survey Description: A002 01S04

M2350-1 Sample Results



Page 2 of 3

Duratek Beta Survey Report

Download File Name: 00000049

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0002	01S04	1	98.0	10	FLDCT	B9999	ZZZZ	1	404	643
A0002	01S04	2	83.0	10	FLDCT	B9999	ZZZZ	2	404	329
A0002	01S04	3	99.0	10	FLDCT	B9999	ZZZZ	3	404	664
A0002	01S04	4	86.0	10	FLDCT	B9999	ZZZZ	4	404	392
A0002	01S04	5	78.0	10	FLDCT	B9999	ZZZZ	5	404	224
A0002	01S04	6	107.0	10	FLDCT	B9999	ZZZZ	6	404	832
A0002	01S04	7	107.0	10	FLDCT	B9999	ZZZZ	7	404	832
A0002	01S04	8	98.0	10	FLDCT	B9999	ZZZZ	8	404	643
A0002	01S04	9	79.0	10	FLDCT	B9999	ZZZZ	9	404	245
A0002	01S04	10	102.0	10	FLDCT	B9999	ZZZZ	10	404	727
A0002	01S04	11	87.0	10	FLDCT	B9999	ZZZZ	11	404	413
A0002	01S04	12	112.0	10	FLDCT	B9999	ZZZZ	12	404	937
A0002	01S04	13	105.0	10	FLDCT	B9999	ZZZZ	13	404	790
A0002	01S04	14	89.0	10	FLDCT	B9999	ZZZZ	14	404	455
A0002	01S04	15	88.0	10	FLDCT	B9999	ZZZZ	15	404	434
A0002	01S04	16	65.0	10	FLDCT	B9999	ZZZZ	16	404	-49
A0002	01S04	17	82.0	10	FLDCT	B9999	ZZZZ	17	404	308
A0002	01S04	18	60.0	10	FLDCT	B9999	ZZZZ	18	404	-154
A0002	01S04	19	83.0	10	FLDCT	B9999	ZZZZ	19	404	329
A0002	01S04	20	90.0	10	FLDCT	B9999	ZZZZ	20	404	475
A0002	01S04	21	77.0	10	FLDCT	B9999	ZZZZ	21	404	203
A0002	01S04	22	90.0	10	FLDCT	B9999	ZZZZ	22	404	475
A0002	01S04	23	82.0	10	FLDCT	B9999	ZZZZ	23	404	308
A0002	01S04	24	98.0	10	FLDCT	B9999	ZZZZ	24	404	643
A0002	01S04	25	103.0	10	FLDCT	B9999	ZZZZ	25	404	748
A0002	01S04	26	75.0	10	FLDCT	B9999	ZZZZ	26	404	161
A0002	01S04	27	84.0	10	FLDCT	B9999	ZZZZ	27	404	350
A0002	01S04	28	98.0	10	FLDCT	B9999	ZZZZ	28	404	643
A0002	01S04	29	123.0	10	FLDCT	B9999	ZZZZ	29	554	643
A0002	01S04	30	110.0	10	FLDCT	B9999	ZZZZ	30	554	371
A0002	01S04	32	175.0	10	FLDCT	B9999	ZZZZ	31	554	1734

Beta Flag	1250	-	_____
Beta Max Flag	5000		

Section 4

M2350 Download Alpha Report(s)

Duratek Alpha Survey Report

Download File Name: 00000034

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0002	01F01	6	0.0	20	FLDCT	B9999	0000A	1	3	-12
A0002	01F01	7	0.0	20	FLDCT	B9999	0000A	2	3	-12
A0002	01F01	8	3.0	20	FLDCT	B9999	0000B	1	3	25
A0002	01F01	9	1.0	20	FLDCT	B9999	0000B	2	3	0
A0002	01F01	11	1.0	20	FLDCT	B9999	0000C	2	3	0
A0002	01F01	12	1.0	20	FLDCT	B9999	0000D	1	3	0
A0002	01F01	13	2.0	20	FLDCT	B9999	0000D	2	3	12
A0002	01F01	14	5.0	20	FLDCT	B9999	0000D	3	3	50
A0002	01F01	15	0.0	20	FLDCT	B9999	0000D	4	3	-12
A0002	01F01	16	0.0	20	FLDCT	B9999	0000D	5	3	-12
A0002	01F01	17	1.0	20	FLDCT	B9999	0000D	6	3	0
A0002	01F01	18	1.0	20	FLDCT	B9999	0000D	7	3	0
A0002	01F01	19	2.0	20	FLDCT	B9999	0000E	1	3	12
A0002	01F01	20	3.0	20	FLDCT	B9999	0000E	2	3	25
A0002	01F01	21	1.0	20	FLDCT	B9999	0000E	3	3	0
A0002	01F01	22	0.0	20	FLDCT	B9999	0000E	4	3	-12
A0002	01F01	23	2.0	20	FLDCT	B9999	0000E	5	3	12
A0002	01F01	24	4.0	20	FLDCT	B9999	0000E	6	3	37
A0002	01F01	25	0.0	20	FLDCT	B9999	0000F	1	3	-12
A0002	01F01	26	0.0	20	FLDCT	B9999	0000F	2	3	-12
A0002	01F01	27	3.0	20	FLDCT	B9999	0000F	3	3	25
A0002	01F01	28	1.0	20	FLDCT	B9999	0000F	4	3	0
A0002	01F01	29	2.0	20	FLDCT	B9999	0000F	5	3	12
A0002	01F01	30	3.0	20	FLDCT	B9999	0000F	6	3	25
A0002	01F01	31	1.0	20	FLDCT	B9999	0000F	7	3	0
A0002	01F01	32	0.0	20	FLDCT	B9999	0000G	1	3	-12
A0002	01F01	33	1.0	20	FLDCT	B9999	0000G	2	3	0
A0002	01F01	34	3.0	20	FLDCT	B9999	0000G	3	3	25
A0002	01F01	35	3.0	20	FLDCT	B9999	0000G	4	3	25
A0002	01F01	36	1.0	20	FLDCT	B9999	0000G	5	3	0
A0002	01F01	37	0.0	20	FLDCT	B9999	0000G	6	3	-12
A0002	01F01	38	1.0	20	FLDCT	B9999	0000G	7	3	0
A0002	01F01	39	1.0	20	FLDCT	B9999	0000H	1	3	0
A0002	01F01	40	3.0	20	FLDCT	B9999	0000H	2	3	25
A0002	01F01	41	2.0	20	FLDCT	B9999	0000H	3	3	12
A0002	01F01	42	1.0	20	FLDCT	B9999	0000H	4	3	0
A0002	01F01	43	0.0	20	FLDCT	B9999	0000H	5	3	-12
A0002	01F01	44	0.0	20	FLDCT	B9999	0000H	6	3	-12

Alpha Flag

Alpha Max Flag

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0002	01F01	45	1.0	20	FLDCT	B9999	0000H	7	3	0
A0002	01F01	46	1.0	20	FLDCT	B9999	0000I	1	3	0
A0002	01F01	47	1.0	20	FLDCT	B9999	0000I	2	3	0
A0002	01F01	48	1.0	20	FLDCT	B9999	0000I	3	3	0
A0002	01F01	49	4.0	20	FLDCT	B9999	0000I	4	3	37
A0002	01F01	50	1.0	20	FLDCT	B9999	0000I	5	3	0
A0002	01F01	51	0.0	20	FLDCT	B9999	0000I	6	3	-12
A0002	01F01	52	2.0	20	FLDCT	B9999	0000I	7	3	12
A0002	01F01	53	4.0	20	FLDCT	B9999	0000J	1	3	37
A0002	01F01	54	5.0	20	FLDCT	B9999	0000J	2	3	50
A0002	01F01	55	1.0	20	FLDCT	B9999	0000J	3	3	0
A0002	01F01	56	2.0	20	FLDCT	B9999	0000J	4	3	12
A0002	01F01	57	0.0	20	FLDCT	B9999	0000J	5	3	-12
A0002	01F01	58	1.0	20	FLDCT	B9999	0000J	6	3	0
A0002	01F01	59	0.0	20	FLDCT	B9999	0000J	7	3	-12
A0002	01F01	60	2.0	20	FLDCT	B9999	0000K	1	3	12
A0002	01F01	61	4.0	20	FLDCT	B9999	0000K	2	3	37
A0002	01F01	62	0.0	20	FLDCT	B9999	0000K	3	3	-12
A0002	01F01	63	0.0	20	FLDCT	B9999	0000K	4	3	-12
A0002	01F01	64	2.0	20	FLDCT	B9999	0000K	5	3	12
A0002	01F01	65	1.0	20	FLDCT	B9999	0000K	6	3	0
A0002	01F01	66	1.0	20	FLDCT	B9999	0000K	7	3	0
A0002	01F01	67	1.0	20	FLDCT	B9999	0000L	1	3	0
A0002	01F01	68	1.0	20	FLDCT	B9999	0000L	2	3	0
A0002	01F01	69	0.0	20	FLDCT	B9999	0000L	3	3	-12
A0002	01F01	70	1.0	20	FLDCT	B9999	0000L	4	3	0
A0002	01F01	71	1.0	20	FLDCT	B9999	0000L	5	3	0
A0002	01F01	72	1.0	20	FLDCT	B9999	0000L	6	3	0
A0002	01F01	73	1.0	20	FLDCT	B9999	0000L	7	3	0
A0002	01F01	74	1.0	20	FLDCT	B9999	0000M	1	3	0
A0002	01F01	75	3.0	20	FLDCT	B9999	0000M	2	3	25
A0002	01F01	76	1.0	20	FLDCT	B9999	0000M	3	3	0
A0002	01F01	77	1.0	20	FLDCT	B9999	0000M	4	3	0
A0002	01F01	78	0.0	20	FLDCT	B9999	0000M	5	3	-12
A0002	01F01	79	0.0	20	FLDCT	B9999	0000M	6	3	-12
A0002	01F01	80	0.0	20	FLDCT	B9999	0000M	7	3	-12
A0002	01F01	81	3.0	20	FLDCT	B9999	0000N	1	3	25
A0002	01F01	82	0.0	20	FLDCT	B9999	0000N	2	3	-12
A0002	01F01	83	1.0	20	FLDCT	B9999	0000N	3	3	0
A0002	01F01	84	2.0	20	FLDCT	B9999	0000N	4	3	12
A0002	01F01	85	0.0	20	FLDCT	B9999	0000N	5	3	-12
A0002	01F01	86	1.0	20	FLDCT	B9999	0000N	6	3	0

Alpha Flag _____
 Alpha Max Flag _____

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0002	01F01	87	0.0	20	FLDCT	B9999	0000N	7	3	-12
A0002	01F01	88	3.0	20	FLDCT	B9999	0000O	1	3	25
A0002	01F01	89	2.0	20	FLDCT	B9999	0000O	2	3	12
A0002	01F01	90	1.0	20	FLDCT	B9999	0000P	1	3	0
A0002	01F01	91	1.0	20	FLDCT	B9999	0000O	3	3	0
A0002	01F01	92	2.0	20	FLDCT	B9999	0000P	2	3	12
A0002	01F01	93	1.0	20	FLDCT	B9999	0000P	3	3	0
A0002	01F01	94	2.0	20	FLDCT	B9999	0000Q	1	3	12
A0002	01F01	95	1.0	20	FLDCT	B9999	0000Q	2	3	0
A0002	01F01	96	0.0	20	FLDCT	B9999	0000Q	3	3	-12
A0002	01W01	97	1.0	20	FLDCT	B9999	0000A	1	3	0
A0002	01W01	98	0.0	20	FLDCT	B9999	0000A	2	3	-12
A0002	01W01	99	0.0	20	FLDCT	B9999	0000A	3	3	-12
A0002	01W01	100	2.0	20	FLDCT	B0008	0000A	4	3	12
A0002	01W01	101	5.0	20	FLDCT	B0008	0000A	5	3	50
A0002	01W01	102	2.0	20	FLDCT	B0008	0000A	6	3	12
A0002	01W01	103	1.0	20	FLDCT	B0008	0000A	7	3	0
A0002	01W01	104	0.0	20	FLDCT	B0008	0000A	11	3	-12
A0002	01W01	105	0.0	20	FLDCT	B9999	0000B	1	3	-12
A0002	01W01	106	0.0	20	FLDCT	B9999	0000B	2	3	-12
A0002	01W01	107	2.0	20	FLDCT	B0008	0000B	3	3	12
A0002	01W01	108	2.0	20	FLDCT	B9999	0000B	4	3	12
A0002	01W01	109	1.0	20	FLDCT	B0008	0000B	5	3	0
A0002	01W01	110	5.0	20	FLDCT	B0008	0000B	6	3	50
A0002	01W01	111	1.0	20	FLDCT	B0008	0000B	7	3	0
A0002	01W01	112	0.0	20	FLDCT	B0008	0000B	8	3	-12
A0002	01W01	113	0.0	20	FLDCT	B0008	0000B	9	3	-12
A0002	01W01	114	2.0	20	FLDCT	B0008	0000B	10	3	12
A0002	01W01	115	0.0	20	FLDCT	B0008	0000B	11	3	-12
A0002	01W02	116	2.0	20	FLDCT	B0001	0000A	1	3	12
A0002	01W02	117	2.0	20	FLDCT	B0001	0000A	2	3	12
A0002	01W02	118	2.0	20	FLDCT	B0001	0000A	3	3	12
A0002	01W02	119	3.0	20	FLDCT	B0001	0000A	4	3	25
A0002	01W02	120	0.0	20	FLDCT	B0001	0000A	5	3	-12
A0002	01W02	121	2.0	20	FLDCT	B0001	0000A	6	3	12
A0002	01W02	122	2.0	20	FLDCT	B0001	0000A	7	3	12
A0002	01W02	123	0.0	20	FLDCT	B0001	0000A	8	3	-12
A0002	01W02	124	1.0	20	FLDCT	B0001	0000A	9	3	0
A0002	01W02	125	1.0	20	FLDCT	B0001	0000A	10	3	0
A0002	01W02	126	2.0	20	FLDCT	B0001	0000A	11	3	12
A0002	01W02	127	1.0	20	FLDCT	B0001	0000A	12	3	0
A0002	01W02	128	2.0	20	FLDCT	B0001	0000B	12	3	12

note: not req'd
OK p. 9-20
1/6/03

Alpha Flag _____
Alpha Max Flag _____

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0002	01W02	129	0.0	20	FLDCT	B0001	0000E	11	3	-12
A0002	01W02	130	2.0	20	FLDCT	B0001	0000E	10	3	12
A0002	01W02	131	2.0	20	FLDCT	B0001	0000E	9	3	12
A0002	01W02	132	0.0	20	FLDCT	B0001	0000E	8	3	-12
A0002	01W02	133	1.0	20	FLDCT	B0001	0000E	7	3	0
A0002	01W02	134	0.0	20	FLDCT	B0001	0000E	6	3	-12
A0002	01W02	135	2.0	20	FLDCT	B0001	0000E	5	3	12
A0002	01W02	136	3.0	20	FLDCT	B0001	0000E	4	3	25
A0002	01W02	137	0.0	20	FLDCT	B0001	0000E	3	3	-12
A0002	01W02	138	3.0	20	FLDCT	B0001	0000E	2	3	25
A0002	01W02	139	1.0	20	FLDCT	B0001	0000E	1	3	0
A0002	01W03	140	1.0	20	FLDCT	B0009	0000A	1	3	0
A0002	01W03	141	2.0	20	FLDCT	B0009	0000A	2	3	12
A0002	01W03	142	1.0	20	FLDCT	B0009	0000A	3	3	0
A0002	01W03	143	0.0	20	FLDCT	B0009	0000A	4	3	-12
A0002	01W03	144	0.0	20	FLDCT	B0009	0000A	5	3	-12
A0002	01W03	145	0.0	20	FLDCT	B0008	0000A	6	3	-12
A0002	01W03	146	3.0	20	FLDCT	B0008	0000A	7	3	25
A0002	01W03	147	2.0	20	FLDCT	B9999	0000A	8	3	12
A0002	01W03	148	0.0	20	FLDCT	B0009	0000A	9	3	-12
A0002	01W03	149	1.0	20	FLDCT	B0009	0000A	10	3	0
A0002	01W03	150	3.0	20	FLDCT	B0001	0000A	11	3	25
A0002	01W03	151	2.0	20	FLDCT	B0001	0000E	11	3	12
A0002	01W03	152	3.0	20	FLDCT	B0001	0000E	10	3	25
A0002	01W03	153	1.0	20	FLDCT	B0009	0000E	9	3	0
A0002	01W03	154	0.0	20	FLDCT	B9999	0000E	8	3	-12
A0002	01W03	155	2.0	20	FLDCT	B0008	0000E	7	3	12
A0002	01W03	156	2.0	20	FLDCT	B9999	0000E	6	3	12
A0002	01W03	157	1.0	20	FLDCT	B0009	0000E	5	3	0
A0002	01W03	158	1.0	20	FLDCT	B0009	0000E	4	3	0
A0002	01W03	159	0.0	20	FLDCT	B0009	0000E	3	3	-12
A0002	01W03	160	2.0	20	FLDCT	B0009	0000E	2	3	12
A0002	01W03	161	1.0	20	FLDCT	B0009	0000E	1	3	0
A0002	01W04	162	3.0	20	FLDCT	B0006	0000A	1	3	25
A0002	01W04	163	3.0	20	FLDCT	B9999	0000A	4	3	25
A0002	01W04	164	2.0	20	FLDCT	B0006	0000A	5	3	12
A0002	01W04	165	3.0	20	FLDCT	B0006	0000A	6	3	25
A0002	01W04	166	1.0	20	FLDCT	B0006	0000A	7	3	0
A0002	01W04	167	1.0	20	FLDCT	B0007	0000A	8	3	0
A0002	01W04	168	2.0	20	FLDCT	B0007	0000A	9	3	12
A0002	01W04	169	0.0	20	FLDCT	B9999	0000A	10	3	-12
A0002	01W04	170	0.0	20	FLDCT	B0007	0000A	11	3	-12

Alpha Flag _____
 Alpha Max Flag _____

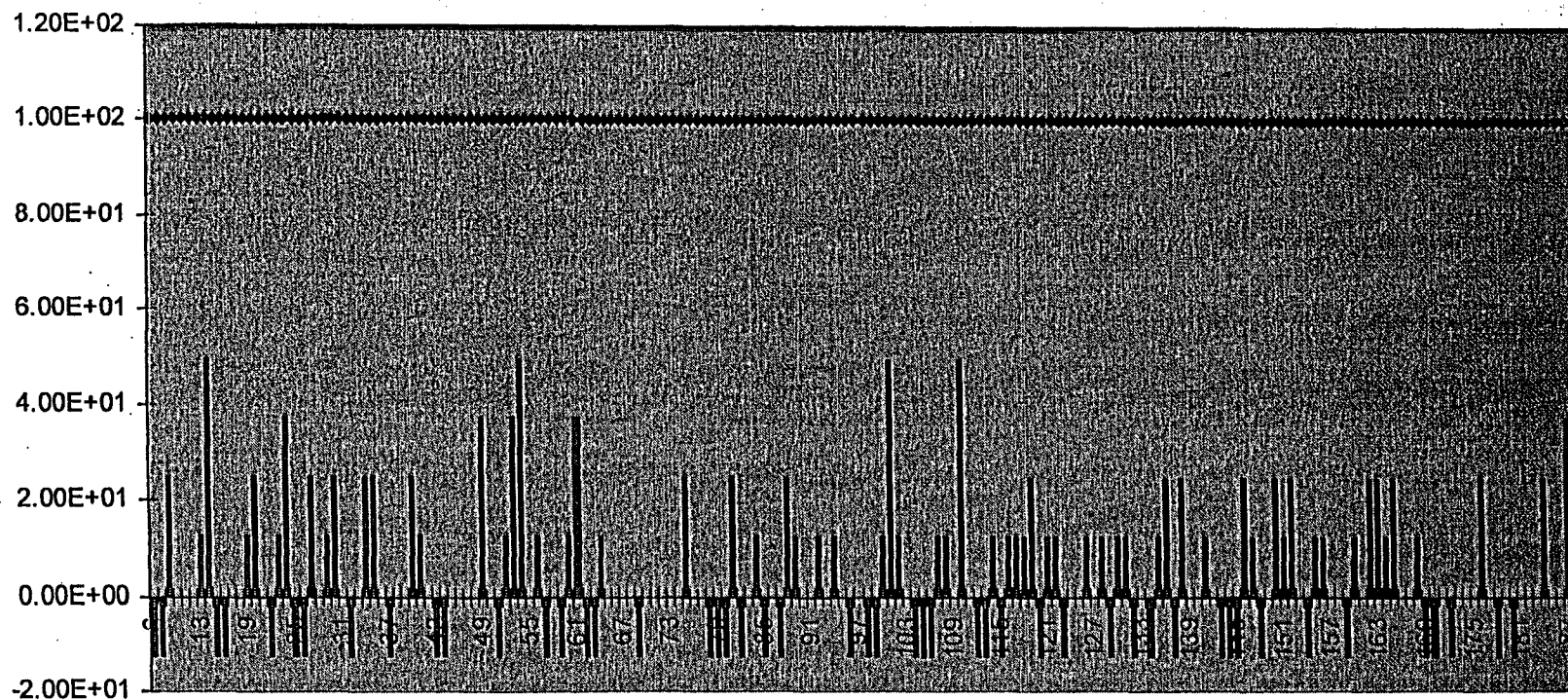
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0002	01W04	171	1.0	20	FLDCT	B0001	0000A	12	3	0
A0002	01W04	172	0.0	20	FLDCT	B9999	0000A	13	3	-12
A0002	01W04	173	1.0	20	FLDCT	B9999	0000A	14	3	0
A0002	01W04	174	1.0	20	FLDCT	B9999	0000A	15	3	0
A0002	01W04	175	1.0	20	FLDCT	B9999	0000B	15	3	0
A0002	01W04	176	3.0	20	FLDCT	B9999	0000B	14	3	25
A0002	01W04	177	1.0	20	FLDCT	B9999	0000B	13	3	0
A0002	01W04	178	0.0	20	FLDCT	B0006	0000B	12	3	-12
A0002	01W04	179	1.0	20	FLDCT	B0007	0000B	11	3	0
A0002	01W04	180	0.0	20	FLDCT	B9999	0000B	10	3	-12
A0002	01W04	181	1.0	20	FLDCT	B0007	0000B	9	3	0
A0002	01W04	182	1.0	20	FLDCT	B0007	0000B	8	3	0
A0002	01W04	183	1.0	20	FLDCT	B9999	0000B	7	3	0
A0002	01W04	184	3.0	20	FLDCT	B9999	0000B	6	3	25
A0002	01W04	185	1.0	20	FLDCT	B9999	0000B	5	3	0
A0002	01W04	186	1.0	20	FLDCT	B9999	0000B	4	3	0
A0002	01W04	187	4.0	20	FLDCT	B0007	0000B	1	3	37
A0002	01F01	189	3.0	20	FLDCT	B9999	0000C	1	3	25

Alpha Flag
 Alpha Max Flag

Download Name: 00000034

Survey Description: A0002 F01,W01-04 Pre S/C

M2350-1 Sample Results



Section 5

**Removable Alpha/Beta Activity Laboratory
Report(s)**

Oma V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
3:51:05

Batch ID: VA Smear Analysis - 200212041308	Acquisition Date: 12/4/2002	Alpha Bkg: 0.25 cpm
Group: D Sample Location: <i>A000Z 01 F01</i>	Batch Key: 6,548	Beta Bkg: 1.95 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency: 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk: 0.00	Beta Efficiency: 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204130847-D1	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204134259-D2	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204134429-D3	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204134549-D4	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204134720-D5	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204134840-D6	1.00	0.75	2.96	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204135010-D7	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204135130-D8	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204135300-D9	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204135420-D10	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204135550-D11	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204135710-D12	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204135840-D13	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204140000-D14	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204140130-D15	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204140300-D16	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204140420-D17	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204140550-D18	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204140711-D19	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204140841-D20	1.00	-0.25	-0.99	17.32	<MDA	3.05	12.89	31.33	<MDA
20021204141001-D21	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204141131-D22	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204141251-D23	1.00	-0.25	-0.99	17.32	<MDA	3.05	12.89	31.33	<MDA
20021204141421-D24	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204141541-D25	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204141711-D26	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204141831-D27	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204142001-D28	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204142121-D29	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: D. Schumacher Date 12/4/02

AD02 01 F01

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/02
3:51:03 PM

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204142251-D30	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204142411-D31	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204142541-D32	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204142702-D33	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204142832-D34	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204142952-D35	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204143122-D36	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204143242-D37	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204143412-D38	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204143532-D39	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204143702-D40	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204143822-D41	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204143952-D42	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204144112-D43	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204144242-D44	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204144402-D45	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204144532-D46	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204144653-D47	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204144823-D48	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204144953-D49	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204145113-D50	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204145243-D51	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204145403-D52	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204145533-D53	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204145653-D54	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204145823-D55	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204145943-D56	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204150113-D57	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204150233-D58	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204150403-D59	1.00	-0.25	-0.99	17.32	<MDA	45.05	190.36	31.33	<MDA
20021204150524-D60	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204150654-D61	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204150814-D62	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204150944-D63	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204151114-D64	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204151234-D65	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA

Grid
K4

P37

Performed By: D. Schumaker

Date 12/4/02

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021204151404-D66	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204151524-D67	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204151654-D68	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204151814-D69	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204151944-D70	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204152104-D71	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204152234-D72	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204152354-D73	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204152525-D74	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204152645-D75	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204152815-D76	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204152935-D77	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204153105-D78	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204153225-D79	1.00	1.75	6.90	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204153355-D80	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204153515-D81	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204153645-D82	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204153805-D83	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204153935-D84	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204154055-D85	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204154225-D86	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204154345-D87	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204154516-D88	1.00	1.75	6.90	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204154636-D89	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204154806-D90	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204154926-D91	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: D. Schumacher Date 12/8/02

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/5/2002
8:55:00

Batch ID:	VA Smear Analysis - 200212041504	Acquisition Date:	12/4/2002	Alpha Bkg	0.25 cpm
Group:	E Sample Location: A000201 W01	Batch Key	6,549	Beta Bkg	1.95 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204150432-E1	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204155224-E2	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204155354-E3	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204155514-E4	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204155644-E5	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204155804-E6	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204155935-E7	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204160055-E8	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204160225-E9	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204160345-E10	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204160515-E11	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204160635-E12	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204160805-E13	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204160935-E14	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204161055-E15	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204161225-E16	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204161345-E17	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA

Performed By: D. Schwanke Date 12/5/02

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/5/02

8:51:32

Batch ID: VA Smear Analysis - 200212041542 Acquisition Date: 12/4/2002 Alpha Bkg 0.25 cpm
 Group: F Sample Location: A000201W02 Batch Key 6,550 Beta Bkg 1.95 cpm
 Device: LB-5100 #15632 Operating Voltage: 1,417.0 Alpha Efficiency 0.2540
 Selected Geometry: Swipe/Smear Alpha to Beta Crosstalk 0.00 Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204154230-F18	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204161642-F19	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204161802-F20	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204161932-F21	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204162052-F22	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204162222-F23	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204162342-F24	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204162512-F25	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204162632-F26	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204162802-F27	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204162922-F28	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204163053-F29	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204163213-F30	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204163343-F31	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204163503-F32	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204163633-F33	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204163803-F34	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204163923-F35	1.00	1.75	6.90	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204164053-F36	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204164213-F37	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204164343-F38	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204164503-F39	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204164633-F40	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204164753-F41	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA

Performed By: D. Schuman Date 12/5/02

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/5/2002
8:49 AM

Batch ID: VA Smear Analysis - 200212041542
 Group: G Sample Location: *A000201 W03*
 Device: LB-5100 #15632
 Selected Geometry: Swipe/Smear

Acquisition Date: 12/4/2002 Alpha Bkg 0.25 cpm
 Batch Key 6,551 Beta Bkg 1.95 cpm
 Operating Voltage: 1,417.0 Alpha Efficiency 0.2540
 Alpha to Beta Crosstalk 0.00 Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204154240-G42	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204165044-G43	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204165214-G44	1.00	0.75	2.96	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204165334-G45	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204165504-G46	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204165624-G47	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204165754-G48	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204165914-G49	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204170045-G50	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204170205-G51	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204170335-G52	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204170505-G53	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204170625-G54	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204170755-G55	1.00	-0.25	-0.99	17.32	<MDA	4.05	17.11	31.33	<MDA
20021204170915-G56	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204171045-G57	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204171205-G58	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204171335-G59	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204171455-G60	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204171625-G61	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204171745-G62	1.00	-0.25	-0.99	17.32	<MDA	3.05	12.89	31.33	<MDA
20021204171915-G63	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: D. Schwanacci Date: 12/5/02

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/5/2002

8:47:56 AM

Batch ID: VA Smear Analysis - 200212041542	Acquisition Date: 12/4/2002	Alpha Bkg 0.25 cpm
Group: H Sample Location: <i>ADDD 201 W04</i>	Batch Key 6,552	Beta Bkg 1.95 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204154252-H64	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204172208-H65	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204172328-H66	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204172458-H67	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204172618-H68	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204172748-H69	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA
20021204172908-H70	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204173038-H71	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204173208-H72	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204173328-H73	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204173458-H74	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204173618-H75	1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204173748-H76	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204173909-H77	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204174039-H78	1.00	-0.25	-0.99	17.32	<MDA	3.05	12.89	31.33	<MDA
20021204174159-H79	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204174329-H80	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204174459-H81	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204174619-H82	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204174749-H83	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204174909-H84	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204175039-H85	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204175159-H86	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204175329-H87	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204175459-H88	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204175619-H89	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA

Performed By: D. Schaefer Date 12/5/02

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
6:04:49

Batch ID: VA Smear Analysis - 200212041549	Acquisition Date: 12/4/2002	Alpha Bkg 0.25 cpm
Group: I Sample Location: <i>A0002 01 50 1</i>	Batch Key 6,553	Beta Bkg 1.95 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204154920-I1	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204175917-I2	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204180037-I3	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204180207-I4	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204180327-I5	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: *D. Schumaker* Date *12/5/02*

P43

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002

6:12:00

Batch ID: VA Smear Analysis - 200212041549	Acquisition Date: 12/4/2002	Alpha Bkg 0.25 cpm
Group: J Sample Location: <i>A000201502</i>	Batch Key 6,554	Beta Bkg 1.95 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204154928-J6	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204180626-J7	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204180746-J8	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204180916-J9	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204181036-J10	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA

Performed By: *D. Schurr* Date *12/5/02*

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
6:26:23 PM

Batch ID:	VA Smear Analysis - 200212041549	Acquisition Date:	12/4/2002	Alpha Bkg	0.25 cpm
Group:	A Sample Location: <i>A000201503</i>	Batch Key	6,555	Beta Bkg	1.95 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204154938-A11	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204181336-A12	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204181456-A13	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204181626-A14	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204181746-A15	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204181916-A16	1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204182036-A17	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204182206-A18	1.00	-0.25	-0.99	17.32	<MDA	3.05	12.89	31.33	<MDA
20021204182336-A19	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204182456-A20	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: D. Schumaker Date 12/5/02

Oman J.A. A/B SMEAR ANALYSIS

Survey Report

12/09/2002
3:05:34

Batch ID:	VA Smear Analysis - 200212091439	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	C Sample Location: <i>A000201701</i>	Batch Key	6,588	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021209143911-C1	1.00	1.85	7.30	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209145242-C2	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209145412-C3	1.00	-0.15	-0.59	15.82	<MDA	16.40	*69.30	29.45	<MDA
20021209145532-C4	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209145702-C5	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209145822-C6	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209145952-C7	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209150112-C8	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209150243-C9	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209150403-C10	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA

* Sub-floor on W. Side of Fuel P.

Performed By: D. Schumacher Date: 12/10/02

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/10/2002
9:00:35

Batch ID:	VA Smear Analysis - 200212100845	Acquisition Date:	12/10/2002	Alpha Bkg	0.30 cpm
Group:	D Sample Location: <i>A006201702</i>	Batch Key	6,594	Beta Bkg	2.00 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021210084601-D1	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210084742-D2	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210084912-D3	1.00	-0.30	-1.18	17.96	<MDA	2.00	8.45	31.58	<MDA
20021210085032-D4	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210085202-D5	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210085322-D6	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210085452-D7	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210085612-D8	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210085742-D9	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210085902-D10	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA

Performed By: *D. Schumaker* Date *12/10/02*

Omni V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/2002
1:51:53

Batch ID: VA Smear Analysis - 200212091228 Acquisition Date: 12/9/2002 Alpha Bkg 0.15 cpm
 Group: D Sample Location: A000 2 01504 Batch Key 6,584 Beta Bkg 1.60 cpm
 Device: LB-5100 #15632 Operating Voltage: 1,417.0 Alpha Efficiency 0.2540
 Selected Geometry: Swipe/Smear Alpha to Beta Crosstalk 0.00 Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021209122909-D1	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209130901-D2	1.00	1.85	7.30	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209131031-D3	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209131151-D4	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209131321-D5	1.00	0.85	3.35	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209131441-D6	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209131611-D7	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209131731-D8	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209131901-D9	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209132021-D10	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209132152-D11	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209132312-D12	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209132442-D13	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209132602-D14	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209132732-D15	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209132852-D16	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209133022-D17	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209133142-D18	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209133312-D19	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209133432-D20	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209133602-D21	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209133722-D22	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209133852-D23	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209134012-D24	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209134143-D25	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209134313-D26	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209134433-D27	1.00	0.85	3.35	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209134603-D28	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209134723-D29	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA

Performed By: D. Schumaker Date 12/9/02

P48

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209134853-D30	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209135013-D31	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA

Performed By: D. Schuman Date 12/9/02

Section 6

**H-3 Removable Beta Contamination
Laboratory Report(s)**

LABORATORY ANALYSIS FORM

P51

Laboratory Sample No.: RC- 0204819
 Survey No.:
 HRWP No.:

1. **URGENT** ROUTINE (circle one) >100 cpm + Bkg Y/NO if yes: ncpm / uR/hr/

Sample Location / Description: Orlake, NE VA Project, A000201F01, W01-W04, S01-S03, T01-T02, S04

Sample Type (circle one): smears no.: 28 soil water leachate other

Sampled By: L. Finn Date 12-3-02 Time 1500

2. Analysis Requested (circle)

Gross Beta Gross Alpha HTO Gamma-quantitative Gamma-qualitative Other

3. Unconditional Release Yes / NO If Yes, is sample representative of entire contents? Yes / No

Analysis (nuclide)	Result	+ or -	Units	MDA (if required)	Comments	Analysis Date
<u>Smear 1-9 / HTO</u>	<u>< mda</u>	<u>N/A</u>	<u>dpm</u>	<u>max 60</u>	<u>A000201F01 #1-9</u>	<u>12-10-02</u>
<u>10-11</u>				<u>max 54</u>	<u>A000201W01 #1+2</u>	
<u>12-13</u>				<u>max 54</u>	<u>A000201W02 #1+2</u>	
<u>14-15</u>				<u>max 52</u>	<u>A000201W03 #1+2</u>	
<u>16-18</u>				<u>max 56</u>	<u>A000201W04 #1-3</u>	
<u>19</u>				<u>51</u>	<u>A000201S01 #1</u>	
<u>20</u>				<u>55</u>	<u>A000201S02 #1</u>	
<u>21</u>				<u>57</u>	<u>A000201S03 #1</u>	
<u>22-23</u>				<u>max 57</u>	<u>A000201T01 #1+2</u>	
<u>24-25</u>				<u>max 58</u>	<u>A000201T02 #1+2</u>	
<u>26-28</u>				<u>max 66</u>	<u>A000201S04 #1-3</u>	
			<u>N</u>			
			<u>A</u>			

Completed By: Mary Proctor (Lab Tech.) Date: 12-11-02

Approved By: Mary Proctor (Lab Supervisor or designee) Date: 12-11-02

Results Received By: PLA Jrs (Technician / Sampler) Date: 12-30-02

Reviewed By: sc. Finn (HRSO or designee) Date: 1-9-03

LABORATORY ANALYSIS FORM

P52

✓	Instrument Used	Serial #	Cal-. Due Date
✓ TP	Packard Tri-Carb 2550	401663	6-2-03
	Genie Gamma Spec (Det. 4)	6922910	2-25-03*
	Protean IPC 9025	721052	11-26-03

* As needed

Section 7

Gamma Spectrum Analysis

***** GAMMA SPECTRUM ANALYSIS *****

Report Generated On 1/24/03 2:24:16 PM

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0176 long.CNF
Spectrum Number VA020176.CNF
Sample Description Resin From Ion Exchanger
Sample Type Resin
Sample Geometry 2

Peak Locate Threshold 3.50
Peak Locate Range (in channels) 100 - 8192
Peak Area Range (in channels) 100 - 8192
Identification Energy Tolerance 2.00 keV

Sample Size 3.350E+002 g
Sample Collection Date 11/25/02 4:00:00 PM
Spectrum Collection Date 12/5/02 7:06:03 PM
Decay Corrected To 11/25/02 4:00:00 PM
Collected By L. Finn

Live Time 7200.0 seconds
Real Time 7213.0 seconds
% Dead Time 0.18 %
Background Type STEP

Energy Calibration Performed On 11/13/02
Efficiency Calibration Performed On 11/13/02
Calibration Geometry Used 2

Reprint

Performed & Reviewed By *RC. Finn* Date *1/24/03*

Supervisory Review *E. Hangille for Paul Jones* Date *2/18/03*

 ***** P E A K L O C A T E R E P O R T *****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0176 long.CNF
 Spectrum Number VA020176.CNF
 Sample Description Resin From Ion Exchanger
 Sample Type Resin

Peak Locate Performed on 1/24/03 2:24:15 PM
 Peak Locate From Channel 100
 Peak Locate To Channel 8192
 Peak Search Sensitivity 3.50
 MDA Confidence 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance	FWHM (keV)
1	167.82	0.2466	42.13	7.11	0.4707
2	315.53	0.2164	79.18	6.63	0.9149
3	486.16	0.1082	121.85	25.00	1.1901
4	977.61	0.1702	244.55	8.36	1.4009
5	1376.25	0.1008	344.21	23.26	1.2620
6	1407.09	0.2439	351.92	4.32	1.2715
7	1710.63	0.2137	427.84	5.12	1.3806
8	1734.91	0.0731	433.86	40.24	1.3874
9	2401.96	0.2072	600.49	5.24	1.5970
10	2436.95	0.2304	609.33	4.22	1.6052
11	2456.40	0.0748	614.13	33.65	1.6097
12	2630.59	0.2169	657.76	5.35	1.5316
13	2646.21	0.1030	661.56	18.15	1.5351
14	2891.35	0.0760	722.80	31.42	1.7208
15	3115.02	0.1453	778.75	8.24	1.8152
16	3338.30	0.1823	834.63	6.00	0.9726
17	3855.75	0.1486	963.80	8.27	1.6385
18	4342.42	0.1358	1085.37	8.81	1.7170
19	4448.08	0.1966	1111.94	5.24	2.4029
20	4462.62	0.1651	1115.39	6.55	2.4054
21	4625.77	0.2028	1156.21	4.44	1.3738
22	4693.00	0.0432	1173.00	80.04	2.1456
23	5098.63	0.1930	1274.36	4.40	1.8420
24	5198.42	0.2082	1299.34	4.03	1.5591
25	5330.36	0.0435	1332.27	74.20	2.3110
26	5632.39	0.1072	1407.77	12.16	2.2694
27	5843.82	0.1129	1460.61	10.69	2.3400

Errors quoted at 1.96 sigma

 ***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0176 long.CNF
 Spectrum Number VAO20176.CNF
 Sample Description Resin From Ion Exchanger

Peak Analysis Performed on 1/24/03 2:24:15 PM
 Peak Analysis From Channel 100
 Peak Analysis To Channel 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	164-	171	167.31	42.13	1.78E+002	38.23	3.62E+002
F	2	309-	323	315.60	79.18	3.21E+002	64.79	1.59E+003
F	3	478-	500	486.36	121.85	2.89E+003	115.17	2.37E+003
F	4	969-	984	977.39	244.55	6.02E+002	75.66	1.61E+003
M	5	1368-	1416	1376.19	344.21	1.64E+003	91.53	1.03E+003
m	6	1368-	1416	1407.07	351.92	8.47E+001	50.47	1.25E+003
M	7	1702-	1747	1710.88	427.84	1.29E+002	51.61	1.12E+003
m	8	1702-	1747	1734.97	433.86	4.30E+003	133.40	1.17E+003
M	9	2396-	2466	2401.82	600.49	1.15E+002	47.88	7.24E+002
m	10	2396-	2466	2437.21	609.33	1.10E+002	45.89	9.62E+002
m	11	2396-	2466	2456.40	614.13	3.36E+003	118.14	9.49E+002
M	12	2625-	2658	2631.01	657.76	1.37E+002	46.96	6.73E+002
m	13	2625-	2658	2646.22	661.56	1.03E+003	75.52	8.34E+002
F	14	2873-	2910	2891.29	722.80	3.02E+003	113.24	1.49E+003
F	15	3104-	3130	3115.19	778.75	4.08E+002	60.71	1.16E+003
F	16	3331-	3345	3338.83	834.63	1.31E+002	46.73	6.81E+002
F	17	3843-	3869	3855.75	963.80	3.59E+002	65.96	1.48E+003
F	18	4331-	4353	4342.26	1085.37	3.25E+002	60.07	9.27E+002
M	19	4429-	4481	4448.61	1111.94	4.04E+002	61.61	1.30E+003
m	20	4429-	4481	4462.40	1115.39	5.13E+002	64.16	1.21E+003
F	21	4616-	4634	4625.74	1156.21	7.76E+001	39.88	4.75E+002
F	22	4672-	4709	4692.95	1173.00	1.92E+004	265.00	8.45E+002
F	23	5089-	5109	5098.60	1274.36	7.17E+001	25.95	1.32E+002
F	24	5191-	5207	5198.53	1299.34	4.81E+001	23.55	1.03E+002
F	25	5308-	5356	5330.34	1332.27	1.74E+004	251.01	3.12E+002
F	26	5619-	5647	5632.46	1407.77	4.72E+002	44.12	8.98E+001
F	27	5831-	5858	5843.92	1460.61	3.87E+002	40.58	8.85E+001

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.96 sigma

 ***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0176 long.CNF
 Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/g)	Activity Uncertainty
K-40	0.998	1460.81*	10.67	4.038E-006	4.924E-007
MN-54	0.998	834.83*	99.97	9.310E-008	3.354E-008
CO-60	0.998	1173.22*	100.00	1.794E-005	1.021E-006
		1332.49*	100.00	1.811E-005	1.093E-006
ZN-65	0.999	1115.52*	50.75	9.272E-007	1.261E-007
SB-125	0.285	176.33	6.89		
		380.43	1.50		
		427.89*	29.33	1.806E-007	7.286E-008
		463.38	10.35		
		600.56*	17.80	3.444E-007	1.453E-007
		606.64	5.02		
		635.90	11.32		
		671.41	1.81		
CS-137	1.000	661.65*	85.12	6.957E-007	6.550E-008
EU-154	0.603	123.07*	40.50	1.653E-006	1.667E-007
		723.30*	19.70	9.456E-006	9.878E-007
		873.19	11.50		
		996.32	10.30		
		1004.76	17.89		
		1274.45*	35.50	2.020E-007	7.540E-008
BI-214	0.293	609.31*	46.30	1.268E-007	5.401E-008
		768.36	5.04		
		806.17	1.23		
		934.06	3.21		
		1120.29	15.10		
		1155.19*	1.70	4.196E-006	2.194E-006
		1238.11	5.94		
		1377.67	4.11		
		1764.49	15.80		

* = Energy line found in the spectrum.

@ = Energy line not used for Weighted Mean Activity

Energy tolerance used was 2.000

Nuclide confidence index threshold = 0.10

Errors quoted at 1.960 sigma

 *** INTERFERENCE CORRECTED REPORT ***

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0176 long.CNF
 Spectrum Number VA020176.CNF

Performed & Reviewed By H. Linn Date 1/24/03

	Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/g)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
X	NA-22	0.999			
	K-40	0.998	4.04E-006	4.92E-007	12.2
	MN-54	0.998	9.31E-008	3.35E-008	36.0
X	CO-57	0.820			
	CO-60	0.998	1.80E-005	7.46E-007	4.1
	ZN-65	0.999	9.27E-007	1.26E-007	13.6
	SB-125	0.285	2.14E-007	6.51E-008	30.5
	CS-137	1.000	6.96E-007	6.55E-008	9.4
	EU-154	0.603	4.92E-007	6.85E-008	13.9
	BI-214	0.293	1.29E-007	5.40E-008	41.8

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

***** UNIDENTIFIED PEAKS *****

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
F 1	42.13	2.4663E-002	21.53
F 2	79.18	4.4583E-002	20.19
F 4	244.55	8.3653E-002	12.56
M 5	344.21	2.2764E-001	5.58
m 6	351.92	1.1769E-002	59.56
m 8	433.86	5.9701E-001	3.10
m 11	614.13	4.6721E-001	3.51
M 12	657.76	1.8992E-002	34.34
F 15	778.75	5.6703E-002	14.87
F 17	963.80	4.9879E-002	18.37
F 18	1085.37	4.5097E-002	18.50
M 19	1111.94	5.6081E-002	15.26
F 24	1299.34	6.6863E-003	48.92
F 26	1407.77	6.5542E-002	9.35

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.96 sigma

**** GAMMA SPECTRUM ANALYSIS ****

Report Generated On 1/24/03 2:16:18 PM

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0178.CNF
Spectrum Number VA020178.CNF
Sample Description Pkg. A000301D01
Sample Type Water
Sample Geometry 2

Peak Locate Threshold 3.50
Peak Locate Range (in channels) 100 - 8192
Peak Area Range (in channels) 100 - 8192
Identification Energy Tolerance 2.00 keV

Sample Size 2.500E+002 ml
Sample Collection Date 11/22/02 4:00:00 PM
Spectrum Collection Date 12/8/02 8:11:33 AM
Decay Corrected To 11/22/02 4:00:00 PM
Collected By L. Finn

Live Time 600.0 seconds
Real Time 600.1 seconds
% Dead Time 0.01 %
Background Type STEP

Energy Calibration Performed On 11/13/02
Efficiency Calibration Performed On 11/13/02
Calibration Geometry Used 2

Represent

Performed & Reviewed By LC. Finn Date 1/24/03

Supervisory Review E. Hengille for Paul Jones Date 2/11/03

No peak locate results available for reporting purposes

 ***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0178.CNF
 Spectrum Number VA020178.CNF
 Sample Description Pkg. A000301D01

Peak Analysis Performed on 1/24/03 2:16:17 PM
 Peak Analysis From Channel 100
 Peak Analysis To Channel 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
----------	-----------	---------	---------------	--------------	---------------	------------------	------------------

One or more peaks were dropped due to multiplet de-convolution.

M = First peak in a multiplet region

m = Other peak in a multiplet region

F = Fitted singlet

Errors quoted at 1.96 sigma

***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D.

C:\GENIE2K\CAMFILES\VA-02-0178.CNF

Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
-----------------	------------------	-----------------	--------------	-----------------------	-------------------------

* = Energy line found in the spectrum.

@ = Energy line not used for Weighted Mean Activity

Energy tolerance used was 2.000

Nuclide confidence index threshold = 0.10

Errors quoted at 1.960 sigma

 *** INTERFERENCE CORRECTED REPORT ***

Sample I.D.

C:\GENIE2K\CAMFILES\VA-02-0178.CNF

Spectrum Number

VA020178.CNF

Performed & Reviewed By SC. Funn

Date 1/24/03

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt mean Activity Uncertainty	Wt mean Activity & Uncertainty
--------------	--------------------------	-------------------------------	---------------------------------	-----------------------------------

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

No peak search results available for nuclide analysis.

*** GAMMA SPECTRUM ANALYSIS ***

Report Generated On 12/8/02 10:49:35 AM

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0189.CNF
Spectrum Number VA020189..CNF
Sample Description Isotopic (FuelPoolFloorParticle)
Sample Type Particle
Sample Geometry 2

Peak Locate Threshold 3.50
Peak Locate Range (in channels) 100 - 8192
Peak Area Range (in channels) 100 - 8192
Identification Energy Tolerance 2.00 keV

Sample Size 1.000E+000 ea
Sample Collection Date
Spectrum Collection Date 12/8/02 10:37:19 AM
Decay Corrected To
Collected By L. Finn

Live Time 600.0 seconds
Real Time 600.1 seconds
% Dead Time 0.02 %
Background Type STEP

Energy Calibration Performed On 11/13/02
Efficiency Calibration Performed On 11/13/02
Calibration Geometry Used 2

Performed & Reviewed By LC Finn Date 12/08/02

Supervisory Review PLA J Date 12/16/02

 **** P E A K L O C A T E R E P O R T ****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0189.CNF
 Spectrum Number VA020189..CNF
 Sample Description Isotopic (FuelPoolFloorParticle)
 Sample Type Particle

Peak Locate Performed on 12/8/02 10:49:34 AM
 Peak Locate From Channel 100
 Peak Locate To Channel 8192
 Peak Search Sensitivity 3.50
 MDA Confidence 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance	FWHM (keV)
1	2643.05	0.1457	660.73	7.63	1.9948

Errors quoted at 1.96 sigma

 ***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0189.CNF
 Spectrum Number VA020189..CNF
 Sample Description Isotopic (FuelPoolFloorParticle)

Peak Analysis Performed on 12/8/02 10:49:34 AM
 Peak Analysis From Channel 100
 Peak Analysis To Channel 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F 1	2631-	2654	2642.88	660.73	2.74E+002	30.42	6.09E+000

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.96 sigma

***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0189.CNF
Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ea)	Activity Uncertainty
CS-137	0.966	661.65*	85.12	7.394E-004	9.315E-005

* = Energy line found in the spectrum.

@ = Energy line not used for Weighted Mean Activity

Energy tolerance used was 2.000

Nuclide confidence index threshold = 0.10

Errors quoted at 1.960 sigma

 *** INTERFERENCE CORRECTED REPORT ***

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0189.CNF
 Spectrum Number VA020189.CNF

Performed & Reviewed By LC. Fern Date 12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ea)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
CS-137	0.966	7.39E-004	9.32E-005	12.6

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

***** UNIDENTIFIED PEAKS *****

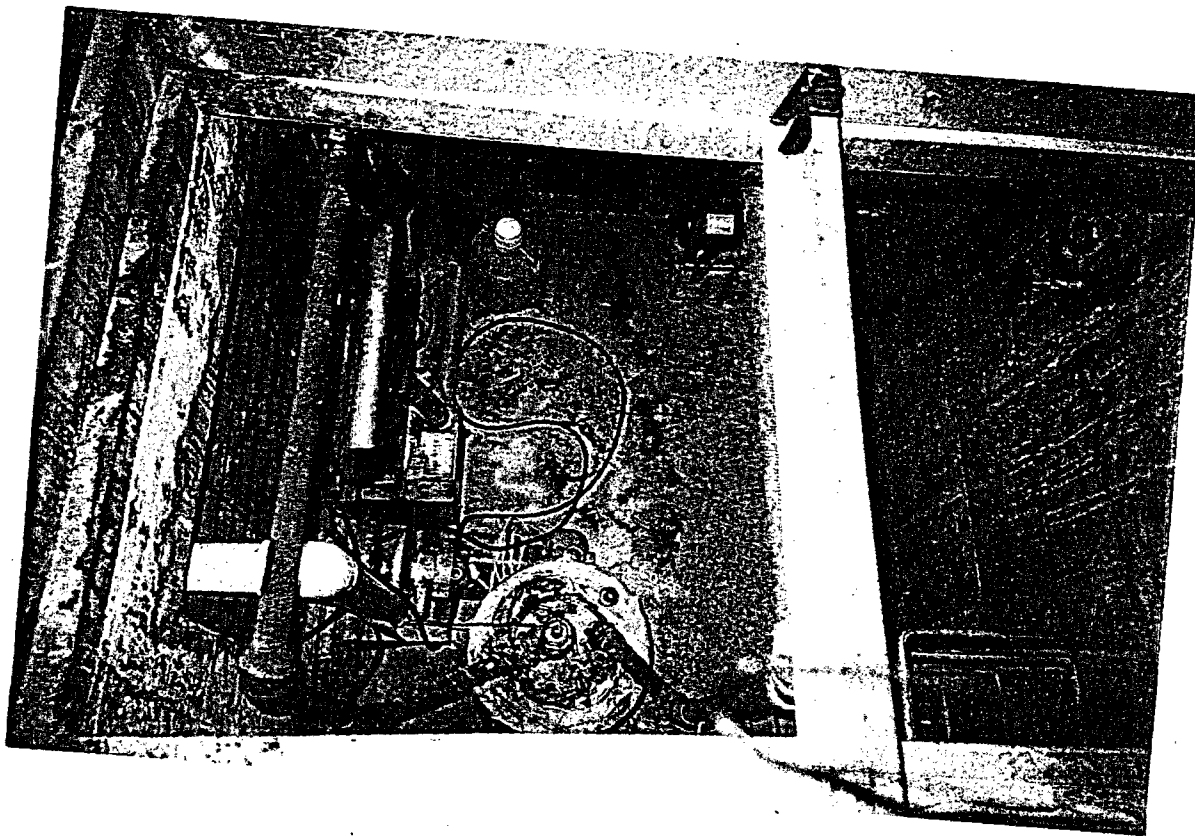
Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
----------	--------------	--------------------------------	------------------------

All peaks were identified.
 M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

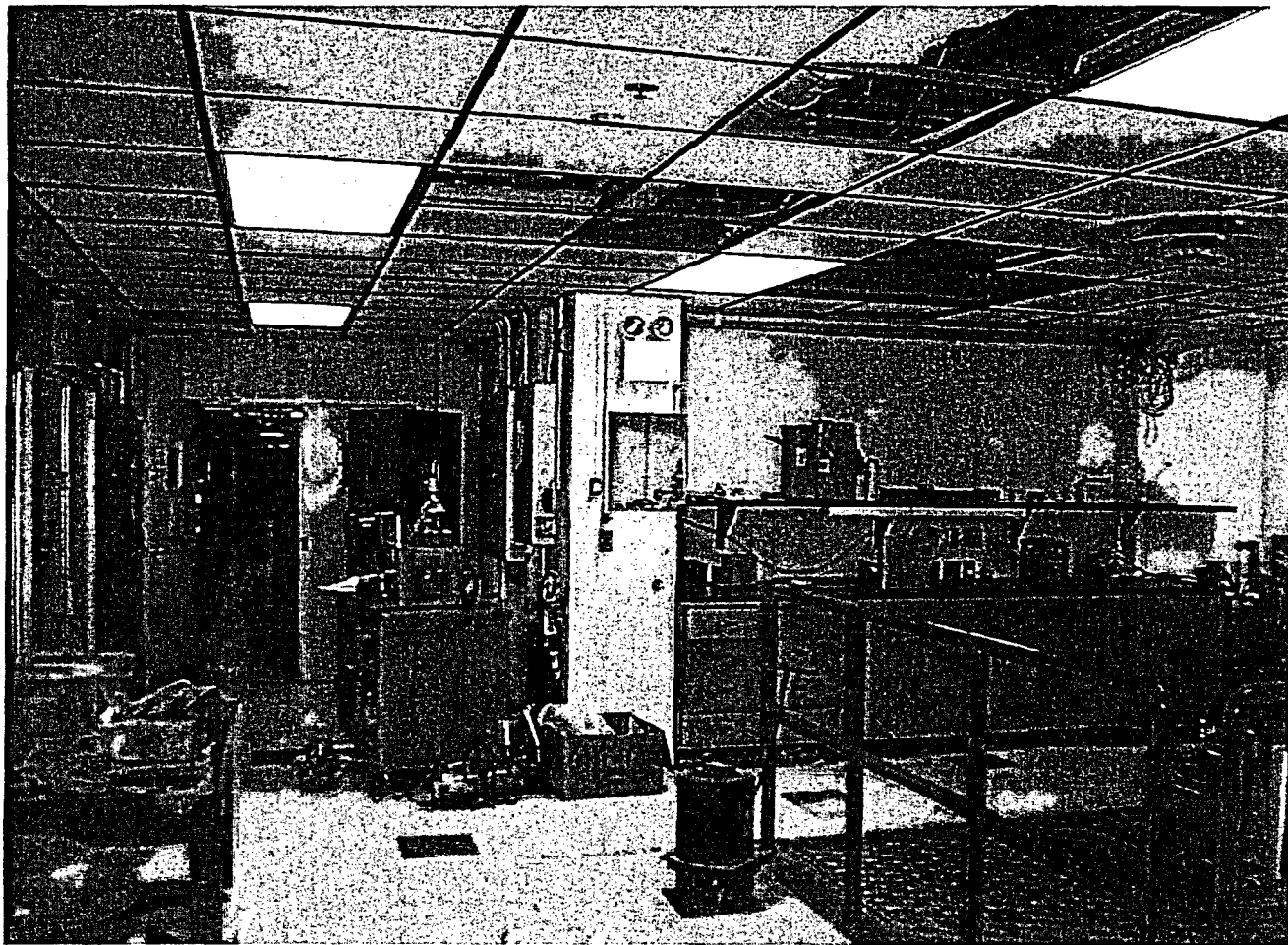
Errors quoted at 1.96 sigma

Section 8

Photos of the Survey Area

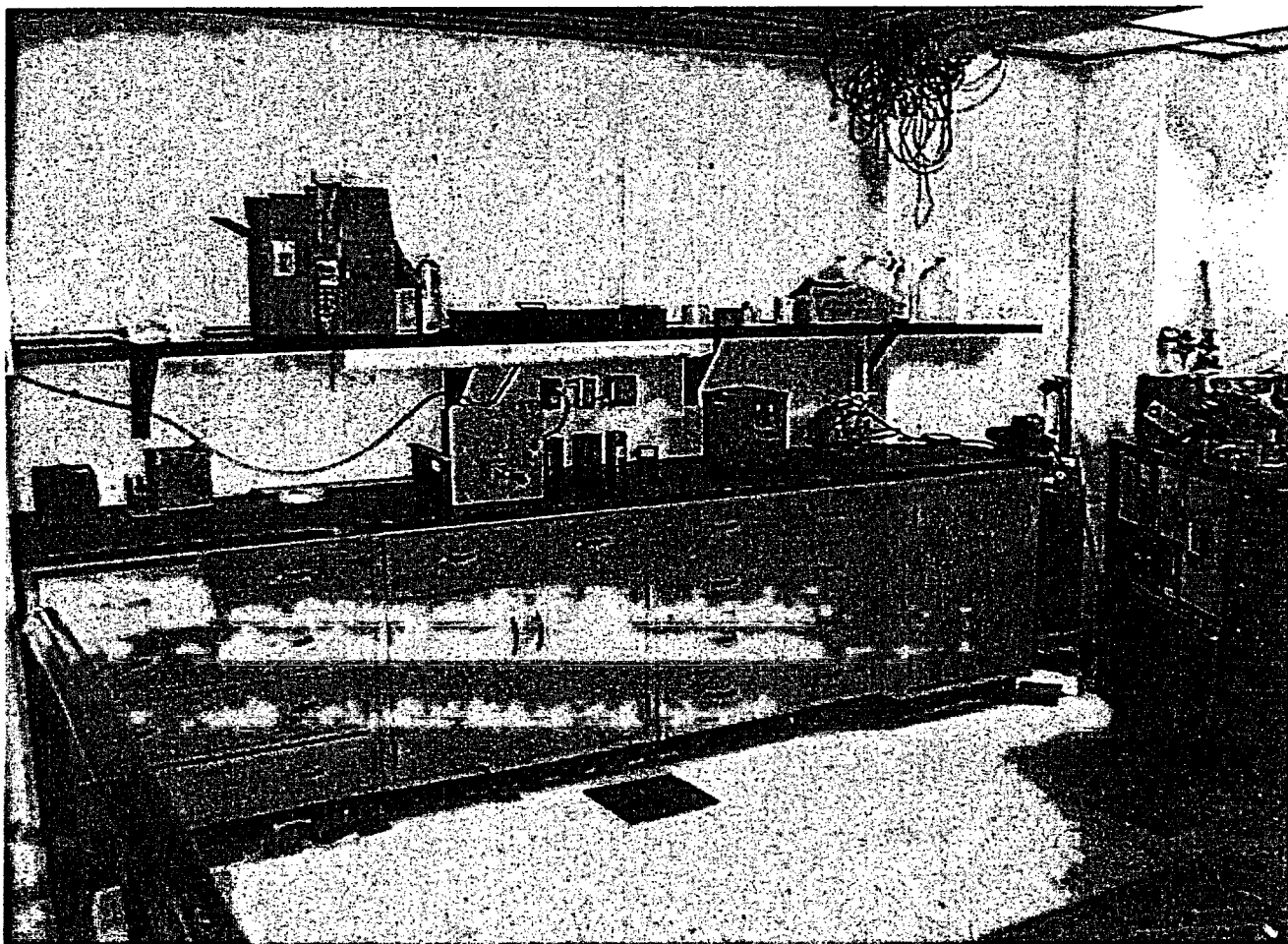


Structure 4



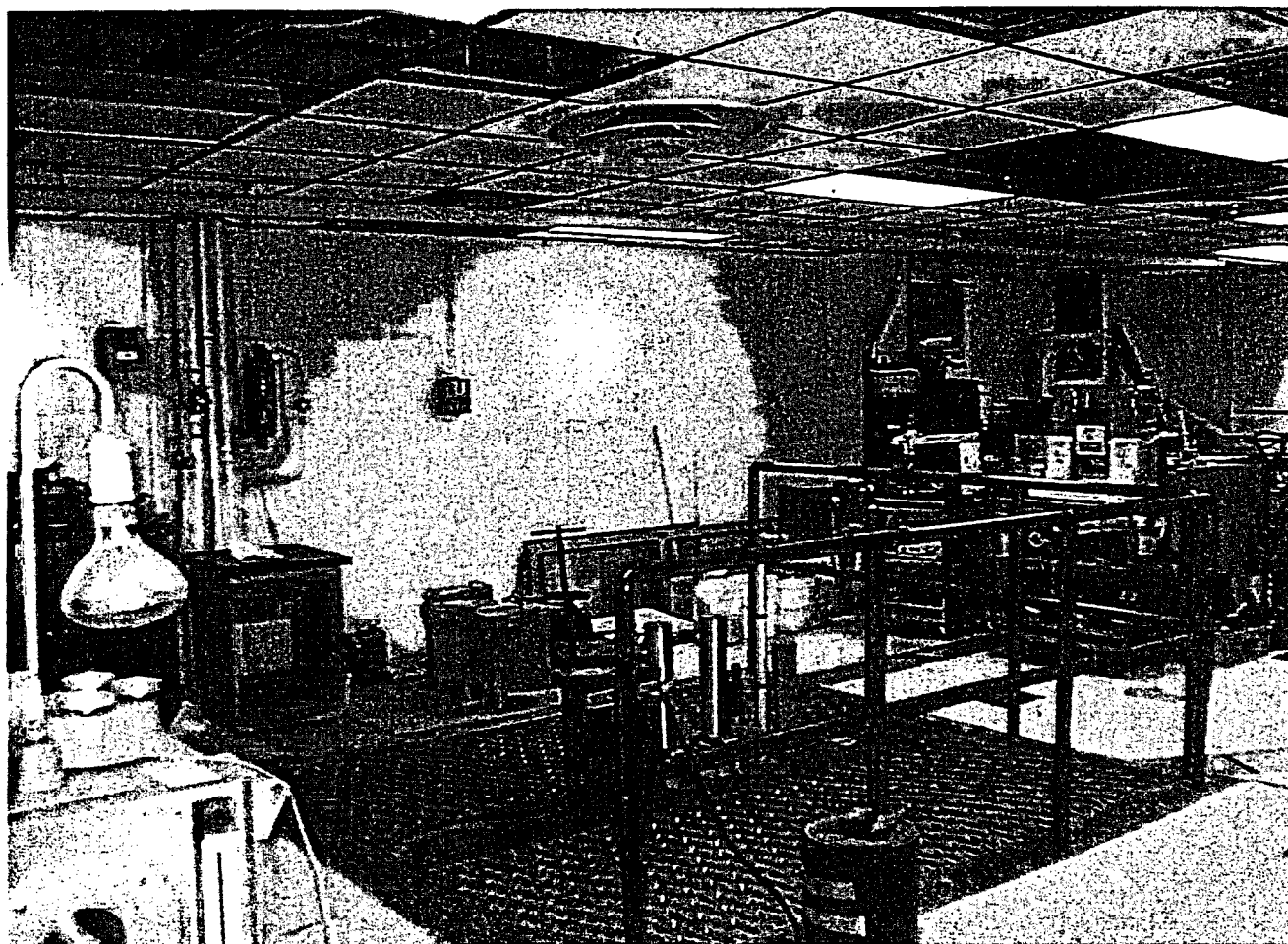
dec13_13

A0002 Facing North

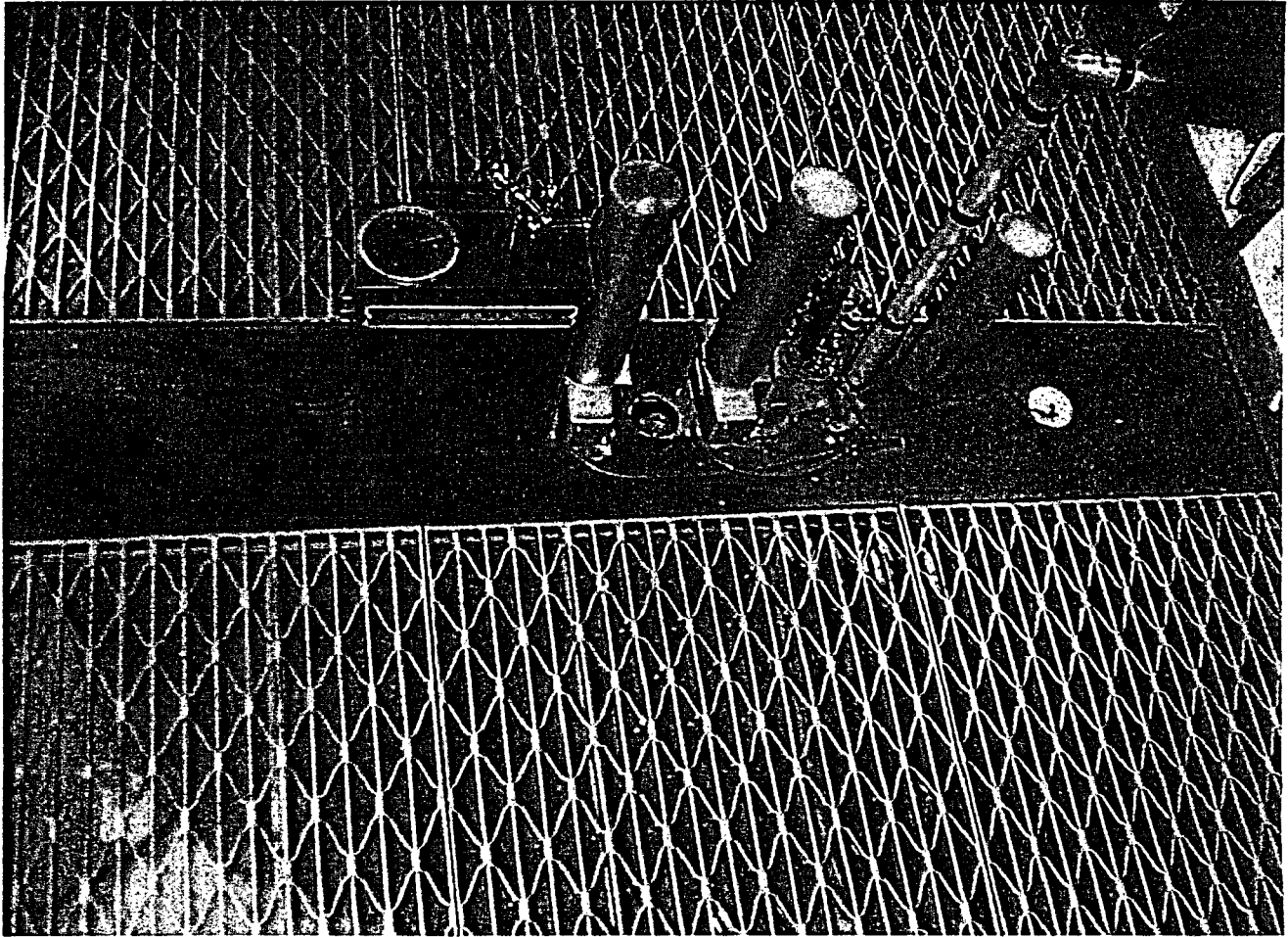


dec13_14

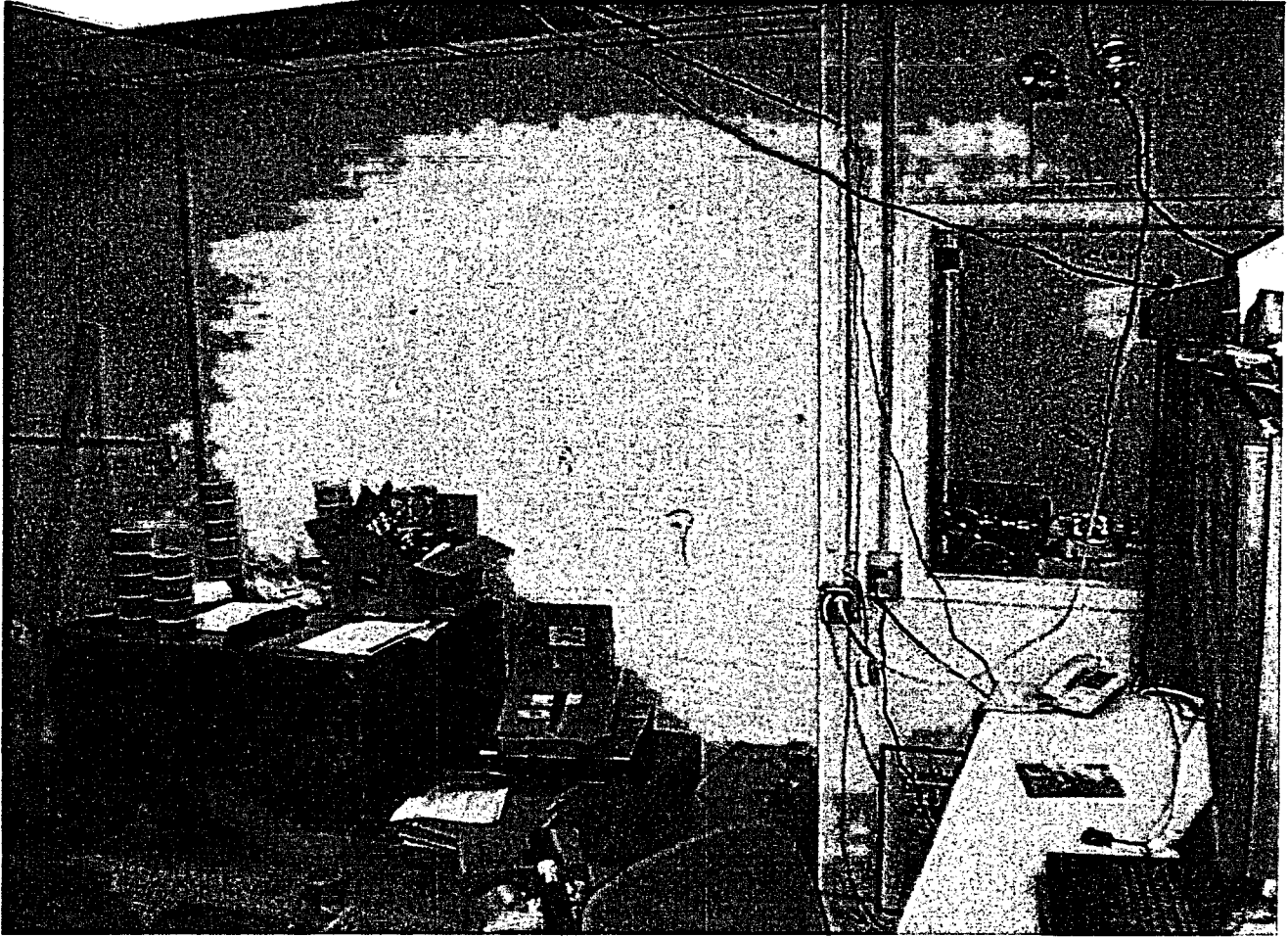
01503
A0000 1 (structure 3)



dec13_15



dec13_16



dec13_17

Alan J. Blotcky Research Reactor

Characterization Survey Package A0003

Rooms SW2C and SW2D

Alan J. Blotcky Reactor Facility
CHARACTERIZATION SURVEY PACKAGE A0003
(Room SW2C and SW2D)

TABLE OF CONTENTS

1.0	Survey Package Worksheet for Rooms SW2C and SW2D of the Reactor Controlled Area...	3
2.0	Map(s) of the Survey Area.....	9
3.0	M2350 Download Beta Report(s).....	14
4.0	M2350 Download Alpha Report(s).....	28
5.0	Removable Alpha/Beta Activity Laboratory Report(s).....	36
6.0	H-3 Removable Beta Contamination Laboratory Report(s).....	49
7.0	Gamma Spectrum Analysis.....	52
8.0	Photos of the Survey Areas.....	57

Section 1

Survey Package Worksheet for Rooms SW2C and SW2D of the Reactor Controlled Area

ATTACHMENT 6.2
CHARACTERIZATION SURVEY PACKAGE WORKSHEET

PACKAGE ID NO.: A0003	PREPARED BY: Paul Jones	DATE: 11/21/02
LOCATION: Veterans Affairs Medical Center		
FLOOR/ELEVATION: Basement	BUILDING: Research	AREA: Room SW2C & SW2D

Area Description

This package is for the reactor area rooms SW2C and SW2D. Room SW2D is a pit that contains the walk-in cooler. The walk in cooler is surveyed as room SW2D and the pit that encompasses the cooler is a structure. The pit is a permit required confined space. The lazy-susan from the reactor was transferred into the pit in 1966. In 1994 the pit area was also used to store a section of the pneumatic transfer system tubing that was replaced. The SW2C area was used for preparatory chemistry in support of research. This area stored chemicals housed in the reactor facility.

Historical Information

The Alan J. Blotcky Reactor was used to support nuclear medicine and research programs conducted at the medical center. The total reactor operation was approximately 515,000 kilowatt hours from 1959 to 2001.

Room 2D is the walk-in cooler for the Nuclear Research Lab. This room was used primarily for storage. This room originally contained a 1.2 Curie Cs-137 Shepard calibration source. The Shepard calibrator was moved in 1997 to the research wing of the hospital. The room was then used to store samples requiring refrigeration.

Room 2C is the Nuclear Research office and lab area. This room/area was used for gas chromatography and sample preparation. Two hoods are located in this area. The hood located on the North side filters and discharges back into the room. The hood located on the south side discharges on the roof of the hospital. In 1993 the pneumatic transfer system exhaust was routed into the south hood. The sink in the hood of this area was used for disposal of liquid effluents to the sanitary sewer system.

Survey Instructions

For the survey, perform measurements according to the Final Survey Plan Section 5.0 and applicable project procedures.

Class I Survey Units

1. Perform a scan over 100% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument.
2. Grid the area as show in the attached drawing(s) for survey locations.
3. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
4. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.

Survey Instructions (continued)

Class III Survey Units

1. Perform a scan over approximately 10% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument. All areas of elevated activity should be identified for further investigation and potential decontamination.
2. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
3. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.
4. Mark the location of the direct beta measurements and smear with a paint stick or equivalent on the surfaces of the survey unit.

General Survey Instructions (Class I, II, and III)

1. Use LMI Data Logger M2350-1 with M43-68 style Gas Flow Proportional for direct beta survey measurements.
2. Perform one 5 minute pre-survey shielded background and one 5 minute post-survey shielded background for each detector used for the survey.
3. Verify that the direct measurement MDA is less than 25% of the expected DCGL (< 1,250 dpm/100cm²) for direct beta measurements. If the field background is less than 1000 CPM, use 10-second count time for each direct beta measurement. If the field background is greater than 1000 CPM, obtain further directions from the Project Manager or designee.
4. Download each M2350-1 at completion of the survey, shift and/or prior to performing surveys in another survey area (before changing L1 codes).
5. Use location codes provided below for direct beta measurements, as appropriate.
6. Use the Package L1, L2, and L8 codes when labeling smears samples for counting.
7. When all measurements, samples or scans are collected, initial and date the "MEASUREMENT TYPE" block on the survey package to indicate the measurements or samples were collected.
8. Note any problems, comments, or other information pertinent to the data or sample collection under the "NOTES" section.

Survey Performance (Initial and Data Reached Survey is Complete)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross Bq	Smear H-3	Other
L1	L2	L3	L7	L8									
Reactor Building Rooms SW2C and SW2D													
A0003	01F01	TAC01	A thru B	1 thru 4	Floor	Impacted Class I	8				8	807 12/5	
A0003	01W01	TAC01	A thru B	1 thru 4	Wall 1	Impacted Class I	8				8	807 12/5	
A0003	01W02	TAC01	A thru B	1 thru 2	Wall 2	Impacted Class I	2				2	807 12/5	
A0003	01W03	TAC01	A thru B	1 thru 4	Wall 3	Impacted Class I	8				8	807 12/5	
A0003	01W04	TAC01	A thru B	1 thru 2	Wall 4	Impacted Class I	2				2	807 12/5	
A0003	01S01	TSC01	ZZZZ	1 thru 30	Structure 1 (Pit o/s Walk-in Cooler)	Impacted Class II	30				30	807	N/A
A0003	01D01	TSC01	ZZZZ	1	Drain o/s Walk-in Cooler	Impacted Class I	1				1	807	N/A
A0003	02F01	TAC01	A thru G	1 thru 7	Floor	Impacted Class I	28				28	807 12/5	
A0003	02W01	TAC01	A thru B	1 thru 10	Wall 1	Impacted Class I	10				10	807 12/5	
A0003	02W02	TAC01	A thru B	1 thru 11	Wall 2	Impacted Class I	7				7	807 12/5	
A0003	02W03	TAC01	A thru B	1 thru 11	Wall 3	Impacted Class I	7				7	807 12/5	
A0003	02W04	TAC01	A thru B	1 thru 17	Wall 4	Impacted Class I	9				9	807 12/5	

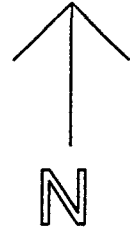
Survey performance (initial and date as each survey is complete)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross βγ	Smear H-3	Other
L1	L2	L3	L7	L8									
A0003	02S01	TAC01	ZZZZZ	1 thru 5	Structure 1 (South Vent Hood)	Impacted Class I	5				5	1 12/5	
A0003	02S02	TAC01	ZZZZZ	1 thru 5	Structure 2 (Recirc. Vent Hood)	Impacted Class I					5	1 12/5	
A0003	02S03	TAC01	ZZZZZ	1 thru 5	Structure 3	Impacted Class I					5	1 12/5	
A0003	02S04	TAC01	ZZZZZ	1 thru 10	Structure 4	Impacted Class I					5	1 12/5	
A0003	02S05	TAC01	ZZZZZ	1 thru 5	Structure 5	Impacted Class I					5	1 12/5	

Gamma ranges from 6-10 uCi/hr
 Walk-in cooler 22 uCi/hr

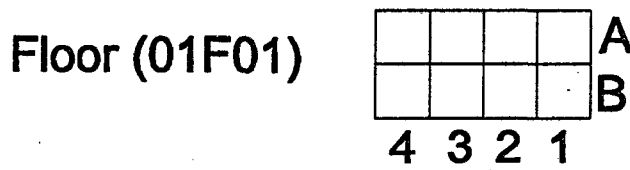
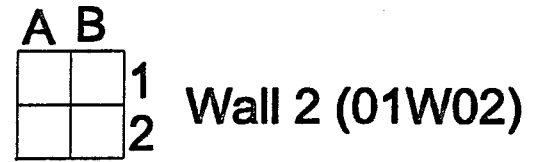
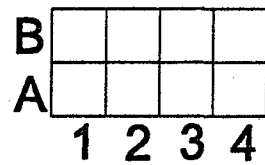
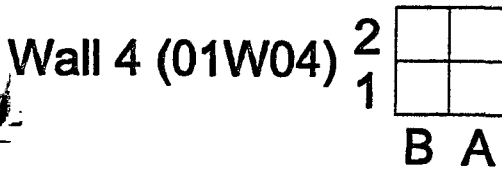
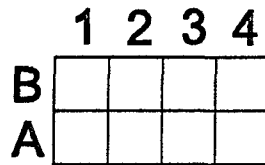
Section 2

Maps of the Survey Areas

Package A0003 Walk-in Cooler (Area 1)



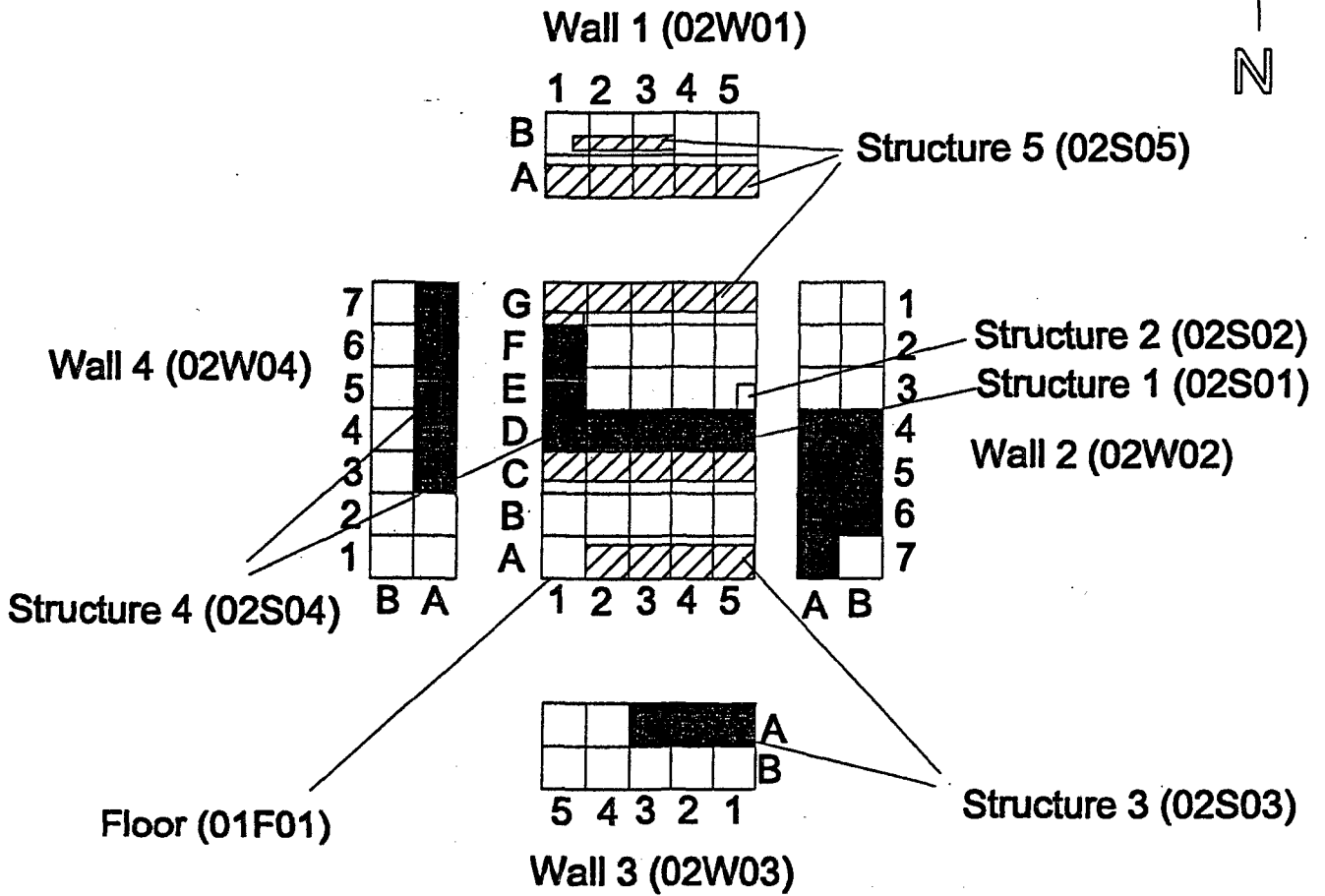
Wall 1 (01W01)






Wall 3 (01W03)

- Denotes 1 Square Meter Grid

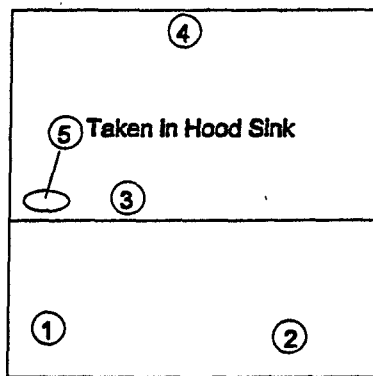
Package A0003 Rooms 2C & 2D(Area 2)



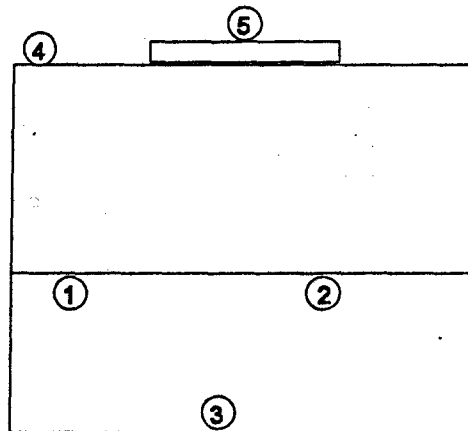
-  - Denotes 1 Square Meter Grid
-  - Denotes Obstructed Area
-  - Denotes Fully Obstructed Grid Area

Package A0003 Rooms 2C & 2D Structures

02S01 Hood (EF11)



02S02 Hood (Recirculates to Room)

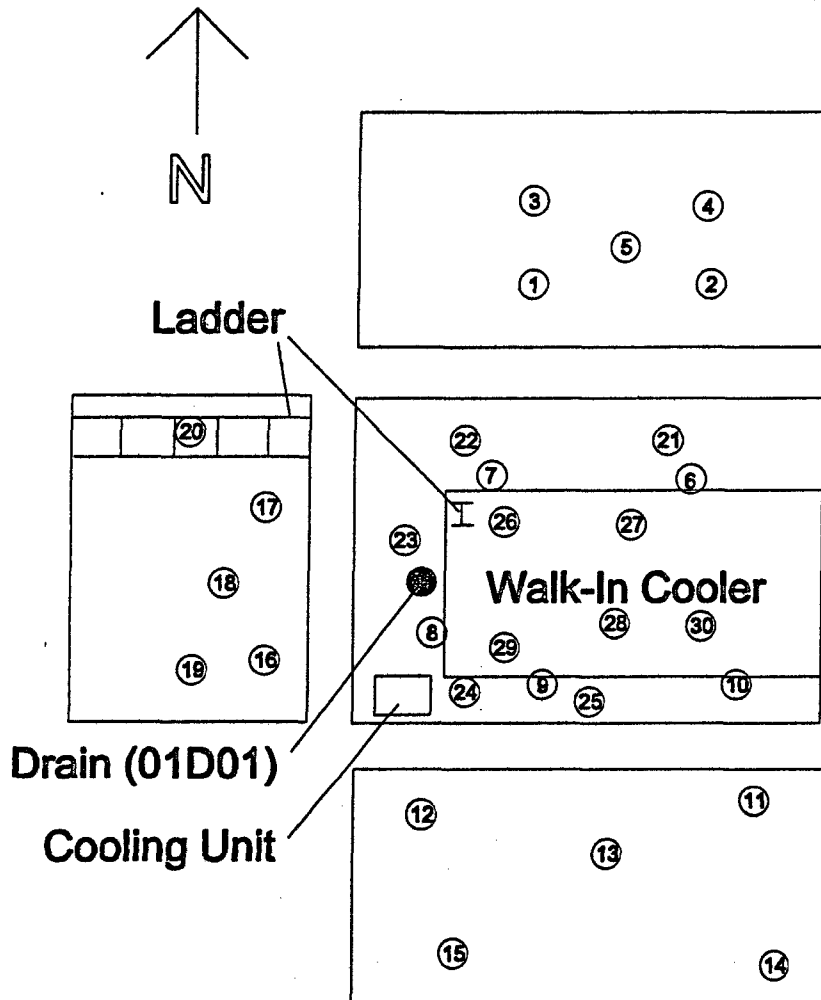


Ⓝ

Denotes Survey Measurement Location (See L8 Code)

Package A0003

West Pit Surrounding Walk-in Cooler (01S01)



Note: Readings 26 through 30 taken on roof of walk-in cooler

Note: Readings 6 through 10 taken on outside walls of walk-in cooler

Section 3

M2350 Download Beta Report(s)



M2350-1 Download BETA Report

File Name : 00000027		Survey Description :Pkg. A0003-Walk In Cooler	
Survey Reason : Characterization			
User ID : JLM9424		Technician Name :	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68B	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : BETA	Detector Type : 02200 : 126 cm2 Gas Proportional Detector		
Detector Area : 126	Efficiency : 0.211	Survey Date : 11/24/02	

<u>Jack Mucic</u> Print Name	<u>[Signature]</u> Signature	<u>11/24/02</u> Date
<u>Wade C. Ford</u> Print Name	<u>[Signature]</u> Signature	<u>11-24-02</u> Date

Comments:

*chg. data pto #23 7.37 from fldBKA to FLDOCT. Tech
 Replied on wrong 45. RCY 1/9/03*

Sign-Off PAUL JONES [Signature] 12/6/02
 Print Name Signature Date

Duratek Beta Survey Report

Download File Name: 00000027

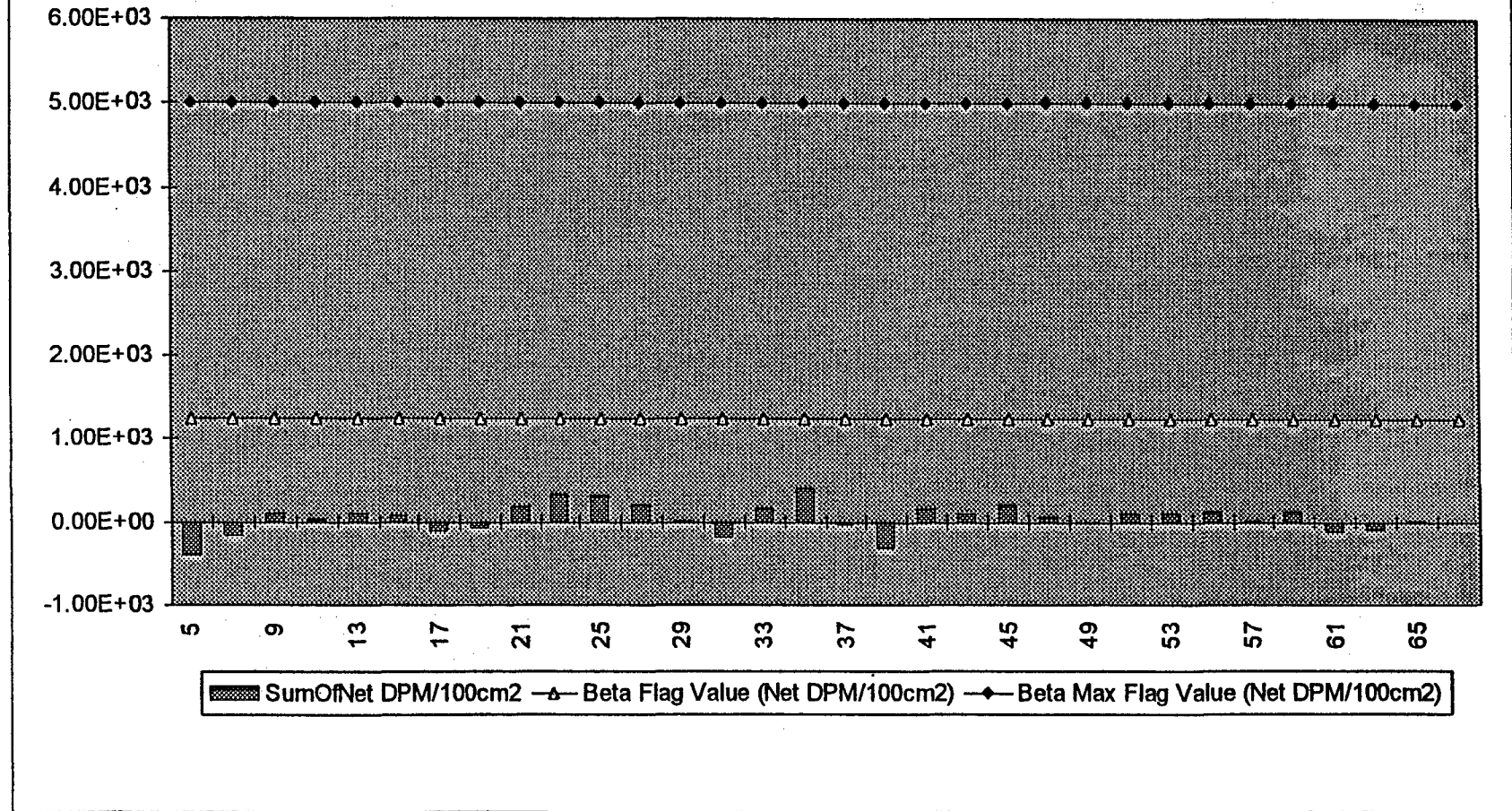
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0003	01F01	5	149.0	30	FLDCT	B9999	0000A	2	402	-391
A0003	01F01	7	179.0	30	FLDCT	B9999	0000A	2	402	-166
A0003	01F01	9	159.0	30	FLDCT	B9999	0000A	3	292	98
A0003	01F01	11	149.0	30	FLDCT	B9999	0000A	1	290	30
A0003	01F01	13	153.0	30	FLDCT	B9999	0000B	1	280	98
A0003	01F01	15	171.0	30	FLDCT	B9999	0000B	2	322	75
A0003	01F01	17	428.0	30	FLDCT	B9999	0000B	3	888	-120
A0003	01F01	19	271.0	30	FLDCT	B9999	0000B	4	560	-68
A0003	01W01	21	174.0	30	FLDCT	B9999	0000A	1	296	196
A0003	01W01	23	216.0	30	FLDCT	B9999	0000A	2	344	331
A0003	01W01	25	581.0	30	FLDCT	B9999	0000A	3	1078	316
A0003	01W01	27	428.0	30	FLDCT	B9999	0000A	4	800	211
A0003	01W01	29	148.0	30	FLDCT	B9999	0000B	1	294	8
A0003	01W01	31	169.0	30	FLDCT	B9999	0000B	2	388	-188
A0003	01W01	33	338.0	30	FLDCT	B9999	0000B	3	630	173
A0003	01W01	35	404.0	30	FLDCT	B9999	0000B	4	700	406
A0003	01W02	37	245.0	30	FLDCT	B9999	0000A	1	498	-30
A0003	01W02	39	116.0	30	FLDCT	B9999	0000A	2	316	-316
A0003	01W02	41	366.0	30	FLDCT	B9999	0000B	1	688	166
A0003	01W02	43	154.0	30	FLDCT	B9999	0000B	2	280	105
A0003	01W03	45	194.0	30	FLDCT	B9999	0000A	1	332	211
A0003	01W03	47	190.0	30	FLDCT	B9999	0000A	2	364	60
A0003	01W03	49	151.0	30	FLDCT	B9999	0000A	3	302	0
A0003	01W03	51	138.0	30	FLDCT	B9999	0000A	4	248	105
A0003	01W03	53	138.0	30	FLDCT	B9999	0000B	1	250	98
A0003	01W03	55	143.0	30	FLDCT	B9999	0000B	2	254	120
A0003	01W03	57	185.0	30	FLDCT	B9999	0000B	3	368	8
A0003	01W03	59	170.0	30	FLDCT	B9999	0000B	4	308	120
A0003	01W04	61	128.0	30	FLDCT	B9999	0000A	1	284	-105
A0003	01W04	63	145.0	30	FLDCT	B9999	0000A	2	314	-90
A0003	01W04	65	140.0	30	FLDCT	B9999	0000B	1	278	8
A0003	01W04	67	145.0	30	FLDCT	B9999	0000B	2	290	0

Beta Flag	1250	-	_____
Beta Max Flag	5000		

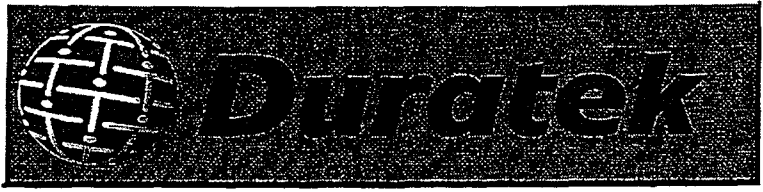
Download Name: 00000027

Survey Description: Pkg. A0003-Walk In Cooler

M2350-1 Sample Results



3 of 3



M2350-1 Download BETA Report

File Name : 00000039		Survey Description :A0003 S03-05 Post S/C	
Survey Reason : Characterization			
User ID : JLM9424		Technician Name :	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68B	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : BETA	Detector Type : 02200 : 126 cm2 Gas Proportional Detector		
Detector Area : 126	Efficiency : 0.218	Survey Date : 12/3/02	

Jack Mucia
Print Name

[Signature]
Signature

12/04/02
Date

Print Name

Signature

Date

Comments:

Sign-Off Paul Jones
Print Name

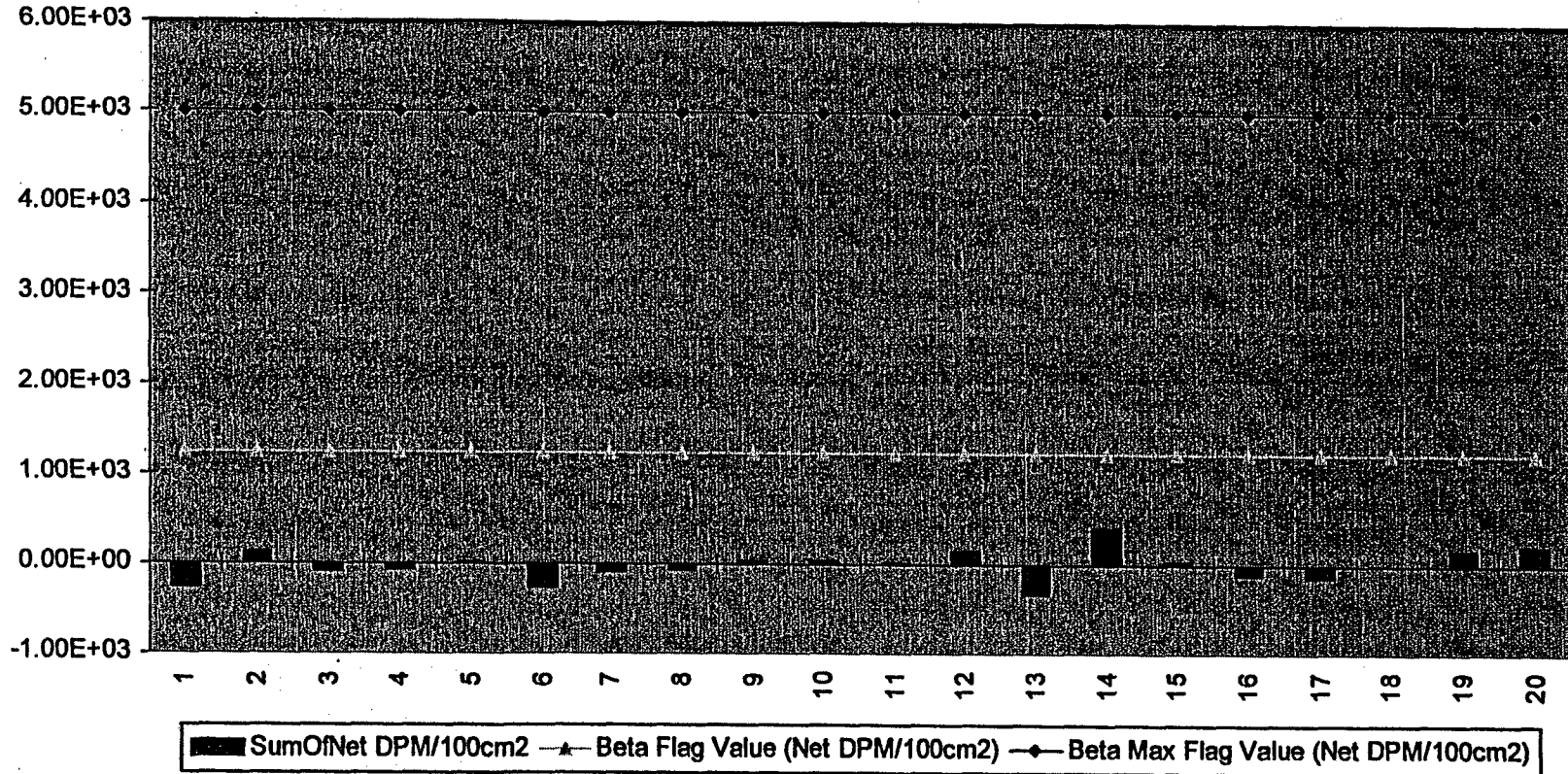
[Signature]
Signature

12/7/02
Date

Download Name: 00000039

Survey Description: A0003 S03-05 P0st S/C

M2350-1 Sample Results



2 of 3

Duratek Beta Survey Report

Download File Name: 00000039

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0003	02S03	1	36.0	10	FLDCT	B9999	////	1	290	-269
A0003	02S03	2	54.0	10	FLDCT	B9999	////	2	290	124
A0003	02S03	3	44.0	10	FLDCT	B9999	////	3	290	-95
A0003	02S03	4	45.0	10	FLDCT	B9999	////	4	290	-73
A0003	02S03	5	49.0	10	FLDCT	B9999	////	5	290	15
A0003	02S04	6	36.0	10	FLDCT	B9999	////	1	290	-269
A0003	02S04	7	44.0	10	FLDCT	B9999	////	2	290	-95
A0003	02S04	8	45.0	10	FLDCT	B9999	////	3	290	-73
A0003	02S04	9	50.0	10	FLDCT	B9999	////	4	290	36
A0003	02S04	10	50.0	10	FLDCT	B9999	////	5	290	36
A0003	02S04	11	49.0	10	FLDCT	B9999	////	6	290	15
A0003	02S04	12	55.0	10	FLDCT	B9999	////	7	290	146
A0003	02S04	13	33.0	10	FLDCT	B9999	////	8	290	-335
A0003	02S04	14	67.0	10	FLDCT	B9999	////	9	290	408
A0003	02S04	15	50.0	10	FLDCT	B9999	////	10	290	36
A0003	02S05	16	43.0	10	FLDCT	B9999	////	1	290	-116
A0003	02S05	17	42.0	10	FLDCT	B9999	////	2	290	-138
A0003	02S05	18	48.0	10	FLDCT	B9999	////	3	290	-7
A0003	02S05	19	56.0	10	FLDCT	B9999	////	4	290	167
A0003	02S05	20	58.0	10	FLDCT	B9999	////	5	290	211

Beta Flag	1250 - _____
Beta Max Flag	5000 

Duratek Beta Survey Report

Download File Name: 0000031

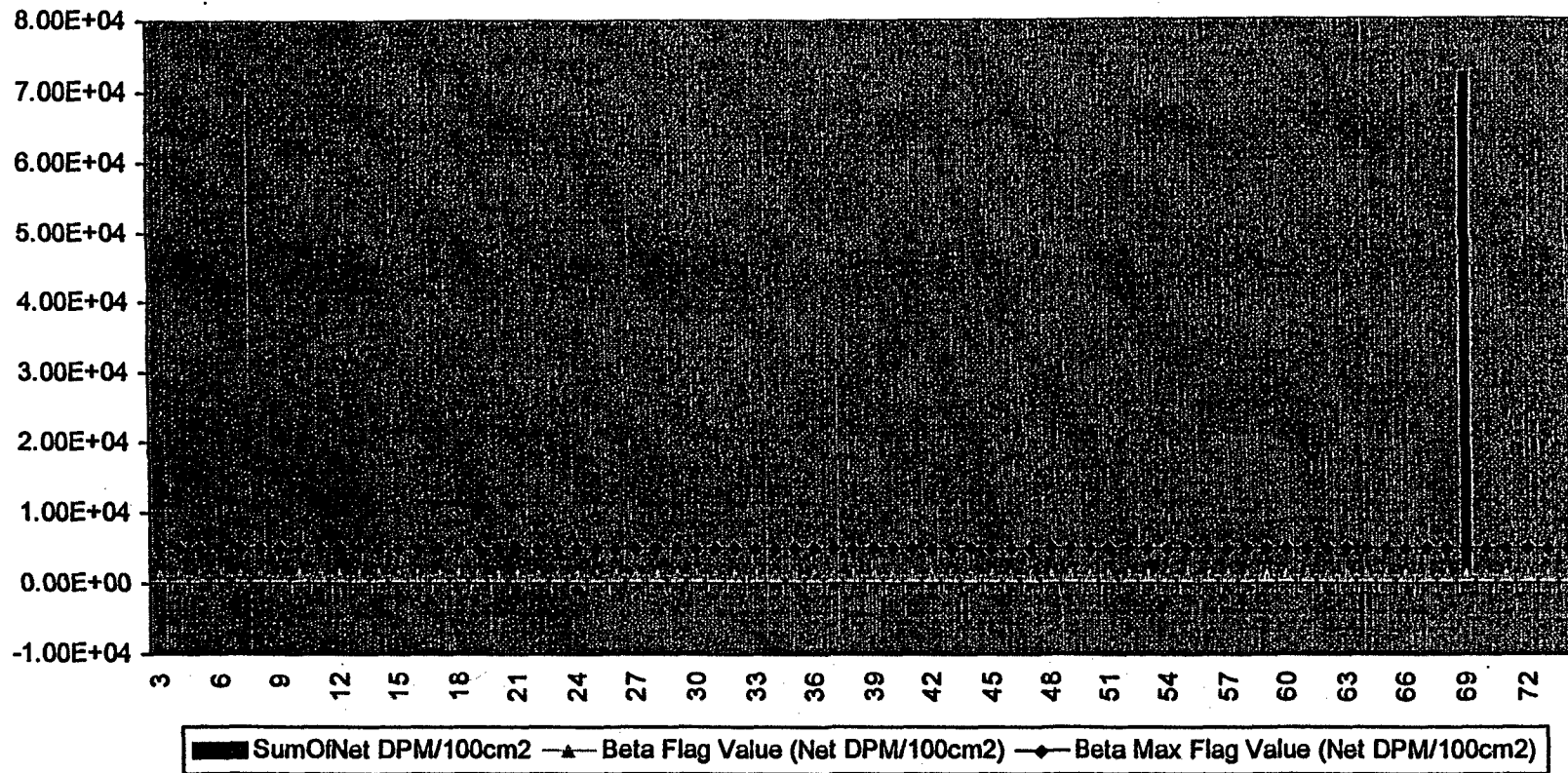
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0003	02F01	3	65.0	10	FLDCT	B9999	0000A	1	266	486
A0003	02F01	4	48.0	10	FLDCT	B9999	0000A	2	266	38
A0003	02F01	5	47.0	10	FLDCT	B9999	0000A	3	266	60
A0003	02F01	6	45.0	10	FLDCT	B9999	0000A	4	266	15
A0003	02F01	7	42.0	10	FLDCT	B9999	0000A	5	266	-53
A0003	02F01	8	51.0	10	FLDCT	B9999	0000B	1	266	150
A0003	02F01	9	54.0	10	FLDCT	B9999	0000B	2	266	218
A0003	02F01	10	51.0	10	FLDCT	B9999	0000B	3	266	150
A0003	02F01	11	49.0	10	FLDCT	B9999	0000B	4	266	105
A0003	02F01	12	47.0	10	FLDCT	B9999	0000B	5	266	60
A0003	02F01	13	56.0	10	FLDCT	B9999	0000C	1	266	263
A0003	02F01	14	51.0	10	FLDCT	B9999	0000C	2	266	150
A0003	02F01	15	51.0	10	FLDCT	B9999	0000C	3	266	150
A0003	02F01	16	50.0	10	FLDCT	B9999	0000C	4	266	128
A0003	02F01	17	62.0	10	FLDCT	B9999	0000C	5	266	399
A0003	02F01	18	41.0	10	FLDCT	B9999	0000E	2	266	-75
A0003	02F01	19	77.0	10	FLDCT	B9999	0000E	3	266	737
A0003	02F01	20	44.0	10	FLDCT	B9999	0000E	4	266	-8
A0003	02F01	21	57.0	10	FLDCT	B9999	0000E	5	266	286
A0003	02F01	22	38.0	10	FLDCT	B9999	0000F	2	266	-143
A0003	02F01	23	45.0	10	FLDCT	B9999	0000F	3	266	15
A0003	02F01	24	67.0	10	FLDCT	B9999	0000F	4	266	512
A0003	02F01	25	56.0	10	FLDCT	B9999	0000F	5	266	263
A0003	02F01	26	55.0	10	FLDCT	B9999	0000G	1	266	241
A0003	02F01	27	54.0	10	FLDCT	B9999	0000G	2	266	218
A0003	02F01	28	57.0	10	FLDCT	B9999	0000G	3	266	286
A0003	02F01	29	48.0	10	FLDCT	B9999	0000G	4	266	38
A0003	02F01	30	51.0	10	FLDCT	B9999	0000G	5	266	150
A0003	02W01	31	56.0	10	FLDCT	B0007	0000A	1	266	263
A0003	02W01	32	49.0	10	FLDCT	B0007	0000A	2	266	105
A0003	02W01	33	44.0	10	FLDCT	B0007	0000A	3	266	-8
A0003	02W01	34	40.0	10	FLDCT	B0007	0000A	4	266	-98
A0003	02W01	35	43.0	10	FLDCT	B0007	0000A	5	266	-30
A0003	02W01	36	53.0	10	FLDCT	B0007	0000B	1	266	196
A0003	02W01	37	26.0	10	FLDCT	B0007	0000B	2	266	-414
A0003	02W01	38	39.0	10	FLDCT	B0007	0000B	3	266	-120
A0003	02W01	39	60.0	10	FLDCT	B0007	0000B	4	266	354
A0003	02W01	40	38.0	10	FLDCT	B0007	0000B	5	266	-143
A0003	02W02	41	36.0	10	FLDCT	B0007	0000A	1	266	-188

Beta Flag	1250 - _____
Beta Max Flag	5000 ██████████

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0003	02W02	42	38.0	10	FLDCT	B0007	0000A	2	266	-143
A0003	02W02	43	46.0	10	FLDCT	B0007	0000A	3	266	38
A0003	02W02	44	39.0	10	FLDCT	B0007	0000B	1	266	-120
A0003	02W02	45	49.0	10	FLDCT	B0007	0000B	2	266	105
A0003	02W02	46	49.0	10	FLDCT	B0007	0000B	3	266	105
A0003	02W02	47	92.0	10	FLDCT	B0007	0000B	7	266	1,076
A0003	02W03	48	50.0	10	FLDCT	B0007	0000A	4	266	128
A0003	02W03	49	78.0	10	FLDCT	B0007	0000A	5	266	760
A0003	02W03	50	50.0	10	FLDCT	B0007	0000B	1	266	128
A0003	02W03	51	49.0	10	FLDCT	B0007	0000B	2	266	105
A0003	02W03	52	41.0	10	FLDCT	B0007	0000B	3	266	-75
A0003	02W03	53	56.0	10	FLDCT	B0007	0000B	4	266	263
A0003	02W03	54	45.0	10	FLDCT	B0007	0000B	5	266	15
A0003	02W03	55	63.0	10	FLDCT	B0007	0000B	6	266	421 (51)
A0003	02W04	56	60.0	10	FLDCT	B9999	0000A	1	266	354
A0003	02W04	57	97.0	10	FLDCT	B9999	0000A	2	266	1,189
A0003	02W04	58	65.0	10	FLDCT	B9999	0000B	1	266	466
A0003	02W04	59	143.0	10	FLDCT	B9999	0000B	2	266	2,227
A0003	02W04	60	56.0	10	FLDCT	B0001	0000B	3	266	263
A0003	02W04	61	51.0	10	FLDCT	B0001	0000B	4	266	150
A0003	02W04	62	53.0	10	FLDCT	B0001	0000B	5	266	196
A0003	02W04	63	50.0	10	FLDCT	B0001	0000B	6	266	128
A0003	02W04	64	67.0	10	FLDCT	B0001	0000B	7	266	512
A0003	02S01	65	46.0	10	FLDCT	B9999	ZZZZZ	1	266	38
A0003	02S01	66	48.0	10	FLDCT	B9999	ZZZZZ	2	266	63
A0003	02S01	67	45.0	10	FLDCT	B9999	ZZZZZ	3	266	15
A0003	02S01	68	47.0	10	FLDCT	B9999	ZZZZZ	4	266	60
A0003	02S01	69	3,244.0	10	FLDCT	B9999	ZZZZZ	5	266	[REDACTED]
A0003	02S02	70	50.0	10	FLDCT	B9999	ZZZZZ	1	266	128
A0003	02S02	71	37.0	10	FLDCT	B9999	ZZZZZ	2	266	-166
A0003	02S02	72	59.0	10	FLDCT	B9999	ZZZZZ	3	266	331
A0003	02S02	73	41.0	10	FLDCT	B9999	ZZZZZ	4	266	-75
A0003	02S02	74	71.0	10	FLDCT	B9999	ZZZZZ	5	266	602

Beta Flag	1250 - _____
Beta Max Flag	5000 [REDACTED]

M2350-1 Sample Results



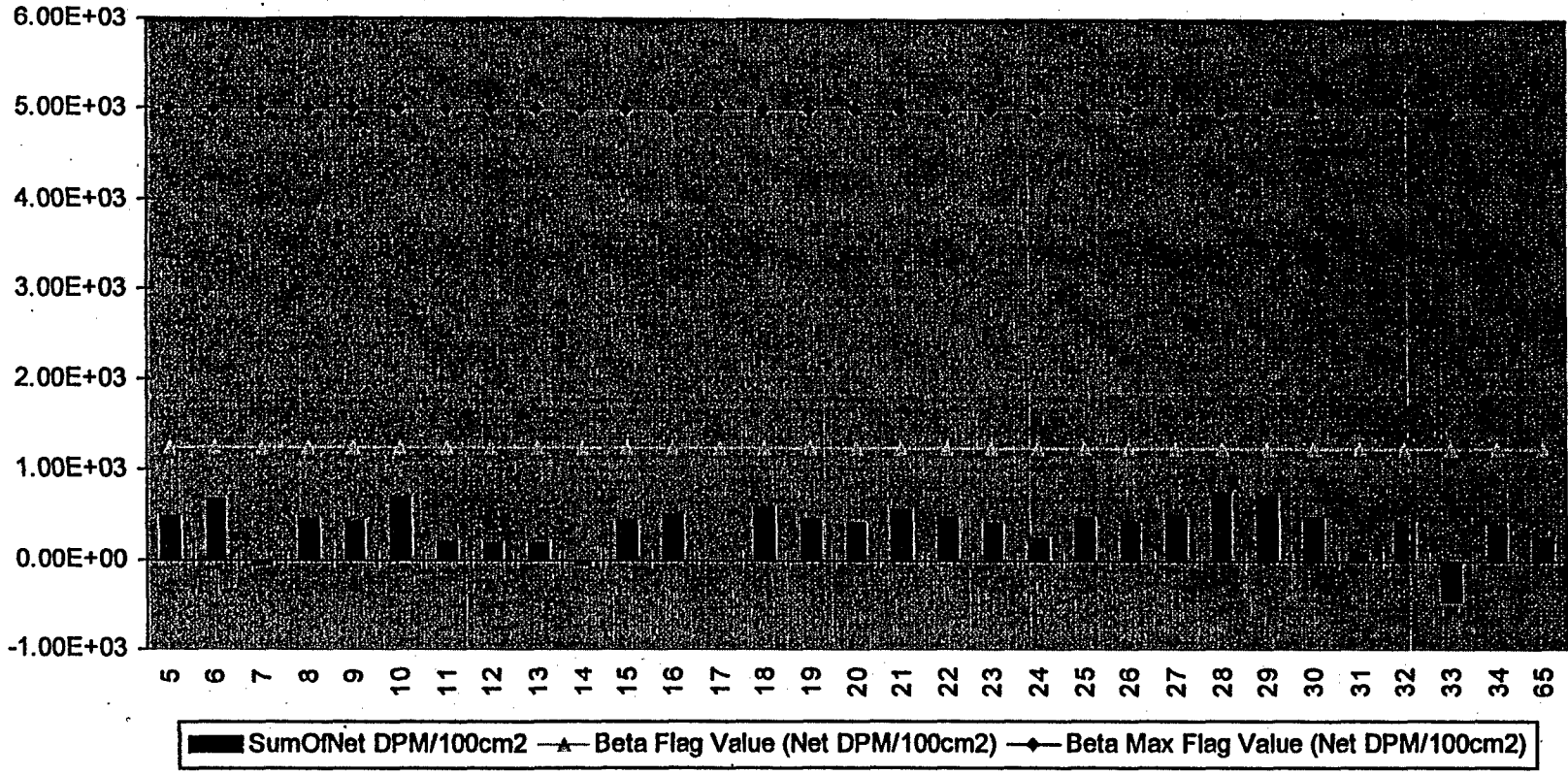
Duratek Beta Survey Report

Download File Name: 00000025

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0003	01SO1	5	236.0	30	FLDCT	B0001	ZZZZ	1	338	492
A0003	01SO1	6	478.0	30	FLDCT	B0001	ZZZZ	2	770	683
A0003	01SO1	7	207.0	30	FLDCT	B0001	ZZZZ	3	426	-44
A0003	01SO1	8	232.0	30	FLDCT	B0001	ZZZZ	4	336	470
A0003	01SO1	9	1,737.0	30	FLDCT	B0001	ZZZZ	5	3356	434
A0003	01SO1	10	1,482.0	30	FLDCT	B9999	ZZZZ	6	2772	705
A0003	01SO1	11	211.0	30	FLDCT	B9999	ZZZZ	7	366	206
A0003	01SO1	12	176.0	30	FLDCT	B9999	ZZZZ	8	302	184
A0003	01SO1	13	184.0	30	FLDCT	B9999	ZZZZ	9	316	191
A0003	01SO1	14	181.0	30	FLDCT	B9999	ZZZZ	10	374	-44
A0003	01SO1	15	230.0	30	FLDCT	B0001	ZZZZ	11	338	448
A0003	01SO1	16	211.0	30	FLDCT	B0001	ZZZZ	12	284	507
A0003	01SO1	17	196.0	30	FLDCT	B0001	ZZZZ	13	396	-15
A0003	01SO1	18	255.0	30	FLDCT	B0001	ZZZZ	14	348	595
A0003	01SO1	19	264.0	30	FLDCT	B0001	ZZZZ	15	402	463
A0003	01SO1	20	204.0	30	FLDCT	B0001	ZZZZ	16	292	426
A0003	01SO1	21	245.0	30	FLDCT	B0001	ZZZZ	17	334	573
A0003	01SO1	22	217.0	30	FLDCT	B0001	ZZZZ	18	298	500
A0003	01SO1	23	193.0	30	FLDCT	B0001	ZZZZ	19	270	426
A0003	01SO1	24	206.0	30	FLDCT	B0001	ZZZZ	20	344	250
A0003	01SO1	25	443.0	30	FLDCT	B0001	ZZZZ	21	754	485
A0003	01SO1	26	334.0	30	FLDCT	B0001	ZZZZ	22	546	448
A0003	01SO1	27	235.0	30	FLDCT	B0001	ZZZZ	23	332	507
A0003	01SO1	28	278.0	30	FLDCT	B0001	ZZZZ	24	344	779
A0003	01SO1	29	284.0	30	FLDCT	B0001	ZZZZ	25	366	742
A0003	01SO1	30	215.0	30	FLDCT	B9999	ZZZZ	26	298	485
A0003	01SO1	31	217.0	30	FLDCT	B9999	ZZZZ	27	404	110
A0003	01SO1	32	283.0	30	FLDCT	B9999	ZZZZ	28	444	448
A0003	01SO1	33	241.0	30	FLDCT	B9999	ZZZZ	29	606	-456
A0003	01SO1	34	358.0	30	FLDCT	B9999	ZZZZ	30	606	404
A0003	01D01	65	178.0	30	FLDCT	B9999	ZZZZ	1	283	268

Beta Flag	_____
Beta Max Flag	██████████

M2350-1 Sample Results



Page 3 of 3

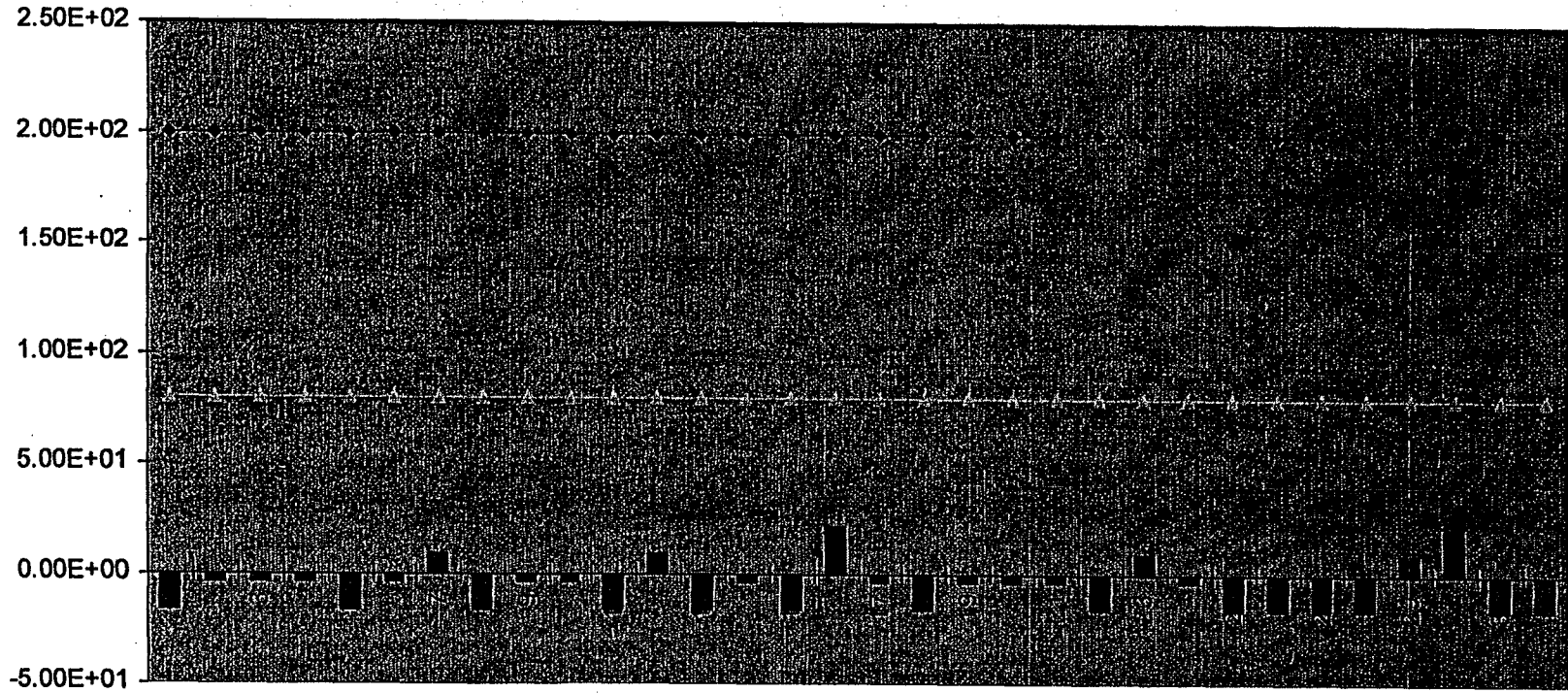
Section 4

M2350 Download Alpha Report(s)

Download Name: 00000041

Survey Description: A003 01F01,W01-04

M2350-1 Sample Results



SumOfNet DPM/100cm2 —▲— Alpha Flag Value (Net DPM/100cm2) —◆— Alpha Max Flag Value (Net DPM/100cm2)

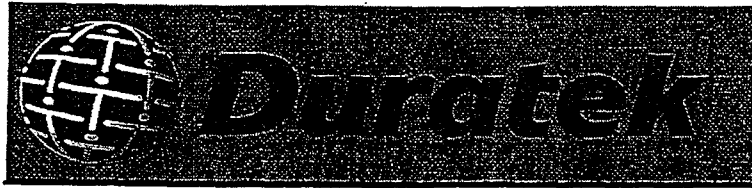
2 of 3

Duratek Alpha Survey Report

Download File Name: 00000041

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0003	01F01	1	0.0	20	FLDCT	B9999	0000A	1	4	-17
A0003	01F01	2	1.0	20	FLDCT	B9999	0000A	2	4	-4
A0003	01F01	3	1.0	20	FLDCT	B9999	0000A	3	4	-4
A0003	01F01	4	1.0	20	FLDCT	B9999	0000A	4	4	-4
A0003	01F01	5	0.0	20	FLDCT	B9999	0000B	1	4	-17
A0003	01F01	6	1.0	20	FLDCT	B9999	0000B	2	4	-4
A0003	01F01	7	2.0	20	FLDCT	B9999	0000B	3	4	8
A0003	01F01	8	0.0	20	FLDCT	B9999	0000B	4	4	-17
A0003	01W01	9	1.0	20	FLDCT	B9999	0000A	1	4	-4
A0003	01W01	10	1.0	20	FLDCT	B9999	0000A	2	4	-4
A0003	01W01	11	0.0	20	FLDCT	B9999	0000A	3	4	-17
A0003	01W01	12	2.0	20	FLDCT	B9999	0000A	4	4	8
A0003	01W01	13	0.0	20	FLDCT	B9999	0000B	1	4	-17
A0003	01W01	14	1.0	20	FLDCT	B9999	0000B	2	4	-4
A0003	01W01	15	0.0	20	FLDCT	B9999	0000B	3	4	-17
A0003	01W01	16	3.0	20	FLDCT	B9999	0000B	4	4	21
A0003	01W03	17	1.0	20	FLDCT	B9999	0000A	1	4	-4
A0003	01W03	18	0.0	20	FLDCT	B9999	0000A	2	4	-17
A0003	01W03	19	1.0	20	FLDCT	B9999	0000A	3	4	-4
A0003	01W03	20	1.0	20	FLDCT	B9999	0000A	4	4	-4
A0003	01W03	21	1.0	20	FLDCT	B9999	0000B	1	4	-4
A0003	01W03	22	0.0	20	FLDCT	B9999	0000B	2	4	-17
A0003	01W03	23	2.0	20	FLDCT	B9999	0000B	3	4	8
A0003	01W03	24	1.0	20	FLDCT	B9999	0000B	4	4	-4
A0003	01W04	25	0.0	20	FLDCT	B9999	0000A	1	4	-17
A0003	01W04	26	0.0	20	FLDCT	B9999	0000A	2	4	-17
A0003	01W04	27	0.0	20	FLDCT	B9999	0000B	1	4	-17
A0003	01W04	28	0.0	20	FLDCT	B9999	0000B	2	4	-17
A0003	01W02	29	2.0	20	FLDCT	B9999	0000A	1	4	8
A0003	01W02	30	3.0	20	FLDCT	B9999	0000A	2	4	21
A0003	01W02	31	0.0	20	FLDCT	B9999	0000B	1	4	-17
A0003	01W02	32	0.0	20	FLDCT	B9999	0000B	2	4	-17

Alpha Flag	80	_____
Alpha Max Flag	200	██████████



M2350-1 Download ALPHA Report

File Name : 00000040		Survey Description : A0003 02F01,W01-04,S01-05 PRE S/C	
Survey Reason : Characterization			
User ID : JLM9424		Technician Name :	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68A	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : ALPHA	Detector Type : 01200 : 126 cm2 Gas Proportional Detector, Alpha Window		
Detector Area : 126	Efficiency : 0.189	Survey Date : 12/4/02	

Jaen Murcia *Jaen Murcia* 12/04/02
 Print Name Signature Date

_____ _____ _____
 Print Name Signature Date

Comments:

Sign-Off PAUL JONES *Pl Jones* 12/7/02
 Print Name Signature Date

Duratek Alpha Survey Report

Download File Name: 0000040

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0003	02F01	5	2.0	20	FLDCT	B9999	0000A	1	4	8
A0003	02F01	6	5.0	20	FLDCT	B9999	0000A	2	4	46
A0003	02F01	7	0.0	20	FLDCT	B9999	0000A	3	4	-17
A0003	02F01	8	0.0	20	FLDCT	B9999	0000A	4	4	-17
A0003	02F01	9	2.0	20	FLDCT	B9999	0000A	5	4	8
A0003	02F01	10	2.0	20	FLDCT	B9999	0000B	1	4	8
A0003	02F01	11	3.0	20	FLDCT	B9999	0000B	2	4	21
A0003	02F01	12	2.0	20	FLDCT	B9999	0000B	3	4	8
A0003	02F01	13	1.0	20	FLDCT	B9999	0000B	4	4	-4
A0003	02F01	14	2.0	20	FLDCT	B9999	0000B	5	4	8
A0003	02F01	15	0.0	20	FLDCT	B9999	0000C	1	4	-17
A0003	02F01	16	5.0	20	FLDCT	B9999	0000C	2	4	46
A0003	02F01	17	0.0	20	FLDCT	B9999	0000C	3	4	-17
A0003	02F01	18	1.0	20	FLDCT	B9999	0000C	4	4	-4
A0003	02F01	19	1.0	20	FLDCT	B9999	0000C	5	4	-4
A0003	02F01	20	0.0	20	FLDCT	B9999	0000E	2	4	-17
A0003	02F01	21	0.0	20	FLDCT	B9999	0000E	3	4	-17
A0003	02F01	22	2.0	20	FLDCT	B9999	0000E	4	4	8
A0003	02F01	23	1.0	20	FLDCT	B9999	0000E	5	4	-4
A0003	02F01	24	4.0	20	FLDCT	B9999	0000F	2	4	34
A0003	02F01	25	2.0	20	FLDCT	B9999	0000F	3	4	8
A0003	02F01	26	0.0	20	FLDCT	B9999	0000F	4	4	-17
A0003	02F01	27	2.0	20	FLDCT	B9999	0000F	5	4	8
A0003	02F01	28	1.0	20	FLDCT	B9999	0000G	2	4	-4
A0003	02F01	29	3.0	20	FLDCT	B9999	0000G	3	4	21
A0003	02F01	30	4.0	20	FLDCT	B9999	0000G	4	4	34
A0003	02F01	31	1.0	20	FLDCT	B9999	0000G	5	4	-4
A0003	02W01	32	0.0	20	FLDCT	B0007	0000A	6	4	-17
A0003	02W01	33	0.0	20	FLDCT	B0007	0000A	2	4	-17
A0003	02W01	34	0.0	20	FLDCT	B0007	0000A	3	4	-17
A0003	02W01	35	1.0	20	FLDCT	B0007	0000A	4	4	-4
A0003	02W01	36	1.0	20	FLDCT	B0007	0000A	5	4	-4
A0003	02W01	37	2.0	20	FLDCT	B0007	0000B	1	4	8
A0003	02W01	38	1.0	20	FLDCT	B0007	0000B	2	4	-4
A0003	02W01	39	0.0	20	FLDCT	B0007	0000B	3	4	-17
A0003	02W01	40	2.0	20	FLDCT	B0007	0000B	4	4	8
A0003	02W01	41	2.0	20	FLDCT	B0007	0000B	5	4	8
A0003	02W02	42	0.0	20	FLDCT	B0007	0000A	1	4	-17

Alpha Flag	80	-	_____
Alpha Max Flag	200		██████████

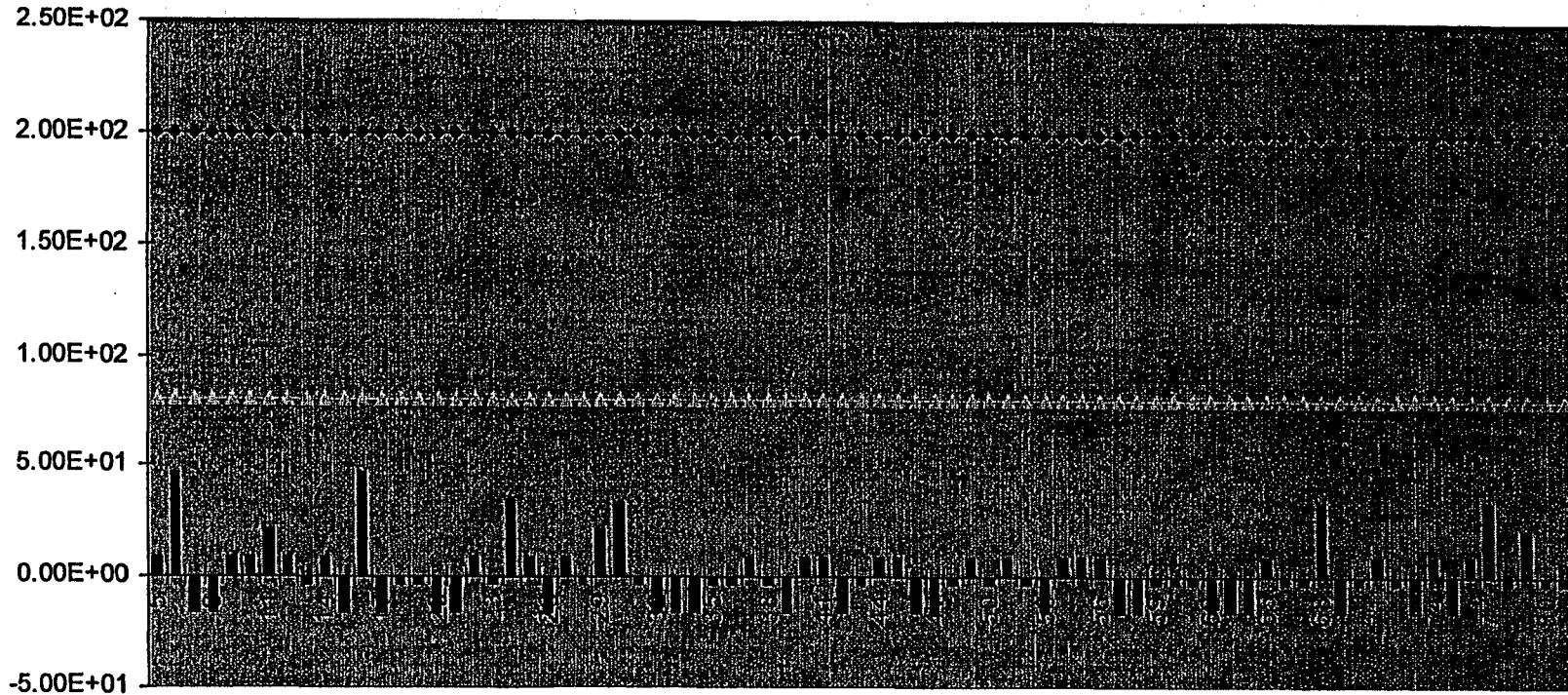
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0003	02W02	43	1.0	20	FLDCT	B0007	0000A	2	4	-4
A0003	02W02	44	2.0	20	FLDCT	B0007	0000A	3	4	8
A0003	02W02	45	2.0	20	FLDCT	B0007	0000B	1	4	8
A0003	02W02	46	0.0	20	FLDCT	B0007	0000B	2	4	-17
A0003	02W02	47	0.0	20	FLDCT	B0007	0000B	3	4	-17
A0003	02W02	48	1.0	20	FLDCT	B0007	0000B	7	4	-4
A0003	02W03	49	2.0	20	FLDCT	B0007	0000A	4	4	8
A0003	02W03	50	1.0	20	FLDCT	B0007	0000A	5	4	-4
A0003	02W03	51	2.0	20	FLDCT	B0007	0000B	1	4	8
A0003	02W03	52	1.0	20	FLDCT	B0007	0000B	2	4	-4
A0003	02W03	53	0.0	20	FLDCT	B0007	0000B	3	4	-17
A0003	02W03	54	2.0	20	FLDCT	B0007	0000B	4	4	8
A0003	02W03	55	2.0	20	FLDCT	B0007	0000B	5	4	8
A0003	02W04	56	2.0	20	FLDCT	B9999	0000A	1	4	8
A0003	02W04	57	0.0	20	FLDCT	B9999	0000A	2	4	-17
A0003	02W04	58	0.0	20	FLDCT	B9999	0000B	1	4	-17
A0003	02W04	59	1.0	20	FLDCT	B9999	0000B	2	4	-4
A0003	02W04	60	1.0	20	FLDCT	B0001	0000B	3	4	-4
A0003	02W04	61	1.0	20	FLDCT	B0001	0000B	4	4	-4
A0003	02W04	62	0.0	20	FLDCT	B0001	0000B	5	4	-17
A0003	02W04	63	0.0	20	FLDCT	B0001	0000B	6	4	-17
A0003	02W04	64	0.0	20	FLDCT	B0001	0000B	7	4	-17
A0003	02S02	65	2.0	20	FLDCT	B9999	0000B	1	4	8
A0003	02S02	66	1.0	20	FLDCT	B9999	0000B	2	4	-4
A0003	02S02	67	1.0	20	FLDCT	B9999	0000B	3	4	-4
A0003	02S05	68	4.0	20	FLDCT	B9999	0000B	1	4	34
A0003	02S05	69	0.0	20	FLDCT	B9999	0000B	2	4	-17
A0003	02S05	70	1.0	20	FLDCT	B9999	0000B	3	4	-4
A0003	02S04	71	2.0	20	FLDCT	B9999	ZZZZZ	1	4	8
A0003	02S04	72	1.0	20	FLDCT	B9999	ZZZZZ	2	4	-4
A0003	02S04	73	0.0	20	FLDCT	B9999	ZZZZZ	3	4	-17
A0003	02S04	74	2.0	20	FLDCT	B9999	ZZZZZ	4	4	8
A0003	02S04	75	0.0	20	FLDCT	B9999	ZZZZZ	5	4	-17
A0003	02S01	76	2.0	20	FLDCT	B9999	ZZZZZ	1	4	8
A0003	02S01	77	4.0	20	FLDCT	B9999	ZZZZZ	2	4	34
A0003	02S01	78	1.0	20	FLDCT	B9999	ZZZZZ	3	4	-4
A0003	02S03	79	3.0	20	FLDCT	B9999	ZZZZZ	1	4	21
A0003	02S03	80	1.0	20	FLDCT	B9999	ZZZZZ	2	4	-4
A0003	02S03	81	1.0	20	FLDCT	B9999	ZZZZZ	3	4	-4

Alpha Flag	80	-	_____
Alpha Max Flag	200		██████████

Download Name: 00000040

Survey Description: A0003 02F01,W01-04,S01-05 PRE S/C

M2350-1 Sample Results



SumOfNet DPM/100cm2 —▲— Alpha Flag Value (Net DPM/100cm2) —◆— Alpha Max Flag Value (Net DPM/100cm2)

Page 4 of 4

Section 5

**Removable Alpha/Beta Activity Laboratory
Report(s)**

OnSite V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
10:52PM

Batch ID:	VA Smear Analysis - 200212031514	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	A Sample Location: A000301W01	Batch Key	6,507	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203151444-A1	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203151624-A2	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203151754-A3	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203151914-A4	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203152044-A5	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203152204-A6	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203152334-A7	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203152455-A8	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By: D. Schumann Date 12-3-02

P37

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
3:32:57 PM

Batch ID:	VA Smear Analysis - 200212031515	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	B Sample Location: <i>A000301 W02</i>	Batch Key	6,508	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203151504-B9	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203152745-B10	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203152915-B11	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203153045-B12	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA

Performed By: *D. Schumaker* Date *12-3-02*

Omnia V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/02
3:43:31PM

Batch ID:	VA Smear Analysis - 200212031515	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	C Sample Location: <i>A000301W03</i>	Batch Key	6,509	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203151557-C13	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203153329-C14	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203153459-C15	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203153619-C16	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203153749-C17	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203153909-C18	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203154039-C19	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203154159-C20	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA

Performed By: D. Schamke Date 12/9/02

Omni V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
3:42:10 AM

Batch ID:	VA Smear Analysis - 200212031516	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	D Sample Location: <i>A000301 W04</i>	Batch Key	6,510	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203151607-D21	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203154449-D22	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203154619-D23	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203154739-D24	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA

Performed By: *D. Schumaker* Date *12-3-02*

Omni A V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
4:00:20 AM

Batch ID: VA Smear Analysis - 200212031516	Acquisition Date: 12/3/2002	Alpha Bkg 0.25 cpm
Group: E Sample Location: A000301 F01	Batch Key 6,511	Beta Bkg 2.10 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203151615-E25	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203155037-E26	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203155157-E27	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203155327-E28	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203155448-E29	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203155618-E30	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203155738-E31	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203155908-E32	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By: D. Schramm Date 12-3-02

Omicron V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/02
1:34:40PM

Batch ID:	VA Smear Analysis - 200212031320	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	A Sample Location: <i>A000302 W01</i>	Batch Key	6,489	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203132018-A1	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203132158-A2	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203132328-A3	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203132448-A4	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203132618-A5	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203132738-A6	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203132909-A7	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203133029-A8	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203133159-A9	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203133319-A10	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By *D. S. Kumar* Date *12-3-02*

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/02
2:00:46PM

Batch ID:	VA Smear Analysis - 200212031350	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	B Sample Location: <i>A000302 W02</i>	Batch Key	6,494	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203135029-B11	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203135210-B12	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203135340-B13	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203135500-B14	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203135630-B15	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203135750-B16	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203135920-B17	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By: *D. Schumaker* Date *12-3-02*

Omni-*a* V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
2:10.39 PM

Batch ID:	VA Smear Analysis - 200212031351	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	C Sample Location: <i>A000302W03</i>	Batch Key	6,495	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203135117-C18	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203140208-C19	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203140328-C20	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203140458-C21	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203140618-C22	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203140748-C23	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203140908-C24	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA

Performed By: *D. Schumaker* Date *12-3-02*

Omni V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
2:25:21 PM

Batch ID:	VA Smear Analysis - 200212031351	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	D Sample Location: <i>A000302 w04</i>	Batch Key	6,496	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203135127-D25	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203141159-D26	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203141329-D27	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203141449-D28	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203141619-D29	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203141739-D30	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203141909-D31	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203142029-D32	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203142159-D33	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA

Performed By: *D. Schumaker* Date *12-3-02*

P45

Omega V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/02
2:57:13PM

Batch ID:	VA Smear Analysis - 200212031351	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	E Sample Location: <i>A000302 F01</i>	Batch Key	6,497	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203135136-E34	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203142448-E35	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203142608-E36	1.00	0.75	2.96	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203142738-E37	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203142858-E38	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203143028-E39	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203143148-E40	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203143318-E41	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203143438-E42	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203143608-E43	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203143728-E44	1.00	1.75	6.90	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203143849-E45	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203144019-E46	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203144139-E47	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203144309-E48	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203144429-E49	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203144559-E50	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203144719-E51	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203144849-E52	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203145009-E53	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203145139-E54	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203145259-E55	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203145429-E56	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203145619-E57	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA

Performed By: D. Schumaker Date 12-3-02

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/02
3:04:25PM

Batch ID: VA Smear Analysis - 200212031351	Acquisition Date: 12/3/2002	Alpha Bkg 0.25 cpm
Group: F Sample Location: <i>A000302501</i>	Batch Key 6,505	Beta Bkg 2.10 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203135149-F58	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203145843-F59	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203150003-F60	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203150133-F61	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203150253-F62	1.00	-0.25	-0.99	17.32	<MDA	255.90	1,081.29	32.08	

Performed By: *D. Schumaker* Date *12-3-02*

PA7

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
3:11:34 PM

Batch ID:	VA Smear Analysis - 200212031351	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	G Sample Location: <i>A000302502</i>	Batch Key	6,506	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203135158-G63	1.00	0.75	2.96	17.32	<MDA	3.90	16.48	32.08	<MDA
20021203150552-G64	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203150712-G65	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203150842-G66	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203151002-G67	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By: *D. Schumaker* Date *12-3-02*

Section 6

**H-3 Removable Beta Contamination
Laboratory Report(s)**

LABORATORY ANALYSIS FORM

P50

Laboratory Sample No.: RC-0204821

Survey No.:

HRWP No.:

1. ~~URGENT~~ **ROUTINE** (circle one) >100 cpm + Bkg Y/~~N~~, if yes: ncpm / uR/hr/

Sample Location / Description: Omaha, NE VA Project, A000301 F01, W01-W04, A000302 F01, 02W01-02W04, 02S01-02S05

Sample Type (circle one): smears, no.: 17 soil water leachate other

Sampled By: L. Finn

Date 12-5-02 Time 1300

2. Analysis Requested (circle)

Gross Beta Gross Alpha **HTO** Gamma-quantitative Gamma-qualitative Other

3. Unconditional Release Yes/~~No~~ If Yes, is sample representative of entire contents? Yes / No

Analysis (nuclide)	Result	+ or -	Units	MDA (if required)	Comments	Analysis Date
Smear #1 / HTO	< MOA	N/A	dpm	56	A000301 F01 #1	12-10-02
2				53	A000301 W01 #1	↓
3				52	A000301 W02 #1	
4				53	A000301 W03 #1	
5				55	A000301 W04 #1	
6-8				max 61	A000302 F01 #1-3	
9				50	A000302 W01 #1	
10				55	A000302 W02 #1	
11				53	A000302 W03 #1	
12				54	A000302 W04 #1	
13				52	A000302 S01 #1	
14				53	A000302 S02 #1	
15				53	A000302 S03 #1	
16				56	A000302 S04 #1	
17				58	A000302 S05 #1	

Completed By: Marcy Proctor (Lab Tech.) Date: 12-11-02

Approved By: Marcy Proctor (Lab Supervisor or designee) Date: 12-11-02

Results Received By: PLO J (Technician / Sampler) Date: 12-30-02

Reviewed By: L.C. Finn (HRSO or designee) Date: 1-8-03

LABORATORY ANALYSIS FORM

P51

✓	Instrument Used	Serial #	Cal-. Due Date
✓ ✓ Ψ	Packard Tri-Carb 2550	401663	6-2-03
	Genie Gamma Spec (Det. 4)	6922910	2-25-03*
	Protean IPC 9025	721052	11-26-03

* As needed

Section 7

Gamma Spectrum Analysis

*** GAMMA SPECTRUM ANALYSIS ***

Report Generated On 12/8/02 8:26:03 AM

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0178.CNF
Spectrum Number VA020178.CNF
Sample Description Pkg. A000301D01
Sample Type Water
Sample Geometry 2

Peak Locate Threshold 3.50
Peak Locate Range (in channels) 100 - 8192
Peak Area Range (in channels) 100 - 8192
Identification Energy Tolerance 2.00 keV

Sample Size 2.500E+002 ml
Sample Collection Date 11/22/02 4:00:00 PM
Spectrum Collection Date 12/8/02 8:11:33 AM
Decay Corrected To 11/22/02 4:00:00 PM
Collected By L. Finn

Live Time 600.0 seconds
Real Time 600.1 seconds
% Dead Time 0.01 %
Background Type STEP

Energy Calibration Performed On 11/13/02
Efficiency Calibration Performed On 11/13/02
Calibration Geometry Used 2

Performed & Reviewed By L. Finn Date 12/08/02

Supervisory Review Pat O'Quinn Date 12/16/02

No peak locate results available for reporting purposes

 ***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0178.CNF
 Spectrum Number VA020178.CNF
 Sample Description Pkg. A000301D01

Peak Analysis Performed on 12/8/02 8:26:02 AM
 Peak Analysis From Channel 100
 Peak Analysis To Channel 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
----------	-----------	---------	---------------	--------------	---------------	------------------	------------------

One or more peaks were dropped due to multiplet de-convolution.
 M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.96 sigma

 ***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0178.CNF
 Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
--------------	---------------	--------------	-----------	-------------------	----------------------

* = Energy line found in the spectrum.
 @ = Energy line not used for Weighted Mean Activity
 Energy tolerance used was 2.000
 Nuclide confidence index threshold = 0.10
 Errors quoted at 1.960 sigma

*** INTERFERENCE CORRECTED REPORT ***

Sample I.D.
Spectrum Number

C:\GENIE2K\CAMFILES\VA-02-0178.CNF
VA020178.CNF

Performed & Reviewed By

XC. Finn

.Date

12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
--------------	--------------------------	-------------------------------	---------------------------------	-----------------------------------

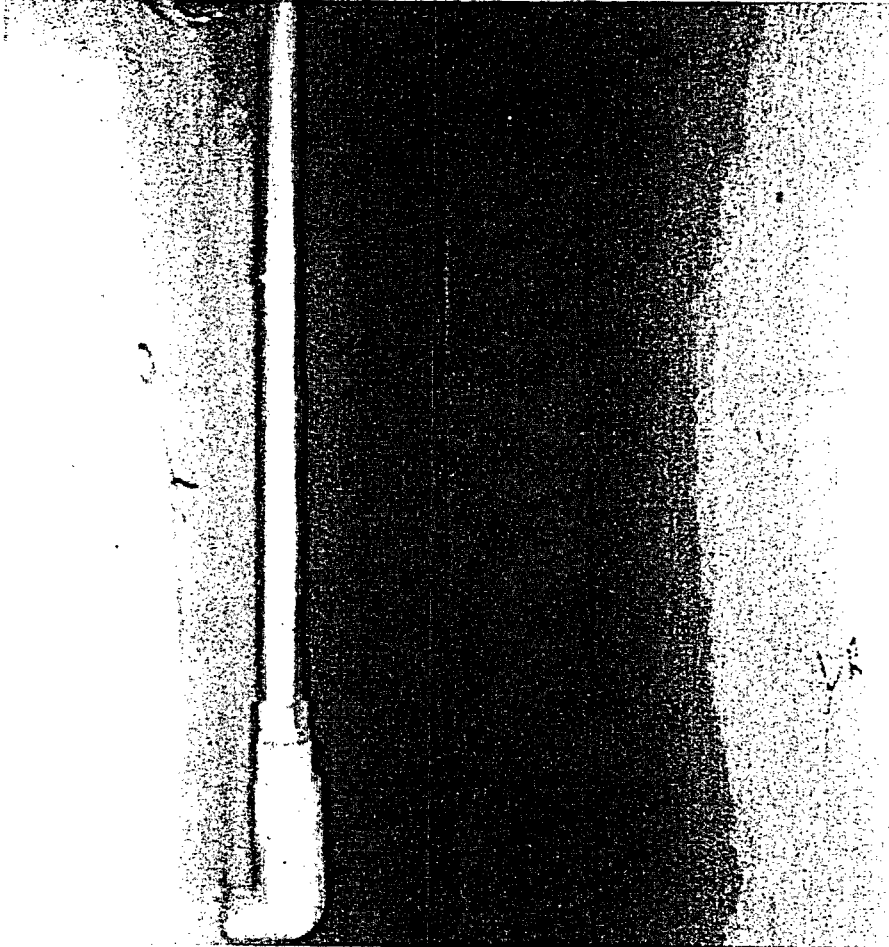
- ? = nuclide is part of an undetermined solution
- X = nuclide rejected by the interference analysis
- @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

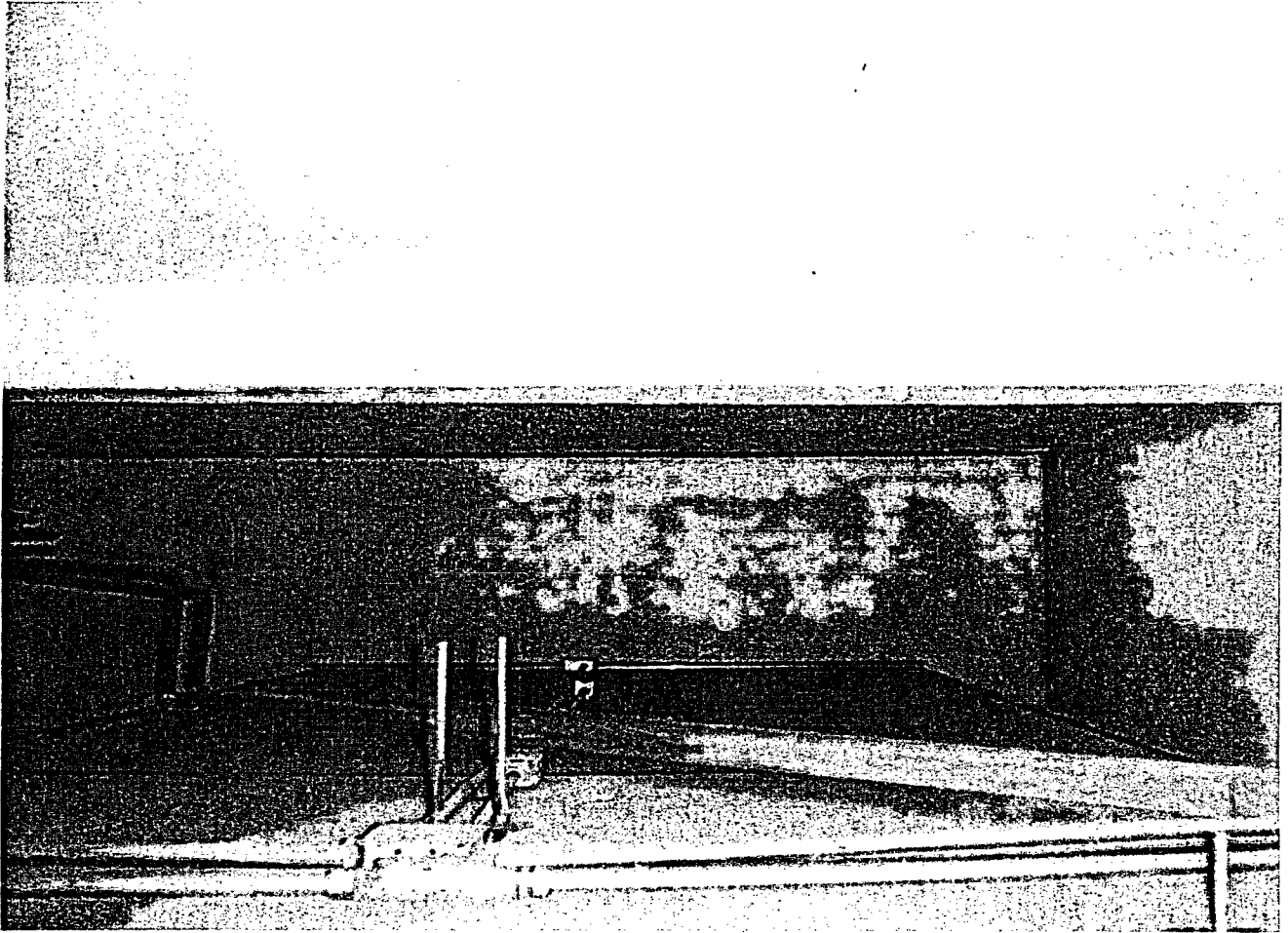
No peak search results available for nuclide analysis.

Section 8

Photos of the Survey Area



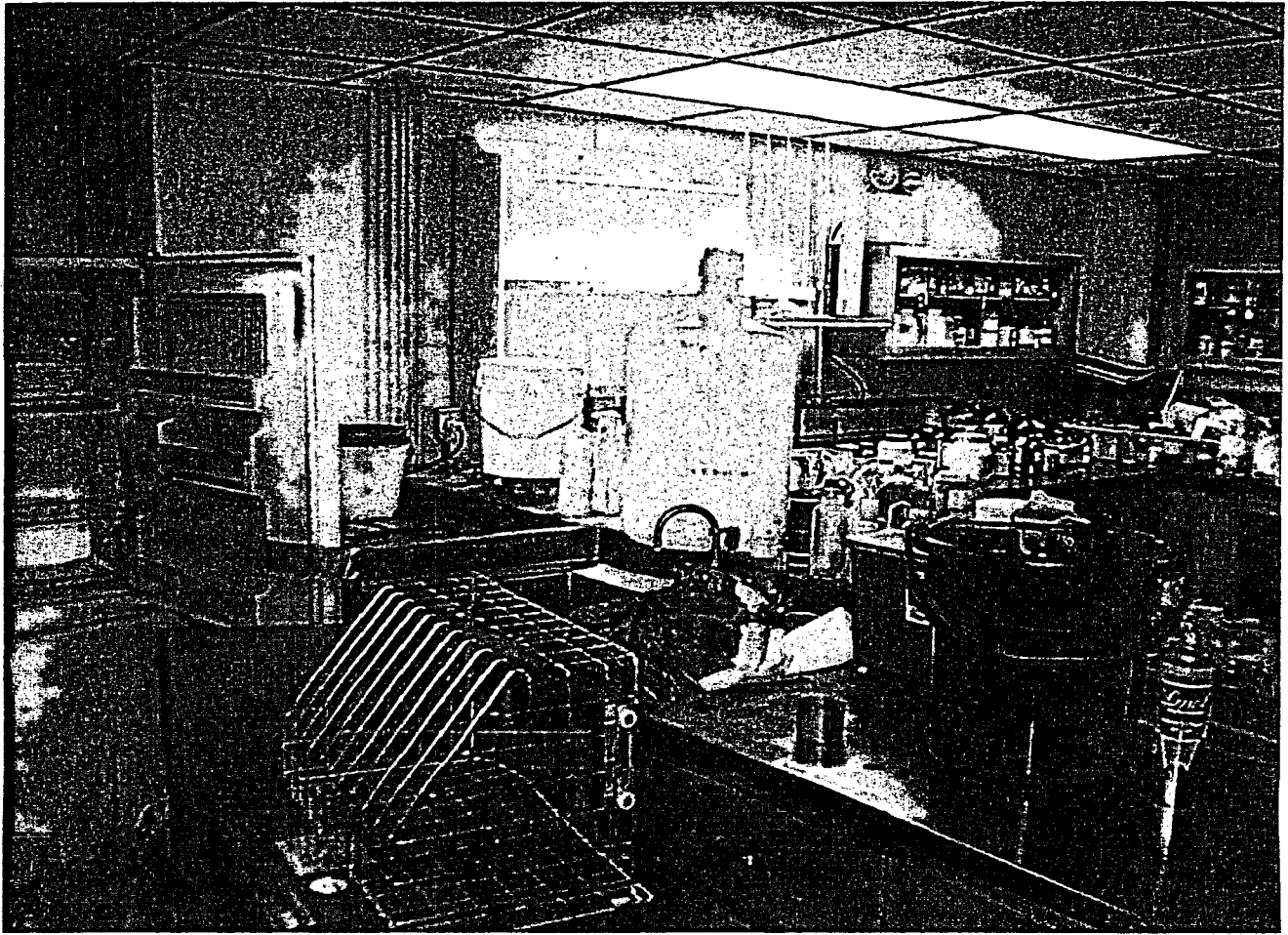
A2 01501 2



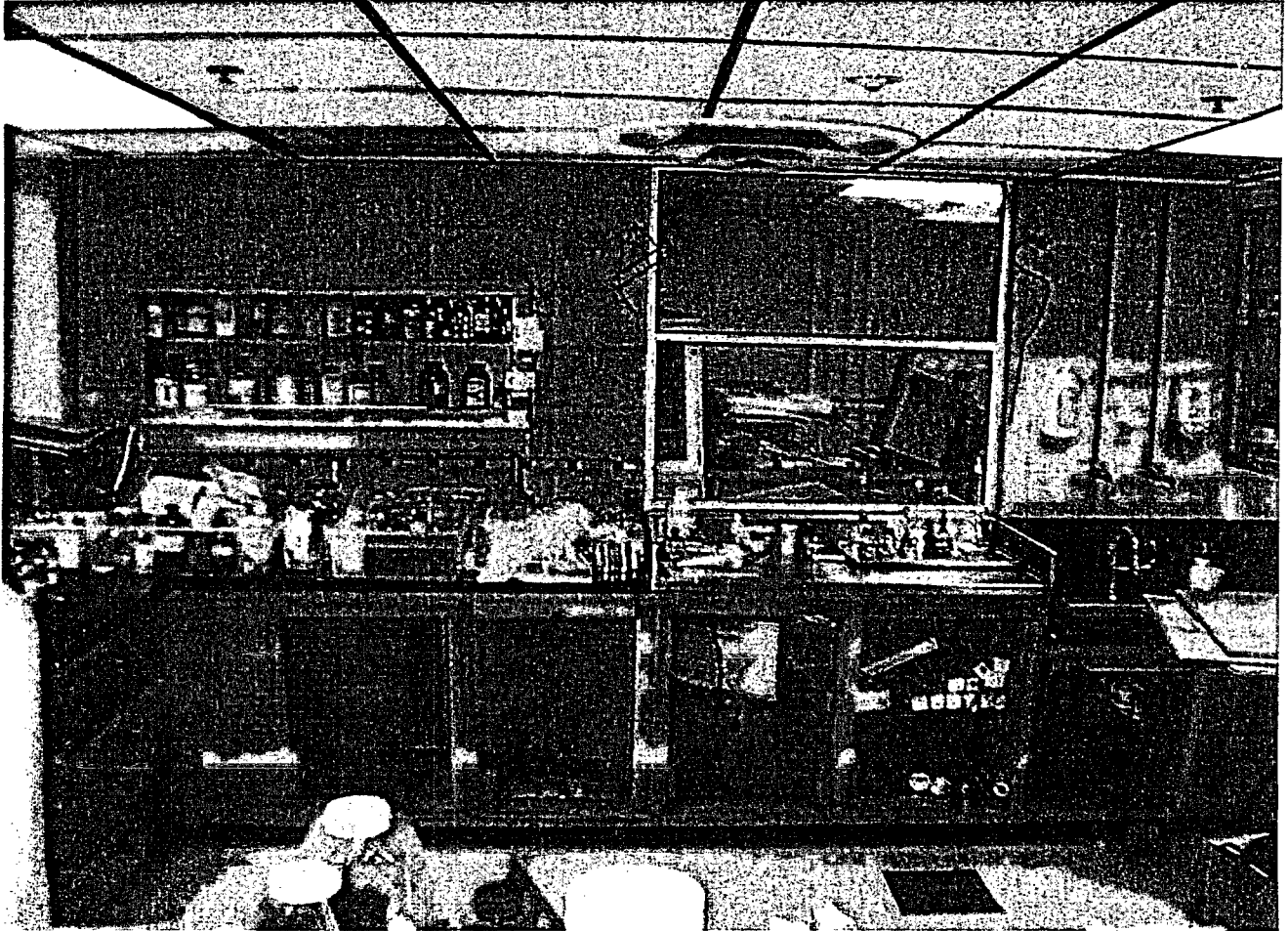
A2 01501 3



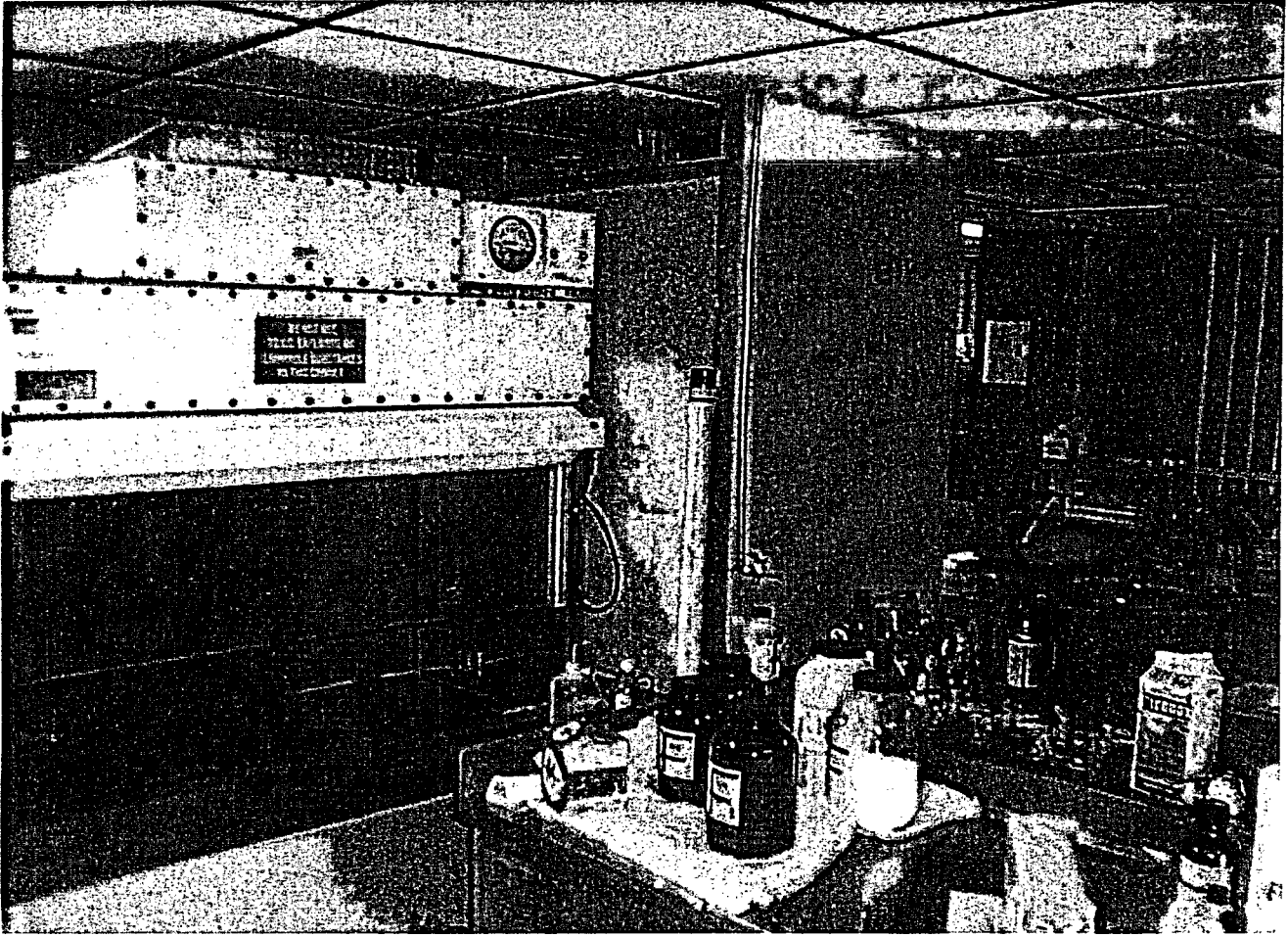
dec13_21



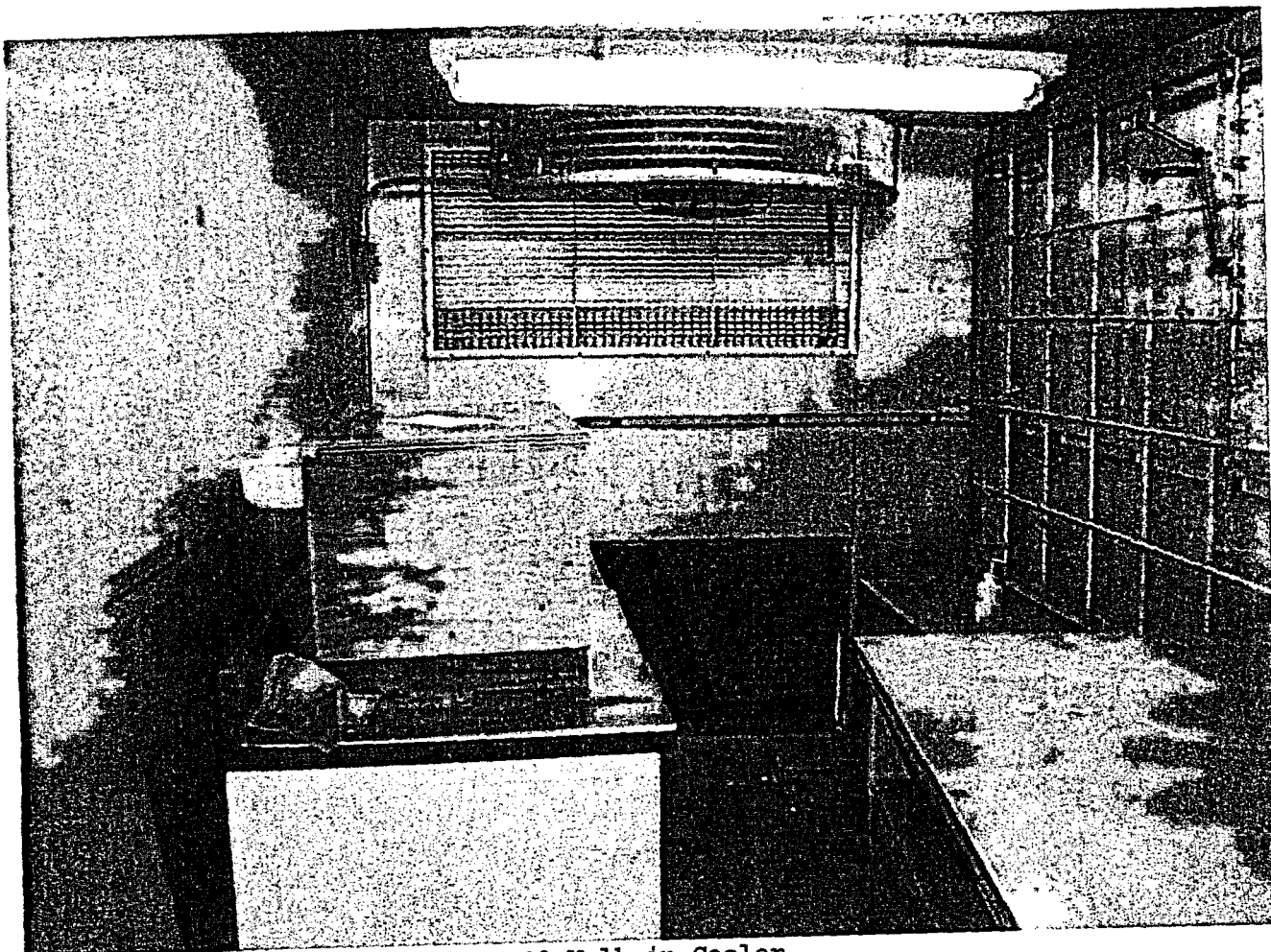
dec13_22



dec13_23



dec13_24



A2 Walk-in Cooler



A2 01501 1

Alan J. Blotcky Research Reactor

Characterization Survey Package A0004

Rooms SW2E & SW2F

Alan J. Blotcky Reactor Facility
CHARACTERIZATION SURVEY PACKAGE A0004
(Room SW2E and SW2F)

TABLE OF CONTENTS

1.0	Survey Package Worksheet for Rooms SW2E and SW2F of the Reactor Controlled Area...	3
2.0	Map(s) of the Survey Area.....	9
3.0	M2350 Download Beta Report(s).....	14
4.0	M2350 Download Alpha Report(s).....	29
5.0	Removable Alpha/Beta Activity Laboratory Report(s).....	35
6.0	H-3 Removable Beta Contamination Laboratory Report(s).....	51
7.0	Photos of the Survey Areas.....	54

Section 1

Survey Package Worksheet for Rooms SW2E and SW2F of the Reactor Controlled Area

ATTACHMENT 6.2
CHARACTERIZATION SURVEY PACKAGE WORKSHEET

PACKAGE ID NO.: A0004	PREPARED BY: Paul Jones	DATE: 11/26/02
LOCATION: Veterans Affairs Medical Center		
FLOOR/ELEVATION: Basement	BUILDING: Research	AREA: Room SW2E & SW2F

Area Description

This package is for the reactor area rooms SW2E and SW2F. These rooms are located in the Northwest corner of the reactor facility.

Historical Information

The Alan J. Blotcky Reactor was used to support nuclear medicine and research programs conducted at the medical center. The total reactor operation was approximately 515,000 kilowatt hours from 1959 to 2001.

Room SW2E was a laboratory in support of research. This area housed two vacuum systems in support of hot atom chemistry. In the Northwest is a committed fume hood that exhausts to the roof on the 12th floor. From 1992 to 1996 this hood was used for radiochemical neutron activation analysis. The sink on the Southeast side was intermittently used to dispose of radioactive liquids to the sanitary sewer system. Glassware was cleaned in this area.

Room SW2F is a vault room used primarily for storage. This room was also used for decay and storage of radioactive waste from the medical research facility. This room housed the moly generators for the hospital until 1993.

Survey Instructions

For the survey, perform measurements according to the Final Survey Plan Section 5.0 and applicable project procedures.

Class I Survey Units

1. Perform a scan over 100% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument.
2. Grid the area as show in the attached drawing(s) for survey locations.
3. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
4. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.

Survey Instructions (continued)

Class III Survey Units

1. Perform a scan over approximately 10% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument. All areas of elevated activity should be identified for further investigation and potential decontamination.
2. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
3. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.
4. Mark the location of the direct beta measurements and smear with a paint stick or equivalent on the surfaces of the survey unit.

General Survey Instructions (Class I, II, and III)

1. Use LMI Data Logger M2350-1 with M43-68 style Gas Flow Proportional for direct beta survey measurements.
2. Perform one 5 minute pre-survey shielded background and one 5 minute post-survey shielded background for each detector used for the survey.
3. Verify that the direct measurement MDA is less than 25% of the expected DCGL (<1,250 dpm/100cm²) for direct beta measurements. If the field background is less than 1000 CPM, use 10-second count time for each direct beta measurement. If the field background is greater than 1000 CPM, obtain further directions from the Project Manager or designee.
4. Download each M2350-1 at completion of the survey, shift and/or prior to performing surveys in another survey area (before changing L1 codes).
5. Use location codes provided below for direct beta measurements, as appropriate.
6. Use the Package L1, L2, and L8 codes when labeling smears samples for counting.
7. When all measurements, samples or scans are collected, initial and date the "MEASUREMENT TYPE" block on the survey package to indicate the measurements or samples were collected.
8. Note any problems, comments, or other information pertinent to the data or sample collection under the "NOTES" section.

Survey performance (Initial and date as each survey is complete)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross Bq	Smear H-3	Other
L1	L2	L3	L7	L8									
Reactor Building Rooms, SW2E, and SW2H													
A0004	01F01	TSC01	A thru C	1 thru 4	Floor	Impacted Class I	12				12	2	
A0004	01W01	TSC01	A thru B	1 thru 4	Wall 1	Impacted Class I	8				8	1	
A0004	01W02	TSC01	A thru B	1 thru 3	Wall 2	Impacted Class I	6				6	1	
A0004	01W03	TSC01	A thru B	1 thru 4	Wall 3	Impacted Class I	6				6	1	
A0004	01W04	TSC01	A thru B	1 thru 3	Wall 4	Impacted Class I	6				6	1	
A0004	02F01	TAC01	A thru C	1 thru 5	Floor	Impacted Class I	13				13	2	
A0004	02W01	TAC01	A thru B	1 thru 5	Wall 1	Impacted Class I	10				10	1	
A0004	02W02	TAC01	A thru B	1 thru 3	Wall 2	Impacted Class I	6				6	1	
A0004	02W03	TAC01	A thru B	1 thru 5	Wall 3	Impacted Class I	10				10	1	
A0004	02W04	TAC01	A thru B	1 thru 3	Wall 4	Impacted Class I	6				6	1	
A0004	02S01	TAC01	ZZZZ	1 thru 5	Structure 1	Impacted Class I	5				5	1	
A0004	02S02	TAC01	ZZZZ	1 thru 5	Structure 2	Impacted Class I	5				5	1	
A0004	02S03	TAC01	ZZZZ	1 thru 10	Structure 3	Impacted Class I	10				10	1	

Gamma from 600 uR/hr - 1 mR/hr in area of S-10 uR/hr Area 2

Survey Performance (Initial and date as each survey is completed)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross Bq	Smear H-3	Other
L1	L2	L3	L7	L8									
A0004	01A01	TAC01	ZZZZZ	1 thru 64	Source storage vaults on Wall 3	Impacted Class I	RC-7 12/19 64	N/A	RC-7 12/19	N/A	RC-7 12/19	N/A	N/A

Package Review

Date Package Completed

12/21/02

Package Reviewed by and Date

P. A. Jones 1/24/03

Notes

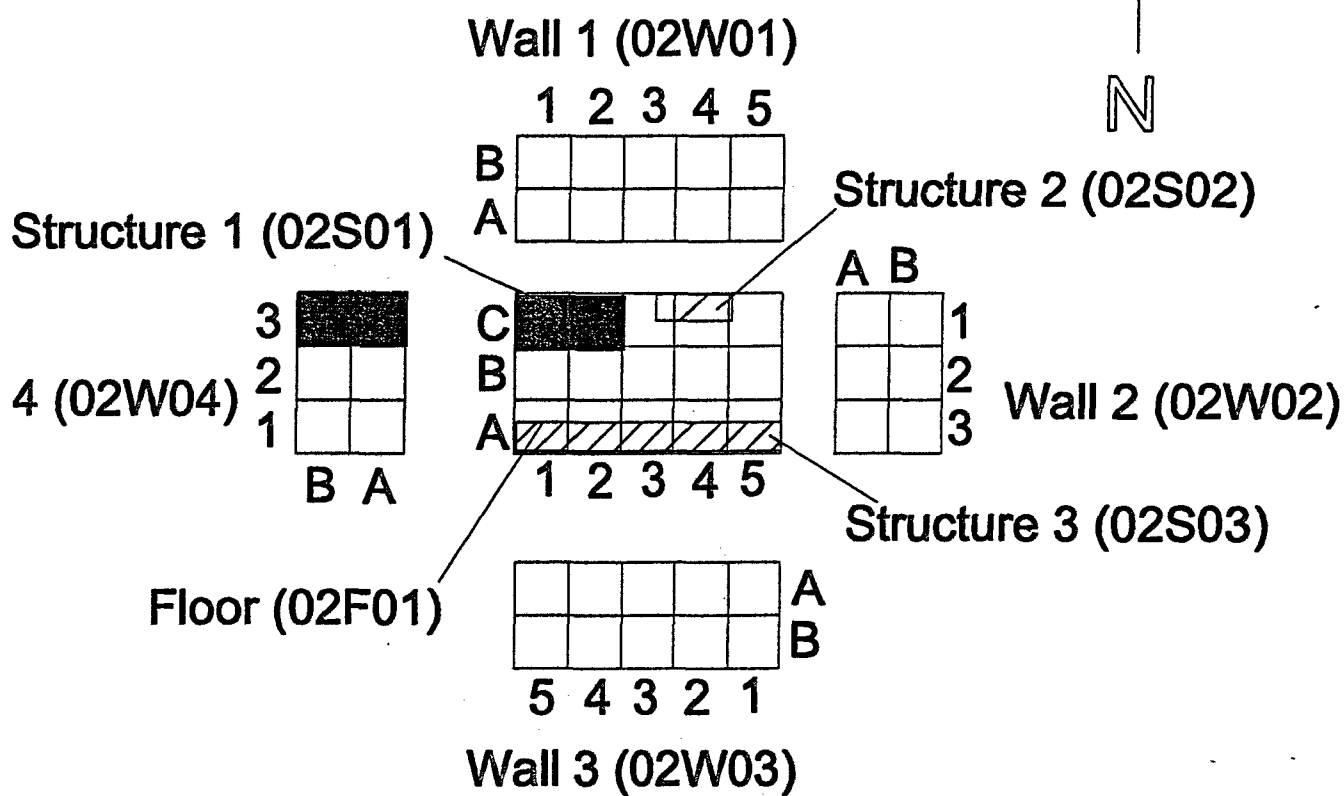
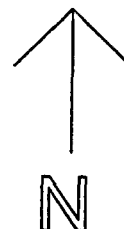
2 of the 10 floor source storage steel had covers on them making them completely inaccessible. A pipe probe 93-94 was used to scan the accessible areas for the other 8 penetrations. Since the geometry was not exact I got an average bkg of 105 cpm and a range of 100 to 280 cpm with the unshielded pipe probe. For sake of identification this will be A0004-01P02. These penetrations are 5 2/16 I.D. 804.




Section 2

Maps of the Survey Areas

Package A0004

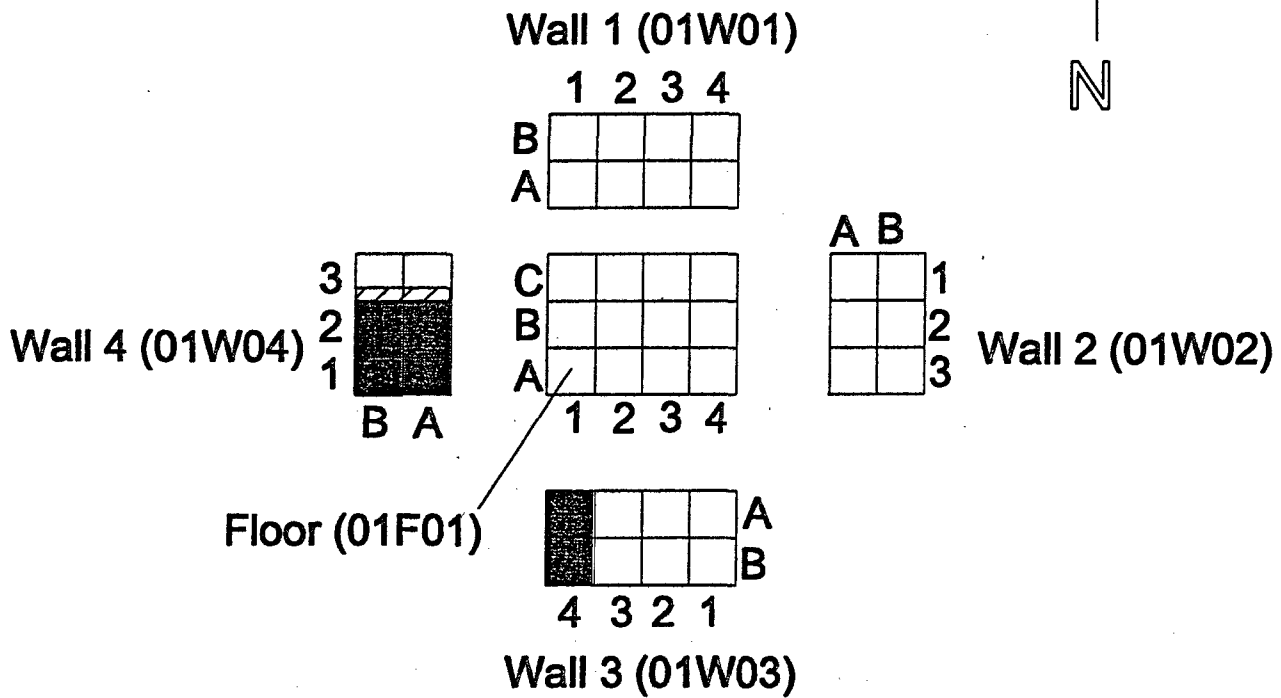
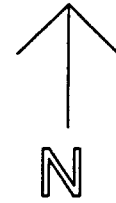
Room SW2E (Area 2)






-  - Denotes 1 Square Meter Grid
-  - Denotes Partially Obstructed Grid Area
-  - Denotes Fully Obstructed Grid Area

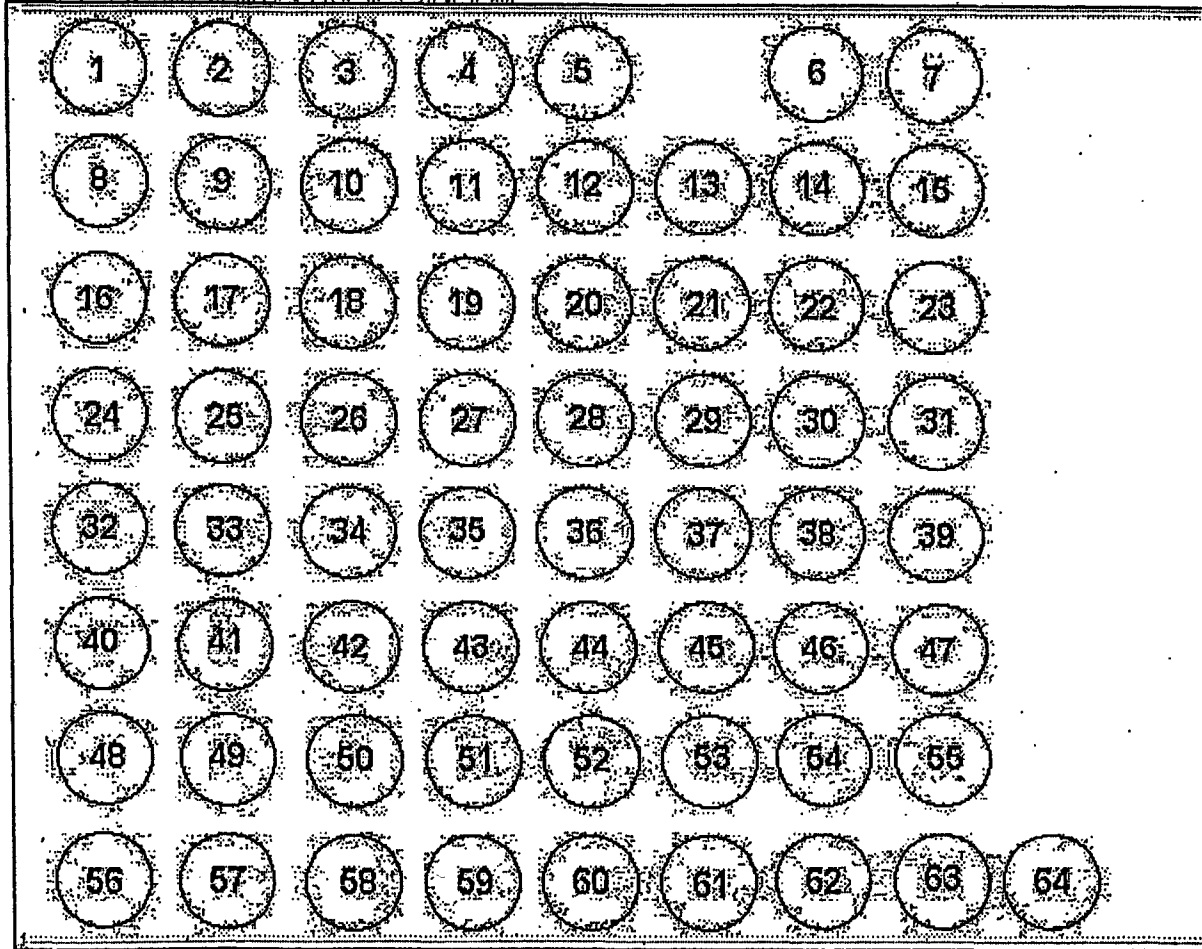
Package A0004

Room SW2F Source Storage (Area 1)



-  - Denotes 1 Square Meter Grid
-  - Denotes Partially Obstructed Grid Area
-  - Denotes Fully Obstructed Grid Area

A000401P01...A000401P01

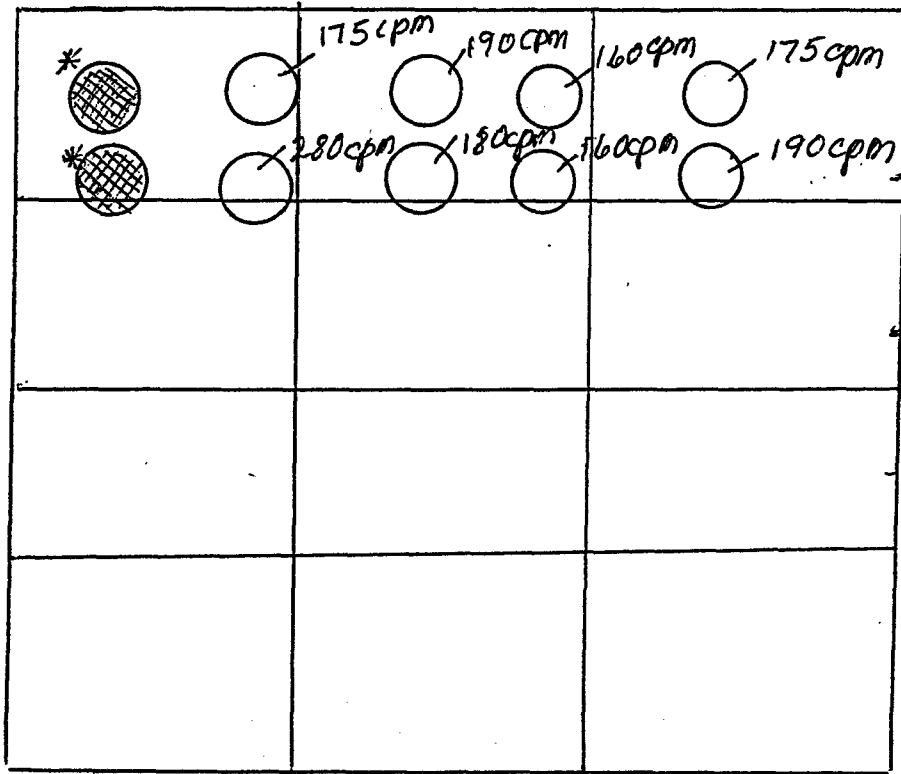


bottom row is 3 inches from concrete floor

SOURCE STORAGE ROOM

PKG. # A0004

AVG. DRG. inside =
105 cpm

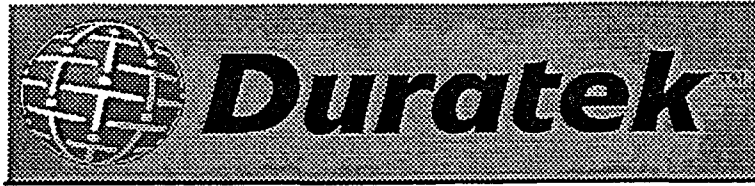


* covers were unremovable from these two storage penetrations making them completely inaccessible.

NOTE ** I.D. for floor penetrations $5 \frac{3}{16}$ "

Section 3

M2350 Download Beta Report(s)



M2350-1 Download BETA Report

File Name : 00000043		Survey Description :A0004 02F01,W01-4,S01-3 01F01,W01-4 Pre-Post S/C	
Survey Reason : Characterization			
User ID : JLM9424		Technician Name : Jack Mucia	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68B	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : BETA	Detector Type : 02200 : 126 cm2 Gas Proportional Detector		
Detector Area : 126	Efficiency : 0.227	Survey Date : 12/4/02	

 Jack Mucia
 Print Name

J. Mucia
 Signature

 1-9-03
 Date

 Print Name

 Signature

 Date

Comments:

Reprint after deleting pts. for 01F01 + W01 - W03.

These data pts. will be removed on download

0000060 after sources were removed from

room 207

Sign-Off

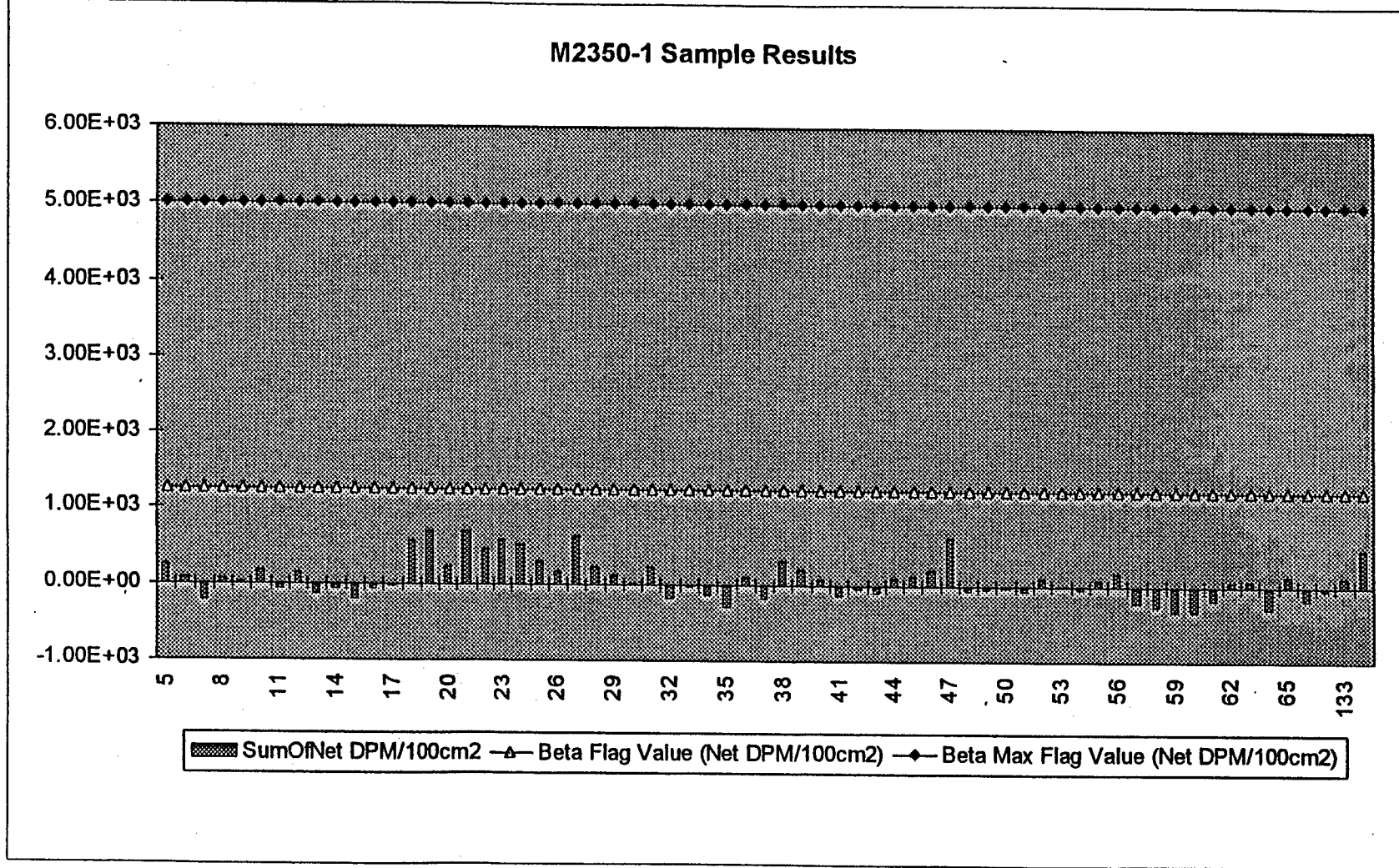
 Print Name

 Signature

 Date

Download Name: 0000043

Survey Description: A0004 02F01,W01-4,S01-3 01F01,W01-4 Pre-Post S/C



20f4

Duratek Beta Survey Report

Download File Name: 00000043

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0004	02F01	5	65.0	10	FLDCT	B9999	0000A	1	315	262
A0004	02F01	6	56.0	10	FLDCT	B9999	0000A	2	315	73
A0004	02F01	7	42.0	10	FLDCT	B9999	0000A	3	315	-220
A0004	02F01	8	55.0	10	FLDCT	B9999	0000A	4	315	52
A0004	02F01	9	53.0	10	FLDCT	B9999	0000A	5	315	10
A0004	02F01	10	61.0	10	FLDCT	B9999	0000B	6	315	178
A0004	02F01	11	49.0	10	FLDCT	B9999	0000B	7	315	-73
A0004	02F01	12	60.0	10	FLDCT	B9999	0000B	8	315	157
A0004	02F01	13	46.0	10	FLDCT	B9999	0000B	9	315	-136
A0004	02F01	14	49.0	10	FLDCT	B9999	0000B	10	315	-73
A0004	02F01	15	43.0	10	FLDCT	B9999	0000C	3	315	-199
A0004	02F01	16	49.0	10	FLDCT	B9999	0000C	4	315	-73
A0004	02F01	17	51.0	10	FLDCT	B9999	0000C	5	315	-31
A0004	02W01	18	80.0	10	FLDCT	B0001	0000A	1	315	577
A0004	02W01	19	86.0	10	FLDCT	B0001	0000A	2	315	703
A0004	02W01	20	64.0	10	FLDCT	B0001	0000A	3	315	241
A0004	02W01	21	86.0	10	FLDCT	B0001	0000A	4	315	703
A0004	02W01	22	74.0	10	FLDCT	B0001	0000A	5	315	451
A0004	02W01	23	81.0	10	FLDCT	B0001	0000B	1	315	598
A0004	02W01	24	77.0	10	FLDCT	B0001	0000B	2	315	514
A0004	02W01	25	67.0	10	FLDCT	B0001	0000B	3	315	304
A0004	02W01	26	61.0	10	FLDCT	B0001	0000B	4	315	178
A0004	02W01	27	83.0	10	FLDCT	B0001	0000B	5	315	640
A0004	02W02	28	64.0	10	FLDCT	B0007	0000A	1	315	241
A0004	02W02	29	58.0	10	FLDCT	B0007	0000A	2	315	115
A0004	02W02	30	53.0	10	FLDCT	B0007	0000A	3	315	10
A0004	02W02	31	64.0	10	FLDCT	B0007	0000B	1	315	241
A0004	02W02	32	44.0	10	FLDCT	B0007	0000B	2	315	-178
A0004	02W02	33	51.0	10	FLDCT	B0007	0000B	3	315	-31
A0004	02W03	34	46.0	10	FLDCT	B0007	0000A	1	315	-136
A0004	02W03	35	39.0	10	FLDCT	B0007	0000A	2	315	-283
A0004	02W03	36	57.0	10	FLDCT	B0007	0000A	3	315	94
A0004	02W03	37	44.0	10	FLDCT	B0007	0000A	4	315	-178
A0004	02W03	38	68.0	10	FLDCT	B0007	0000A	5	315	325
A0004	02W03	39	63.0	10	FLDCT	B0007	0000B	1	315	220
A0004	02W03	40	56.0	10	FLDCT	B0007	0000B	2	315	73
A0004	02W03	41	46.0	10	FLDCT	B0007	0000B	3	315	-136
A0004	02W03	42	50.0	10	FLDCT	B0007	0000B	4	315	-52
A0004	02W03	43	48.0	10	FLDCT	B0007	0000B	5	315	-94

Beta Flag	1250	-	
Beta Max Flag	5000		

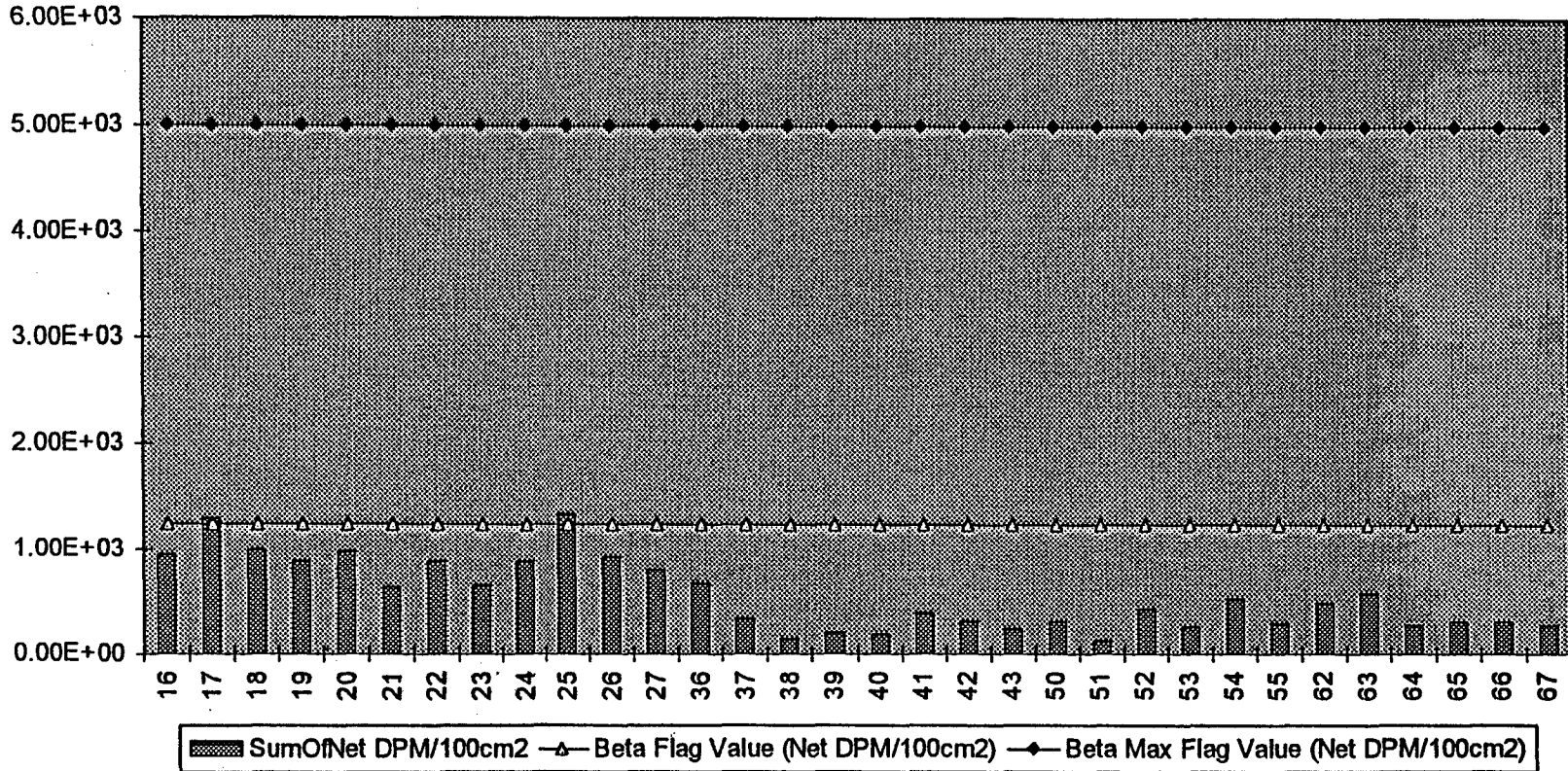
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0004	02W04	44	57.0	10	FLDCT	B0001	0000A	1	315	94
A0004	02W04	45	58.0	10	FLDCT	B0001	0000A	2	315	115
A0004	02W04	46	63.0	10	FLDCT	B0001	0000B	1	315	220
A0004	02W04	47	83.0	10	FLDCT	B0001	0000B	2	315	640
A0004	02S01	48	49.0	10	FLDCT	B9999	ZZZZZ	1	315	-73
A0004	02S01	49	50.0	10	FLDCT	B9999	ZZZZZ	2	315	-52
A0004	02S01	50	51.0	10	FLDCT	B9999	ZZZZZ	3	315	-31
A0004	02S01	51	49.0	10	FLDCT	B9999	ZZZZZ	4	315	-73
A0004	02S01	52	57.0	10	FLDCT	B9999	ZZZZZ	5	315	94
A0004	02S02	53	52.0	10	FLDCT	B9999	ZZZZZ	1	315	-10
A0004	02S02	54	50.0	10	FLDCT	B9999	ZZZZZ	2	315	-52
A0004	02S02	55	56.0	10	FLDCT	B9999	ZZZZZ	3	315	73
A0004	02S02	56	61.0	10	FLDCT	B9999	ZZZZZ	4	315	178
A0004	02S02	57	42.0	10	FLDCT	B9999	ZZZZZ	5	315	-220
A0004	02S03	58	40.0	10	FLDCT	B9999	ZZZZZ	1	315	-262
A0004	02S03	59	36.0	10	FLDCT	B9999	ZZZZZ	2	315	-346
A0004	02S03	60	36.0	10	FLDCT	B9999	ZZZZZ	3	315	-346
A0004	02S03	61	44.0	10	FLDCT	B9999	ZZZZZ	4	315	-178
A0004	02S03	62	55.0	10	FLDCT	B9999	ZZZZZ	5	315	52
A0004	02S03	63	56.0	10	FLDCT	B9999	ZZZZZ	6	315	73
A0004	02S03	64	39.0	10	FLDCT	B9999	ZZZZZ	7	315	-283
A0004	02S03	65	60.0	10	FLDCT	B9999	ZZZZZ	8	315	157
A0004	02S03	66	44.0	10	FLDCT	B9999	ZZZZZ	9	315	-178
A0004	02S03	67	50.0	10	FLDCT	B9999	ZZZZZ	10	315	-52
A0004	01W04	133	782.0	30	FLDCT	B0001	0000A	3	1530	119
A0004	01W04	135	555.0	30	FLDCT	B0001	0000B	3	964	510

<i>Beta Flag</i>	1250 - _____
<i>Beta Max Flag</i>	5000 

Download Name: 0000060

Survey Description: PKG. A0004-Resurvey of 01F01,01W01-01W03-Pre/Post

M2350-1 Sample Results



Page 2 of 3

Duratek Beta Survey Report

Download File Name: 0000060

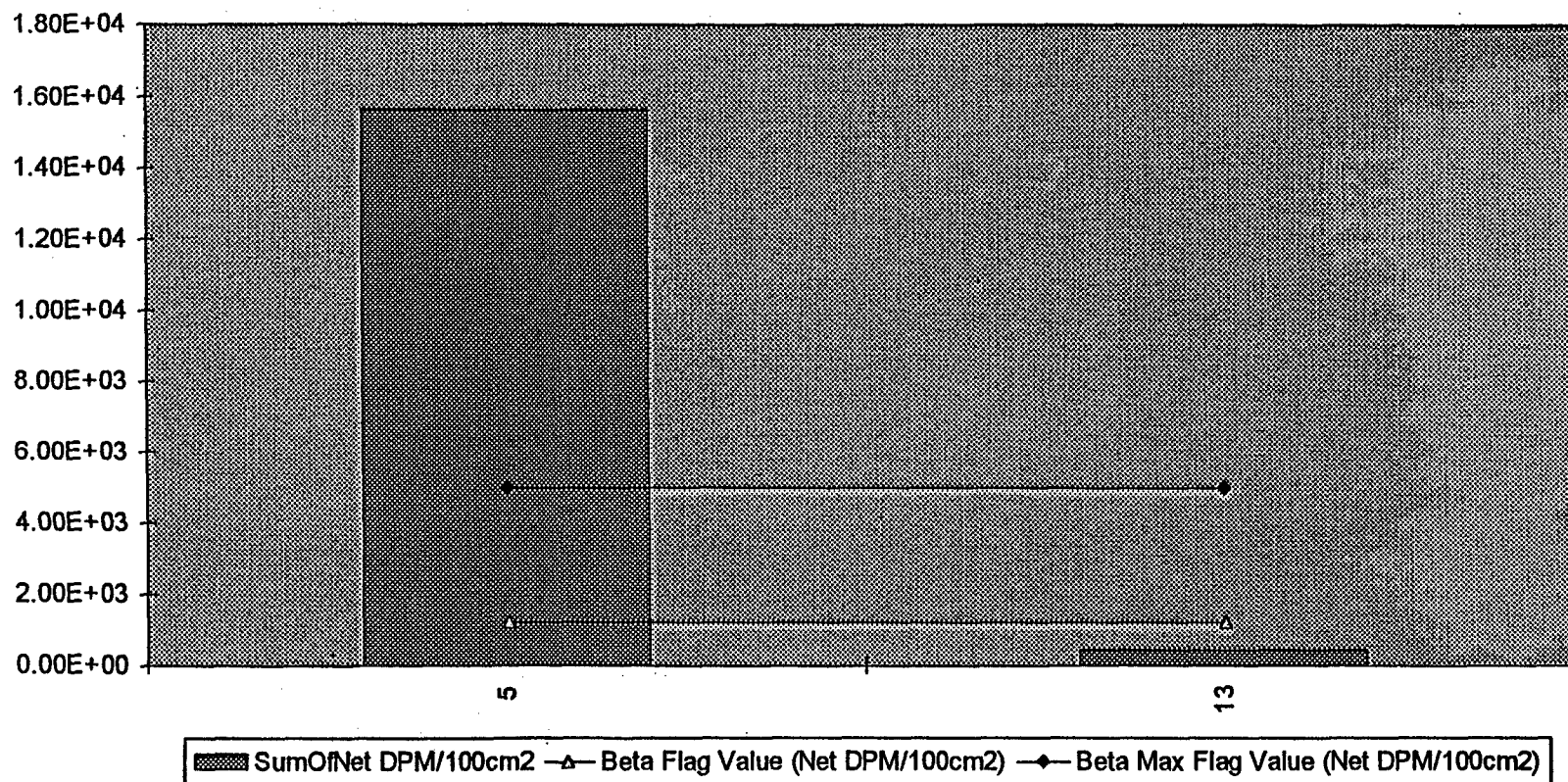
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0004	01F01	16	309.0	30	FLDCT	B0002	0000A	1	362	941
A0004	01F01	17	346.0	30	FLDCT	B0002	0000A	2	338	<u>1301</u>
A0004	01F01	18	343.0	30	FLDCT	B0002	0000A	3	414	999
A0004	01F01	19	314.0	30	FLDCT	B0002	0000A	4	388	882
A0004	01F01	20	310.0	30	FLDCT	B0002	0000B	1	354	977
A0004	01F01	21	277.0	30	FLDCT	B0002	0000B	2	384	625
A0004	01F01	22	334.0	30	FLDCT	B0002	0000B	3	424	897
A0004	01F01	23	268.0	30	FLDCT	B0002	0000B	4	358	654
A0004	01F01	24	287.0	30	FLDCT	B0002	0000C	1	330	897
A0004	01F01	25	342.0	30	FLDCT	B0002	0000C	2	320	<u>1337</u>
A0004	01F01	26	332.0	30	FLDCT	B0002	0000C	3	412	926
A0004	01F01	27	304.0	30	FLDCT	B0002	0000C	4	390	801
A0004	01W01	36	259.0	30	FLDCT	B0001	0000A	1	336	669
A0004	01W01	37	205.0	30	FLDCT	B0001	0000A	2	320	331
A0004	01W01	38	207.0	30	FLDCT	B0001	0000A	3	374	147
A0004	01W01	39	204.0	30	FLDCT	B0001	0000A	4	354	198
A0004	01W01	40	196.0	30	FLDCT	B0001	0000B	1	342	184
A0004	01W01	41	215.0	30	FLDCT	B0001	0000B	2	326	382
A0004	01W01	42	223.0	30	FLDCT	B0001	0000B	3	362	309
A0004	01W01	43	215.0	30	FLDCT	B0001	0000B	4	364	243
A0004	01W02	50	209.0	30	FLDCT	B0001	0000A	1	330	323
A0004	01W02	51	206.0	30	FLDCT	B0001	0000A	2	376	132
A0004	01W02	52	226.0	30	FLDCT	B0001	0000A	3	334	434
A0004	01W02	53	219.0	30	FLDCT	B0001	0000B	1	366	265
A0004	01W02	54	233.0	30	FLDCT	B0001	0000B	2	324	522
A0004	01W02	55	223.0	30	FLDCT	B0001	0000B	3	364	301
A0004	01W03	62	241.0	30	FLDCT	B0001	0000A	1	350	485
A0004	01W03	63	231.0	30	FLDCT	B0001	0000A	2	306	573
A0004	01W03	64	214.0	30	FLDCT	B0001	0000A	3	352	279
A0004	01W03	65	223.0	30	FLDCT	B0001	0000B	1	362	309
A0004	01W03	66	216.0	30	FLDCT	B0001	0000B	2	344	323
A0004	01W03	67	207.0	30	FLDCT	B0001	0000B	3	340	272

Beta Flag	1250 - _____
Beta Max Flag	5000 <input type="checkbox"/>

Download Name: 00000054

Survey Description: A0004 RESURVEY 01W03,B2 01F01,C3

M2350-1 Sample Results



2 of 3

Duratek Beta Survey Report

Download File Name: 00000054

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0004	01F01	5	5,019.0	60	FLDCT	B0001	0000C	2	494	4527
A0004	01W03	13	594.0	60	FLDCT	B0001	0000B	0	462	457

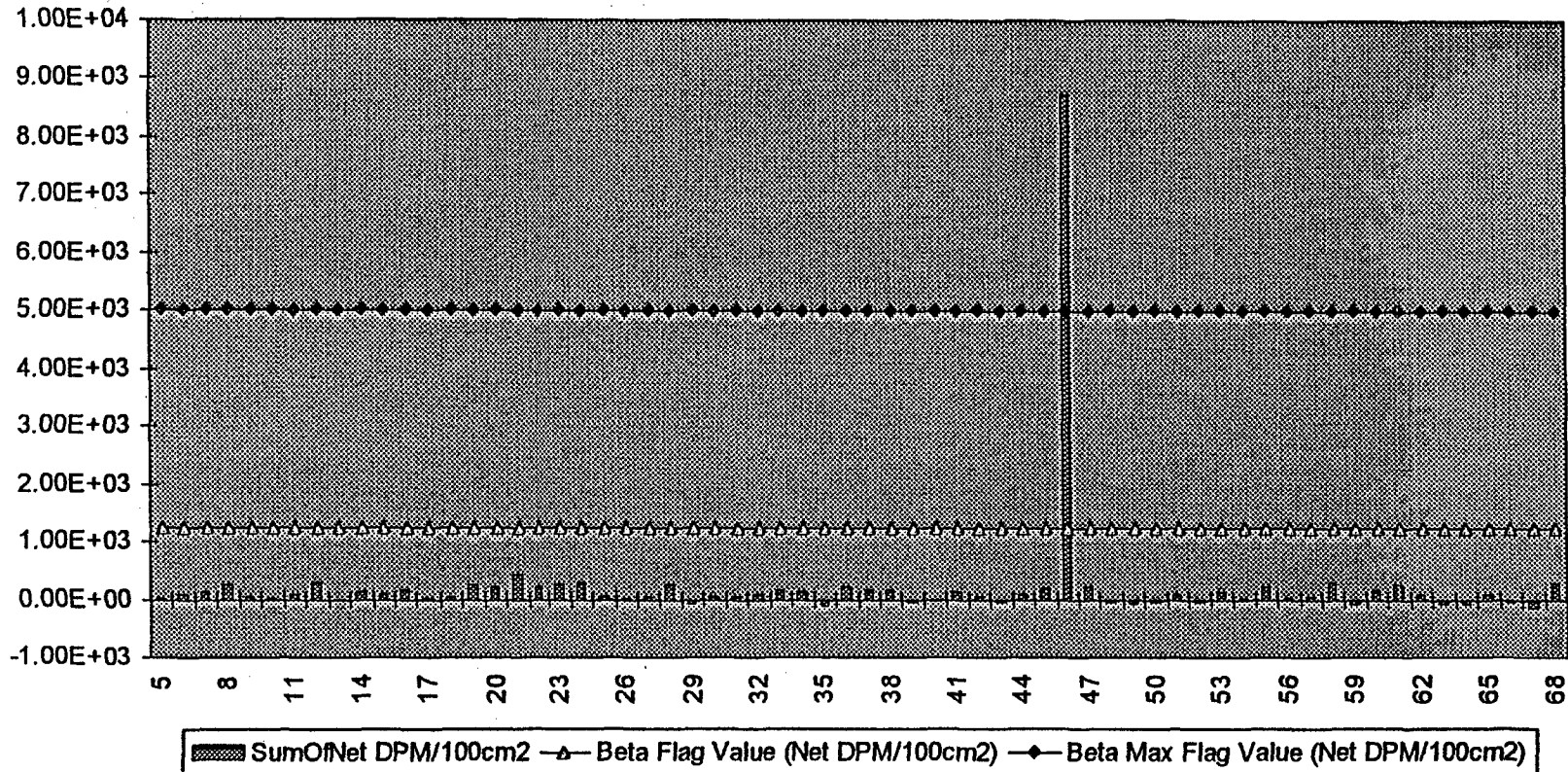
delet
P.Q. 1/24/03

Beta Flag	1250	-	_____
Beta Max Flag	5000		██████████

Download Name: 0000057

Survey Description: Package A0004 -Source Room Wall Penetrations

M2350-1 Sample Results



Page 2 of 34
FH

Duratek Beta Survey Report

Download File Name: 00000057

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0004	01P01	5	187.0	30	FLDCT	B9999	ZZZZZ	1	370	14
A0004	01P01	6	198.0	30	FLDCT	B9999	ZZZZZ	2	370	92
A0004	01P01	7	200.0	30	FLDCT	B9999	ZZZZZ	3	370	106
A0004	01P01	8	220.0	30	FLDCT	B9999	ZZZZZ	4	370	247
A0004	01P01	9	192.0	30	FLDCT	B9999	ZZZZZ	5	370	49
A0004	01P01	10	188.0	30	FLDCT	B9999	ZZZZZ	6	370	21
A0004	01P01	11	195.0	30	FLDCT	B9999	ZZZZZ	7	370	71
A0004	01P01	12	227.0	30	FLDCT	B9999	ZZZZZ	8	370	296
A0004	01P01	13	181.0	30	FLDCT	B9999	ZZZZZ	9	370	-28
A0004	01P01	14	202.0	30	FLDCT	B9999	ZZZZZ	10	370	120
A0004	01P01	15	197.0	30	FLDCT	B9999	ZZZZZ	11	370	85
A0004	01P01	16	205.0	30	FLDCT	B9999	ZZZZZ	12	370	141
A0004	01P01	17	186.0	30	FLDCT	B9999	ZZZZZ	13	370	7
A0004	01P01	18	194.0	30	FLDCT	B9999	ZZZZZ	14	370	63
A0004	01P01	19	220.0	30	FLDCT	B9999	ZZZZZ	15	370	247
A0004	01P01	20	216.0	30	FLDCT	B9999	ZZZZZ	16	370	219
A0004	01P01	21	246.0	30	FLDCT	B9999	ZZZZZ	17	370	430
A0004	01P01	22	217.0	30	FLDCT	B9999	ZZZZZ	18	370	226
A0004	01P01	23	220.0	30	FLDCT	B9999	ZZZZZ	19	370	247
A0004	01P01	24	227.0	30	FLDCT	B9999	ZZZZZ	20	370	296
A0004	01P01	25	194.0	30	FLDCT	B9999	ZZZZZ	21	370	63
A0004	01P01	26	190.0	30	FLDCT	B9999	ZZZZZ	22	370	35
A0004	01P01	27	191.0	30	FLDCT	B9999	ZZZZZ	23	370	42
A0004	01P01	28	222.0	30	FLDCT	B9999	ZZZZZ	24	370	261
A0004	01P01	29	171.0	30	FLDCT	B9999	ZZZZZ	25	370	-99
A0004	01P01	30	192.0	30	FLDCT	B9999	ZZZZZ	26	370	49
A0004	01P01	31	192.0	30	FLDCT	B9999	ZZZZZ	27	370	49
A0004	01P01	32	195.0	30	FLDCT	B9999	ZZZZZ	28	370	71
A0004	01P01	33	206.0	30	FLDCT	B9999	ZZZZZ	29	370	148
A0004	01P01	34	202.0	30	FLDCT	B9999	ZZZZZ	30	370	120
A0004	01P01	35	170.0	30	FLDCT	B9999	ZZZZZ	31	370	-106
A0004	01P01	36	215.0	30	FLDCT	B9999	ZZZZZ	32	370	212
A0004	01P01	37	208.0	30	FLDCT	B9999	ZZZZZ	33	370	162
A0004	01P01	38	208.0	30	FLDCT	B9999	ZZZZZ	34	370	162
A0004	01P01	39	180.0	30	FLDCT	B9999	ZZZZZ	35	370	-35
A0004	01P01	40	184.0	30	FLDCT	B9999	ZZZZZ	36	370	-7
A0004	01P01	41	201.0	30	FLDCT	B9999	ZZZZZ	37	370	113
A0004	01P01	42	192.0	30	FLDCT	B9999	ZZZZZ	38	370	49
A0004	01P01	43	178.0	30	FLDCT	B9999	ZZZZZ	39	370	-49

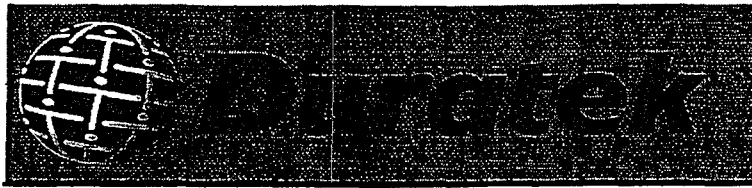
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Beta Max Flag	5000		

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0004	01P01	44	197.0	30	FLDCT	B9999	ZZZZZ	40	370	85
A0004	01P01	45	213.0	30	FLDCT	B9999	ZZZZZ	41	370	198
A0004	01P01	46	1,425.0	30	FLDCT	B9999	ZZZZZ	42	370	8748
A0004	01P01	47	217.0	30	FLDCT	B9999	ZZZZZ	43	370	226
A0004	01P01	48	179.0	30	FLDCT	B9999	ZZZZZ	44	370	-42
A0004	01P01	49	175.0	30	FLDCT	B9999	ZZZZZ	45	370	-71
A0004	01P01	50	177.0	30	FLDCT	B9999	ZZZZZ	46	370	-56
A0004	01p01	51	195.0	30	FLDCT	B9999	ZZZZZ	47	370	71
A0004	01P01	52	178.0	30	FLDCT	B9999	ZZZZZ	48	370	-49
A0004	01P01	53	203.0	30	FLDCT	B9999	ZZZZZ	49	370	127
A0004	01P01	54	190.0	30	FLDCT	B9999	ZZZZZ	50	370	35
A0004	01P01	55	218.0	30	FLDCT	B9999	ZZZZZ	51	370	233
A0004	01P01	56	189.0	30	FLDCT	B9999	ZZZZZ	52	370	28
A0004	01P01	57	192.0	30	FLDCT	B9999	ZZZZZ	53	370	49
A0004	01P01	58	224.0	30	FLDCT	B9999	ZZZZZ	54	370	275
A0004	01P01	59	175.0	30	FLDCT	B9999	ZZZZZ	55	370	-71
A0004	01P01	60	209.0	30	FLDCT	B9999	ZZZZZ	56	370	169
A0004	01P01	61	222.0	30	FLDCT	B9999	ZZZZZ	57	370	261
A0004	01P01	62	195.0	30	FLDCT	B9999	ZZZZZ	58	370	71
A0004	01P01	63	172.0	30	FLDCT	B9999	ZZZZZ	59	370	-92
A0004	01P01	64	172.0	30	FLDCT	B9999	ZZZZZ	60	370	-92
A0004	01P01	65	198.0	30	FLDCT	B9999	ZZZZZ	61	370	92
A0004	01P01	66	176.0	30	FLDCT	B9999	ZZZZZ	62	370	-63
A0004	01P01	67	165.0	30	FLDCT	B9999	ZZZZZ	63	370	-141
A0004	01P01	68	227.0	30	FLDCT	B9999	ZZZZZ	64	370	296

Beta Flag	1250	-	_____
Beta Max Flag	5000		██████████

Section 4

M2350 Download Alpha Report(s)



M2350-1 Download ALPHA Report

File Name : 00000042		Survey Description : A0004 02F01,W01-04,S01-3 01F01,W01-04 Post S/C	
Survey Reason : Characterization			
User ID : JLM9424		Technician Name :	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68A	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : ALPHA	Detector Type : 01200 : 126 cm2 Gas Proportional Detector, Alpha Window		
Detector Area : 126	Efficiency : 0.189	Survey Date : 12/4/02	

Jack Murcia [Signature] 12/04/02
 Print Name Signature Date
 _____ _____ _____
 Print Name Signature Date

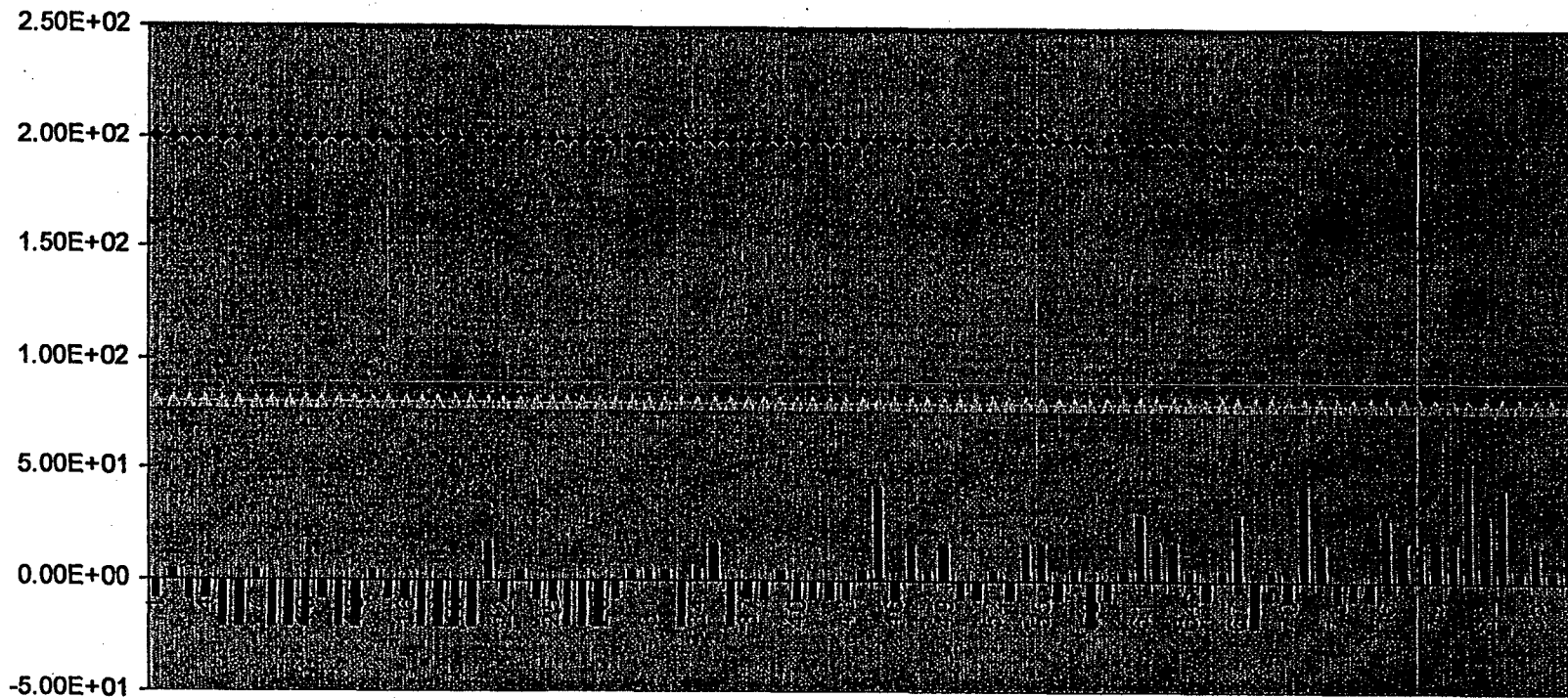
Comments:

Sign-Off Paul Jones [Signature] 12/7/02
 Print Name Signature Date

Download Name: 00000042

Survey Description: A0004 02F01,W01-04,S01-3 01F01,W01-04 Post S/C

M2350-1 Sample Results



SumOfNet DPM/100cm2 —▲— Alpha Flag Value (Net DPM/100cm2) —◆— Alpha Max Flag Value (Net DPM/100cm2)

Page 2 of 5

Duratek Alpha Survey Report

Download File Name: 00000042

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0004	02F01	1	1.0	20	FLDCT	B9999	0000A	1	5	-8
A0004	02F01	2	2.0	20	FLDCT	B9999	0000A	2	5	4
A0004	02F01	3	1.0	20	FLDCT	B9999	0000A	3	5	-8
A0004	02F01	4	1.0	20	FLDCT	B9999	0000A	4	5	-8
A0004	02F01	5	0.0	20	FLDCT	B9999	0000A	5	5	-21
A0004	02F01	6	0.0	20	FLDCT	B9999	0000B	1	5	-21
A0004	02F01	7	2.0	20	FLDCT	B9999	0000B	2	5	4
A0004	02F01	8	0.0	20	FLDCT	B9999	0000B	3	5	-21
A0004	02F01	9	0.0	20	FLDCT	B9999	0000B	4	5	-21
A0004	02F01	10	0.0	20	FLDCT	B9999	0000B	5	5	-21
A0004	02F01	11	1.0	20	FLDCT	B9999	0000C	3	5	-8
A0004	02F01	12	0.0	20	FLDCT	B9999	0000C	4	5	-21
A0004	02F01	13	0.0	20	FLDCT	B9999	0000C	5	5	-21
A0004	02W01	14	2.0	20	FLDCT	B0001	0000A	1	5	4
A0004	02W01	15	1.0	20	FLDCT	B0001	0000A	2	5	-8
A0004	02W01	16	1.0	20	FLDCT	B0001	0000A	3	5	-8
A0004	02W01	17	0.0	20	FLDCT	B0001	0000A	4	5	-21
A0004	02W01	18	0.0	20	FLDCT	B0001	0000A	5	5	-21
A0004	02W01	19	0.0	20	FLDCT	B0001	0000B	1	5	-21
A0004	02W01	20	0.0	20	FLDCT	B0001	0000B	2	5	-21
A0004	02W01	21	3.0	20	FLDCT	B0001	0000B	3	5	17
A0004	02W01	22	1.0	20	FLDCT	B0001	0000B	4	5	-8
A0004	02W01	23	2.0	20	FLDCT	B0001	0000B	5	5	4
A0004	02W02	24	1.0	20	FLDCT	B0007	0000A	1	5	-8
A0004	02W02	25	1.0	20	FLDCT	B0007	0000A	2	5	-8
A0004	02W02	26	0.0	20	FLDCT	B0007	0000A	3	5	-21
A0004	02W02	27	0.0	20	FLDCT	B0007	0000A	1	5	-21
A0004	02W02	28	0.0	20	FLDCT	B0007	0000A	2	5	-21
A0004	02W02	29	1.0	20	FLDCT	B0007	0000A	3	5	-8
A0004	02W03	30	2.0	20	FLDCT	B0007	0000A	1	5	4
A0004	02W03	31	2.0	20	FLDCT	B0007	0000A	2	5	4
A0004	02W03	32	2.0	20	FLDCT	B0007	0000A	3	5	4
A0004	02W03	33	0.0	20	FLDCT	B0007	0000A	4	5	-21
A0004	02W03	34	2.0	20	FLDCT	B0007	0000A	5	5	4
A0004	02W03	35	3.0	20	FLDCT	B0007	0000B	1	5	17
A0004	02W03	36	0.0	20	FLDCT	B0007	0000B	2	5	-21
A0004	02W03	37	1.0	20	FLDCT	B0007	0000B	3	5	-8
A0004	02W03	38	1.0	20	FLDCT	B0007	0000B	4	5	-8

Alpha Flag	80	_____
Alpha Max Flag	200	██████████

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0004	02W03	39	2.0	20	FLDCT	B0007	0000B	5	5	4
A0004	02W04	40	1.0	20	FLDCT	B0001	0000A	6	5	-8
A0004	02W04	41	1.0	20	FLDCT	B0001	0000A	7	5	-8
A0004	02W04	42	1.0	20	FLDCT	B0001	0000B	1	5	-8
A0004	02W04	43	1.0	20	FLDCT	B0001	0000B	2	5	-8
A0004	02S01	44	2.0	20	FLDCT	B9999	ZZZZ	1	5	4
A0004	02S01	45	5.0	20	FLDCT	B9999	ZZZZ	2	5	42
A0004	02S01	46	1.0	20	FLDCT	B9999	ZZZZ	3	5	-8
A0004	02S02	47	3.0	20	FLDCT	B9999	ZZZZ	1	5	17
A0004	02S02	48	2.0	20	FLDCT	B9999	ZZZZ	2	5	4
A0004	02S02	49	3.0	20	FLDCT	B9999	ZZZZ	3	5	17
A0004	02S03	50	1.0	20	FLDCT	B9999	ZZZZ	1	5	-8
A0004	02S03	51	1.0	20	FLDCT	B9999	ZZZZ	2	5	-8
A0004	02S03	52	2.0	20	FLDCT	B9999	ZZZZ	3	5	4
A0004	02S03	53	1.0	20	FLDCT	B9999	ZZZZ	4	5	-8
A0004	01F01	54	3.0	20	FLDCT	B0001	0000A	1	5	17
A0004	01F01	55	3.0	20	FLDCT	B0001	0000A	2	5	17
A0004	01F01	56	1.0	20	FLDCT	B0001	0000A	3	5	-8
A0004	01F01	57	2.0	20	FLDCT	B0001	0000A	4	5	4
A0004	01F01	58	0.0	20	FLDCT	B0001	0000B	1	5	-21
A0004	01F01	59	1.0	20	FLDCT	B0001	0000B	2	5	-8
A0004	01F01	60	2.0	20	FLDCT	B0001	0000B	3	5	4
A0004	01F01	61	4.0	20	FLDCT	B0001	0000B	4	5	29
A0004	01F01	62	3.0	20	FLDCT	B0001	0000C	1	5	17
A0004	01F01	63	3.0	20	FLDCT	B0001	0000C	2	5	17
A0004	01F01	64	2.0	20	FLDCT	B0001	0000C	3	5	4
A0004	01F01	65	1.0	20	FLDCT	B0001	0000C	4	5	-8
A0004	01W01	66	2.0	20	FLDCT	B0001	0000A	1	5	4
A0004	01W01	67	4.0	20	FLDCT	B0001	0000A	2	5	29
A0004	01W01	68	0.0	20	FLDCT	B0001	0000A	3	5	-21
A0004	01W01	69	2.0	20	FLDCT	B0001	0000A	4	5	4
A0004	01W01	70	1.0	20	FLDCT	B0001	0000B	1	5	-8
A0004	01W01	71	5.0	20	FLDCT	B0001	0000B	2	5	42
A0004	01W01	72	3.0	20	FLDCT	B0001	0000B	3	5	17
A0004	01W01	73	1.0	20	FLDCT	B0001	0000B	4	5	-8
A0004	01W02	74	1.0	20	FLDCT	B0001	0000A	1	5	-8
A0004	01W02	75	1.0	20	FLDCT	B0001	0000A	2	5	-8
A0004	01W02	76	4.0	20	FLDCT	B0001	0000A	3	5	29
A0004	01W02	77	3.0	20	FLDCT	B0001	0000B	1	5	17
A0004	01W02	78	3.0	20	FLDCT	B0001	0000B	2	5	17
A0004	01W02	79	3.0	20	FLDCT	B0001	0000B	3	5	17
A0004	01W03	80	3.0	20	FLDCT	B0001	0000A	1	5	17

Alpha Flag	80	_____
Alpha Max Flag	200	██████████

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
A0004	01W03	81	6.0	20	FLDCT	B0001	0000A	2	5	55
A0004	01W03	82	4.0	20	FLDCT	B0001	0000A	3	5	29
A0004	01W03	83	5.0	20	FLDCT	B0001	0000B	1	5	42
A0004	01W03	84	2.0	20	FLDCT	B0001	0000B	2	5	4
A0004	01W03	85	3.0	20	FLDCT	B0001	0000B	3	5	17
A0004	01W04	86	2.0	20	FLDCT	B0001	0000A	3	5	4
A0004	01W04	87	4.0	20	FLDCT	B0001	0000B	3	5	29

Alpha Flag	80	-	_____
Alpha Max Flag	200		

Section 5

**Removable Alpha/Beta Activity Laboratory
Report(s)**

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
12:36:03PM

Batch ID:	VA Smear Analysis - 200212091150	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	I Sample Location: <i>A000401F01</i>	Batch Key	6,579	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021209115008-19 ² ₁	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209122030-12	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA
20021209122150-13	1.00	-0.15	-0.59	15.82	<MDA	3.40	14.37	29.45	<MDA
20021209122320-14	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209122440-15 <i>Grid</i>	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209122610-16 <i>B2</i>	1.00	-0.15	-0.59	15.82	<MDA	10.40	43.94	29.45	
20021209122730-17 <i>B3</i>	1.00	-0.15	-0.59	15.82	<MDA	60.40	255.22	29.45	
20021209122900-18	1.00	-0.15	-0.59	15.82	<MDA	5.40	22.82	29.45	<MDA
20021209123020-19	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209123151-110 <i>C2</i>	1.00	-0.15	-0.59	15.82	<MDA	11.40	48.17	29.45	
20021209123321-111 <i>C3</i>	1.00	-0.15	-0.59	15.82	<MDA	26.40	111.55	29.45	
20021209123441-112 <i>C4</i>	1.00	-0.15	-0.59	15.82	<MDA	35.40	149.58	29.45	

Performed By: *D. Schumaker* Date *12/9/02*

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
12:47:31 PM

Batch ID: VA Smear Analysis - 200212091150	Acquisition Date: 12/9/2002	Alpha Bkg 0.15 cpm
Group: J Sample Location: ^{DB 12-9-02} A000401 W021	Batch Key 6,580	Beta Bkg 1.60 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209115016-J13	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209123739-J14	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209123859-J15	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209124029-J16	1.00	0.85	3.35	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209124149-J17	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209124319-J18	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209124439-J19	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209124610-J20	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA

Performed By: D. Schumaker Date 12/9/02

P37

Omics V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/2002
12:56:00 PM

Batch ID:	VA Smear Analysis - 200212091151	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	A Sample Location: A000401W02	Batch Key	6,581	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021209115200-A21	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA
20021209124903-A22	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209125023-A23	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209125153-A24	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209125313-A25	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209125443-A26	1.00	0.85	3.35	15.82	<MDA	0.40	1.69	29.45	<MDA

Performed By: D. Schirmer Date 12/9/02

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
1:04:44PM

Batch ID: VA Smear Analysis - 200212091152	Acquisition Date: 12/9/2002	Alpha Bkg 0.15 cpm
Group: B Sample Location: <i>A000401W03</i>	Batch Key 6,582	Beta Bkg 1.60 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209115209-B27	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209125732-B28	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209125902-B29	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209130022-B30	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209130152-B31	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209130313-B32	1.00	0.85	3.35	15.82	<MDA	-1.60	-6.76	29.45	<MDA

Performed By: *D. Schumaker* Date *12/9/02*

Oman V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
1:07:52PM

Batch ID:	VA Smear Analysis - 200212091152	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	C Sample Location: <i>A000401W04</i>	Batch Key	6,583	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209115217-C33	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209130611-C34	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA

Performed By: *D. Schumaker* Date *12/8/02*

P40

Omicron V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
11:07:39 AM

Batch ID: VA Smear Analysis - 200212091048	Acquisition Date: 12/9/2002	Alpha Bkg 0.15 cpm
Group: A Sample Location: <i>A0004 02F01</i>	Batch Key 6,571	Beta Bkg 1.60 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021209104842-A1	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209105023-A2	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA
20021209105153-A3	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA
20021209105313-A4	1.00	-0.15	-0.59	15.82	<MDA	3.40	14.37	29.45	<MDA
20021209105443-A5	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209105613-A6	1.00	-0.15	-0.59	15.82	<MDA	5.40	22.82	29.45	<MDA
20021209105733-A7	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209105903-A8	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209110023-A9	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209110153-A10	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209110313-A11	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209110443-A12	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209110603-A13	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA

Performed By: D. Schumaker Date 12/9/02

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
11:21:30AM

Batch ID:	VA Smear Analysis - 200212091059	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	B Sample Location: <i>R0004 02W01</i>	Batch Key	6,572	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209105907-B14	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209110858-B15	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209111028-B16	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA
20021209111148-B17	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209111318-B18	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209111438-B19	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209111608-B20	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209111728-B21	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209111858-B22	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209112019-B23	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA

Performed By: *D. Schumaker* Date *12/9/02*

Batch ID:	VA Smear Analysis - 200212091059	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	C Sample Location: <i>A000402W02</i>	Batch Key	6,573	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time</u> (Min)	<u>Alpha Count Rate</u> (CPM)	<u>Alpha DPM</u>	<u>Alpha MDA</u> (DPM)	<u>Flag</u>	<u>Beta Count Rate</u> (CPM)	<u>Beta DPM</u>	<u>Beta MDA</u> (DPM)	<u>Flag</u>
20021209105920-C24	1.00	0.85	3.35	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209112311-C25	1.00	0.85	3.35	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209112441-C26	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA
20021209112611-C27	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209112731-C28	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209112901-C29	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA

Performed By: *D. Schupack* Date *12/9/02*

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
11:44:42AM

Batch ID: VA Smear Analysis - 200212091100	Acquisition Date: 12/9/2002	Alpha Bkg 0.15 cpm
Group: D Sample Location: <i>A000402 W03</i>	Batch Key 6,574	Beta Bkg 1.60 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021209110048-D30	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209113149-D31	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209113320-D32	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209113440-D33	1.00	0.85	3.35	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209113610-D34	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209113730-D35	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209113900-D36	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209114020-D37	1.00	0.85	3.35	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209114150-D38	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209114310-D39	1.00	0.85	3.35	15.82	<MDA	1.40	5.92	29.45	<MDA

Performed By: *D. Schumaker* Date *12/9/02*

Omicron V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
11:50:20AM

Batch ID:	VA Smear Analysis - 200212091105	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	E Sample Location: <i>A000402W04</i>	Batch Key	6,575	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209110506-E40	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209114609-E41	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209114729-E42	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209114859-E43	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA

Performed By: *D. Schumaker* Date *12/9/02*

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
11:57:31AM

Batch ID: VA Smear Analysis - 200212091105	Acquisition Date: 12/9/2002	Alpha Bkg 0.15 cpm
Group: F Sample Location: <i>A006402501</i>	Batch Key 6,576	Beta Bkg 1.60 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209110517-F44	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209115149-F45	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209115319-F46	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209115439-F47	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209115609-F48	1.00	-0.15	-0.59	15.82	<MDA	3.40	14.37	29.45	<MDA

Performed By: *D. Schumaker* Date: *12/9/02*

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
12:04:56PM

Batch ID:	VA Smear Analysis - 200212091114	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	G Sample Location: <i>A060402502</i>	Batch Key	6,577	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209111431-G49	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209115904-G50	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209120024-G51	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209120154-G52	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209120314-G53	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA

Performed By: D. Schumaker Date 12/9/02

P47

Batch ID: VA Smear Analysis - 200212091114	Acquisition Date: 12/9/2002	Alpha Bkg: 0.15 cpm
Group: H Sample Location: <i>A0064 02503</i>	Batch Key: 6,578	Beta Bkg: 1.60 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency: 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk: 0.00	Beta Efficiency: 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021209111440-H54	1.00	0.85	3.35	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209120613-H55	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209120733-H56	1.00	0.85	3.35	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209120903-H57	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209121023-H58	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209121153-H59	1.00	0.85	3.35	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209121313-H60	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209121443-H61	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209121603-H62	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209121734-H63	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA

Performed By: *D. Schumaker* Date: *12/9/02*

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

1/7/03
11:25:35AM

Batch ID:	VA Smear Analysis - 200301070927	Acquisition Date:	1/7/2003	Alpha Bkg	0.25 cpm
Group:	D Sample Location: <i>A0004 01P01-01P64</i>	Batch Key	6,667	Beta Bkg	2.65 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20030107092711-D1	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107095332-D2	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107095502-D3	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107095622-D4	1.00	-0.25	-0.99	17.32	<MDA	0.35	1.48	34.62	<MDA
20030107095752-D5	1.00	-0.25	-0.99	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107095912-D6	1.00	-0.25	-0.99	17.32	<MDA	1.35	5.70	34.62	<MDA
20030107100042-D7	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107100213-D8	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107100333-D9	1.00	-0.25	-0.99	17.32	<MDA	0.35	1.48	34.62	<MDA
20030107100503-D10	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107100623-D11	1.00	-0.25	-0.99	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107100753-D12	1.00	-0.25	-0.99	17.32	<MDA	0.35	1.48	34.62	<MDA
20030107100913-D13	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107101043-D14	1.00	0.75	2.96	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107101203-D15	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107101333-D16	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107101503-D17	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107101623-D18	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107101753-D19	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107101913-D20	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107102043-D21	1.00	-0.25	-0.99	17.32	<MDA	1.35	5.70	34.62	<MDA
20030107102204-D22	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107102334-D23	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107102454-D24	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107102624-D25	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107102754-D26	1.00	0.75	2.96	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107102914-D27	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107103044-D28	1.00	-0.25	-0.99	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107103204-D29	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA

Performed By: *[Signature]* Date: *1-7-03*

Add'l 01P01-01P64

Omni V.A. A/B SMEAR ANALYSIS

Survey Report

1/7/03
11:25:35 AM

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20030107103334-D30	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107103454-D31	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107103624-D32	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107103744-D33	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107103914-D34	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107104034-D35	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107104205-D36	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107104335-D37	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107104455-D38	1.00	0.75	2.96	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107104625-D39	1.00	0.75	2.96	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107104745-D40	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107104915-D41	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107105035-D42	1.00	-0.25	-0.99	17.32	<MDA	38.35	162.05	34.62	<MDA
20030107105205-D43	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107105325-D44	1.00	0.75	2.96	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107105455-D45	1.00	-0.25	-0.99	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107105615-D46	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107105745-D47	1.00	-0.25	-0.99	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107105915-D48	1.00	1.75	6.90	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107110036-D49	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107110206-D50	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107110326-D51	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107110456-D52	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107110616-D53	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107110746-D54	1.00	-0.25	-0.99	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107110906-D55	1.00	-0.25	-0.99	17.32	<MDA	0.35	1.48	34.62	<MDA
20030107111036-D56	1.00	-0.25	-0.99	17.32	<MDA	-2.65	-11.20	34.62	<MDA
20030107111206-D57	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA
20030107111326-D58	1.00	-0.25	-0.99	17.32	<MDA	1.35	5.70	34.62	<MDA
20030107111456-D59	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107111616-D60	1.00	0.75	2.96	17.32	<MDA	0.35	1.48	34.62	<MDA
20030107111746-D61	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107111906-D62	1.00	-0.25	-0.99	17.32	<MDA	-1.65	-6.97	34.62	<MDA
20030107112037-D63	1.00	-0.25	-0.99	17.32	<MDA	0.35	1.48	34.62	<MDA
20030107112207-D64	1.00	-0.25	-0.99	17.32	<MDA	-0.65	-2.75	34.62	<MDA

Performed By: APK

Date: 1/7/03

P50

Section 6

**H-3 Removable Beta Contamination
Laboratory Report(s)**

LABORATORY ANALYSIS FORM

P52

Laboratory Sample No.: RC-0204822
 Survey No.:
 HRWP No.:

1. URGENT ROUTINE (circle one) >100 cpm + Bkg Y/N, if yes: ncpm / uR/hr/

Sample Location / Description: Omaha, NE VA Project, A000402 F01, 02W01-02W04, 02S01-02S03, A000401 F01, 01W01-01W04, C0001010401

Sample Type (circle one): smears, no.: 21 soil water leachate other

Sampled By: L. Finn Date 12-6-02 Time 1430

2. Analysis Requested (circle)

Gross Beta Gross Alpha HTO Gamma-quantitative Gamma-qualitative Other

3. Unconditional Release Yes/No If Yes, is sample representative of entire contents? Yes / No

Analysis (nuclide)	Result	+ or -	Units	MDA (if required)	Comments	Analysis Date
Smear 1-2/HTO	< MDA	N/A	dpm	max 59	A000402 F01 #1+2	12-10-02
3	↓	↓	↓	52	A000402 W01 #1	↓
4	↓	↓	↓	52	A000402 W02 #1	↓
5	↓	↓	↓	53	A000402 W03 #1	↓
6	↓	↓	↓	52	A000402 W04 #1	↓
7	↓	↓	↓	53	A000402 S01 #1	↓
8	↓	↓	↓	56	A000402 S02 #1	↓
9	↓	↓	↓	53	A000402 S03 #1	↓
10	792	108		N/A	A000401 F01 #1	
11	< MDA	N/A		53	A0004 01 F01 #2	
12	↓	↓	↓	52	A000401 W01 #1	↓
13	↓	↓	↓	52	A000401 W02 #1	↓
14	↓	↓	↓	52	A000401 W03 #1	↓
15	↓	↓	↓	53	A000401 W04 #1	↓
16-21	↓	↓	↓	max 53	C000101 H01 #1-6	↓

Completed By: Marcy Proctor (Lab Tech.) Date: 12-11-02

Approved By: Marcy Proctor (Lab Supervisor or designee) Date: 12-11-02

Results Received By: PLA J (Technician / Sampler) Date: 12-30-02

Reviewed By: E. Langille (HRSO or designee) Date: 1/8/03

LABORATORY ANALYSIS FORM

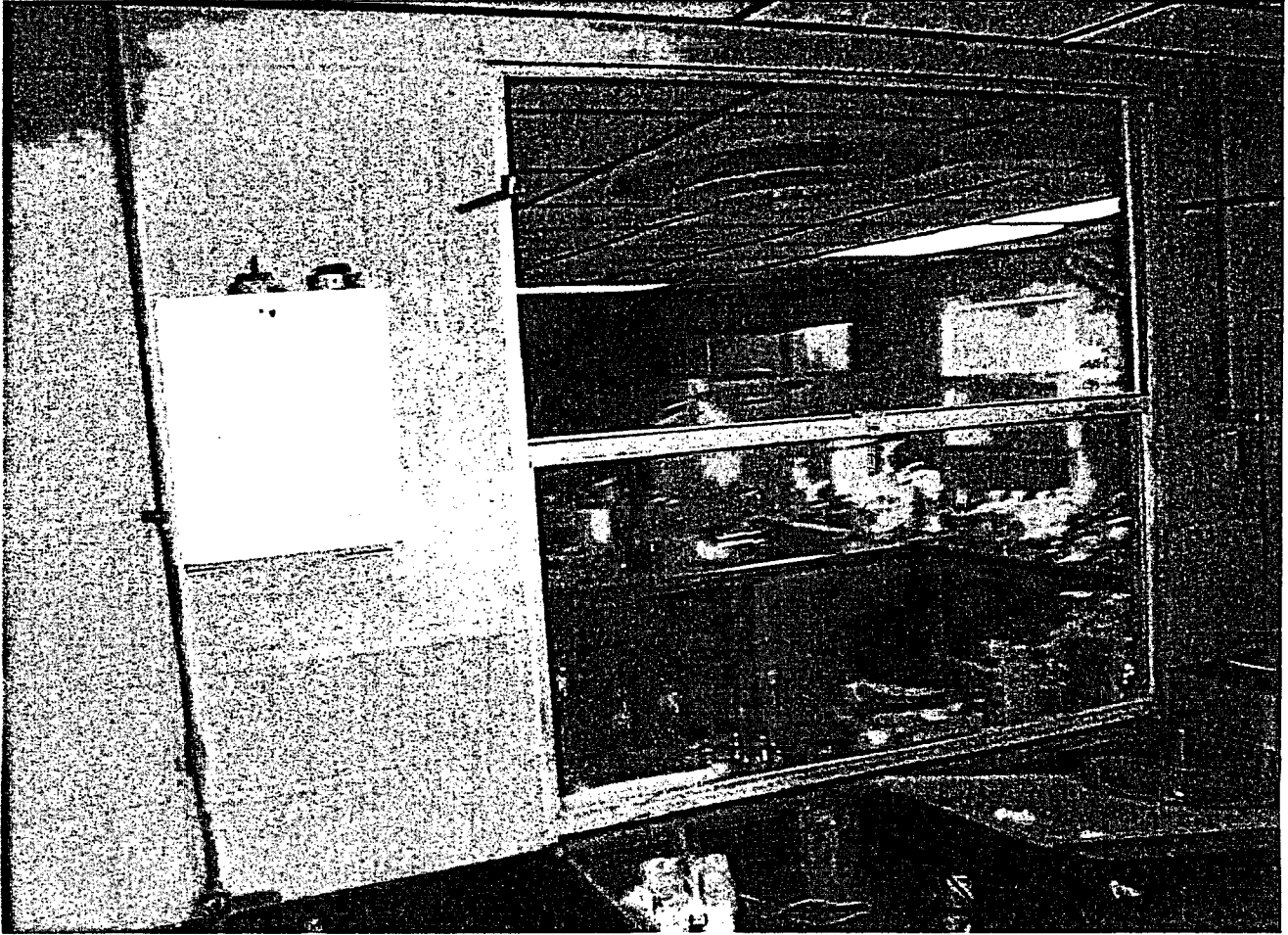
P53

✓	Instrument Used	Serial #	Cal-. Due Date
✓ TP	Packard Tri-Carb 2550	401663	6-2-03
	Genie Gamma Spec (Det. 4)	6922910	2-25-03*
	Protean IPC 9025	721052	11-26-03

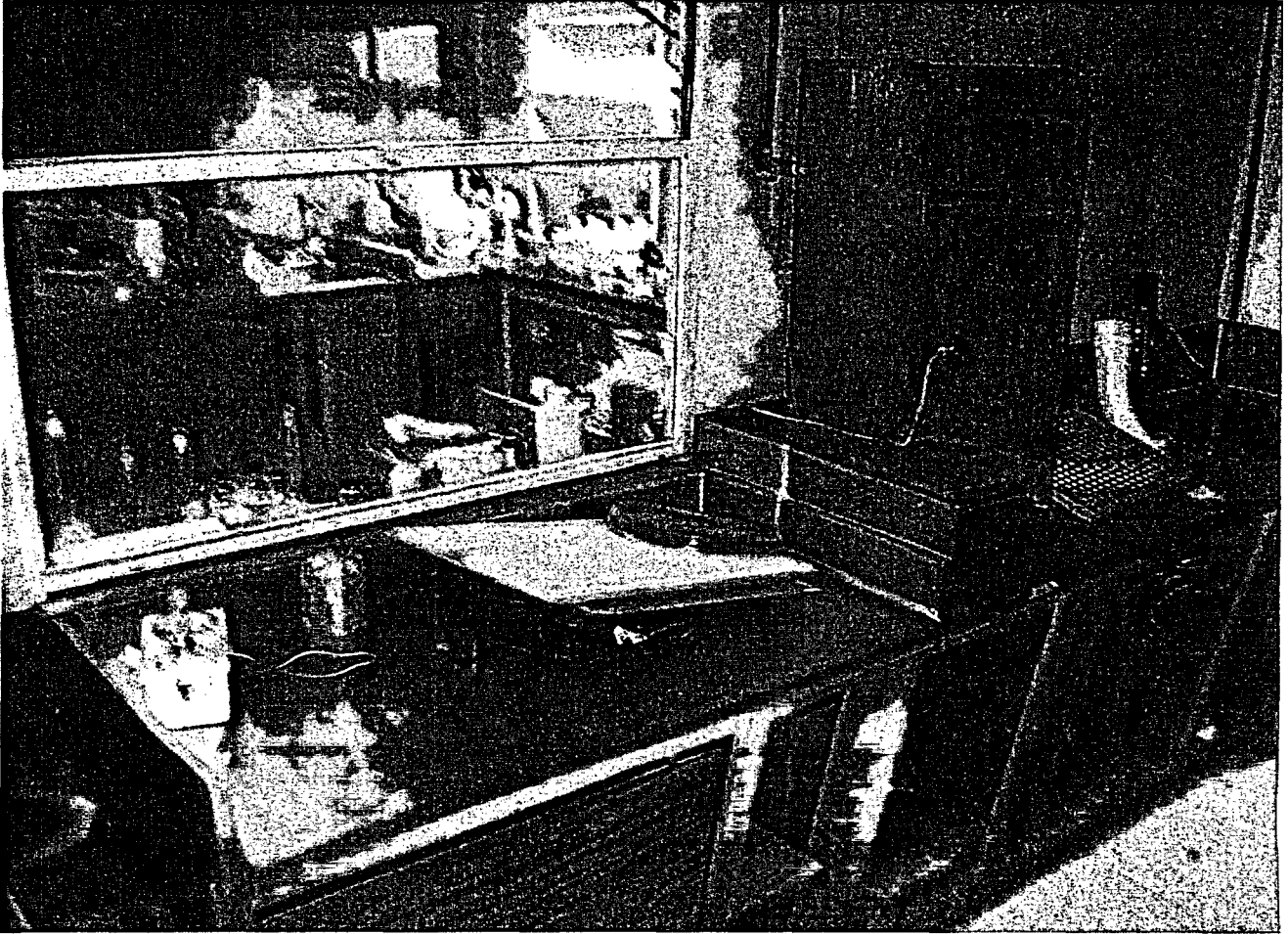
* As needed

Section 7

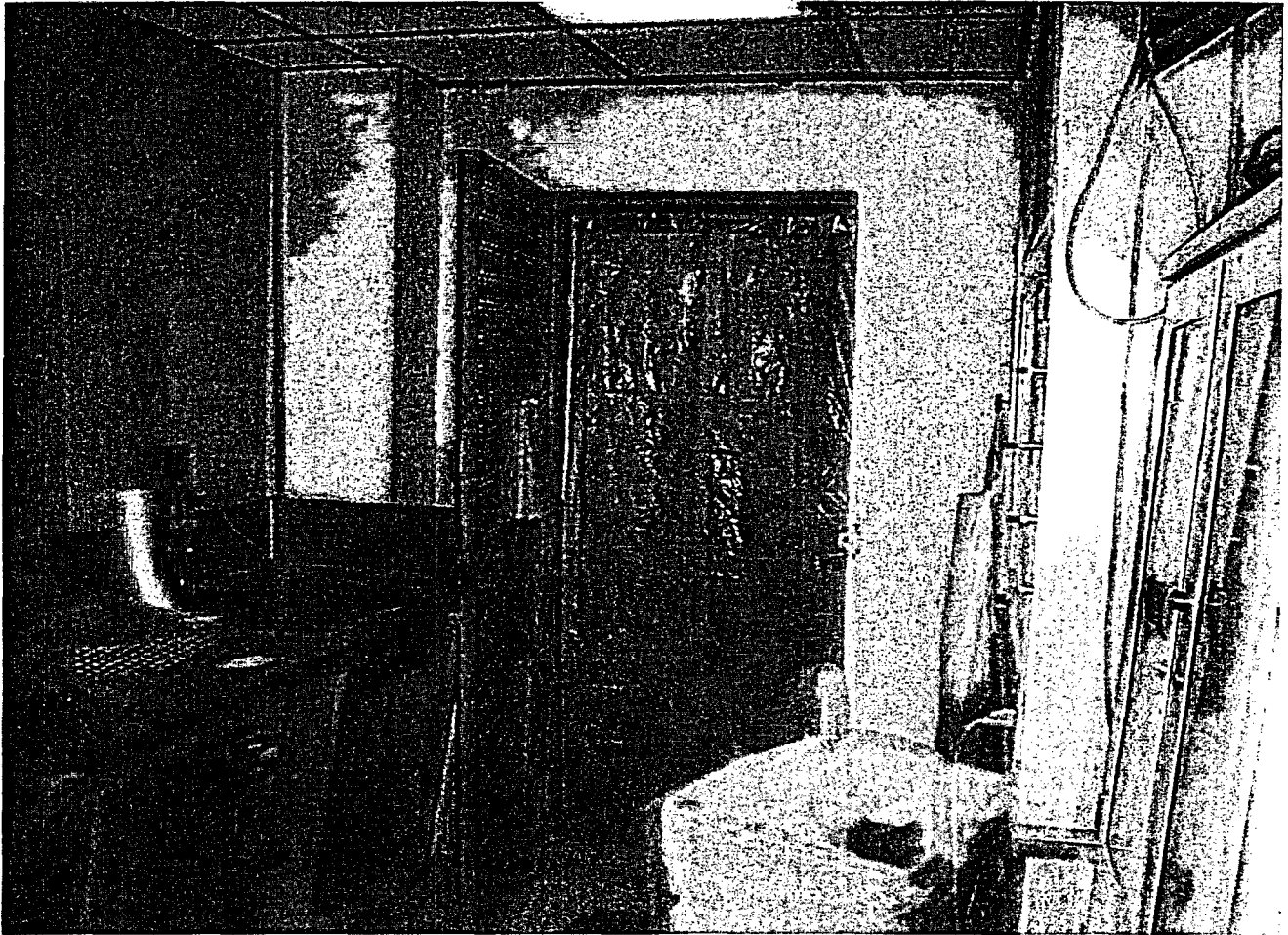
Photos of the Survey Area



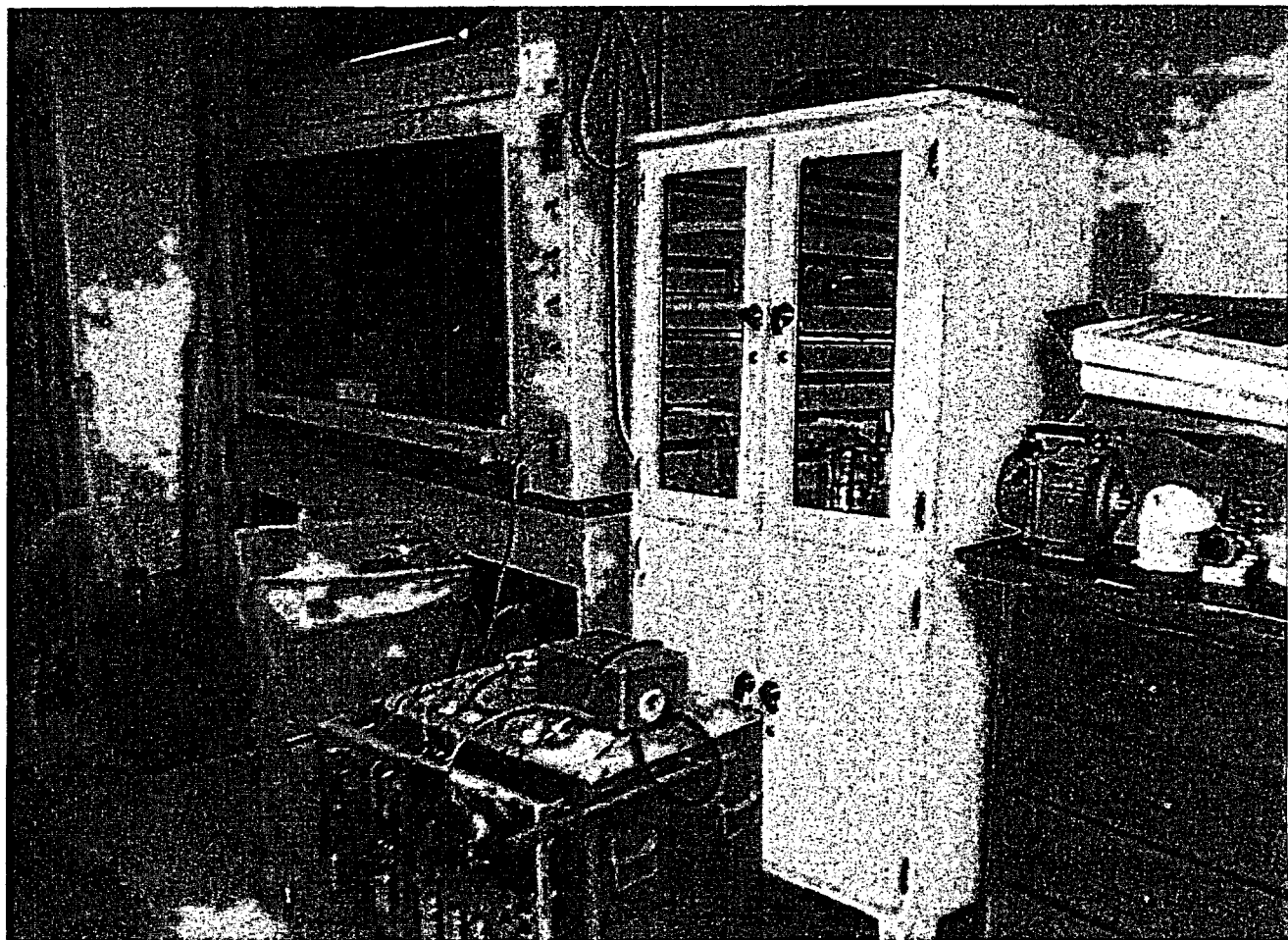
dec13_30



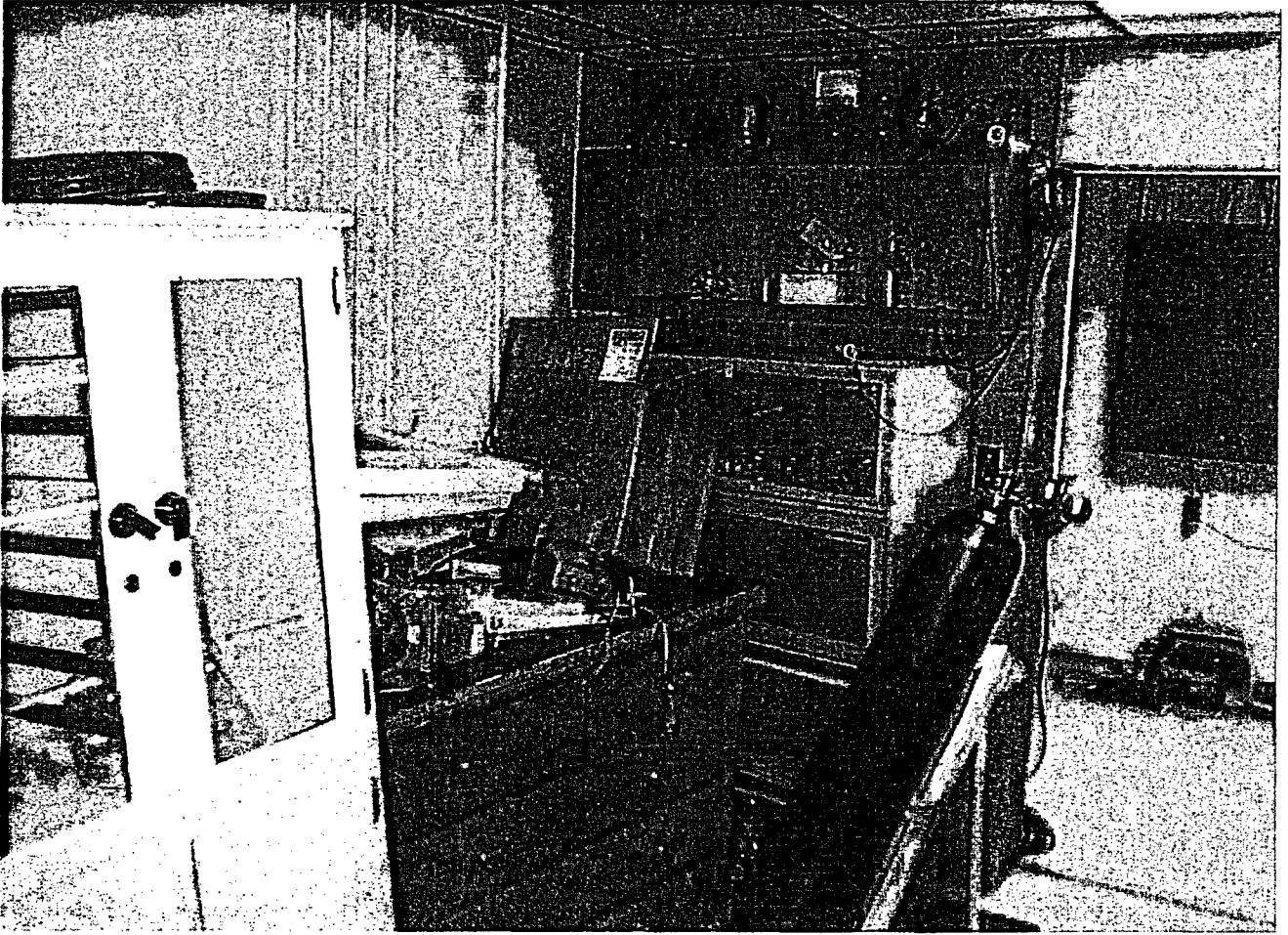
dec13_31



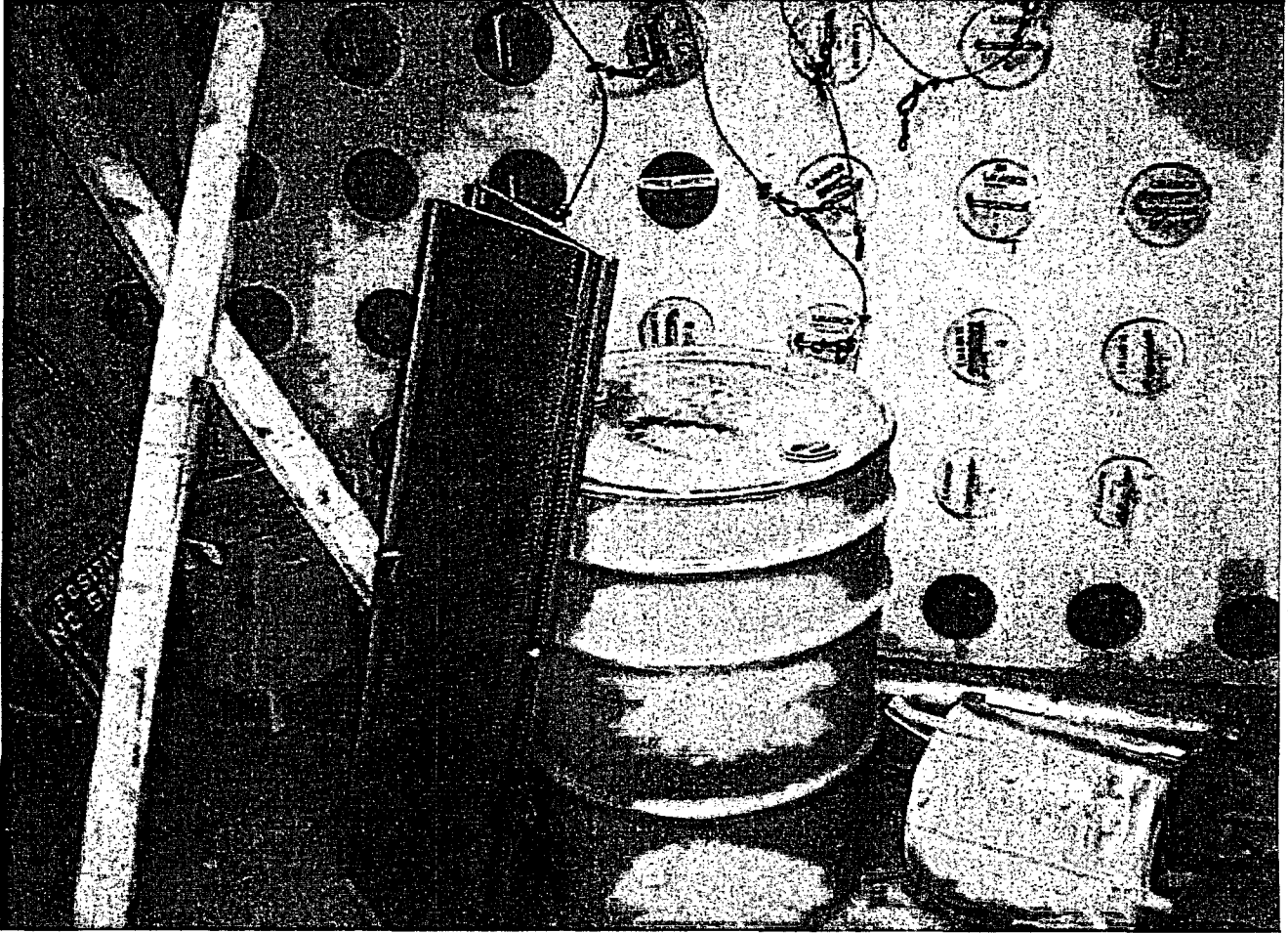
dec13_32



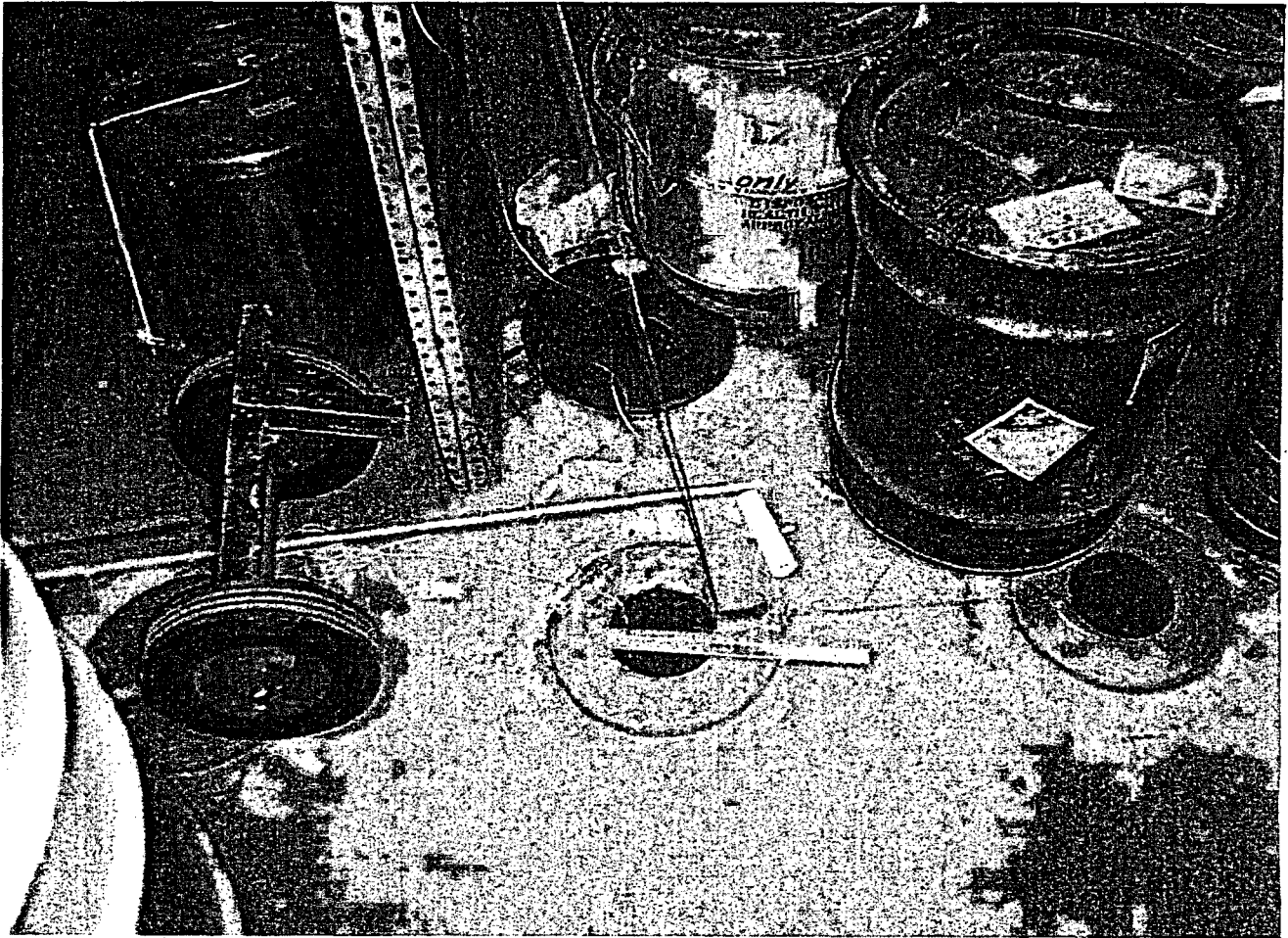
dec13_33



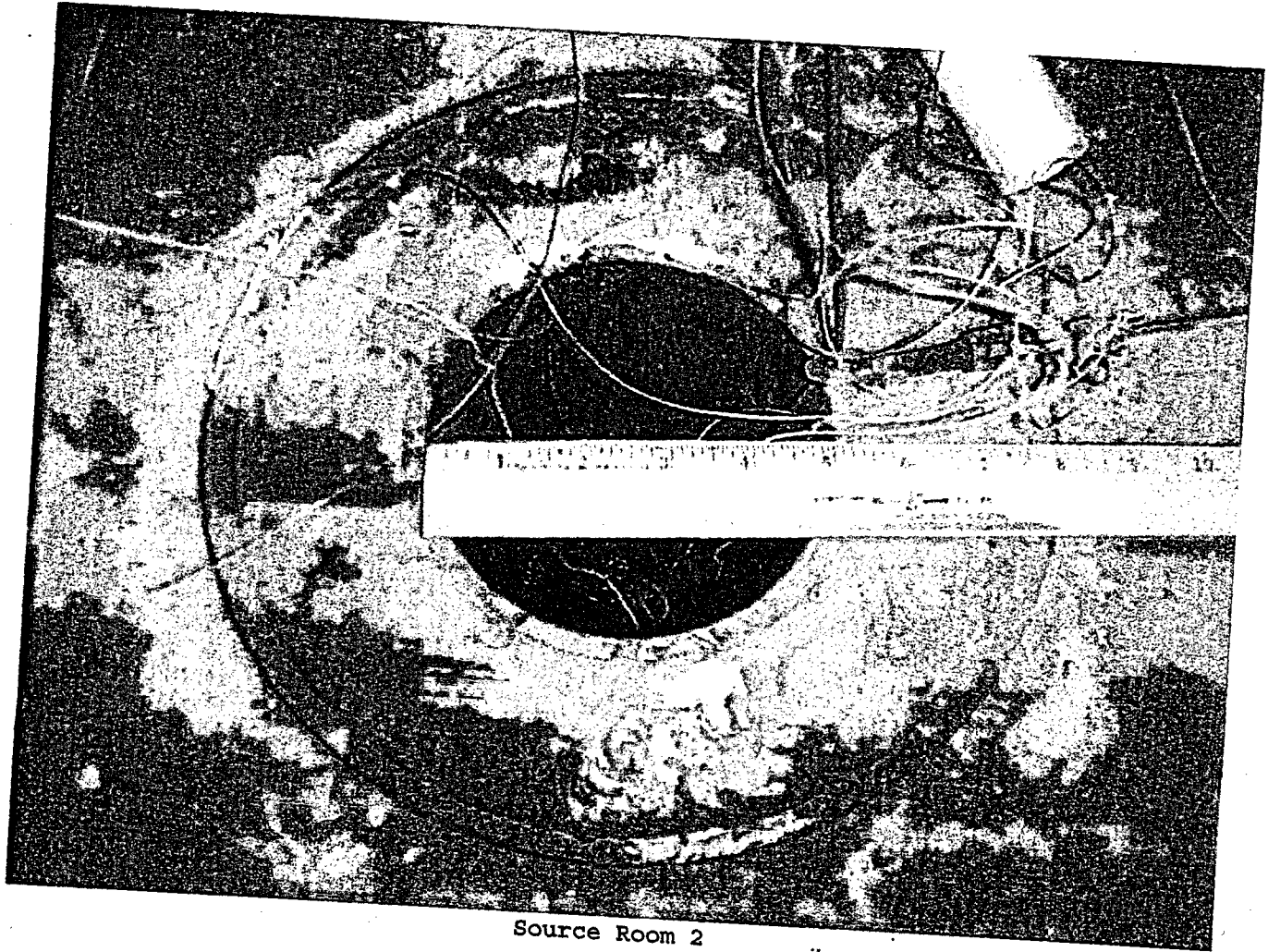
dec13_34



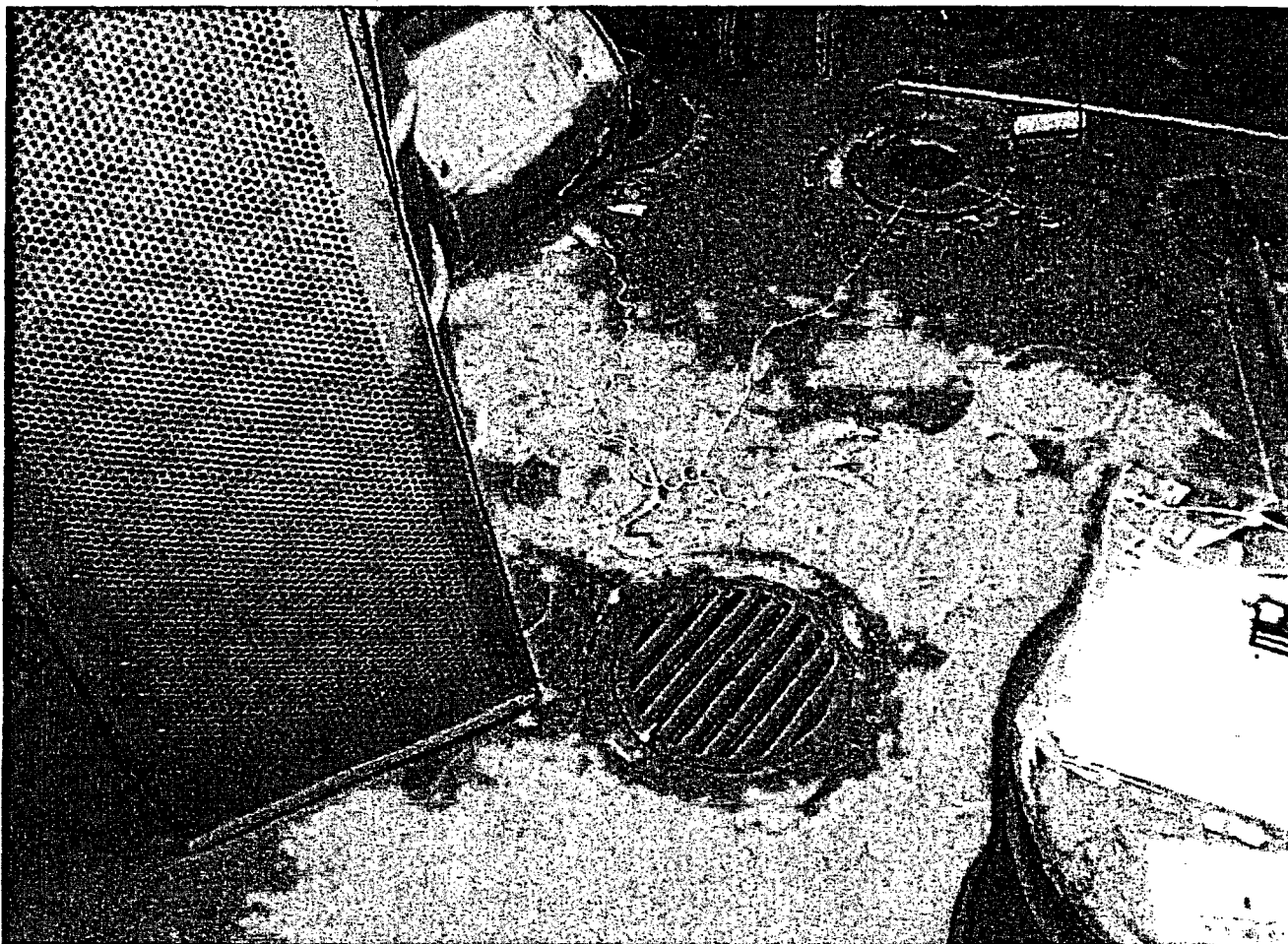
Horizontal Storage Tubes



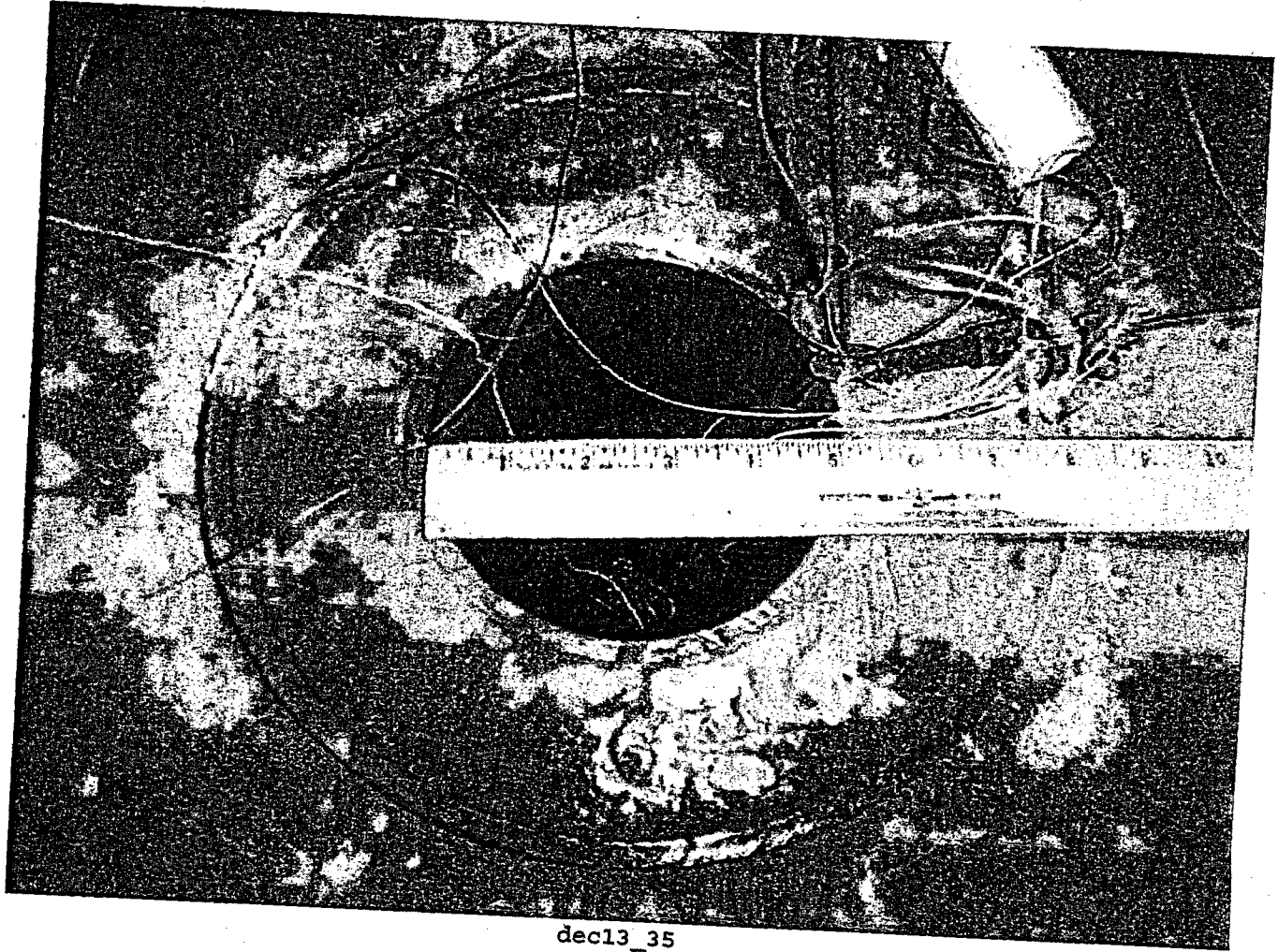
Source Room 1



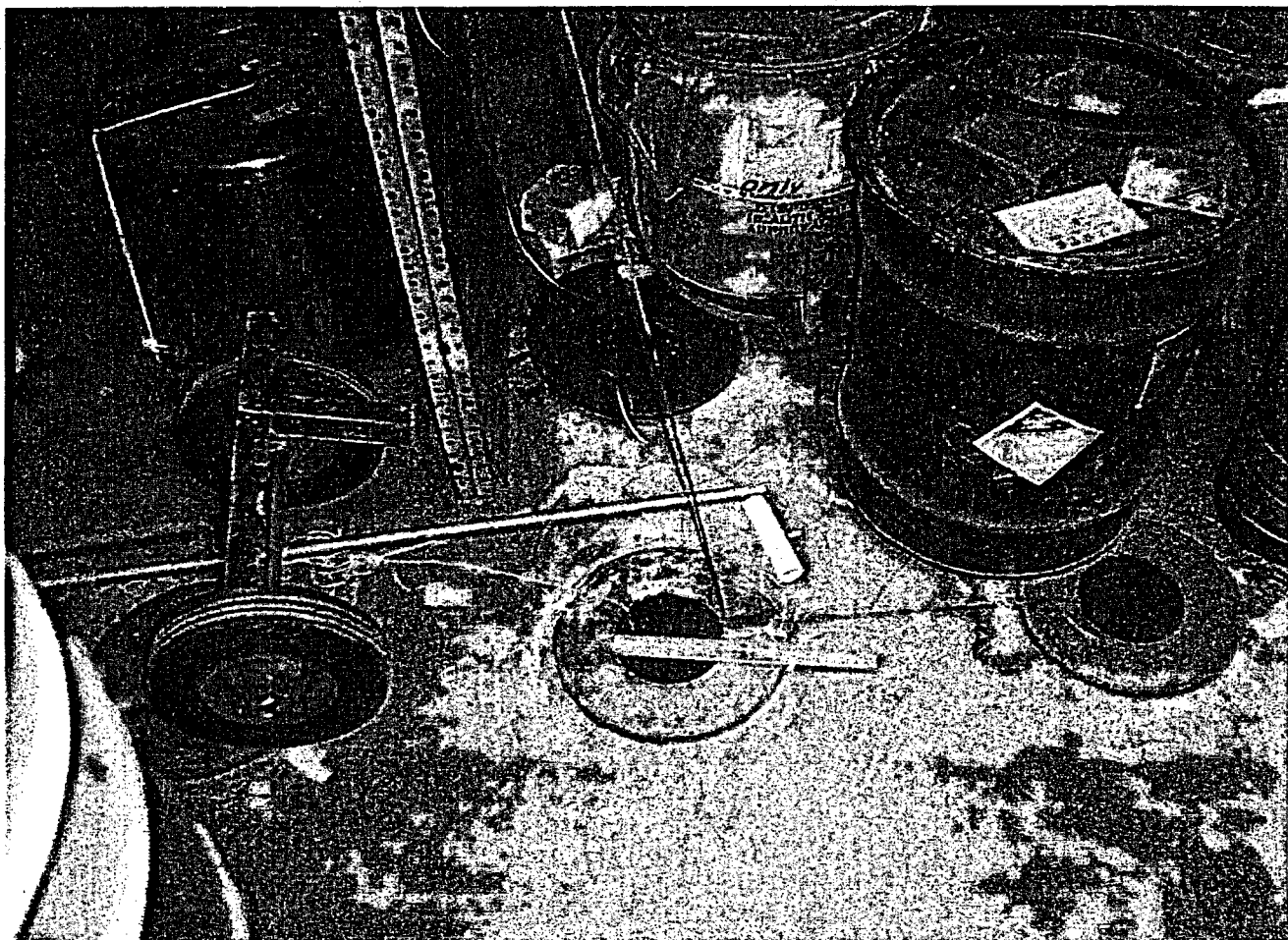
Source Room 2



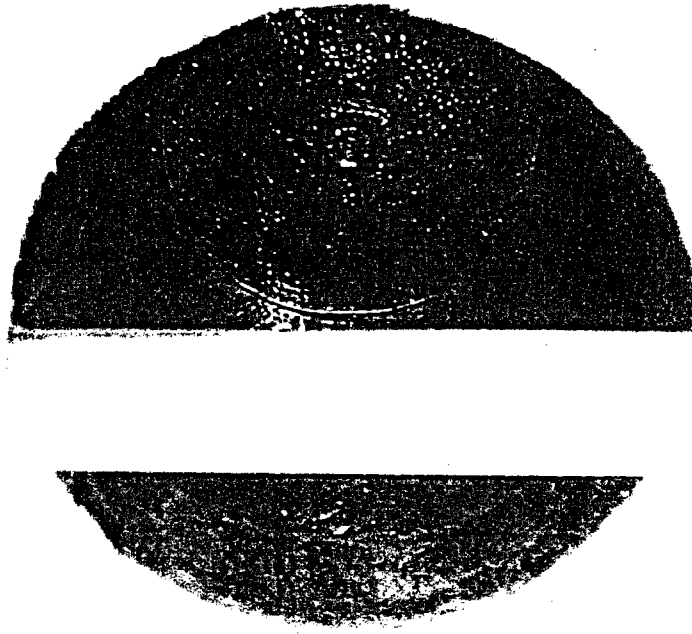
A2 01D01



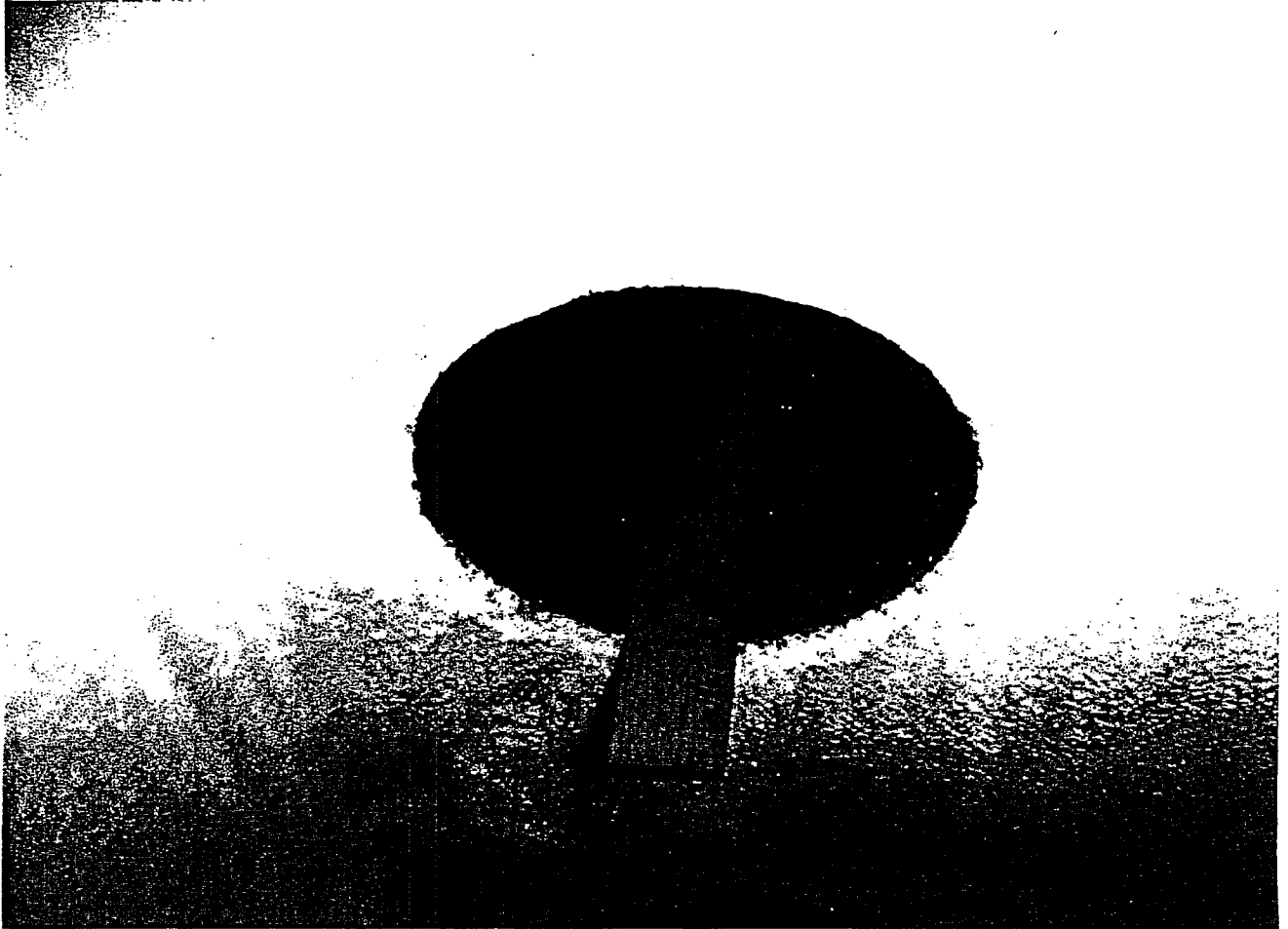
dec13_35



dec13_36



dec13_37



dec13_38

Alan J. Blotcky Research Reactor

Characterization Survey Package B0001

Access Areas Outside Reactor Controlled Area

Alan J. Blotcky Reactor Facility
CHARACTERIZATION SURVEY PACKAGE B0001
(Access Areas Outside Reactor Controlled Area)

TABLE OF CONTENTS

1.0	Survey Package Worksheet for the Access Areas Outside of the Reactor Controlled Area....	3
2.0	Map of the Survey Area.....	9
3.0	M2350 Download Beta Report(s).....	13
4.0	M2350 Download Alpha Report(s).....	24
5.0	Removable Alpha/Beta Activity Laboratory Report(s).....	28
6.0	H-3 Removable Beta Contamination Laboratory Report(s).....	46
7.0	Photos of the Survey Area.....	49

Section 1

**Survey Package Worksheet for the Access Areas
Outside of the Reactor Controlled Area**

ATTACHMENT 6.2
CHARACTERIZATION SURVEY PACKAGE WORKSHEET

PACKAGE ID NO.: B0001	PREPARED BY: Paul Jones	DATE: 11/20/02
LOCATION: Veterans Affairs Medical Center		
FLOOR/ELEVATION: Access areas outside reactor controlled area.	BUILDING: Research	AREA: Reactor Room Access Areas

Area Description

This package includes the access areas located immediately adjacent to the reactor room. The areas include the South stairwell, the North storage room, the bathroom, and the locker room.

Historical Information

The Alan J. Blotcky Reactor was used to support nuclear medicine and research programs conducted at the medical center. The total reactor operation was approximately 515,000 kilowatt hours from 1959 to 2001.

Survey Instructions

For the survey, perform measurements according to the Final Survey Plan Section 5.0 and applicable project procedures.

Class III Survey Units

1. Perform a scan over 25% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument.
2. Grid the area as show in the attached drawing(s) for survey locations.
3. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
4. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.

Survey Instructions (Continued)

General Survey Instructions (Impacted Class III Areas)

1. Use LMI Data Logger M2350-1 with M43-68 style Gas Flow Proportional for direct beta survey measurements.
2. Perform one 5 minute pre-survey shielded background and one 5 minute post-survey shielded background for each detector used for the survey.
3. Verify that the direct measurement MDA is less than 25% of the expected DCGL ($< 1,250 \text{ dpm}/100\text{cm}^2$) for direct beta measurements. If the field background is less than 1000 CPM, use 10-second count time for each direct beta measurement. If the field background is greater than 1000 CPM, obtain further directions from the Project Manager or designee.
4. Download each M2350-1 at completion of the survey, shift and/or prior to performing surveys in another survey area (before changing L1 codes).
5. Use location codes provided below for direct beta measurements, as appropriate.
6. Use the Package L1, L2, and L8 codes when labeling smears samples for counting.
7. When all measurements, samples or scans are collected, initial and date the "MEASUREMENT TYPE" block on the survey package to indicate the measurements or samples were collected.
8. Note any problems, comments, or other information pertinent to the data or sample collection under the "NOTES" section.

Survey performance (Initial and date as each survey is complete)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross Bq	Smear H-3	Other
L1	L2	L3	L7	L8									
Outside Areas													
B0001	01F01	TAC01	A thru D	1 thru 12	Floor	Impacted Class III	38 RCY for P.S.	4 RCY for JM	RCY for P.S.	N/A	38 RCY	RCY 12/5	N/A
B0001	01W01	TAC01	A thru B	1 thru 8	Wall 1	Impacted Class III	14 RCY for P.S.	1 RCY for JM	RCY for P.S.	N/A	14 RCY	RCY 12/5	N/A
B0001	01W02	TAC01	A thru B	1 thru 2	Wall 2	Impacted Class III	4 RCY for P.S.	1 RCY for JM	RCY for P.S.	N/A	4 RCY	RCY 12/5	N/A
B0001	01W03	TAC01	A thru B	1 thru 20	Wall 3	Impacted Class III	40 RCY for P.S.	4 RCY for JM	RCY for P.S. JM	N/A	40 RCY	RCY 12/5	N/A
B0001	01W04	TAC01	A thru B	1 thru 4	Wall 4	Impacted Class III	18 RCY for P.S.	10 RCY for JM	RCY for JM	N/A	8 RCY	RCY 12/5	N/A
B0001	02F01	TAC01	A thru D	1 thru 5	Floor	Impacted Class III	16 RCY (D)	2 RCY for JM	RCY for JM	N/A	16 RCY	RCY 12/5	N/A
B0001	02W01	TAC01	A thru B	1 thru 16	Wall 1	Impacted Class III	32 RCY for P.S.	3 RCY for JM	RCY for JM	N/A	32 RCY	RCY 12/5	N/A
B0001	03F01	TAC01	A thru C	1 thru 5	Floor	Impacted Class III	12 RCY for J.M.	1 RCY for JM	RCY for JM	N/A	12 RCY	RCY 12/5	N/A
B0001	03W01	TAC01	A thru B	1 thru 12	Wall 1	Impacted Class III	24 RCY for J.M.	2 RCY for JM	RCY for JM	N/A	24 RCY	RCY 12/5	N/A
B0001	03W02	TAC01	A thru B	1 thru 4	Wall 2	Impacted Class III	7 RCY for J.M.	1 RCY for JM	RCY for JM	N/A	7 RCY	RCY 12/5	N/A
B0001	03W03	TAC01	A thru B	1 thru 4	Wall 3	Impacted Class III	10 RCY for J.M.	1 RCY for JM	RCY for JM	N/A	10 RCY	RCY 12/5	N/A
B0001	03W04	TAC01	A thru B	1 thru 3	Wall 4	Impacted Class III	6 RCY for J.M.	1 RCY for JM	RCY for JM	N/A	6 RCY	RCY 12/5	N/A

Survey performance (Initial and date as each survey is complete)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross Bq	Smear H-3	Other
L1	L2	L3	L7	L8									
B0001	03S01	TAC01	ZZZZZ	1 thru 15	Structure 1 (Stairs)	Impacted Class III	15 scf for JM.	N/A	scf for JM	N/A	15 scf	scf	N/A

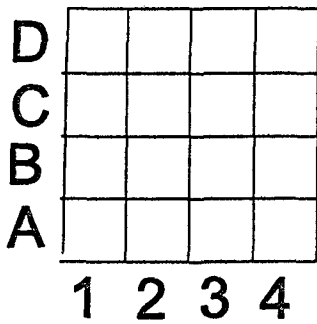
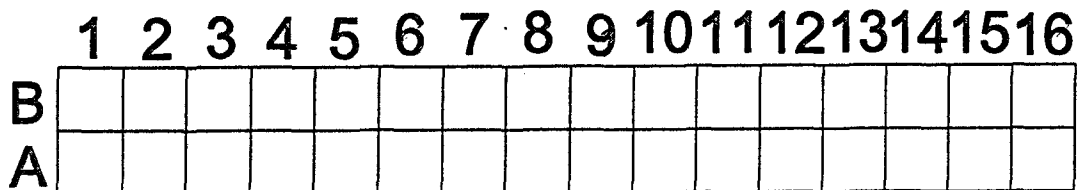
Section 2

Maps of the Survey Areas

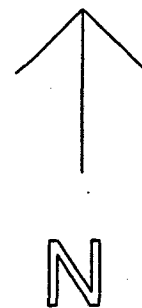
Package B0001

Room SW1A

Wall 1 (02W01), Continuous Wall Starting in NW Corner



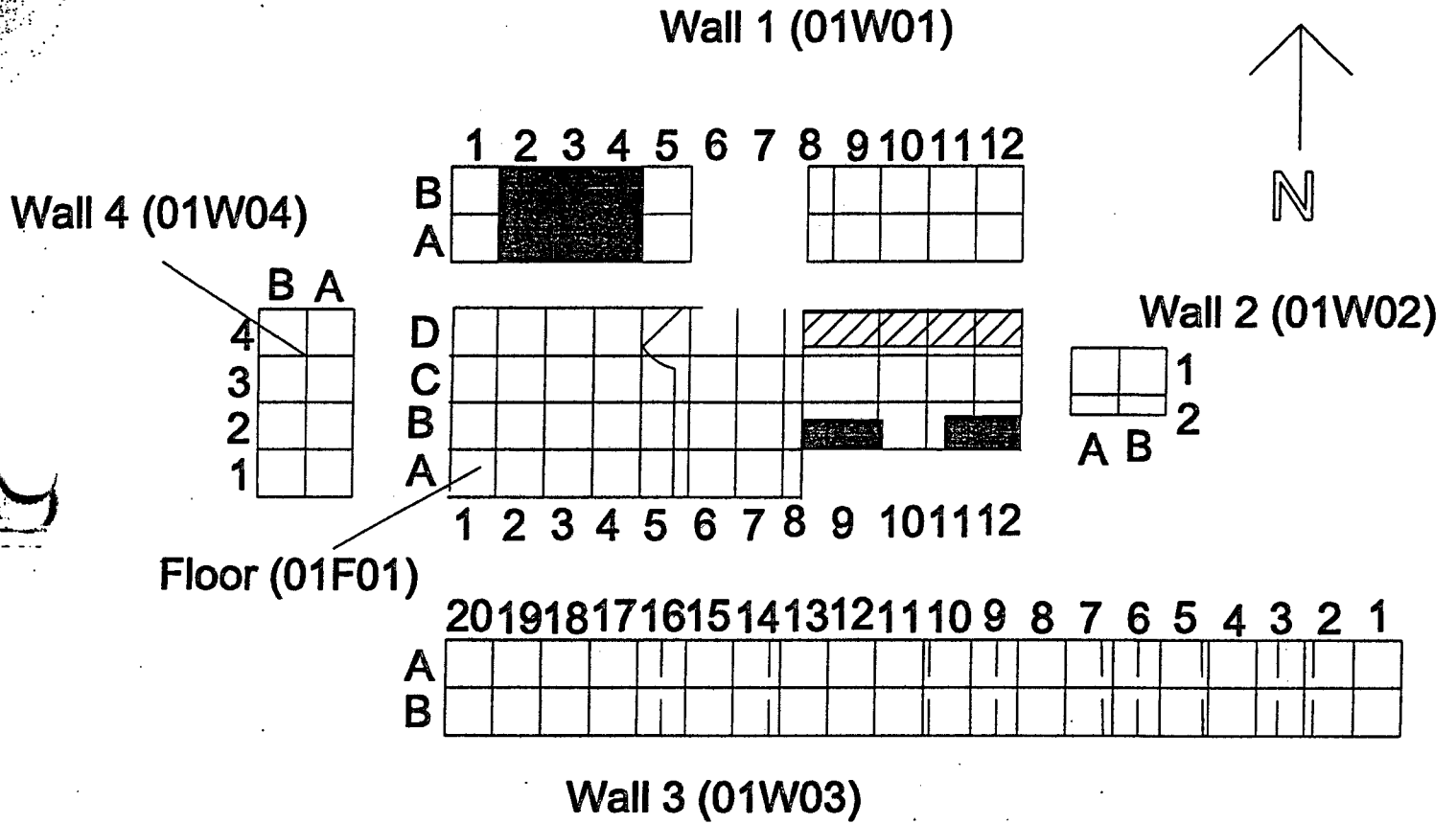
Floor (02F01)



- Denotes 1 Square Meter Grid
- Denotes Partially Obstructed Grid Area

Package B0001

Rooms SW1 & SW 2

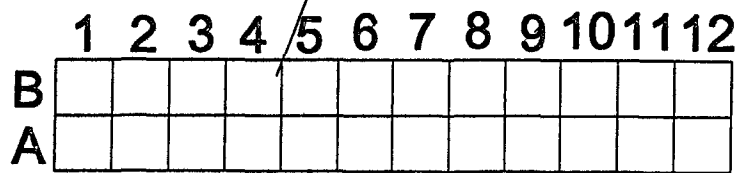


- - Denotes 1 Square Meter Grid
- ▨ - Denotes Partially Obstructed Grid Area
- - Denotes Fully Obstructed Grid Area

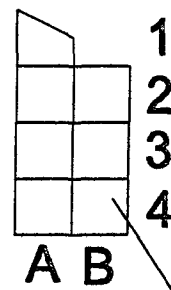
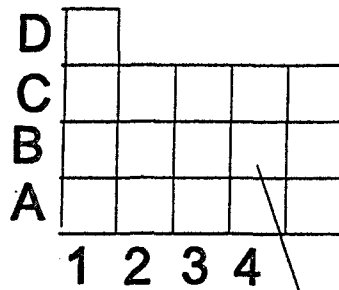
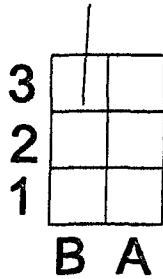
Package B0001

Back Stairwell Area

Wall 1 (03W01), Continuous Wall
Moving Up Stairs to Next Floor

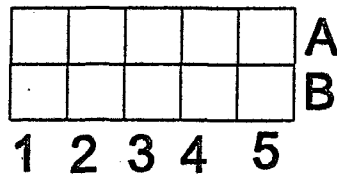
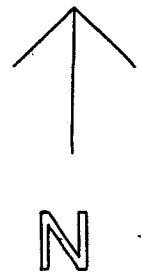


Wall 4 (03W04)



Floor (03F01)

Wall 2 (03W02)



Wall 3 (03W03)

□ - Denotes 1 Square Meter Grid

Section 3

M2350 Download Beta Report(s)

Duratek Beta Survey Report

Download File Name: 00000029

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
B0001	03F01	6	181.0	30	FLDCT	B9999	0000A	1	266	361
B0001	03F01	7	143.0	30	FLDCT	B9999	0000A	2	266	75
B0001	03F01	8	154.0	30	FLDCT	B9999	0000A	3	266	158
B0001	03F01	9	145.0	30	FLDCT	B9999	0000A	4	266	90
B0001	03F01	10	173.0	30	FLDCT	B9999	0000A	5	266	301
B0001	03F01	11	165.0	30	FLDCT	B9999	0000A	1	266	241
B0001	03F01	12	165.0	30	FLDCT	B9999	0000A	2	266	241
B0001	03F01	13	171.0	30	FLDCT	B9999	0000A	3	266	286
B0001	03F01	14	137.0	30	FLDCT	B9999	0000A	4	266	30
B0001	03F01	15	153.0	30	FLDCT	B9999	0000A	5	266	150
B0001	03F01	16	163.0	30	FLDCT	B9999	0000A	1	266	226
B0001	03F01	17	174.0	30	FLDCT	B9999	0000A	2	266	308
B0001	03W01	18	162.0	30	FLDCT	B9999	0000A	1	266	218
B0001	03W01	19	136.0	30	FLDCT	B9999	0000A	2	266	23
B0001	03W01	20	139.0	30	FLDCT	B9999	0000A	3	266	45
B0001	03W01	21	158.0	30	FLDCT	B9999	0000A	4	266	188
B0001	03W01	22	162.0	30	FLDCT	B9999	0000A	5	266	218
B0001	03W01	23	147.0	30	FLDCT	B9999	0000A	6	266	105
B0001	03W01	24	143.0	30	FLDCT	B9999	0000A	7	266	75
B0001	03W01	25	148.0	30	FLDCT	B9999	0000A	8	266	113
B0001	03W01	26	140.0	30	FLDCT	B9999	0000A	9	266	53
B0001	03W01	27	172.0	30	FLDCT	B9999	0000A	10	266	293
B0001	03W01	28	150.0	30	FLDCT	B9999	0000A	11	266	128
B0001	03W01	29	157.0	30	FLDCT	B9999	0000A	12	266	181
B0001	03W01	30	133.0	30	FLDCT	B9999	0000B	1	266	0
B0001	03W01	31	161.0	30	FLDCT	B9999	0000B	2	266	211
B0001	03W01	32	158.0	30	FLDCT	B9999	0000B	3	266	188
B0001	03W01	33	177.0	30	FLDCT	B9999	0000B	4	266	331
B0001	03W01	34	122.0	30	FLDCT	B9999	0000B	5	266	-83
B0001	03W01	35	164.0	30	FLDCT	B9999	0000B	6	266	233
B0001	03W01	36	158.0	30	FLDCT	B9999	0000B	7	266	188
B0001	03W01	37	167.0	30	FLDCT	B9999	0000B	8	266	256
B0001	03W01	38	168.0	30	FLDCT	B9999	0000B	9	266	263
B0001	03W01	39	175.0	30	FLDCT	B9999	0000B	10	266	316
B0001	03W01	40	163.0	30	FLDCT	B9999	0000B	11	266	226
B0001	03W01	41	181.0	30	FLDCT	B9999	0000B	12	266	361
B0001	03S01	43	150.0	30	FLDCT	B9999	ZZZZ	1	266	128
B0001	03S01	44	146.0	30	FLDCT	B9999	ZZZZ	2	266	98
B0001	03S01	45	147.0	30	FLDCT	B9999	ZZZZ	3	266	105

Beta Flag	1250 - _____
Beta Max Flag	5000 XXXXXXXXXX

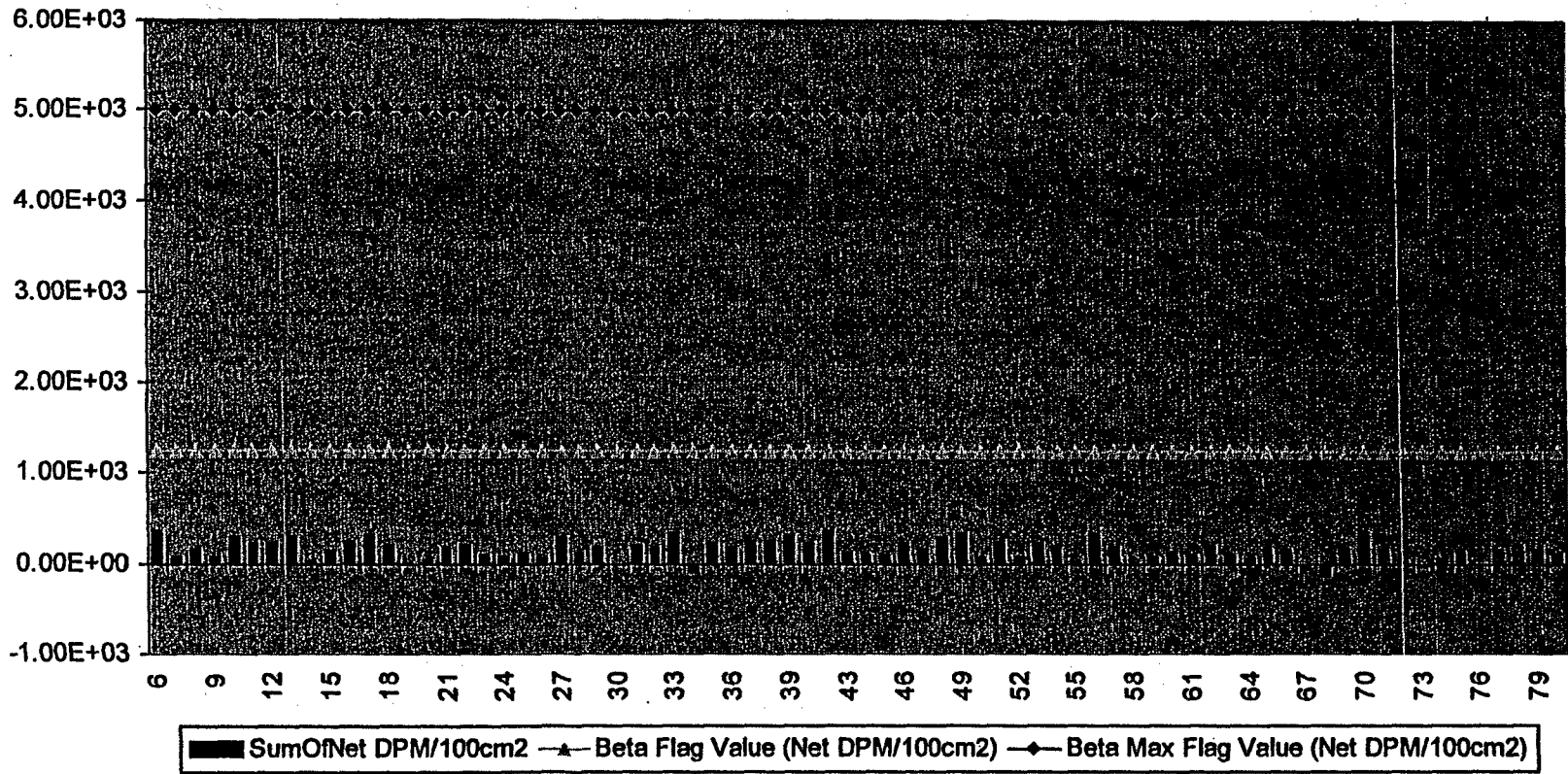
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
B0001	03S01	46	165.0	30	FLDCT	B9999	////	4	266	241
B0001	03S01	47	154.0	30	FLDCT	B9999	////	5	266	158
B0001	03S01	48	171.0	30	FLDCT	B9999	////	6	266	286
B0001	03S01	49	177.0	30	FLDCT	B9999	////	7	266	331
B0001	03S01	50	143.0	30	FLDCT	B9999	////	8	266	75
B0001	03S01	51	164.0	30	FLDCT	B9999	////	9	266	233
B0001	03S01	52	141.0	30	FLDCT	B9999	////	10	266	60
B0001	03S01	53	163.0	30	FLDCT	B9999	////	11	266	226
B0001	03S01	54	154.0	30	FLDCT	B9999	////	12	266	158
B0001	03S01	55	138.0	30	FLDCT	B9999	////	13	266	38
B0001	03S01	56	179.0	30	FLDCT	B9999	////	14	266	346
B0001	03S01	57	158.0	30	FLDCT	B9999	////	15	266	188
B0001	03W02	58	132.0	30	FLDCT	B9999	0000A	1	266	-8
B0001	03W02	59	143.0	30	FLDCT	B9999	0000A	2	266	75
B0001	03W02	60	149.0	30	FLDCT	B9999	0000A	3	266	120
B0001	03W02	61	147.0	30	FLDCT	B9999	0000A	4	266	105
B0001	03W02	62	160.0	30	FLDCT	B9999	0000B	1	266	203
B0001	03W02	63	147.0	30	FLDCT	B9999	0000B	2	266	105
B0001	03W02	64	140.0	30	FLDCT	B9999	0000B	3	266	53
B0001	03W03	65	154.0	30	FLDCT	B9999	0000A	1	266	158
B0001	03W03	66	154.0	30	FLDCT	B9999	0000A	2	266	158
B0001	03W03	67	126.0	30	FLDCT	B9999	0000A	3	266	-53
B0001	03W03	68	114.0	30	FLDCT	B9999	0000A	4	266	-143
B0001	03W03	69	159.0	30	FLDCT	B9999	0000A	5	266	196
B0001	03W03	70	180.0	30	FLDCT	B9999	0000B	1	266	354
B0001	03W03	71	154.0	30	FLDCT	B9999	0000B	2	266	158
B0001	03W03	72	136.0	30	FLDCT	B9999	0000B	3	266	38
B0001	03W03	73	129.0	30	FLDCT	B9999	0000B	4	266	-30
B0001	03W03	74	141.0	30	FLDCT	B9999	0000B	5	266	60
B0001	03W04	75	151.0	30	FLDCT	B9999	0000A	1	266	135
B0001	03W04	76	133.0	30	FLDCT	B9999	0000A	2	266	0
B0001	03W04	77	155.0	30	FLDCT	B9999	0000A	3	266	166
B0001	03W04	78	161.0	30	FLDCT	B9999	0000B	1	266	211
B0001	03W04	79	155.0	30	FLDCT	B9999	0000B	2	266	166
B0001	03W04	80	148.0	30	FLDCT	B9999	0000B	3	266	113

Beta Flag	1250 - _____
Beta Max Flag	5000 

Download Name: 00000029

Survey Description: B0001 SW Stairs W01-4,F01,S01, Pre S/C

M2350-1 Sample Results



Page 4 of 4


Duratek Beta Survey Report

Download File Name: 00000030

Package ID(L1)	Surface (L2)	Sampl e #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
B0001	01F01	5	66.0	10	FLDCT	B9999	0000A	1	343	180
B0001	01F01	6	59.0	10	FLDCT	B9999	0000A	2	343	37
B0001	01F01	7	61.0	10	FLDCT	B9999	0000A	3	343	78
B0001	01F01	8	52.0	10	FLDCT	B9999	0000A	4	343	-105
B0001	01F01	9	40.0	10	FLDCT	B9999	0000A	5	343	-349
B0001	01F01	10	62.0	10	FLDCT	B9999	0000A	6	343	98
B0001	01F01	11	73.0	10	FLDCT	B9999	0000A	7	343	322
B0001	01F01	12	47.0	10	FLDCT	B9999	0000B	1	343	-207
B0001	01F01	13	52.0	10	FLDCT	B9999	0000B	2	343	-105
B0001	01F01	14	45.0	10	FLDCT	B9999	0000B	3	343	-248
B0001	01F01	15	38.0	10	FLDCT	B9999	0000B	4	343	-390
B0001	01F01	16	67.0	10	FLDCT	B9999	0000B	5	343	200
B0001	01F01	17	70.0	10	FLDCT	B9999	0000B	6	343	261
B0001	01F01	18	39.0	10	FLDCT	B9999	0000B	7	343	-370
B0001	01F01	19	65.0	10	FLDCT	B9999	0000B	8	343	159
B0001	01F01	20	57.0	10	FLDCT	B9999	0000B	9	343	-3
B0001	01F01	21	50.0	10	FLDCT	B9999	0000B	10	343	-146
B0001	01F01	22	59.0	10	FLDCT	B9999	0000B	11	343	37
B0001	01F01	23	54.0	10	FLDCT	B9999	0000B	12	343	-64
B0001	01F01	24	53.0	10	FLDCT	B9999	0000C	1	343	-85
B0001	01F01	25	52.0	10	FLDCT	B9999	0000C	2	343	-105
B0001	01F01	26	47.0	10	FLDCT	B9999	0000C	3	343	-207
B0001	01F01	27	52.0	10	FLDCT	B9999	0000C	4	343	-105
B0001	01F01	28	49.0	10	FLDCT	B9999	0000C	5	343	-166
B0001	01F01	29	65.0	10	FLDCT	B9999	0000C	6	343	159
B0001	01F01	30	77.0	10	FLDCT	B9999	0000C	7	343	404
B0001	01F01	31	62.0	10	FLDCT	B9999	0000C	8	343	98
B0001	01F01	32	62.0	10	FLDCT	B9999	0000C	9	343	98
B0001	01F01	33	60.0	10	FLDCT	B9999	0000C	10	343	58
B0001	01F01	34	62.0	10	FLDCT	B9999	0000C	11	343	98
B0001	01F01	35	69.0	10	FLDCT	B9999	0000C	12	343	241
B0001	01F01	36	48.0	10	FLDCT	B9999	0000D	1	343	-187
B0001	01F01	37	65.0	10	FLDCT	B9999	0000D	2	343	159
B0001	01F01	38	58.0	10	FLDCT	B9999	0000D	3	343	17
B0001	01F01	39	61.0	10	FLDCT	B9999	0000D	4	343	78
B0001	01F01	40	58.0	10	FLDCT	B9999	0000D	5	343	17
B0001	01F01	41	53.0	10	FLDCT	B9999	0000D	6	343	-85
B0001	01F01	42	57.0	10	FLDCT	B9999	0000D	7	343	-3
B0001	01W01	44	109.0	10	FLDCT	B0004	0000A	1	317	1,143

Beta Flag	1250	-	_____
Beta Max Flag	5000		

Package ID(L1)	Surface (L2)	Sampl e #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
B0001	01W01	45	82.0	10	FLDCT	B0004	0000A	2	317	594
B0001	01W01	46	94.0	10	FLDCT	B0004	0000A	3	317	838
B0001	01W01	48	43.0	10	FLDCT	B9999	0000A	1	292	-115
B0001	01W01	49	60.0	10	FLDCT	B9999	0000A	2	292	231
B0001	01W01	50	42.0	10	FLDCT	B9999	0000A	3	292	-136
B0001	01W01	51	27.0	10	FLDCT	B9999	0000A	4	292	-441
B0001	01W01	52	26.0	10	FLDCT	B0004	0000B	1	317	-546
B0001	01W01	53	16.0	10	FLDCT	B0004	0000B	2	317	-750
B0001	01W01	54	2.0	10	FLDCT	B0004	0000B	3	317	-1,034
B0001	01W01	55	28.0	10	FLDCT	B9999	0000B	1	292	-421
B0001	01W01	56	32.0	10	FLDCT	B9999	0000B	2	292	-339
B0001	01W01	57	36.0	10	FLDCT	B9999	0000B	3	292	-258
B0001	01W01	58	35.0	10	FLDCT	B9999	0000B	4	292	-278
B0001	01W02	60	68.0	10	FLDCT	B0006	0000A	1	339	234
B0001	01W02	61	105.0	10	FLDCT	B0006	0000A	2	339	987
B0001	01W02	62	96.0	10	FLDCT	B0006	0000B	1	339	804
B0001	01W02	63	121.0	10	FLDCT	B0006	0000B	2	339	1,313
B0001	01W03	64	49.0	10	FLDCT	B9999	0000A	1	339	-153
B0001	01W03	65	52.0	10	FLDCT	B9999	0000A	2	339	-92
B0001	01W03	66	33.0	10	FLDCT	B9999	0000A	3	339	-478
B0001	01W03	67	37.0	10	FLDCT	B9999	0000A	4	339	-397
B0001	01W03	68	55.0	10	FLDCT	B9999	0000A	5	339	-31
B0001	01W03	69	69.0	10	FLDCT	B9999	0000A	6	339	254
B0001	01W03	70	93.0	10	FLDCT	B0004	0000A	7	339	743
B0001	01W03	71	90.0	10	FLDCT	B0004	0000A	8	339	682
B0001	01W03	72	109.0	10	FLDCT	B0004	0000A	9	339	1,068
B0001	01W03	73	51.0	10	FLDCT	B9999	0000A	10	339	-112
B0001	01W03	74	82.0	10	FLDCT	B0004	0000A	11	339	519
B0001	01W03	75	82.0	10	FLDCT	B0004	0000A	12	339	519
B0001	01W03	76	105.0	10	FLDCT	B0004	0000A	13	339	987
B0001	01W03	77	80.0	10	FLDCT	B0004	0000A	14	339	478
B0001	01W03	78	70.0	10	FLDCT	B0004	0000A	15	339	275
B0001	01W03	79	96.0	10	FLDCT	B0004	0000A	16	339	804
B0001	01W03	80	80.0	10	FLDCT	B0004	0000A	17	339	478
B0001	01W03	81	76.0	10	FLDCT	B0004	0000A	18	339	397
B0001	01W03	82	92.0	10	FLDCT	B0004	0000A	19	339	722
B0001	01W03	83	86.0	10	FLDCT	B0004	0000A	20	339	600
B0001	01W03	84	47.0	10	FLDCT	B9999	0000B	1	339	-193
B0001	01W03	85	46.0	10	FLDCT	B9999	0000B	2	339	-214
B0001	01W03	86	42.0	10	FLDCT	B9999	0000B	3	339	-295
B0001	01W03	87	42.0	10	FLDCT	B9999	0000B	4	339	-295
B0001	01W03	88	59.0	10	FLDCT	B9999	0000B	5	339	51
B0001	01W03	89	57.0	10	FLDCT	B9999	0000B	6	339	10
B0001	01W03	90	55.0	10	FLDCT	B0004	0000B	7	339	-31

Beta Flag	1250	-	_____
Beta Max Flag	5000		

Package ID(L1)	Surface (L2)	Sampl e #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
B0001	01W03	91	82.0	10	FLDCT	B0004	0000B	8	339	519
B0001	01W03	92	71.0	10	FLDCT	B0004	0000B	9	339	295
B0001	01W03	93	63.0	10	FLDCT	B9999	0000B	10	339	132
B0001	01W03	94	52.0	10	FLDCT	B0004	0000B	11	339	-92
B0001	01W03	95	62.0	10	FLDCT	B0004	0000B	12	339	112
B0001	01W03	96	55.0	10	FLDCT	B0004	0000B	13	339	-31
B0001	01W03	97	74.0	10	FLDCT	B0004	0000B	14	339	356
B0001	01W03	98	98.0	10	FLDCT	B0004	0000B	15	339	845
B0001	01W03	99	103.0	10	FLDCT	B0004	0000B	16	339	946
B0001	01W03	100	69.0	10	FLDCT	B0004	0000B	17	339	254
B0001	01W03	101	66.0	10	FLDCT	B0004	0000B	18	339	193
B0001	01W03	102	77.0	10	FLDCT	B0004	0000B	19	339	417
B0001	01W03	103	79.0	10	FLDCT	B0004	0000B	20	339	458
B0001	01W04	105	82.0	10	FLDCT	B0001	0000A	1	285	702
B0001	01W04	106	79.0	10	FLDCT	B0001	0000A	2	285	641
B0001	01W04	107	66.0	10	FLDCT	B0001	0000A	3	285	376
B0001	01W04	108	58.0	10	FLDCT	B0001	0000A	4	285	214
B0001	01W04	109	77.0	10	FLDCT	B0001	0000B	1	285	600
B0001	01W04	110	80.0	10	FLDCT	B0001	0000B	2	285	661
B0001	01W04	111	72.0	10	FLDCT	B0001	0000B	3	285	499
B0001	01W04	112	66.0	10	FLDCT	B0001	0000B	4	285	376
B0001	02F01	114	44.0	10	FLDCT	B9999	0000A	1	326	-210
B0001	02F01	115	46.0	10	FLDCT	B9999	0000A	2	326	-170
B0001	02F01	116	36.0	10	FLDCT	B9999	0000A	3	326	-373
B0001	02F01	117	32.0	10	FLDCT	B9999	0000A	4	326	-454
B0001	02F01	118	28.0	10	FLDCT	B9999	0000B	1	326	-536
B0001	02F01	119	19.0	10	FLDCT	B9999	0000B	2	326	-719
B0001	02F01	120	15.0	10	FLDCT	B9999	0000B	3	326	-800
B0001	02F01	121	11.0	10	FLDCT	B9999	0000B	4	326	-882
B0001	02F01	122	14.0	10	FLDCT	B9999	0000C	1	326	-821
B0001	02F01	123	7.0	10	FLDCT	B9999	0000C	2	326	-963
B0001	02F01	124	11.0	10	FLDCT	B9999	0000C	3	326	-882
B0001	02F01	125	3.0	10	FLDCT	B9999	0000C	4	326	-1,045
B0001	02F01	126	2.0	10	FLDCT	B9999	0000D	1	326	-1,065
B0001	02F01	127	2.0	10	FLDCT	B9999	0000D	2	326	-1,065
B0001	02F01	128	2.0	10	FLDCT	B9999	0000D	3	326	-1,065
B0001	02F01	129	7.0	10	FLDCT	B9999	0000D	4	326	-963
B0001	02W01	131	124.0	10	FLDCT	B0006	0000A	1	355	1,319
B0001	02W01	132	120.0	10	FLDCT	B0006	0000A	2	355	1,238
B0001	02W01	133	53.0	10	FLDCT	B9999	0000A	3	355	-125
B0001	02W01	134	105.0	10	FLDCT	B0006	0000A	4	355	933
B0001	02W01	135	111.0	10	FLDCT	B0006	0000A	5	355	1,055
B0001	02W01	136	109.0	10	FLDCT	B0006	0000A	6	355	1,014
B0001	02W01	137	89.0	10	FLDCT	B9999	0000A	7	355	607

Ⓢ Sample Pts. 114-125 are all rejected see note Ⓢ on survey package review sheet.

Beta Flag	1250	-	_____
Beta Max Flag	5000		

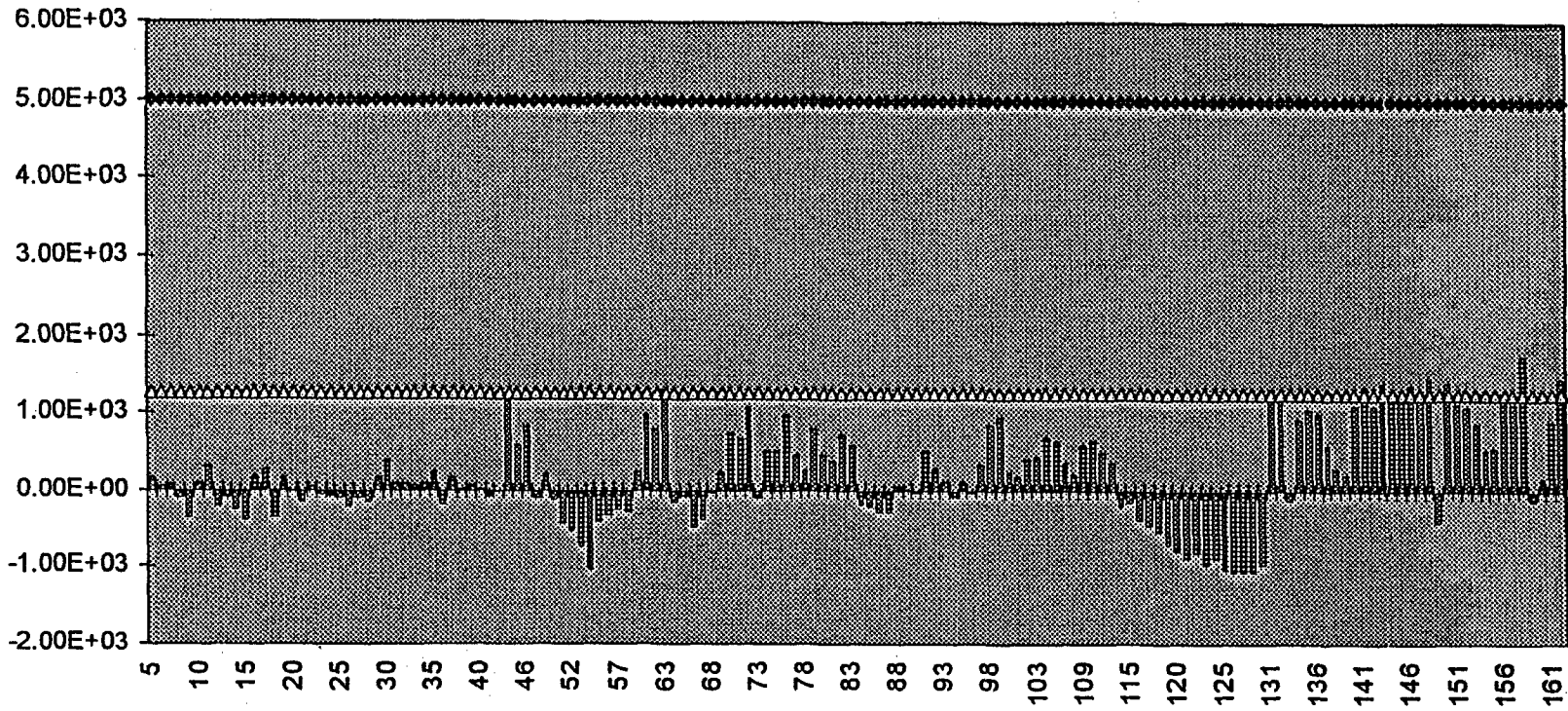
Package ID(L1)	Surface (L2)	Sampl e #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
B0001	02W01	138	74.0	10	FLDCT	B9999	0000A	8	355	302
B0001	02W01	139	70.0	10	FLDCT	B9999	0000A	9	355	220
B0001	02W01	140	113.0	10	FLDCT	B0006	0000A	10	355	1,096
B0001	02W01	141	126.0	10	FLDCT	B0006	0000A	11	355	<u>1,360</u>
B0001	02W01	142	114.0	10	FLDCT	B0006	0000A	12	355	1,116
B0001	02W01	143	128.0	10	FLDCT	B0006	0000A	13	355	<u>1,401</u>
B0001	02W01	144	120.0	10	FLDCT	B0006	0000A	14	355	1,238
B0001	02W01	145	118.0	10	FLDCT	B0006	0000A	15	355	1,197
B0001	02W01	146	127.0	10	FLDCT	B0006	0000A	16	355	<u>1,380</u>
B0001	02W01	147	122.0	10	FLDCT	B0006	0000B	1	355	<u>1,279</u>
B0001	02W01	148	131.0	10	FLDCT	B0006	0000B	2	355	<u>1,462</u>
B0001	02W01	149	39.0	10	FLDCT	B9999	0000B	3	355	-410
B0001	02W01	150	128.0	10	FLDCT	B0006	0000B	4	355	<u>1,401</u>
B0001	02W01	151	115.0	10	FLDCT	B0006	0000B	5	355	1,136
B0001	02W01	152	112.0	10	FLDCT	B0006	0000B	6	355	1,075
B0001	02W01	153	102.0	10	FLDCT	B9999	0000B	7	355	872
B0001	02W01	154	86.0	10	FLDCT	B9999	0000B	8	355	546
B0001	02W01	155	87.0	10	FLDCT	B9999	0000B	9	355	566
B0001	02W01	156	119.0	10	FLDCT	B0006	0000B	10	355	1,218
B0001	02W01	157	115.0	10	FLDCT	B0006	0000B	11	355	1,136
B0001	02W01	158	146.0	10	FLDCT	B0006	0000B	12	355	<u>1,767</u>
B0001	02W01	159	53.0	10	FLDCT	B9999	0000B	13	355	-125
B0001	02W01	160	68.0	10	FLDCT	B9999	0000B	14	355	180
B0001	02W01	161	103.0	10	FLDCT	B0006	0000B	15	355	892
B0001	02W01	162	131.0	10	FLDCT	B0006	0000B	16	355	<u>1,462</u>



Download Name: 00000030

Survey Description: B0001 Rm SW1, SW2, & SW1A Walls & Floor

M2350-1 Sample Results



SumOfNet DPM/100cm2 \blacktriangle Beta Flag Value (Net DPM/100cm2) \blacklozenge Beta Max Flag Value (Net DPM/100cm2)

Bo. C. 117

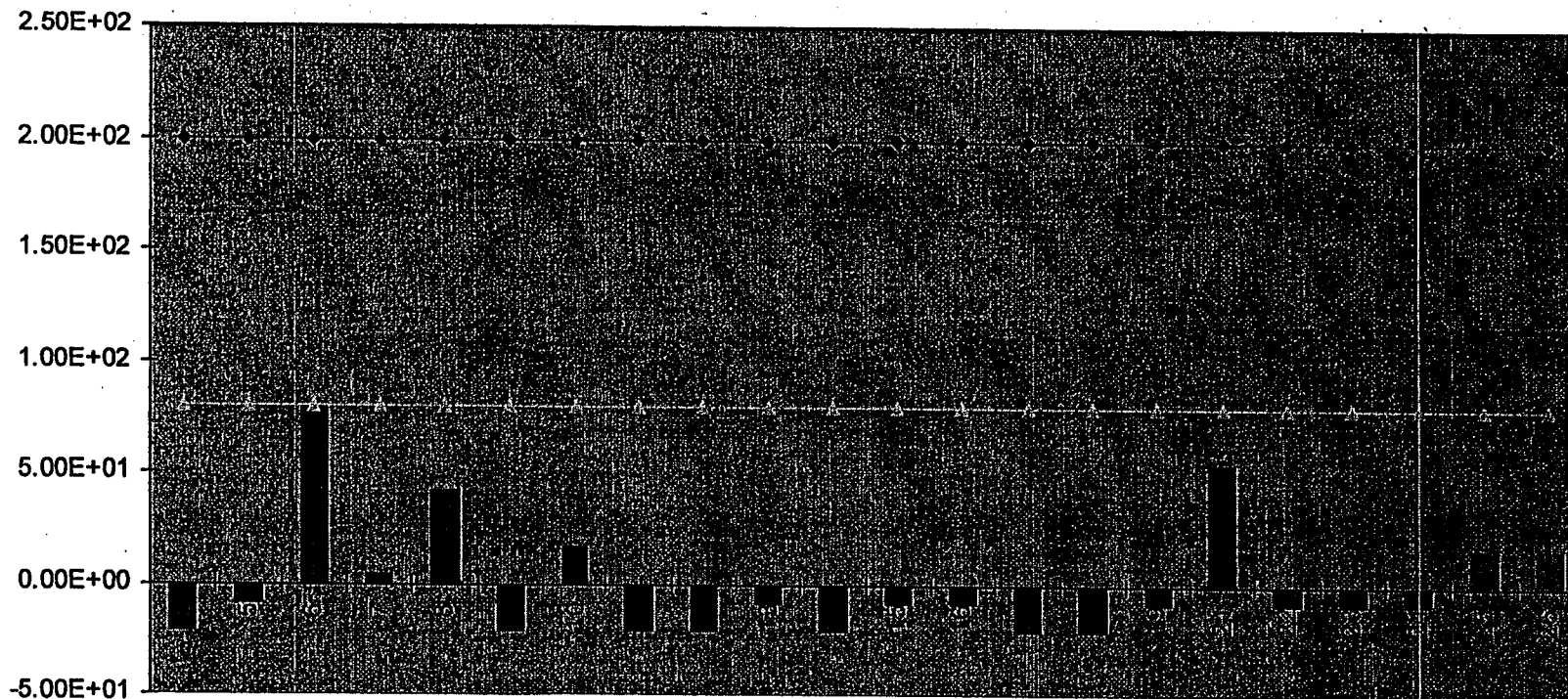
Section 4

M2350 Download Alpha Report(s)

Download Name: 0000051

Survey Description: B0001 AREAS 01-03F01,W01-04 PRE/POST S/C

M2350-1 Sample Results



SumOfNet DPM/100cm2 —▲— Alpha Flag Value (Net DPM/100cm2) —◆— Alpha Max Flag Value (Net DPM/100cm2)

2 of 3

Duratek Alpha Survey Report

Download File Name: 0000051

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
B0001	02F01	4	0.0	20	FLDCT	B9999	0000B	2	5	-21
B0001	02F01	5	1.0	20	FLDCT	B9999	0000C	3	5	-8
B0001	02W01	6	8.0	20	FLDCT	B0006	0000A	2	5	79
B0001	02W01	7	2.0	20	FLDCT	B0006	0000A	9	5	4
B0001	02W01	8	5.0	20	FLDCT	B0006	0000B	14	5	42
B0001	01F01	9	0.0	20	FLDCT	B9999	0000A	6	5	-21
B0001	01F01	10	3.0	20	FLDCT	B9999	0000B	2	5	17
B0001	01F01	11	0.0	20	FLDCT	B9999	0000C	5	5	-21
B0001	01F01	12	0.0	20	FLDCT	B9999	0000D	6	5	-21
B0001	01W01	13	1.0	20	FLDCT	B0001	0000B	5	5	-8
B0001	01W02	14	0.0	20	FLDCT	B0006	0000A	2	5	-21
B0001	01W03	15	1.0	20	FLDCT	B9999	0000A	3	5	-8
B0001	01W03	16	1.0	20	FLDCT	B9999	0000B	4	5	-8
B0001	01W03	17	0.0	20	FLDCT	B9999	0000B	11	5	-21
B0001	01W03	18	0.0	20	FLDCT	B0001	0000B	14	5	-21
B0001	01W04	19	1.0	20	FLDCT	B0001	0000B	3	5	-8
B0001	03F01	21	6.0	20	FLDCT	B9999	0000A	2	5	54
B0001	03W01	22	1.0	20	FLDCT	B9999	0000A	1	5	-8
B0001	03W01	23	1.0	20	FLDCT	B9999	0000B	2	5	-8
B0001	03W02	24	1.0	20	FLDCT	B9999	0000B	3	5	-8
B0001	03W03	25	3.0	20	FLDCT	B9999	0000B	2	5	17
B0001	03W04	26	3.0	20	FLDCT	B9999	0000A	1	5	17

Alpha Flag	80 - _____
Alpha Max Flag	200 ██████████

Section 5

**Removable Alpha/Beta Activity Laboratory
Report(s)**

On-Site V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
8:37:17 AM

Batch ID:	VA Smear Analysis - 200212031622	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	F Sample Location: <i>B060101F01</i>	Batch Key	6,515	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203162253-F13	<i>Bb</i> 1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203162434-F14	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203162604-F15	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203162724-F16	1.00	1.75	6.90	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203162854-F17	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203163014-F18	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203163144-F19	<i>B1a</i> 1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203163304-F20	<i>C1</i> 1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203163434-F21	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203163554-F22	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203163724-F23	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203163845-F24	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203164015-F25	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203164135-F26	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203164305-F27	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203164425-F28	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203164555-F29	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203164715-F30	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203164845-F31	<i>C1a</i> 1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203165005-F32	<i>D1</i> 1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203165135-F33	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203165255-F34	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203165425-F35	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203165545-F36	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203165716-F37	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203165836-F38	<i>D1</i> 1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA

Performed By: *D. Schirmer* Date: *12/5/02*

P29

On-Site V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
5:25:51 PM

Batch ID:	VA Smear Analysis - 200212031623	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	G Sample Location: <i>B008101 w01</i>	Batch Key	6,516	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203162306-G1	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203170128-G2	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203170259-G3	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203170419-G4	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203170549-G5	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203170709-G6	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203170829-G7	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203170959-G8	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203171119-G9	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203171249-G10	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203171409-G11	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203171539-G12	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203171659-G13	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203171829-G14	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA

Performed By: D. Schumacher Date: 12/4/02

On-Site V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/02
5:25PM

Batch ID:	VA Smear Analysis - 200212031632	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	H Sample Location: <i>B000101 W02</i>	Batch Key	6,517	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203163251-H15-A1	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203172124-H16-A2	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203172244-H17-B4	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203172414-H18-B2	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA

Performed By: *D. S. [Signature]* Date *12/4/02*

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/18/02
9:52:33AM

Batch ID:	VA Smear Analysis - 200212180935	Acquisition Date:	12/18/2002	Alpha Bkg	0.15 cpm
Group:	D Sample Location: <i>B000101 F01</i>	Batch Key	6,638	Beta Bkg	2.15 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021218093510-D1	<i>A</i> 1.00	-0.15	-0.59	15.82	<MDA	0.85	3.59	32.32	<MDA
20021218093650-D2	1.00	-0.15	-0.59	15.82	<MDA	-0.15	-0.63	32.32	<MDA
20021218093820-D3	1.00	-0.15	-0.59	15.82	<MDA	0.85	3.59	32.32	<MDA
20021218093940-D4	1.00	-0.15	-0.59	15.82	<MDA	-1.15	-4.86	32.32	<MDA
20021218094110-D5	1.00	-0.15	-0.59	15.82	<MDA	-1.15	-4.86	32.32	<MDA
20021218094230-D6	<i>V</i> 1.00	-0.15	-0.59	15.82	<MDA	-1.15	-4.86	32.32	<MDA
20021218094401-D7	<i>A7</i> 1.00	0.85	3.35	15.82	<MDA	-2.15	-9.08	32.32	<MDA
20021218094521-D8	<i>B1</i> 1.00	0.85	3.35	15.82	<MDA	-0.15	-0.63	32.32	<MDA
20021218094651-D9	1.00	-0.15	-0.59	15.82	<MDA	-2.15	-9.08	32.32	<MDA
20021218094811-D10	1.00	-0.15	-0.59	15.82	<MDA	-2.15	-9.08	32.32	<MDA
20021218094941-D11	<i>V</i> 1.00	0.85	3.35	15.82	<MDA	-2.15	-9.08	32.32	<MDA
20021218095101-D12	<i>B5</i> 1.00	-0.15	-0.59	15.82	<MDA	2.85	12.04	32.32	<MDA

Performed By: *D. Schumaker* Date *12/18/02*

Omni V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
6:00:08 PM

Batch ID:	VA Smear Analysis - 200212031632	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	I Sample Location: <i>B000101403</i>	Batch Key	6,518	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203163300-I19	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203172703-I20	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203172833-I21	1.00	0.75	2.96	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203172953-I22	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203173123-I23	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203173243-I24	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203173413-I25	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203173533-I26	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203173703-I27	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203173823-I28	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203173943-I29	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203174113-I30	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203174233-I31	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203174404-I32	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203174524-I33	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203174654-I34	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203174814-I35	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203174944-I36	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203175104-I37	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203175234-I38	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203175354-I39	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203175524-I40	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203175644-I41	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203175814-I42	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203175934-I43	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203180104-I44	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203180224-I45	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203180355-I46	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203180515-I47	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By: D. Schumacher Date: 12/4/02

B000101W03

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12/04/02
6:06:08 PM

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203180645-I48- B1b	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By D. Schumaker Date 12/4/02

Omega V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/02
6:35:46PM

Batch ID: VA Smear Analysis - 200212031633	Acquisition Date: 12/3/2002	Alpha Bkg 0.25 cpm
Group: J Sample Location: <i>B000101W04E W03</i>	Batch Key 6,519	Beta Bkg 2.10 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
03 20021203163308-J49	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203180933-J50	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203181103-J51	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203181223-J52	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203181353-J53	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203181513-J54	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203181643-J55	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203181813-J56	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
03 20021203181933-J57	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
04 20021203182103-J58	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203182223-J59	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203182353-J60	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203182513-J61	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203182644-J62	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203182804-J63	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203182934-J64	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203183104-J65	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
04 20021203183224-J66	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA

Performed By: D. Schuman Date: 12/4/02

On-Site V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/02
12:55:00PM

Batch ID:	VA Smear Analysis - 200212041132	Acquisition Date:	12/4/2002	Alpha Bkg	0.25 cpm
Group:	A Sample Location: <i>B000102 FO1</i>	Batch Key	6,544	Beta Bkg	1.95 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204113233-A1	AI 1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204123437-A2	AI 1.00	0.75	2.96	17.32	<MDA	3.05	12.89	31.33	<MDA
20021204123607-A3	AJ 1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204123727-A4	AK 1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204123857-A5	BI 1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204124017-A6	BJ 1.00	0.75	2.96	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204124147-A7	BK 1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204124307-A8	BL 1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204124437-A9	CL 1.00	-0.25	-0.99	17.32	<MDA	3.05	12.89	31.33	<MDA
20021204124557-A10	DL 1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204124727-A11	EL 1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204124858-A12	FL 1.00	0.75	2.96	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204125018-A13	GL 1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204125148-A14	HL 1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204125308-A15	IL 1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204125438-A16	OL 1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: D. Schumacci Date 12/4/02

P36

Omni-3 V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
1:10:10PM

Batch ID:	VA Smear Analysis - 200212041132	Acquisition Date:	12/4/2002	Alpha Bkg	0.25 cpm
Group:	B Sample Location: <i>B000102W01</i>	Batch Key	6,545	Beta Bkg	1.95 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204113243-B17	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204125728-B18	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204125858-B19	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204130018-B20	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204130148-B21	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204130308-B22	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204130438-B23	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204130558-B24	1.00	0.75	2.96	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204130728-B25	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204130849-B26	1.00	-0.25	-0.99	17.32	<MDA	2.05	8.66	31.33	<MDA

Performed By: D. Schumaker Date 12/4/02

On a V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
1:41:51 PM

Batch ID:	VA Smear Analysis - 200212041132	Acquisition Date:	12/4/2002	Alpha Bkg	0.25 cpm
Group:	C Sample Location: <i>B0001 02 W01</i>	Batch Key	6,546	Beta Bkg	1.95 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204113252-C27	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204131147-C28	1.00	0.75	2.96	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204131308-C29	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204131438-C30	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204131558-C31	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204131728-C32	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204131848-C33	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204132018-C34	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204132138-C36	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204132308-C35	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204132428-C37	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204132558-C38	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204132718-C39	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204132848-C40	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA
20021204133008-C41	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204133138-C42	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204133259-C43	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204133429-C44	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204133549-C45	1.00	0.75	2.96	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204133719-C46	1.00	-0.25	-0.99	17.32	<MDA	-1.95	-8.24	31.33	<MDA
20021204133849-C47	1.00	-0.25	-0.99	17.32	<MDA	1.05	4.44	31.33	<MDA
20021204134009-C48	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA

Performed By: D. Schmitt Date 12/4/02

On-Site V.A. A/B SMEAR ANALYSIS

Survey Report

10:58:36AM '02

Batch ID: VA Smear Analysis - 200212031024	Acquisition Date: 12/3/2002	Alpha Bkg 0.25 cpm
Group: A Sample Location: 8000103W01	Batch Key 6,471	Beta Bkg 2.10 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203102419-A1	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203102600-A2	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203102730-A3	1.00	0.75	2.96	17.32	<MDA	8.90	37.61	32.08	<MDA
20021203102850-A4	1.00	-0.25	-0.99	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203103020-A5	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203103140-A6	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203103310-A7	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203103430-A8	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203103600-A9	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203103720-A10	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203103850-A11	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203104010-A12	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203104141-A13	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203104301-A14	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203104421-A15	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203104551-A16	1.00	0.75	2.96	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203104711-A17	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203104841-A18	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203105001-A19	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203105131-A20	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203105251-A21	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203105421-A22	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203105541-A23	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203105711-A24	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA

Performed By: J. Schumann Date: 12/3/02

On-Site V.A. A/B SMEAR ANALYSIS

Survey Report

11:06:28AM

Batch ID: VA Smear Analysis - 200212031024	Acquisition Date: 12/3/2002	Alpha Bkg 0.25 cpm
Group: B Sample Location: <i>B0001 03 W02</i>	Batch Key 6,472	Beta Bkg 2.10 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203102434-B25	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203105956-B26	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203110126-B27	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203110246-B28	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203110416-B29	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203110536-B30	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203110706-B31	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA

Performed By: *D. Schumaker* Date *12/4/02*

On-Site V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
11:22:41AM

Batch ID: VA Smear Analysis - 200212031024	Acquisition Date: 12/3/2002	Alpha Bkg 0.25 cpm
Group: C Sample Location: B000103W03	Batch Key 6,473	Beta Bkg 2.10 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203102456-C32	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203110959-C33	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203111119-C34	1.00	0.75	2.96	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203111239-C35	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203111409-C36	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203111529-C37	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203111659-C38	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203111819-C39	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203111949-C40	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203112109-C41	1.00	0.75	2.96	17.32	<MDA	3.90	16.48	32.08	<MDA

Performed By: D. Schumaker Date 12/4/02

Omni A V.A. A/B SMEAR ANALYSIS

Survey Report

12/3/2002
11:51:00AM

Batch ID:	VA Smear Analysis - 200212031025	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	D Sample Location: <i>B000103W04</i>	Batch Key	6,474	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203102515-D42	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203112408-D43	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203112528-D44	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203112648-D45	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203112818-D46	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203112938-D47	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By: *D. Schumacher* Date: *12/4/02*

P42

On-Site V.A. A/B SMEAR ANALYSIS

Survey Report

72
11:48:03AM

Batch ID: VA Smear Analysis - 200212031029	Acquisition Date: 12/3/2002	Alpha Bkg 0.25 cpm
Group: E Sample Location: B0001 03 F01	Batch Key 6,475	Beta Bkg 2.10 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021203102927-E48	1.00	0.75	2.96	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203113230-E49	1.00	0.75	2.96	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203113400-E50	1.00	0.75	2.96	17.32	<MDA	2.90	12.25	32.08	<MDA
20021203113520-E51	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203113650-E52	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203113810-E53	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203113941-E54	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203114101-E55	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203114231-E56	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203114351-E57	1.00	0.75	2.96	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203114521-E58	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203114641-E59	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA

Performed By: 12/3/02 D. Schramm Date: 12/4/02

Omaha V.A. A/B SMEAR ANALYSIS

Survey Report

12:57:47PM

Batch ID:	VA Smear Analysis - 200212031218	Acquisition Date:	12/3/2002	Alpha Bkg	0.25 cpm
Group:	F Sample Location: <i>8000103502</i>	Batch Key	6,478	Beta Bkg	2.10 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021203121824-F60	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203122004-F61	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203122254-F63	1.00	0.75	2.96	17.32	<MDA	1.90	8.03	32.08	<MDA
20021203122424-F64	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA
20021203122544-F65	1.00	-0.25	-0.99	17.32	<MDA	0.90	3.80	32.08	<MDA
20021203122714-F66	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203122834-F67	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203122954-F68	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203123124-F69	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203123245-F70	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203123415-F71	1.00	-0.25	-0.99	17.32	<MDA	-1.10	-4.65	32.08	<MDA
20021203123535-F72	1.00	-0.25	-0.99	17.32	<MDA	-2.10	-8.87	32.08	<MDA
20021203123825-F74	1.00	-0.25	-0.99	17.32	<MDA	-0.10	-0.42	32.08	<MDA

Performed By: *D. Schumaker* Date *12/4/02*

On a V.A. A/B SMEAR ANALYSIS

Survey Report

12/4/2002
12:33:11 PM

Batch ID: VA Smear Analysis - 200212041154	Acquisition Date: 12/4/2002	Alpha Bkg 0.25 cpm
Group: F Sample Location: 80001 03501	Batch Key 6,547	Beta Bkg 1.95 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021204115448-F62	1.00	-0.25	-0.99	17.32	<MDA	0.05	0.21	31.33	<MDA
20021204123141-F73	1.00	-0.25	-0.99	17.32	<MDA	-0.95	-4.01	31.33	<MDA

Performed By: D. Schumaker Date: 12/4/02

Section 6

**H-3 Removable Beta Contamination
Laboratory Report(s)**

LABORATORY ANALYSIS FORM

P47

Laboratory Sample No.: RC- 0204820

Survey No.:

HRWP No.:

1. **URGENT** ROUTINE (circle one) >100 cpm + Bkg Y/NO if yes: ncpm / uR/hr/

Sample Location / Description: Omaha, NE VA Project, B000101F01, 01W01-01W04, B000102F01, 02W01, B000103F01, 03W01-03W04

Sample Type (circle one): smears, no.: 22 soil water leachate other

Sampled By: L. Finn

Date 12-5-02 Time 1600

2. Analysis Requested (circle)

Gross Beta Gross Alpha HTO Gamma-quantitative Gamma-qualitative Other

3. Unconditional Release Yes/NO If Yes, is sample representative of entire contents? Yes / No

Analysis (nuclide)	Result	+ or -	Units	MDA (if required)	Comments	Analysis Date
<u>Smear 1-4 / HTO</u>	<u>< MDA</u>	<u>N/A</u>	<u>dpm</u>	<u>max 59</u>	<u>B000101F01 #1-4</u>	<u>12-10-02</u>
<u>5-6</u>				<u>max 54</u>	<u>B000101W01 #1+2</u>	
<u>7-10</u>				<u>max 52</u>	<u>B000101W03 #1-4</u>	
<u>11</u>				<u>51</u>	<u>B000101W04 #1</u>	
<u>12-13</u>				<u>max 56</u>	<u>B000102F01 #1+2</u>	
<u>14-16</u>				<u>max 52</u>	<u>B000102W01 #1-3</u>	
<u>17</u>				<u>52</u>	<u>B000103F01 #1</u>	
<u>18</u>				<u>52</u>	<u>B000103W01 #1</u>	
<u>19-20</u>				<u>max 53</u>	<u>B000103W02 #1-2</u>	
<u>21</u>				<u>53</u>	<u>B000103W03 #1</u>	
<u>22</u>				<u>50</u>	<u>B000103W04 #1</u>	
<u>NS</u>						
<u>AS</u>						

Completed By: Tracy Proctor (Lab Tech.) Date: 12-11-02

Approved By: Tracy Proctor (Lab Supervisor or designee) Date: 12-11-02

Results Received By: PLA GS (Technician / Sampler) Date: 12-30-02

Reviewed By: _____ (HRSO or designee) Date: _____

LABORATORY ANALYSIS FORM

P48

✓ ✓R	Instrument Used	Serial #	Cal. Due Date
	Packard Tri-Carb 2550	401663	6-2-03
	Genie Gamma Spec (Det. 4)	6922910	2-25-03*
	Protean IPC 9025	721052	11-26-03

* As needed

Section 7

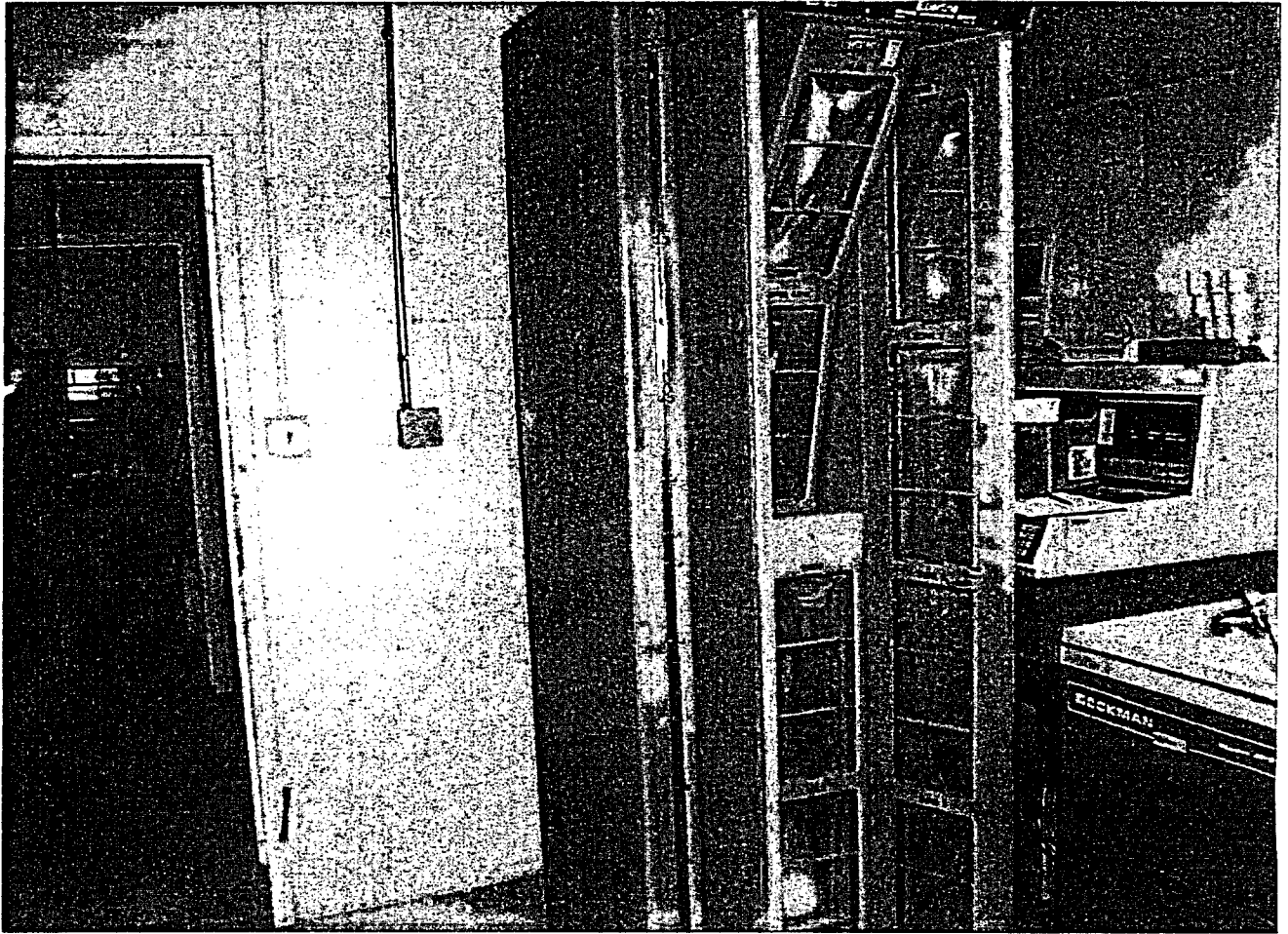
Photos of the Survey Area



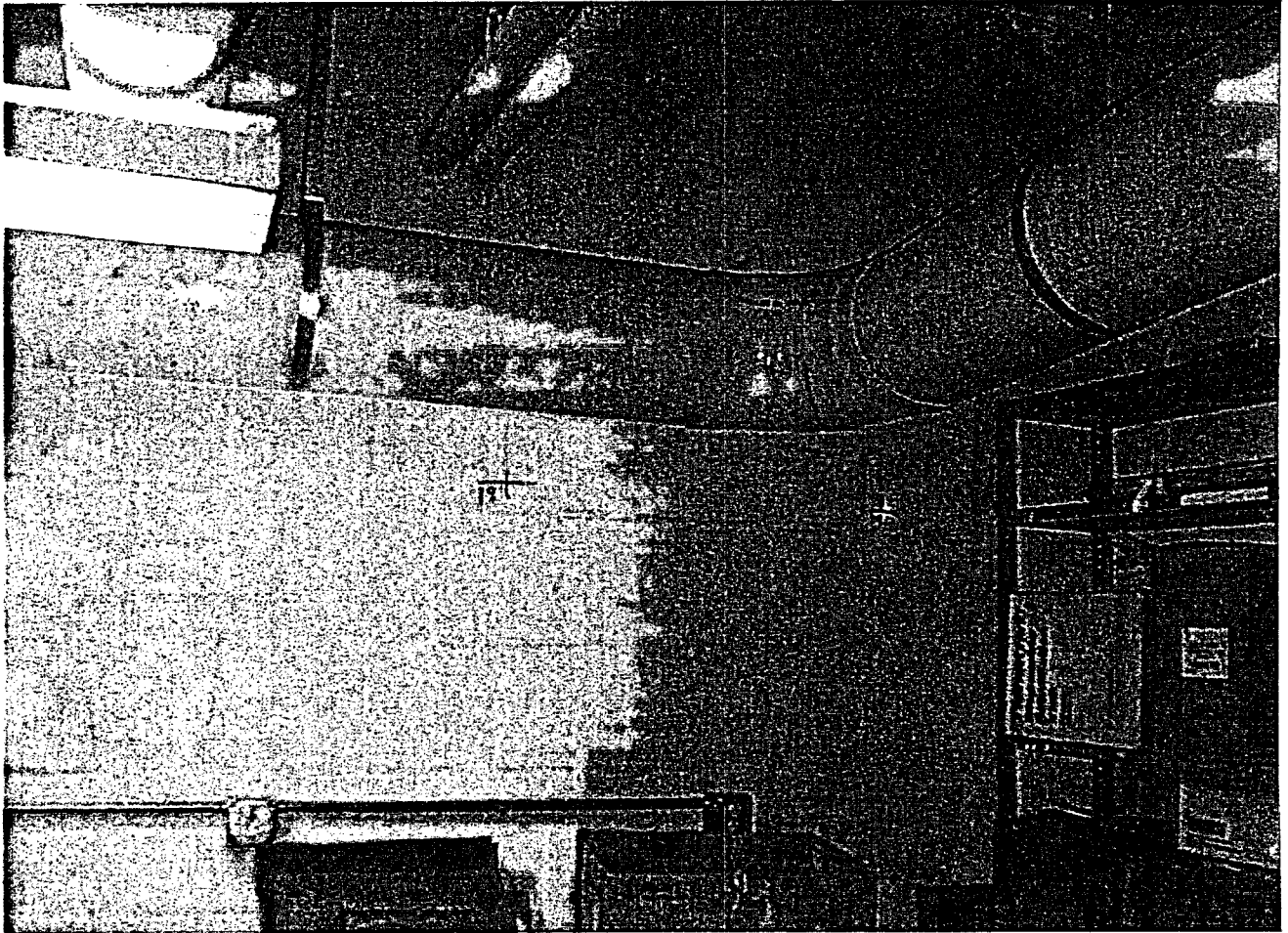
B1 1



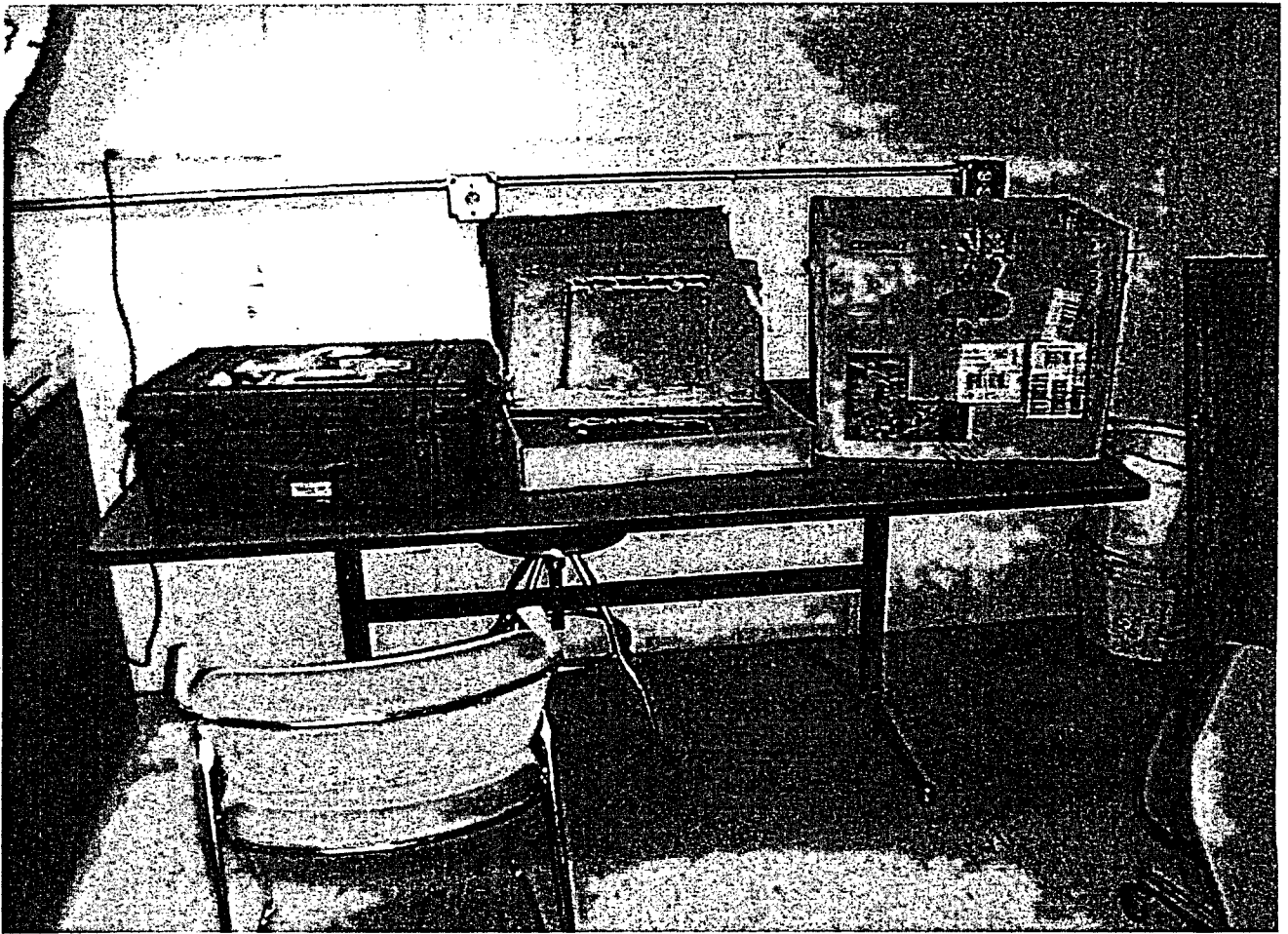
B1 2



B1 3



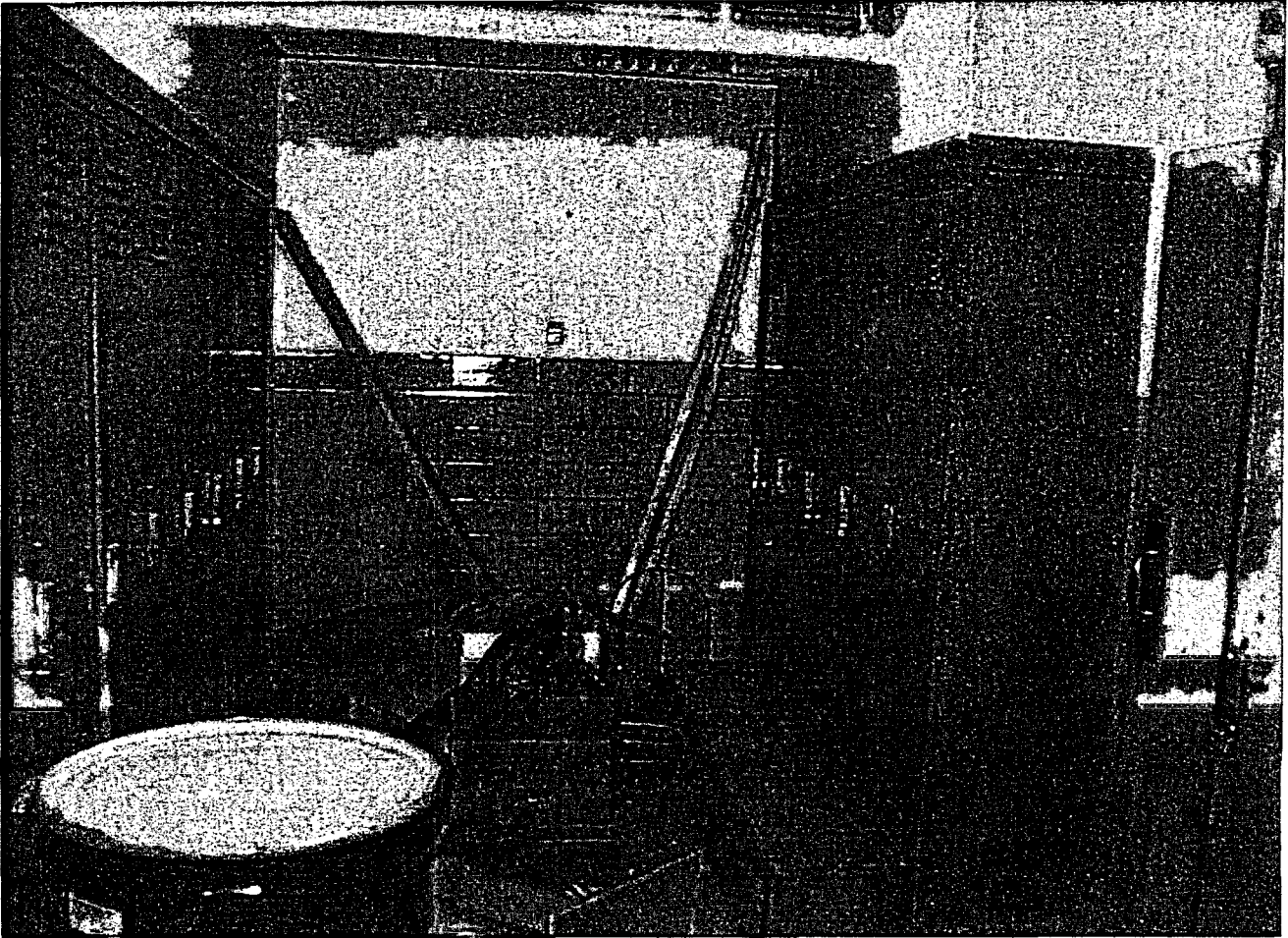
B1 4



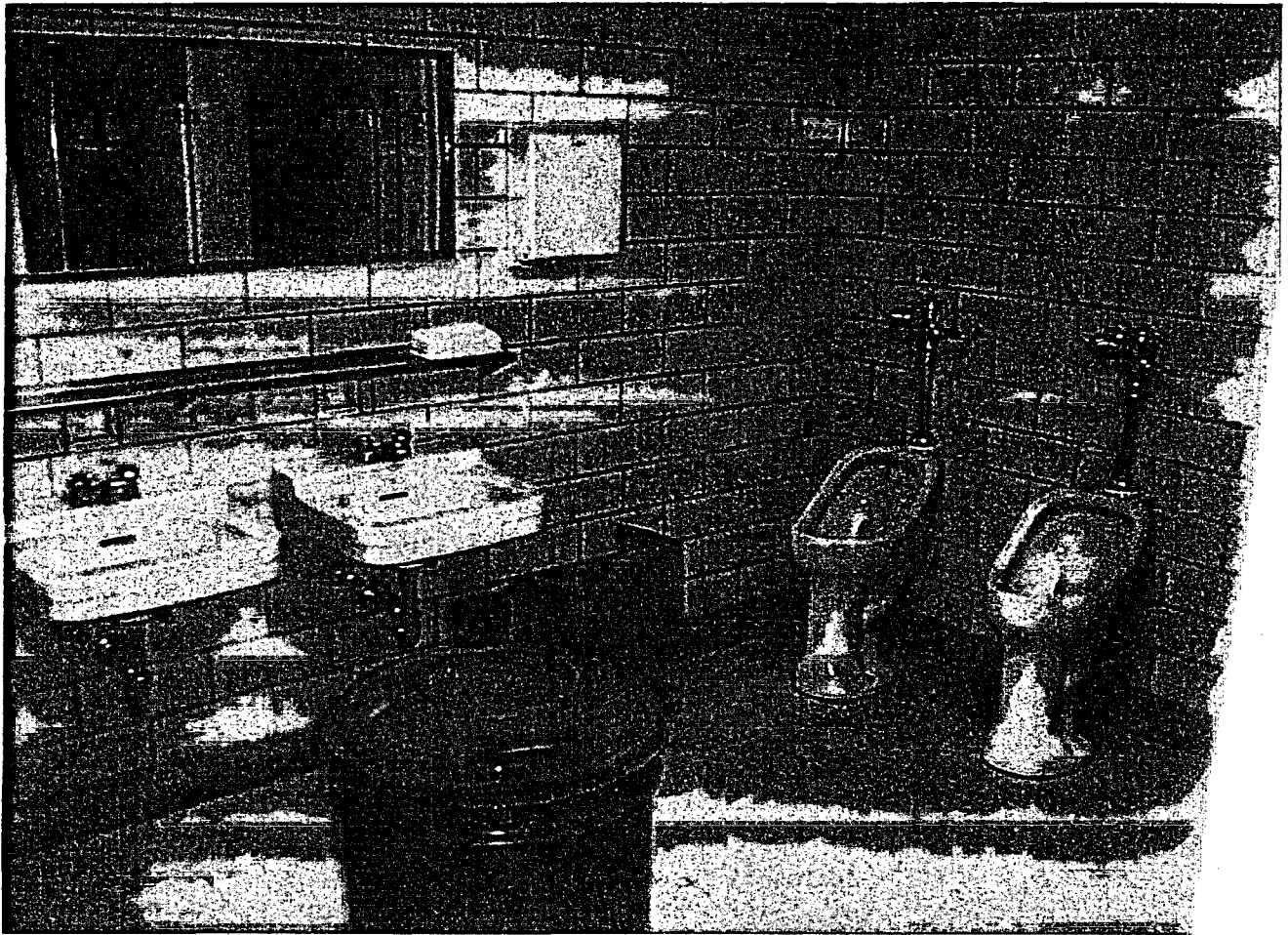
B1 5



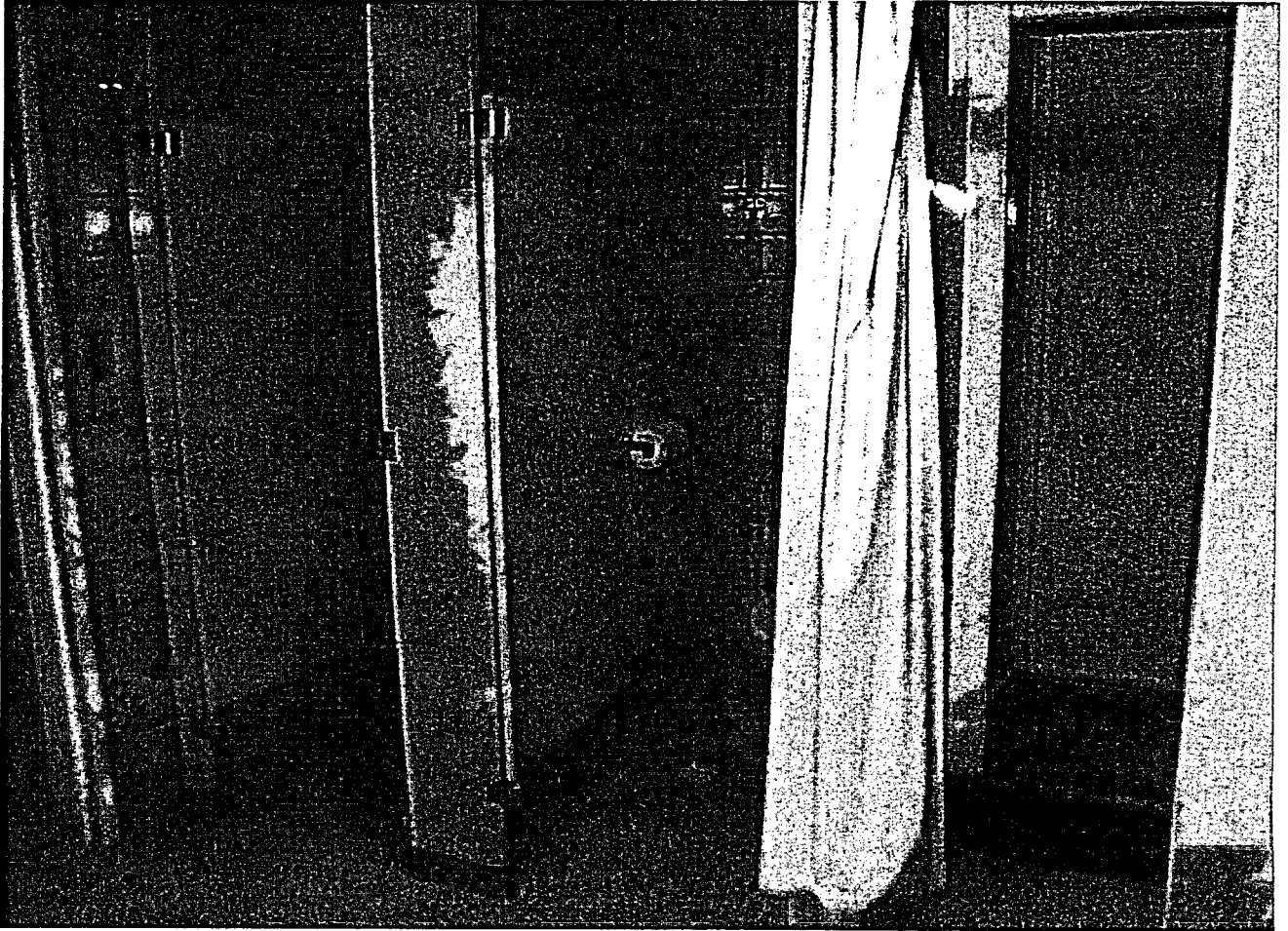
B1 6



B1 7



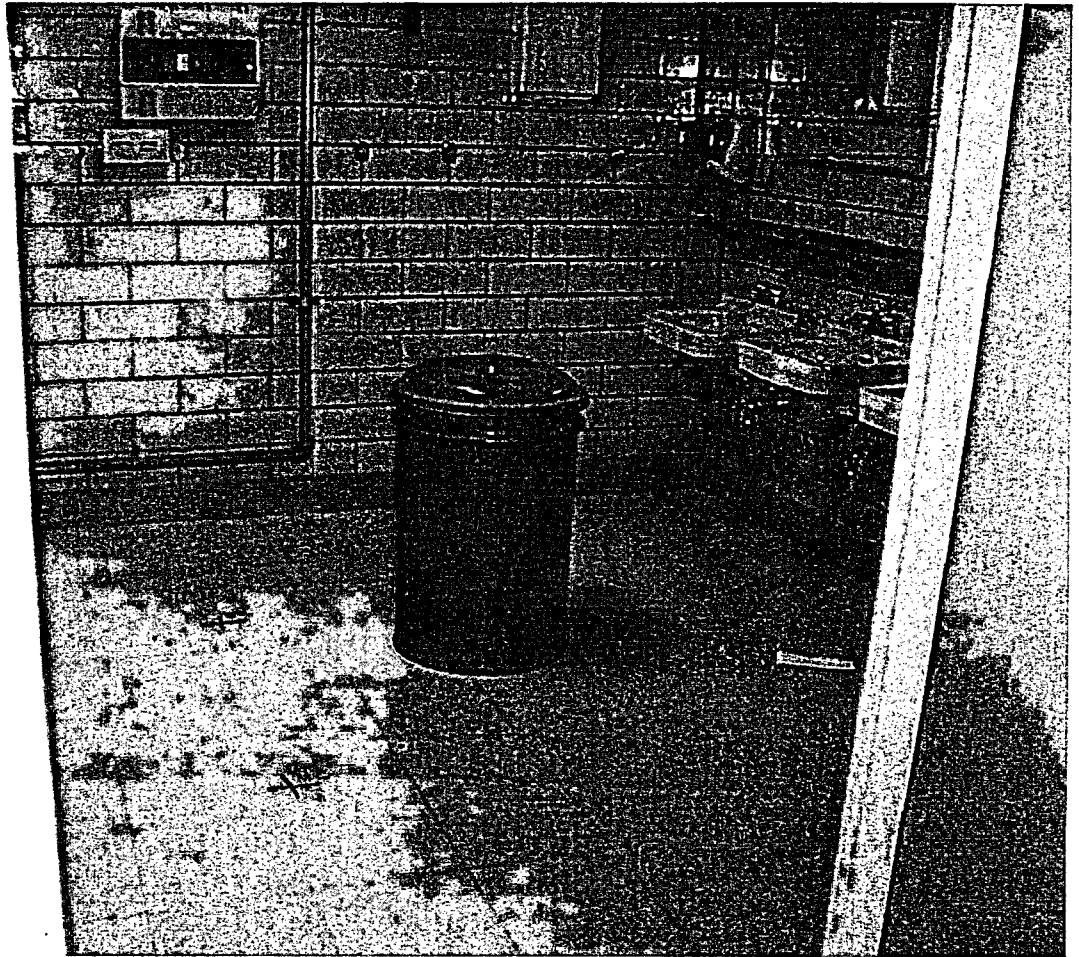
B1 8



B1 9



B1 10



B1 11

Alan J. Blotcky Research Reactor

Characterization Survey Package C0001

Overhead of the Reactor Controlled Area

Alan J. Blotcky Reactor Facility
CHARACTERIZATION SURVEY PACKAGE C0001
(Overhead of the Reactor Controlled Area)

TABLE OF CONTENTS

1.0 Survey Package Worksheet for the Overhead of the Reactor Controlled Area.....3

2.0 Map of the Survey Area.....8

3.0 M2350 Download Beta Report(s).....10

4.0 M2350 Download Alpha Report(s).....14

5.0 Removable Alpha/Beta Activity Laboratory Report(s).....18

6.0 H-3 Removable Beta Contamination Laboratory Report(s).....21

Section 1

Survey Package Worksheet for the Overhead of the Reactor Controlled Area

ATTACHMENT 6.2
CHARACTERIZATION SURVEY PACKAGE WORKSHEET

PACKAGE ID NO.: C0001	PREPARED BY: Paul Jones	DATE: 12/3/02
LOCATION: Veterans Affairs Medical Center		
FLOOR/ELEVATION: Basement	BUILDING: Research	AREA: Reactor Controlled Area Overhead

Area Description

This package is for the overhead areas within the reactor controlled area.

Historical Information

The Alan J. Blotcky Reactor was used to support nuclear medicine and research programs conducted at the medical center. The total reactor operation was approximately 515,000 kilowatt hours from 1959 to 2001.

No known radioactive materials were used in the overhead of the reactor controlled area.

Survey Instructions

For the survey, perform measurements according to the Final Survey Plan Section 5.0 and applicable project procedures.

Class III Survey Units

1. Perform a minimum of 10% scan of accessible surfaces. The surface scanned should be biased towards surfaces with a higher potential of being contaminated, (i.e. tops of lamps and other tops of horizontal surfaces). All areas of elevated activity should be identified for further investigation and potential decontamination.
2. Collect a minimum of 30 direct beta measurements in the overhead. Denote on map(s) the location of all survey measurement (SML) locations.
3. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.
4. Mark the location of the direct beta measurements and smear with a paint stick or equivalent on the surfaces of the survey unit.
5. Obtain direct alpha measurements at a minimum of 10% of the beta survey measurement locations.

Survey Instructions (continued)

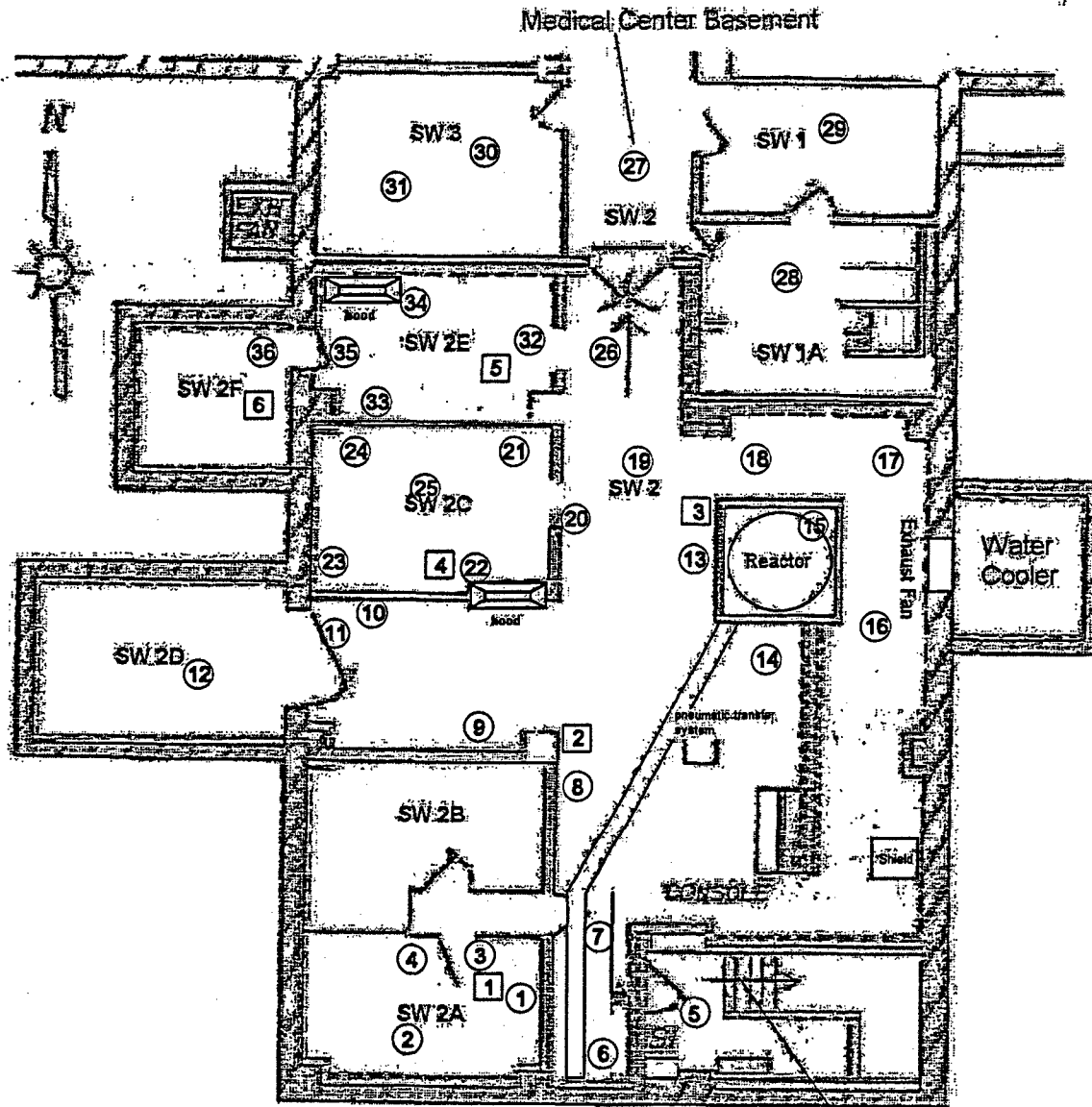
General Survey Instructions (Class I, II, and III)

1. Use LMI Data Logger M2350-1 with M43-68 style Gas Flow Proportional for direct beta survey measurements.
2. Perform one 5 minute pre-survey shielded background and one 5 minute post-survey shielded background for each detector used for the survey.
3. Verify that the direct measurement MDA is less than $1,000 \text{ dpm}/100\text{cm}^2$ for direct beta measurements. If the field background is less than 1000 CPM, use 10-second count time for each direct beta measurement. If the field background is greater than 1000 CPM, obtain further directions from the Project Manager or designee.
4. Download each M2350-1 at completion of the survey, shift and/or prior to performing surveys in another survey area (before changing L1 codes).
2. Use location codes provided below for direct beta measurements, as appropriate.
3. Use the Package L1, L2, and L8 codes when labeling smears samples for counting.
4. When all measurements, samples or scans are collected, initial and date the "MEASUREMENT TYPE" block on the survey package to indicate the measurements or samples were collected.
5. Note any problems, comments, or other information pertinent to the data or sample collection under the "NOTES" section.

Section 2

Map of the Survey Area

Package C0001 Overhead of Reactor Areas



Arrows indicate evacuation route
 Dashed line indicates operation boundary

To first floor research

⊙ Indicates Background, Tritium Smears, and Alpha Reading Locations

⊠ Direct Beta Readings

Section 3

M2350 Download Beta Report(s)

Duratek Beta Survey Report

Download File Name: 00000045

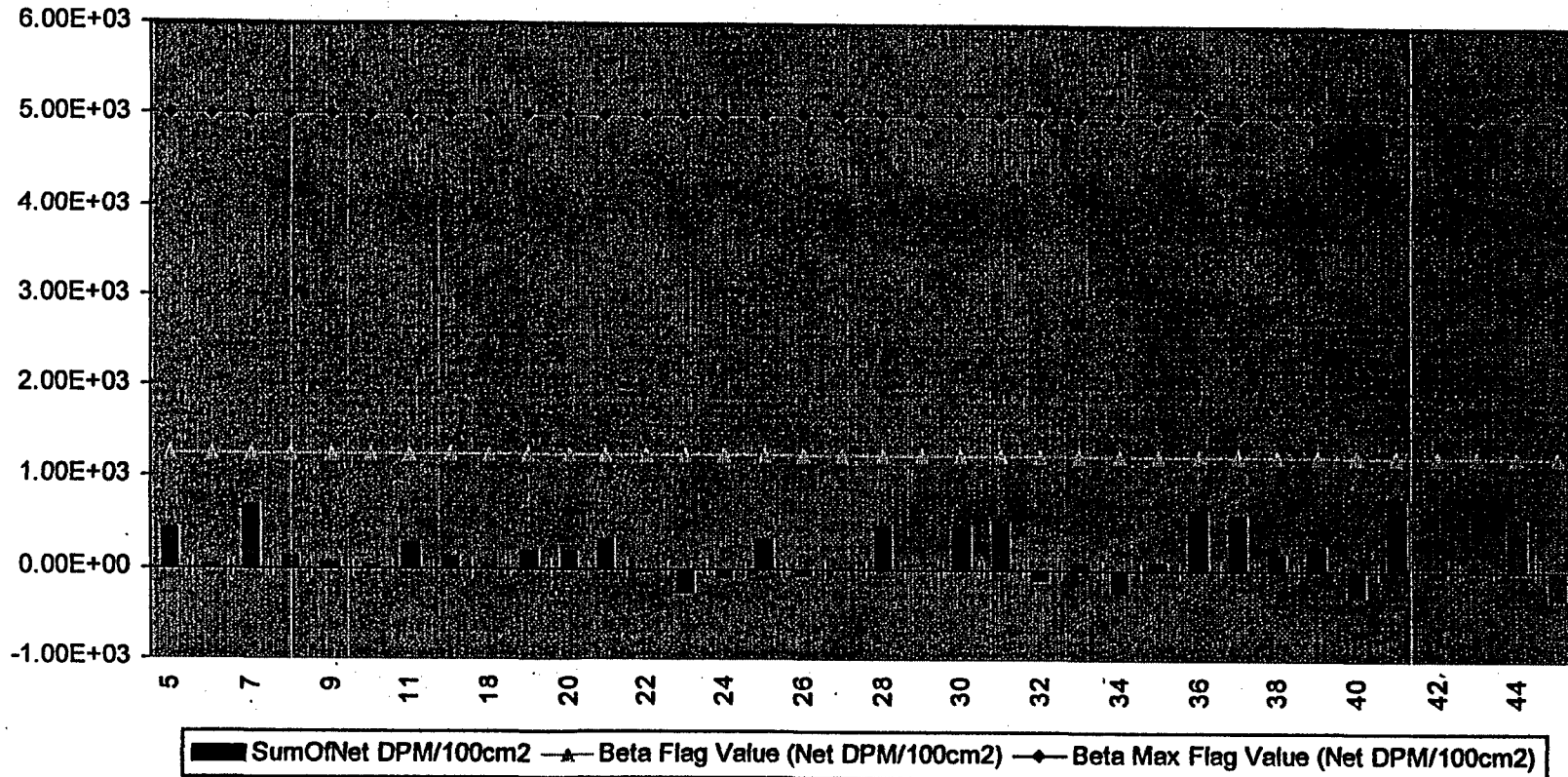
Package ID(L1)	Surface (L2)	Sampl e #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
C0001	01OH1	5	79.0	10	FLDCT	B9999	ZZZZZ	1	353	437
C0001	01OH1	6	61.0	10	FLDCT	B9999	ZZZZZ	2	353	47
C0001	01OH1	7	90.0	10	FLDCT	B9999	ZZZZZ	3	353	675
C0001	01OH1	8	65.0	10	FLDCT	B9999	ZZZZZ	4	353	133
C0001	01OH1	9	62.0	10	FLDCT	B9999	ZZZZZ	5	353	69
C0001	01OH1	10	61.0	10	FLDCT	B9999	ZZZZZ	6	353	47
C0001	01OH1	11	72.0	10	FLDCT	B9999	ZZZZZ	7	353	285
C0001	01OH1	17	65.0	10	FLDCT	B9999	ZZZZZ	8	353	133
C0001	01OH1	18	60.0	10	FLDCT	B9999	ZZZZZ	9	353	25
C0001	01OH1	19	68.0	10	FLDCT	B9999	ZZZZZ	10	353	198
C0001	01OH1	20	68.0	10	FLDCT	B9999	ZZZZZ	11	353	198
C0001	01OH1	21	74.0	10	FLDCT	B9999	ZZZZZ	12	353	328
C0001	01OH1	22	58.0	10	FLDCT	B9999	ZZZZZ	13	353	-18
C0001	01OH1	23	47.0	10	FLDCT	B9999	ZZZZZ	14	353	-256
C0001	01OH1	24	55.0	10	FLDCT	B9999	ZZZZZ	15	353	-83
C0001	01OH1	25	74.0	10	FLDCT	B9999	ZZZZZ	16	353	328
C0001	01OH1	26	56.0	10	FLDCT	B9999	ZZZZZ	17	353	-61
C0001	01OH1	27	60.0	10	FLDCT	B9999	ZZZZZ	18	353	25
C0001	01OH1	28	81.0	10	FLDCT	B9999	ZZZZZ	19	353	480
C0001	01OH1	29	59.0	10	FLDCT	B9999	ZZZZZ	20	353	4
C0001	01OH1	30	81.0	10	FLDCT	B9999	ZZZZZ	21	353	480
C0001	01OH1	31	83.0	10	FLDCT	B9999	ZZZZZ	22	353	523
C0001	01OH1	32	54.0	10	FLDCT	B9999	ZZZZZ	23	353	-105
C0001	01OH1	33	63.0	10	FLDCT	B9999	ZZZZZ	24	353	90
C0001	01OH1	34	48.0	10	FLDCT	B9999	ZZZZZ	25	353	-234
C0001	01OH1	35	63.0	10	FLDCT	B9999	ZZZZZ	26	353	90
C0001	01OH1	36	88.0	10	FLDCT	B9999	ZZZZZ	27	353	631
C0001	01OH1	37	86.0	10	FLDCT	B9999	ZZZZZ	28	353	588
C0001	01OH1	38	67.0	10	FLDCT	B9999	ZZZZZ	29	353	177
C0001	01OH1	39	71.0	10	FLDCT	B9999	ZZZZZ	30	353	263
C0001	01OH1	40	46.0	10	FLDCT	B9999	ZZZZZ	31	353	-278
C0001	01OH1	41	95.0	10	FLDCT	B9999	ZZZZZ	32	353	783
C0001	01OH1	42	56.0	10	FLDCT	B9999	ZZZZZ	33	353	-61
C0001	01OH1	43	60.0	10	FLDCT	B9999	ZZZZZ	34	353	25
C0001	01OH1	44	85.0	10	FLDCT	B9999	ZZZZZ	35	353	566
C0001	01OH1	45	542.0	30	FLDCT	B9999	ZZZZZ	36	1172	-317

<i>Beta Flag</i>	1250 - _____
<i>Beta Max Flag</i>	5000

Download Name: 0000045

Survey Description: C0001 01OH1 Pre-Post S/C

M2350-1 Sample Results



100 of 100

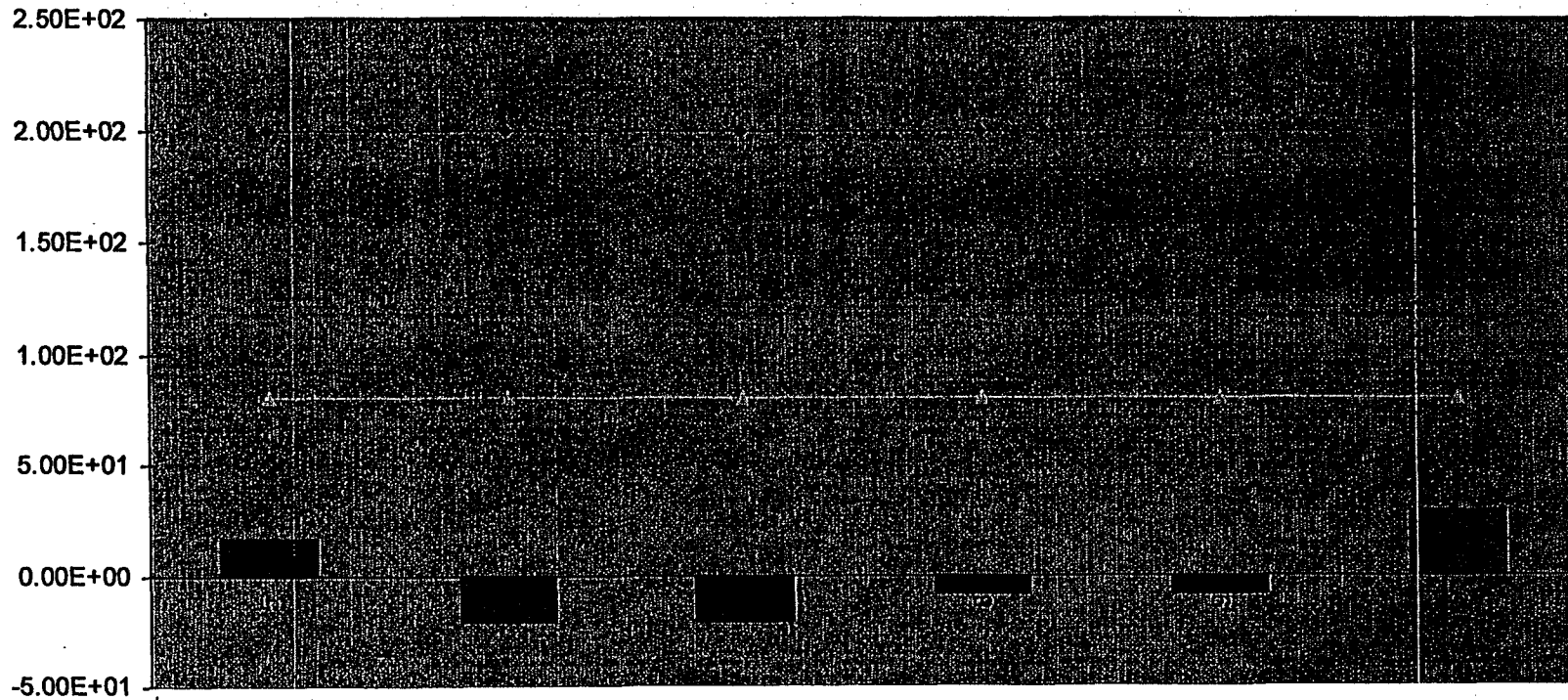
Section 4

M2350 Download Alpha Report(s)

Download Name: 0000052

Survey Description: C001 01OH1 PRE-POST S/C

M2350-1 Sample Results



■ SumOfNet DPM/100cm2 ▲ Alpha Flag Value (Net DPM/100cm2) ◆ Alpha Max Flag Value (Net DPM/100cm2)

Page 2 of 3

Duratek Alpha Survey Report

Download File Name: 00000052

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type (L5)	Material Type (L6)	Grid ID(L7)	Location # (L8)	Bkgd	Net DPM/100cm2
C0001	01OH1	5	3.0	20	FLDCT	B9999	ZZZZ	1	5	17
C0001	01OH1	6	0.0	20	FLDCT	B9999	ZZZZ	2	5	-21
C0001	01OH1	7	0.0	20	FLDCT	B9999	ZZZZ	3	5	-21
C0001	01OH1	8	1.0	20	FLDCT	B9999	ZZZZ	4	5	-8
C0001	01OH1	9	1.0	20	FLDCT	B9999	ZZZZ	5	5	-8
C0001	01OH1	10	4.0	20	FLDCT	B9999	ZZZZ	6	5	29

Alpha Flag	80	-
Alpha Max Flag	200	

Section 5

**Removable Alpha/Beta Activity Laboratory
Report(s)**

On. Va V.A. A/B SMEAR ANALYSIS

Survey Report

12-10-2002
10:15:33AM

Batch ID: VA Smear Analysis - 200212100924	Acquisition Date: 12/10/2002	Alpha Bkg 0.30 cpm
Group: A Sample Location: 20001-01 OHL	Batch Key 6,595	Beta Bkg 2.00 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021210092425-A1	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210092605-A2	1.00	0.70	2.76	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210092735-A3	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210092855-A4	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210093025-A5	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210093146-A6	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210093316-A7	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210093436-A8	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210093606-A9	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210093726-A10	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210093856-A11	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210094016-A12	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210094146-A13	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210094306-A14	1.00	0.70	2.76	17.96	<MDA	1.00	4.23	31.58	<MDA
20021210094436-A15	1.00	0.70	2.76	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210094556-A16	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210094726-A17	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210094846-A18	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210095017-A19	1.00	0.70	2.76	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210095137-A20	1.00	-0.30	-1.18	17.96	<MDA	3.00	12.68	31.58	<MDA
20021210095307-A21	1.00	0.70	2.76	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210095427-A22	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210095557-A23	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210095717-A24	1.00	0.70	2.76	17.96	<MDA	2.00	8.45	31.58	<MDA
20021210095847-A25	1.00	-0.30	-1.18	17.96	<MDA	1.00	4.23	31.58	<MDA
20021210100007-A26	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210100137-A27	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210100257-A28	1.00	0.70	2.76	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210100427-A29	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA

Performed By: D. Schumaker Date 12-10-02

C000101041

On-Ca V.A. A/B SMEAR ANALYSIS

Survey Report

12/10/2002

10:13:55AM

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021210100547-A30	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210100717-A31	1.00	-0.30	-1.18	17.96	<MDA	2.00	8.45	31.58	<MDA
20021210100838-A32	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210101008-A33	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210101128-A34	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210101258-A35	1.00	2.70	10.65	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210101418-A36	1.00	0.70	2.76	17.96	<MDA	0.00	0.00	31.58	<MDA

Performed By: D. Schumaker Date 12/10/02

Section 6

**H-3 Removable Beta Contamination
Laboratory Report(s)**

LABORATORY ANALYSIS FORM

P22

Laboratory Sample No.: RC-0204822
 Survey No.:
 HRWP No.:

1. **URGENT** ROUTINE (circle one) >100 cpm + Bkg Y/N, if yes: ncpm / uR/hr/

Sample Location / Description: Omaha, NE VA Project, A000402FO1, 02W01-02W04, 02S01-02S03, A000401FO1, 01W01-01W04, C0001010401

Sample Type (circle one): smears, no.: 21 soil water leachate other

Sampled By: L. Finn Date 12-6-02 Time 1430

2. Analysis Requested (circle)

Gross Beta Gross Alpha HTO Gamma-quantitative Gamma-qualitative Other

3. Unconditional Release Yes / No If Yes, is sample representative of entire contents? Yes / No

Analysis (nuclide)	Result	+ or -	Units	MDA (if required)	Comments	Analysis Date
<u>Smear 1-2/HTO</u>	<u>< MDA</u>	<u>N/A</u>	<u>dpm</u>	<u>max 59</u>	<u>A000402FO1 #1+2</u>	<u>12-10-02</u>
<u>3</u>	↓	↓	↓	<u>52</u>	<u>A000402W01 #1</u>	↓
<u>4</u>	↓	↓	↓	<u>52</u>	<u>A000402W02 #1</u>	↓
<u>5</u>	↓	↓	↓	<u>53</u>	<u>A000402W03 #1</u>	↓
<u>6</u>	↓	↓	↓	<u>52</u>	<u>A000402W04 #1</u>	↓
<u>7</u>	↓	↓	↓	<u>53</u>	<u>A000402S01 #1</u>	↓
<u>8</u>	↓	↓	↓	<u>56</u>	<u>A000402S02 #1</u>	↓
<u>9</u>	↓	↓	↓	<u>53</u>	<u>A000402S03 #1</u>	↓
<u>10</u>	<u>792</u>	<u>108</u>	↓	<u>N/A</u>	<u>A000401FO1 #1</u>	↓
<u>11</u>	<u>< MDA</u>	<u>N/A</u>	↓	<u>53</u>	<u>A000401FO1 #2</u>	↓
<u>12</u>	↓	↓	↓	<u>52</u>	<u>A000401W01 #1</u>	↓
<u>13</u>	↓	↓	↓	<u>52</u>	<u>A000401W02 #1</u>	↓
<u>14</u>	↓	↓	↓	<u>52</u>	<u>A000401W03 #1</u>	↓
<u>15</u>	↓	↓	↓	<u>53</u>	<u>A000401W04 #1</u>	↓
<u>16-21</u>	↓	↓	↓	<u>max 53</u>	<u>C000101H01 #1-6</u>	↓

Completed By: Marcy Proctor (Lab Tech.) Date: 12-11-02

Approved By: Marcy Proctor (Lab Supervisor or designee) Date: 12-11-02

Results Received By: P.L.A. J. (Technician / Sampler) Date: 12-30-02

Reviewed By: E. Langille (HRSO or designee) Date: 1/8/03

COPY
 (original in)
 PKG. A00041

LABORATORY ANALYSIS FORM

P23

✓	Instrument Used	Serial #	Cal-. Due Date
✓ <u>U</u>	Packard Tri-Carb 2550	401663	6-2-03
	Genie Gamma Spec (Det. 4)	6922910	2-25-03*
	Protean IPC 9025	721052	11-26-03

* As needed

Alan J. Blotcky Research Reactor

Characterization Survey Package D0001

Ventilation, Drain, and Pneumatic Transfer System

Alan J. Blotcky Reactor Facility
CHARACTERIZATION SURVEY PACKAGE D0001
(Ventilation, Drain, and Pneumatic Transfer Systems)

TABLE OF CONTENTS

1.0 Survey Package Worksheet for the Ventilation and Drain Systems.....3

2.0 Map of the Survey Area.....8

3.0 M2350 Download Beta Report(s).....11

4.0 Removable Alpha/Beta Activity Laboratory Report(s).....24

5.0 Gamma Spectrum Analysis.....29

6.0 Photos of the Survey Area.....63

Section 1

**Survey Package Worksheet for the Ventilation and
Drain Systems**

ATTACHMENT 6.2
CHARACTERIZATION SURVEY PACKAGE WORKSHEET

PACKAGE ID NO.: D0001	PREPARED BY: Paul Jones	DATE: 12/04/02
LOCATION: Veterans Affairs Medical Center		
FLOOR/ELEVATION: Basement	BUILDING: Research	AREA: Ventillation and Drain & Misc. Systems

Area Description

This package is for the reactor area room drain, ventilation, and pneumatic transfer systems.

Historical Information

The Alan J. Blotcky Reactor was used to support nuclear medicine and research programs conducted at the medical center. The total reactor operation was approximately 515,000 kilowatt hours from 1959 to 2001.

Radioactive materials were dumped down the drain system at levels that were acceptable for effluent release. The lab hoods were used for radioactive material experiments. This package is for survey of the ventilation of the lab hoods numbered EF10 and EF11. These two hoods are dedicated hoods for radioactive materials. The two lab hoods exhaust to the 12th floor roof. The vents can be accessed easily in four locations; (1) the entry point, (2) the 1st floor damper area, (3) the 4th floor, and (4) the doghouse on the roof.

Survey Instructions

For the survey, perform measurements according to the Final Survey Plan Section 5.0 and applicable project procedures.

Class I Survey Units

1. Perform a scan over 100% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument.
2. Grid the area as show in the attached drawing(s) for survey locations.
3. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
4. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.

Survey Instructions (continued)

Class III Survey Units

1. Perform a scan over approximately 10% of the accessible building surfaces using a gas-flow proportional detector while listening to the audible output of the instrument. All areas of elevated activity should be identified for further investigation and potential decontamination.
2. Collect 1 direct beta measurement at each SML. See attached drawing(s) for survey locations.
3. Obtain 1 smear (approximately 100 cm²) at each direct beta SML for removable beta surface activity.
4. Mark the location of the direct beta measurements and smear with a paint stick or equivalent on the surfaces of the survey unit.

General Survey Instructions (Class I, II, and III)

1. Use LMI Data Logger M2350-1 with M43-68 style Gas Flow Proportional for direct beta survey measurements.
2. Perform one 5 minute pre-survey shielded background and one 5 minute post-survey shielded background for each detector used for the survey.
3. Verify that the direct measurement MDA is less than 25% of the expected DCGL (<1,250 dpm/100cm²) for direct beta measurements. If the field background is less than 1000 CPM, use 10-second count time for each direct beta measurement. If the field background is greater than 1000 CPM, obtain further directions from the Project Manager or designee.
4. Download each M2350-1 at completion of the survey, shift and/or prior to performing surveys in another survey area (before changing L1 codes).
5. Use location codes provided below for direct beta measurements, as appropriate.
6. Use the Package L1, L2, and L8 codes when labeling smears samples for counting.
7. When all measurements, samples or scans are collected, initial and date the "MEASUREMENT TYPE" block on the survey package to indicate the measurements or samples were collected.
8. Note any problems, comments, or other information pertinent to the data or sample collection under the "NOTES" section.

Survey performance (Initial and date as each survey is complete)													
Location Code					General Description	Area Classification	Direct Beta	Direct Alpha	Beta Scan	γ Scan	Smear Gross Bq	Smear H-3	Other
L1	L2	L3	L7	L8									
Reactor Building Systems													
D0001	01D01-01D10	TSC01	ZZZZZ	1	Current Drains	Impacted Class I	10 PA (41)	N/A	N/A	N/A	10 PA	N/A	(42)
D0001	01V01	TSC01	B, 1, 4, or R	1 thru 2	Vent (EF-10)	Impacted Class I	8 PA	(43)	PA		8 PA		
D0001	01V02	TSC01	B, 1, 4, or R	1 thru 2	Vent (EF-11)	Impacted Class I	8 PA	(43)	PA		8 PA		
D0001	01P01-01P08	TSC01	ZZZZZ	1	Pneumatic Transfer System Openings	Impacted Class I	N/A		N/A		8 PA		
D0001	01P09-01P10	TSC01	ZZZZZ	1	Reactor Coolant System	Impacted Class I	N/A	✓	N/A	✓	8 PA	✓	
D0001	02P01-02P03	TSC01	ZZZZZ	1--	Fuel Storage Penetration	Impacted Class I	3 PA	N/A	PA	N/A	N/A	N/A	

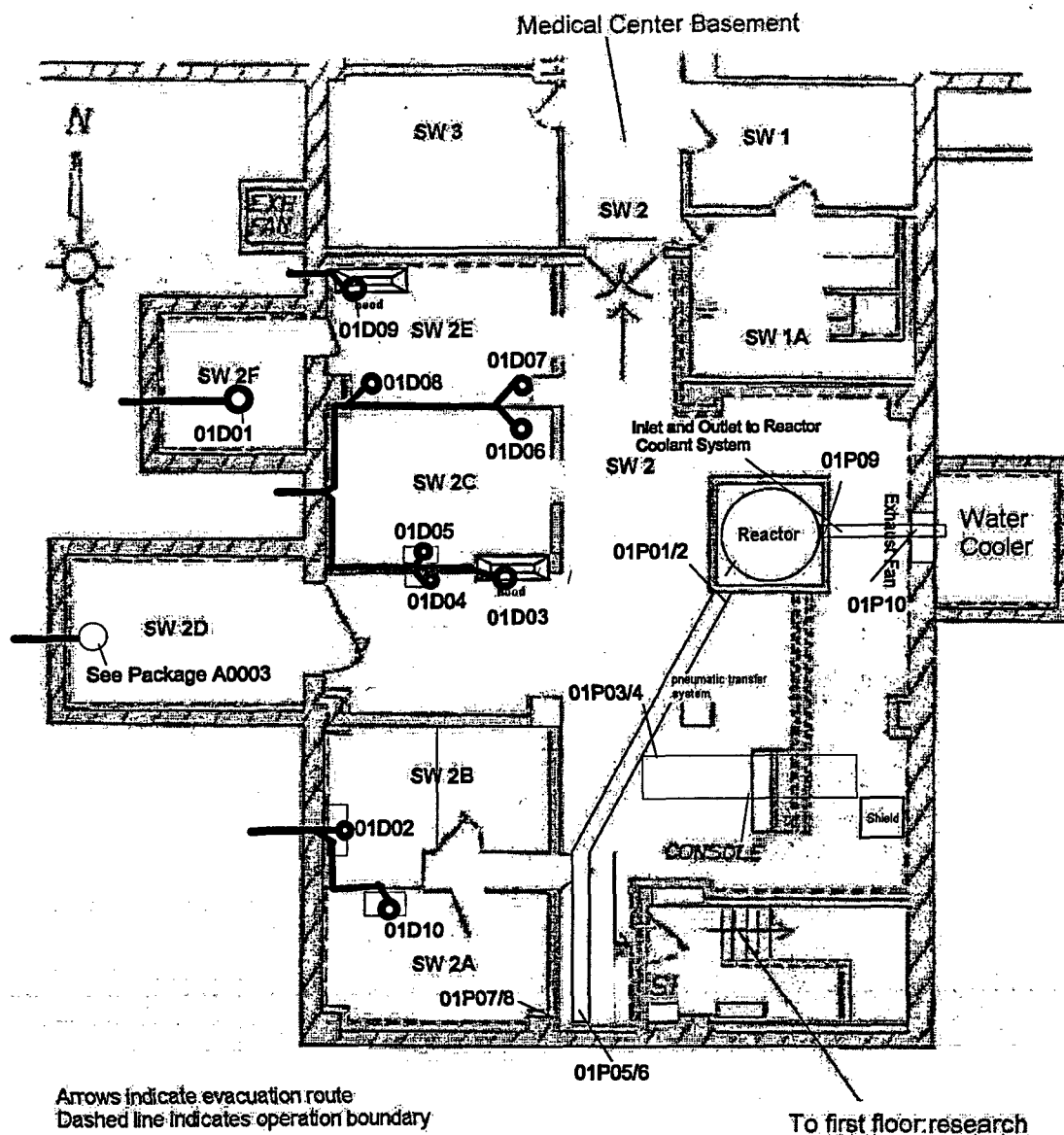
(41) & (42) - see notes section

Section 2

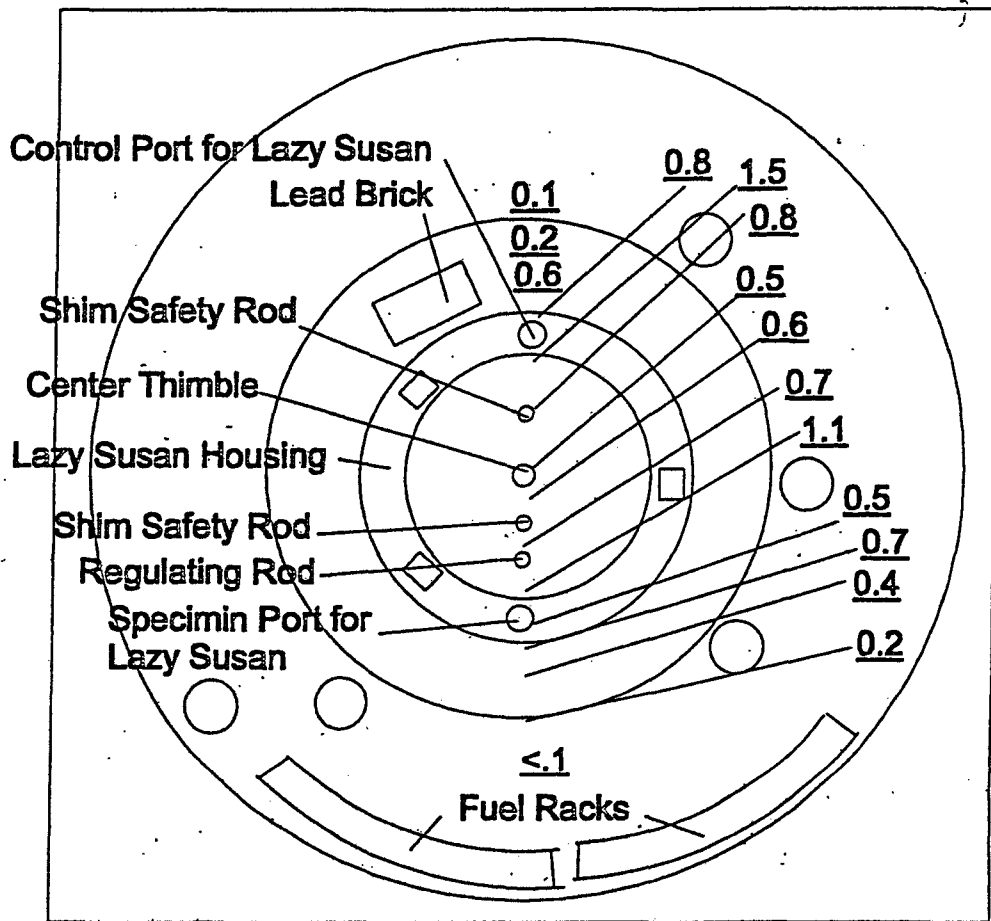
Maps of the Survey Areas

Package D0001

Drains and Pneumatic Transfer Systems



Reactor Core Profile



Gamma Dose Rate in R/hr

Section 3

M2350 Download Beta Report(s)



M2350-1 Download BETA Report

D0001

File Name : 00000047		Survey Description : <i>A0085 V01-02</i>	
Survey Reason : Characterization			
User ID : JLM9424		Technician Name : Jack Mucia	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68B	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : BETA		Detector Type : 02200 : 126 cm2 Gas Proportional Detector	
Detector Area : 126	Efficiency : 0.22	Survey Date : 12/5/02	

<u>Jack Mucia</u> Print Name	<u><i>Jack Mucia</i></u> Signature	<u>12/06/02</u> Date
<u>Paul Jones</u> Print Name	<u><i>Paul Jones</i></u> Signature	<u>12/6/02</u> Date

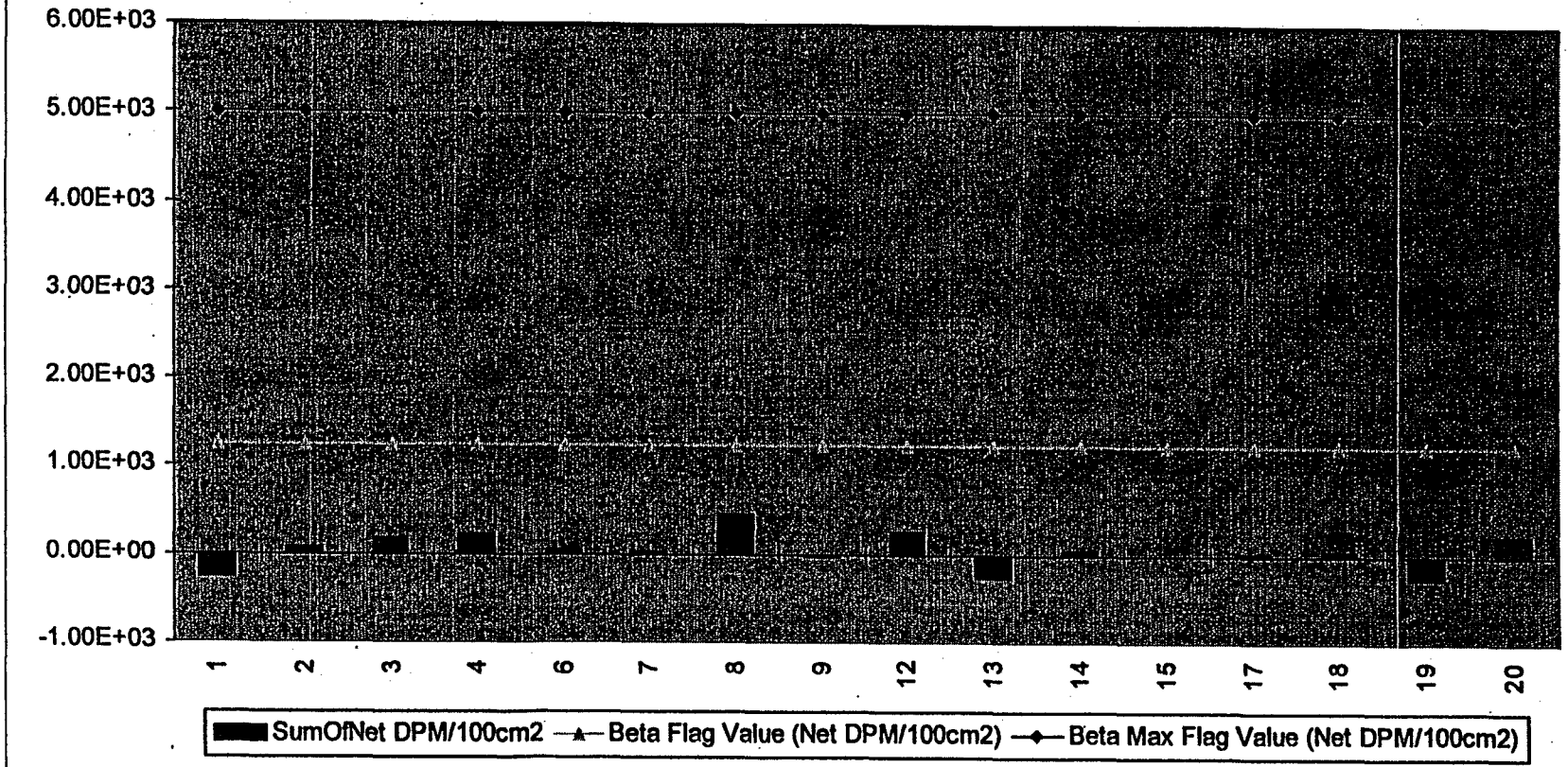
Comments:

Sign-Off *Linda C. Ford* *LL. Linn* 12-06-02
 Print Name Signature Date

Download Name: 00000047
Survey Description: A0005 V01-02

D0001

M2350-1 Sample Results



Page 3 of 3

Duratek Beta Survey Report

Download File Name: 00000047

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
A0005	01V01	1	34.0	10	FLDCT	ZZZZ	1	1	279	-271
A0005	01V01	2	50.0	10	FLDCT	ZZZZ	1	2	279	76
A0005	01V02	3	55.0	10	FLDCT	ZZZZ	1	1	279	184
A0005	01V02	4	57.0	10	FLDCT	ZZZZ	1	2	279	227
A0005	01V01	6	55.0	10	FLDCT	ZZZZ	B	1	312	65
A0005	01V01	7	54.0	10	FLDCT	ZZZZ	B	2	312	43
A0005	01V02	8	70.0	10	FLDCT	ZZZZ	B	1	291	465
A0005	01V02	9	47.0	10	FLDCT	ZZZZ	B	2	291	-32
A0005	01V02	12	71.0	10	FLDCT	ZZZZ	4	1	349	278
A0005	01V02	13	46.0	10	FLDCT	ZZZZ	4	2	349	-263
A0005	01V01	14	61.0	10	FLDCT	ZZZZ	4	1	349	61
A0005	01V01	15	58.0	10	FLDCT	ZZZZ	4	2	349	-4
A0005	01V02	17	54.0	10	FLDCT	ZZZZ	R	1	314	36
A0005	01V02	18	55.0	10	FLDCT	ZZZZ	R	2	314	58
A0005	01V01	19	40.0	10	FLDCT	ZZZZ	R	1	314	-267
A0005	01V01	20	64.0	10	FLDCT	ZZZZ	R	2	314	253

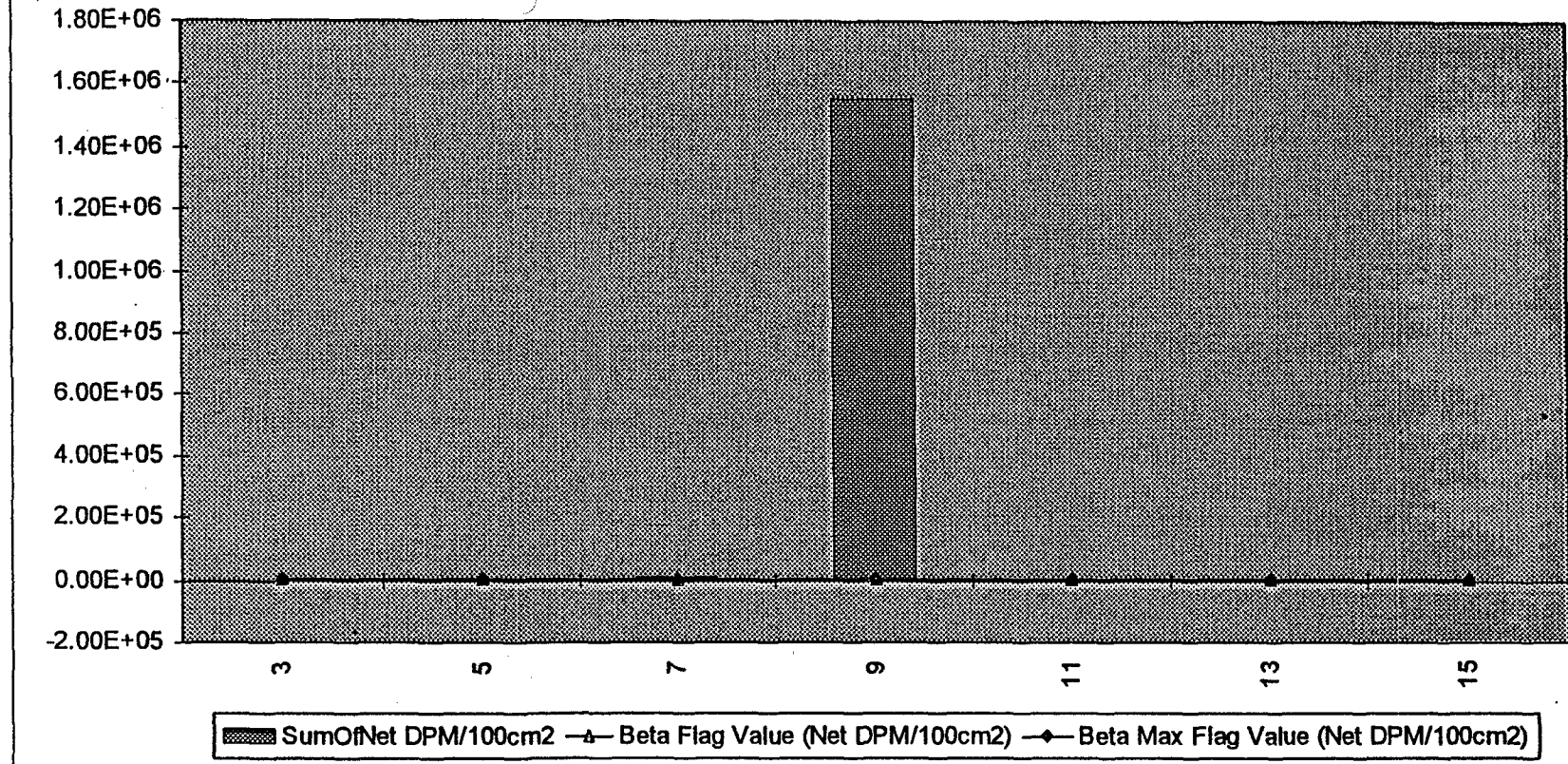
A
D0001

Beta Flag	1250	-	_____
Beta Max Flag	5000		

Download Name: 00000059

Survey Description: Pkg.D0001 Drains 01D002,03,04,05,06,07-Pre/Post SC

M2350-1 Sample Results




Page 2 of 3

Duratek Beta Survey Report

Download File Name: 00000059

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
D0001	01D10	3	272.0	180	FLDCT	B9999	ZZZZZ	1	85	298
D0001	01D02	5	234.0	180	FLDCT	B9999	ZZZZZ	1	73	263
D0001	01D04	7	754.0	180	FLDCT	B9999	ZZZZZ	1	79	8379
D0001	01D03	9	88,981.0	180	FLDCT	B9999	ZZZZZ	1	125	454463
D0001	01D05	11	328.0	180	FLDCT	B9999	ZZZZZ	1	71	2018
D0001	01D06	13	268.0	180	FLDCT	B9999	ZZZZZ	1	96	-351
D0001	01D07	15	237.0	180	FLDCT	B9999	ZZZZZ	1	92	-684

Beta Flag	1250 - _____
Beta Max Flag	5000 

Download Name: 0000050

Survey Description: D0001 01D01 POST S/C

M2350-1 Sample Results



■ SumOfNet DPM/100cm2 ▲ Beta Flag Value (Net DPM/100cm2) ◆ Beta Max Flag Value (Net DPM/100cm2)

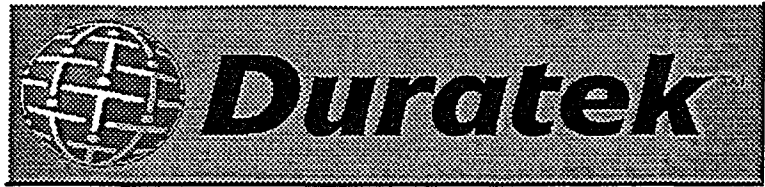
Page 2 of 3

Duratek Beta Survey Report

Download File Name: 00000050

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
D0001	01D01	1	83.0	10	FLDCT	B9999	ZZZZ	1	408	-315
D0001	01D01	2	75.0	10	FLDCT	B9999	ZZZZ	2	408	147

Beta Flag	1250 - _____
Beta Max Flag	5000 



M2350-1 Download BETA Report

File Name : 0000056		Survey Description : Vertical Fuel Storage Holes	
Survey Reason : Characterization			
User ID : JLM9424		Technician Name : Jack Mucia	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68B	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : BETA		Detector Type : 02200 : 126 cm2 Gas Proportional Detector	
Detector Area : 126	Efficiency : 0.2	Survey Date : 12/7/02	

 Jack Mucia
 Print Name

J.C. Finn for J. Mucia
 Signature

 1-10-03
 Date

 Print Name

 Signature

 Date

Comments:

Scan of Fuel Emergency Storage Pits showed no elevated activity above background. *pgs*

Sign-Off PAUL JONES _____
 Print Name Signature

 Signature

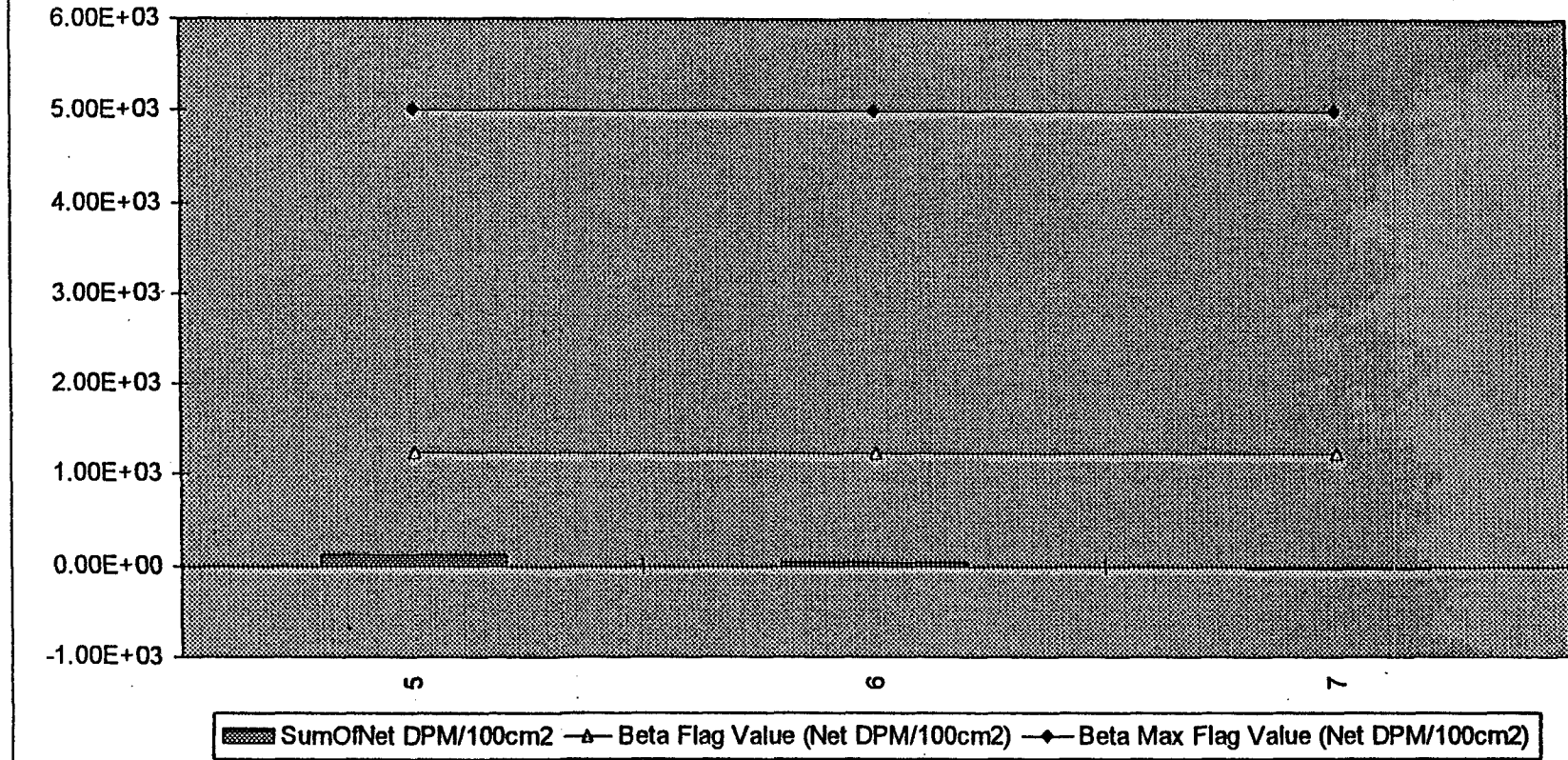
 1/10/03
 Date

Page 1 of 3

Download Name: 00000056

Survey Description: Vertical Fuel Storage Holes

M2350-1 Sample Results



2 of 3

Duratek Beta Survey Report

Download File Name: 00000056

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
	A 11103									
D0001	01P01	5	241.0	60	FLDCT	B9999	ZZZZ	1	211	119
D0001	01P02	6	264.0	60	FLDCT	B9999	ZZZZ	1	254	40
D0001	01P03	7	256.0	60	FLDCT	B9999	ZZZZ	1	265	-36

2

Beta Flag	1250	-	
Beta Max Flag	5000		

Section 4

**Removable Alpha/Beta Activity Laboratory
Report(s)**

V.A. A/B SMEAR ANALYSIS

Survey Report

12/9
2:51:13PM

Batch ID:	VA Smear Analysis - 200212091425	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	B Sample Location: <i>A000501002</i>	Batch Key	6,587	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209142550-B1	1.00	-0.15	-0.59	15.82	<MDA	-1.60	-6.76	29.45	<MDA
20021209144121-B2	1.00	-0.15	-0.59	15.82	<MDA	2.40	10.14	29.45	<MDA
20021209144241-B3	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209144411-B4	1.00	0.85	3.35	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209144531-B5	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209144702-B6	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209144822-B7	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209144952-B8	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA

Performed By: *D. Schumaker* Date *12/9/02*

Orlando V.A. A/B SMEAR ANALYSIS

Survey Report

12/9/02
2:59:50PM

Batch ID:	VA Smear Analysis - 200212091423	Acquisition Date:	12/9/2002	Alpha Bkg	0.15 cpm
Group:	A Sample Location: <i>A0005 01 V 01</i>	Batch Key	6,586	Beta Bkg	1.60 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

<u>Sample ID</u>	<u>Count Time (Min)</u>	<u>Alpha Count Rate (CPM)</u>	<u>Alpha DPM</u>	<u>Alpha MDA (DPM)</u>	<u>Flag</u>	<u>Beta Count Rate (CPM)</u>	<u>Beta DPM</u>	<u>Beta MDA (DPM)</u>	<u>Flag</u>
20021209142328-A1	1.00	-0.15	-0.59	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209142958-A2	1.00	-0.15	-0.59	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209143118-A3	1.00	0.85	3.35	15.82	<MDA	-0.60	-2.54	29.45	<MDA
20021209143248-A4	1.00	0.85	3.35	15.82	<MDA	1.40	5.92	29.45	<MDA
20021209143409-A5	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209143539-A6	1.00	-0.15	-0.59	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209143659-A7	1.00	0.85	3.35	15.82	<MDA	0.40	1.69	29.45	<MDA
20021209143829-A8	1.00	0.85	3.35	15.82	<MDA	-1.60	-6.76	29.45	<MDA

Performed By: D. Schumaker Date 12/9/02

VA A/B SMEAR ANALYSIS

Survey Report

12/10/02
11:00:27 AM

Batch ID: VA Smear Analysis - 200212101045	Acquisition Date: 12/10/2002	Alpha Bkg 0.30 cpm
Group: C Sample Location: D0001/01 D01-01D10	Batch Key 6,598	Beta Bkg 2.00 cpm
Device: LB-5100 #15632	Operating Voltage: 1,417.0	Alpha Efficiency 0.2540
Selected Geometry: Swipe/Smear	Alpha to Beta Crosstalk 0.00	Beta Efficiency 0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021210104555-C1	1.00	-0.30	-1.18	17.96	<MDA	16.00	67.61	31.58	
20021210104735-C2	1.00	0.70	2.76	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210104905-C3	1.00	0.70	2.76	17.96	<MDA	91.00	384.51	31.58	
20021210105025-C4	1.00	0.70	2.76	17.96	<MDA	1.00	4.23	31.58	<MDA
20021210105155-C5	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210105315-C6	1.00	0.70	2.76	17.96	<MDA	1.00	4.23	31.58	<MDA
20021210105445-C7	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210105605-C8	1.00	-0.30	-1.18	17.96	<MDA	-2.00	-8.45	31.58	<MDA
20021210105736-C9	1.00	-0.30	-1.18	17.96	<MDA	1.00	4.23	31.58	<MDA
20021210105856-C10	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA

Performed By D. Schumaker Date 12/10/02

P27

Onion V.A. A/B SMEAR ANALYSIS

Survey Report

12/10/2002
10:29:54AM

Batch ID:	VA Smear Analysis - 200212100953	Acquisition Date:	12/10/2002	Alpha Bkg	0.30 cpm
Group:	B Sample Location: <i>D0001/01 P01-01P08</i>	Batch Key	6,596	Beta Bkg	2.00 cpm
Device:	LB-5100 #15632	Operating Voltage:	1,417.0	Alpha Efficiency	0.2540
Selected Geometry:	Swipe/Smear	Alpha to Beta Crosstalk	0.00	Beta Efficiency	0.2370

Sample ID	Count Time (Min)	Alpha Count Rate (CPM)	Alpha DPM	Alpha MDA (DPM)	Flag	Beta Count Rate (CPM)	Beta DPM	Beta MDA (DPM)	Flag
20021210095319-B1 <i>P01</i>	1.00	-0.30	-1.18	17.96	<MDA	10.00	42.25	31.58	
20021210101711-B2	1.00	-0.30	-1.18	17.96	<MDA	36.00	152.12	31.58	
20021210101841-B3	1.00	-0.30	-1.18	17.96	<MDA	54.00	228.17	31.58	
20021210102001-B4	1.00	-0.30	-1.18	17.96	<MDA	19.00	80.28	31.58	
20021210102131-B5	1.00	-0.30	-1.18	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210102251-B6	1.00	0.70	2.76	17.96	<MDA	2.00	8.45	31.58	<MDA
20021210102421-B7	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA
20021210102541-B8 <i>P08</i>	1.00	-0.30	-1.18	17.96	<MDA	1.00	4.23	31.58	<MDA
20021210102711-B9 <i>P09</i>	1.00	0.70	2.76	17.96	<MDA	0.00	0.00	31.58	<MDA
20021210102831-B10 <i>P10</i>	1.00	-0.30	-1.18	17.96	<MDA	-1.00	-4.23	31.58	<MDA

Pneumatic Transfer System
Reactor Coolant System

Performed By: *D. Schurraker* Date: *12/10/02*

Section 5

Gamma Spectrum Analysis

*** GAMMA SPECTRUM ANALYSIS ***

Report Generated On 12/8/02 8:48:02 AM

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0180.CNF
Spectrum Number VA020180.CNF
Sample Description Pkg. ~~2000~~ 501D01 (Fl. Drain)
Sample Type Dust ⁰⁰⁰¹
Sample Geometry 2

Peak Locate Threshold 3.50
Peak Locate Range (in channels) 100 - 8192
Peak Area Range (in channels) 100 - 8192
Identification Energy Tolerance 2.00 keV

Sample Size 2.303E+002 ^{g A 12/16/02}
Sample Collection Date 12/6/02 3:30:00 PM
Spectrum Collection Date 12/8/02 8:36:06 AM
Decay Corrected To 12/6/02 3:30:00 PM
Collected By L. Finn

Live Time 600.0 seconds
Real Time 600.1 seconds
& Dead Time 0.02 %
Background Type STEP

Energy Calibration Performed On 11/13/02
Efficiency Calibration Performed On 11/13/02
Calibration Geometry Used 2

Performed & Reviewed By LC. Finn Date 12/08/02

Supervisory Review PLG Date 12/16/02

 ***** P E A K L O C A T E R E P O R T *****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0180.CNF
 Spectrum Number VA020180.CNF
 Sample Description Pkg.A000501D01 (Fl.Drain)
 Sample Type Dust

Peak Locate Performed on 12/8/02 8:48:01 AM
 Peak Locate From Channel 100
 Peak Locate To Channel 8192
 Peak Search Sensitivity 3.50
 MDA Confidence 5.00

Peak No.	Centroid Channel	Centroid Uncertainty	Energy (keV)	Peak Significance	FWHM (keV)
1	4696.16	0.1671	1173.75	5.08	2.2468
2	5334.92	0.1664	1333.32	4.68	2.5174

Errors quoted at 1.96 sigma

 ***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0180.CNF
 Spectrum Number VA020180.CNF
 Sample Description Pkg.A000501D01 (Fl.Drain)

Peak Analysis Performed on 12/8/02 8:48:01 AM
 Peak Analysis From Channel 100
 Peak Analysis To Channel 8192

	Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
F	1	4684-	4707	4695.94	1173.75	9.20E+001	18.39	1.96E+000
F	2	5323-	5346	5334.55	1333.32	8.98E+001	18.63	6.23E+000

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.96 sigma

***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0180.CNF
Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
CO-60	0.981	1173.22*	100.00	1.495E-006	3.101E-007
		1332.49*	100.00	1.625E-006	3.501E-007

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy tolerance used was 2.000
Nuclide confidence index threshold = 0.10
Errors quoted at 1.960 sigma

 *** INTERFERENCE CORRECTED REPORT ***

Sample I.D.
 Spectrum Number

C:\GENIE2K\CAMFILES\VA-02-0180.CNF
 VA020180.CNF

Performed & Reviewed By Dr. Linn Date 12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml) ^{ratio}	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
CO-60	0.981	1.55E-006	2.32E-007	15.0

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

***** UNIDENTIFIED PEAKS *****

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
----------	--------------	--------------------------------	------------------------

All peaks were identified.

M = First peak in a multiplet region
 m = Other peak in a multiplet region
 F = Fitted singlet

Errors quoted at 1.96 sigma

No peak locate results available for reporting purposes

***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0182.CNF
Spectrum Number VA020182.CNF
Sample Description Pkg.D000101D02

Peak Analysis Performed on 12/8/02 9:26:17 AM
Peak Analysis From Channel 100
Peak Analysis To Channel 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
----------	-----------	---------	---------------	--------------	---------------	------------------	------------------

One or more peaks were dropped due to multiplet de-convolution.

M = First peak in a multiplet region

m = Other peak in a multiplet region

F = Fitted singlet

Errors quoted at 1.96 sigma

 ***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0182.CNF
 Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
--------------	---------------	--------------	-----------	-------------------	----------------------

* = Energy line found in the spectrum.
 @ = Energy line not used for Weighted Mean Activity
 Energy tolerance used was 2.000
 Nuclide confidence index threshold = 0.10
 Errors quoted at 1.960 sigma

*** INTERFERENCE CORRECTED REPORT ***

Sample I.D.
Spectrum Number

C:\GENIE2K\CAMFILES\VA-02-0182.CNF
VA020182.CNF

Performed & Reviewed By

SL. Linn

Date

12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
--------------	--------------------------	-------------------------------	---------------------------------	-----------------------------------

? = nuclide is part of an undetermined solution

X = nuclide rejected by the interference analysis

@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

No peak search results available for nuclide analysis.

 *** GAMMA SPECTRUM ANALYSIS ***

Report Generated On 12/8/02 9:39:24 AM

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0183.CNF
 Spectrum Number VA020183.CNF 12/8/02
 Sample Description Pkg.D000101D02
 Sample Type Water 4
 Sample Geometry 2

Peak Locate Threshold 3.50
 Peak Locate Range (in channels) 100 - 8192
 Peak Area Range (in channels) 100 - 8192
 Identification Energy Tolerance 2.00 keV

Sample Size 2.500E+002 ml
 Sample Collection Date 12/6/02 3:00:00 PM
 Spectrum Collection Date 12/8/02 9:25:50 AM
 Decay Corrected To 12/6/02 3:00:00 PM
 Collected By L. Finn

Live Time 600.0 seconds
 Real Time 600.1 seconds
 % Dead Time 0.01 %
 Background Type STEP

Energy Calibration Performed On 11/13/02
 Efficiency Calibration Performed On 11/13/02
 Calibration Geometry Used 2

Performed & Reviewed By RC. Finn Date 12/08/02

Supervisory Review PLA J Date 12/16/02

No peak locate results available for reporting purposes

***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0183.CNF
Spectrum Number VA020182.CNF
Sample Description Pkg.D000101D0₄

Peak Analysis Performed on 12/8/02 9:39:23 AM
Peak Analysis From Channel 100
Peak Analysis To Channel 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
----------	-----------	---------	---------------	--------------	---------------	------------------	------------------

One or more peaks were dropped due to multiplet de-convolution.

M = First peak in a multiplet region

m = Other peak in a multiplet region

F = Fitted singlet

Errors quoted at 1.96 sigma

 ***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0183.CNF
 Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
--------------	---------------	--------------	-----------	-------------------	----------------------

* = Energy line found in the spectrum.
 @ = Energy line not used for Weighted Mean Activity
 Energy tolerance used was 2.000
 Nuclide confidence index threshold = 0.10
 Errors quoted at 1.960 sigma

 ** INTERFERENCE CORRECTED REPORT **

Sample I.D.
 Spectrum Number

C:\GENIE2K\CAMFILES\VA-02-0183.CNF
 VA020182.CNF

Performed & Reviewed By

sc. Luna

Date

12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
--------------	--------------------------	-------------------------------	---------------------------------	-----------------------------------

- ? = nuclide is part of an undetermined solution
- X = nuclide rejected by the interference analysis
- @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

No peak search results available for nuclide analysis.

 ** GAMMA SPECTRUM ANALYSIS **

Report Generated On 12/8/02 9:51:26 AM

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0184.CNF
 Spectrum Number VA020184.CNF
 Sample Description Pkg.D000101D05
 Sample Type Water
 Sample Geometry 2

Peak Locate Threshold 3.50
 Peak Locate Range (in channels) 100 - 8192
 Peak Area Range (in channels) 100 - 8192
 Identification Energy Tolerance 2.00 keV

Sample Size 2.500E+002 ml
 Sample Collection Date 12/6/02 3:00:00 PM
 Spectrum Collection Date 12/8/02 9:38:29 AM
 Decay Corrected To 12/6/02 3:00:00 PM
 Collected By L. Finn

Live Time 600.0 seconds
 Real Time 600.1 seconds
 % Dead Time 0.01 %
 Background Type STEP

Energy Calibration Performed On 11/13/02
 Efficiency Calibration Performed On 11/13/02
 Calibration Geometry Used 2

Performed & Reviewed By H. Finn Date 12/08/02

Supervisory Review PLO Date 12/16/02

No peak locate results available for reporting purposes

 ***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0184.CNF
 Spectrum Number VA020184.CNF
 Sample Description Pkg.D000101D05

Peak Analysis Performed on 12/8/02 9:51:26 AM
 Peak Analysis From Channel 100
 Peak Analysis To Channel 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
----------	-----------	---------	---------------	--------------	---------------	------------------	------------------

One or more peaks were dropped due to multiplet de-convolution.

M = First peak in a multiplet region

m = Other peak in a multiplet region

F = Fitted singlet

Errors quoted at 1.96 sigma

 ***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0184.CNF
 Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
--------------	---------------	--------------	-----------	--------------------	----------------------

* = Energy line found in the spectrum.
 @ = Energy line not used for Weighted Mean Activity
 Energy tolerance used was 2.000
 Nuclide confidence index threshold = 0.10
 Errors quoted at 1.960 sigma

 *** INTERFERENCE CORRECTED REPORT ***

Sample I.D.
 Spectrum Number

C:\GENIE2K\CAMFILES\VA-02-0184.CNF
 VA020184.CNF

Performed & Reviewed By

SP. Linn

Date

12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
--------------	--------------------------	-------------------------------	---------------------------------	-----------------------------------

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

No peak search results available for nuclide analysis.

 *** GAMMA SPECTRUM ANALYSIS *****

Report Generated On 12/8/02 10:04:34 AM

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0185.CNF
 Spectrum Number VA020185.CNF
 Sample Description Pkg.D000101D06
 Sample Type Water
 Sample Geometry 2

Peak Locate Threshold 3.50
 Peak Locate Range (in channels) 100 - 8192
 Peak Area Range (in channels) 100 - 8192
 Identification Energy Tolerance 2.00 keV

Sample Size 2.500E+002 ml
 Sample Collection Date 12/6/02 3:00:00 PM
 Spectrum Collection Date 12/8/02 9:49:47 AM
 Decay Corrected To 12/6/02 3:00:00 PM
 Collected By L. Finn

Live Time 600.0 seconds
 Real Time 600.1 seconds
 % Dead Time 0.01 %
 Background Type STEP

Energy Calibration Performed On 11/13/02
 Efficiency Calibration Performed On 11/13/02
 Calibration Geometry Used 2

Performed & Reviewed By LC. Finn Date 12/08/02

Supervisory Review PLG Jes Date 12/16/02

No peak locate results available for reporting purposes

***** P E A K A N A L Y S I S R E P O R T *****

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0185.CNF
Spectrum Number VA020185.CNF
Sample Description Pkg.D000101D06

Peak Analysis Performed on 12/8/02 10:04:33 AM
Peak Analysis From Channel 100
Peak Analysis To Channel 8192

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
----------	-----------	---------	---------------	--------------	---------------	------------------	------------------

One or more peaks were dropped due to multiplet de-convolution.
M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Errors quoted at 1.96 sigma

***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0185.CNF
Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
-----------------	------------------	-----------------	--------------	-----------------------	-------------------------

* = Energy line found in the spectrum.

@ = Energy line not used for Weighted Mean Activity

Energy tolerance used was 2.000

Nuclide confidence index threshold = 0.10

Errors quoted at 1.960 sigma

*** INTERFERENCE CORRECTED REPORT ***

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0185.CNF
Spectrum Number VA020185.CNF

Performed & Reviewed By *R. Funn* Date 12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
--------------	-----------------------	----------------------------	------------------------------	--------------------------------

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

No peak search results available for nuclide analysis.

 *** GAMMA SPECTRUM ANALYSIS ***

Report Generated On 12/8/02 10:16:27 AM

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0186.CNF
 Spectrum Number VA020186.CNF
 Sample Description Pkg.D000101D07
 Sample Type Water
 Sample Geometry 2

Peak Locate Threshold 3.50
 Peak Locate Range (in channels) 100 - 8192
 Peak Area Range (in channels) 100 - 8192
 Identification Energy Tolerance 2.00 keV

Sample Size 2.500E+002 ml
 Sample Collection Date 12/6/02 3:00:00 PM
 Spectrum Collection Date 12/8/02 10:02:14 AM
 Decay Corrected To 12/6/02 3:00:00 PM
 Collected By L. Finn

Live Time 600.0 seconds
 Real Time 600.1 seconds
 % Dead Time 0.01 %
 Background Type STEP

Energy Calibration Performed On 11/13/02
 Efficiency Calibration Performed On 11/13/02
 Calibration Geometry Used 2

Performed & Reviewed By SC. Finn Date 12/08/02

Supervisory Review PLA Jo Date 12/16/02

 ***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0186.CNF
 Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
--------------	---------------	--------------	-----------	-------------------	----------------------

* = Energy line found in the spectrum.
 @ = Energy line not used for Weighted Mean Activity
 Energy tolerance used was 2.000
 Nuclide confidence index threshold = 0.10
 Errors quoted at 1.960 sigma

*** INTERFERENCE CORRECTED REPORT ***

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0186.CNF
Spectrum Number VA020186.CNF

Performed & Reviewed By RC. Fine Date 12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
--------------	-----------------------	----------------------------	------------------------------	--------------------------------

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

No peak search results available for nuclide analysis.

** GAMMA SPECTRUM ANALYSIS **

Report Generated On 12/8/02 10:25:57 AM

Detector DET01
Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0187.CNF
Spectrum Number VA020187.CNF
Sample Description Pkg.D000101D08
Sample Type Water
Sample Geometry 2

Peak Locate Threshold 3.50
Peak Locate Range (in channels) 100 - 8192
Peak Area Range (in channels) 100 - 8192
Identification Energy Tolerance 2.00 keV

Sample Size 2.500E+002 ml
Sample Collection Date 12/6/02 3:00:00 PM
Spectrum Collection Date 12/8/02 10:13:39 AM
Decay Corrected To 12/6/02 3:00:00 PM
Collected By L. Finn

Live Time 600.0 seconds
Real Time 600.1 seconds
% Dead Time 0.02 %
Background Type STEP

Energy Calibration Performed On 11/13/02
Efficiency Calibration Performed On 11/13/02
Calibration Geometry Used 2

Performed & Reviewed By LC. Finn Date 12/08/02

Supervisory Review P. A. J. Date 12/16/02

 ***** N U C L I D E I D E N T I F I C A T I O N R E P O R T *****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0187.CNF
 Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

..... IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
--------------	---------------	--------------	-----------	-------------------	----------------------

* = Energy line found in the spectrum.
 @ = Energy line not used for Weighted Mean Activity
 Energy tolerance used was 2.000
 Nuclide confidence index threshold = 0.10
 Errors quoted at 1.960 sigma

 *** INTERFERENCE CORRECTED REPORT ***

Sample I.D.
 Spectrum Number

C:\GENIE2K\CAMFILES\VA-02-0187.CNF
 VA020187.CNF

Performed & Reviewed By

SC. Ferrer

Date

12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt. mean Activity Uncertainty	Wt mean Activity % Uncertainty
--------------	--------------------------	-------------------------------	----------------------------------	-----------------------------------

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

No peak search results available for nuclide analysis.

 *** GAMMA SPECTRUM ANALYSIS ***

Report Generated On 12/8/02 10:40:35 AM

Detector DET01
 Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0188.CNF
 Spectrum Number VA020188.CNF
 Sample Description Pkg.D000101D10
 Sample Type Water
 Sample Geometry 2

Peak Locate Threshold 3.50
 Peak Locate Range (in channels) 100 - 8192
 Peak Area Range (in channels) 100 - 8192
 Identification Energy Tolerance 2.00 keV

Sample Size 2.500E+002 ml
 Sample Collection Date 12/6/02 3:00:00 PM
 Spectrum Collection Date 12/8/02 10:25:05 AM
 Decay Corrected To 12/6/02 3:00:00 PM
 Collected By L. Finn

Live Time 600.0 seconds
 Real Time 600.1 seconds
 % Dead Time 0.01 %
 Background Type STEP

Energy Calibration Performed On 11/13/02
 Efficiency Calibration Performed On 11/13/02
 Calibration Geometry Used 2

Performed & Reviewed By LC. Finn Date 12/08/02

Supervisory Review PL a Jes Date 12/16/02

**** N U C L I D E I D E N T I F I C A T I O N R E P O R T ****

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0188.CNF
Nuclide Library Used C:\GENIE2K\CAMFILES\MYAP.NLB

IDENTIFIED NUCLIDES

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/ml)	Activity Uncertainty
--------------	---------------	--------------	-----------	-------------------	----------------------

* = Energy line found in the spectrum.
@ = Energy line not used for Weighted Mean Activity
Energy tolerance used was 2.000
Nuclide confidence index threshold = 0.10
Errors quoted at 1.960 sigma

 ** INTERFERENCE CORRECTED REPORT **

Sample I.D. C:\GENIE2K\CAMFILES\VA-02-0188.CNF
 Spectrum Number VA020188.CNF

Performed & Reviewed By SC. Linn Date 12/08/02

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/ml)	Wt mean Activity Uncertainty	Wt mean Activity % Uncertainty
--------------	-----------------------	----------------------------	------------------------------	--------------------------------

? = nuclide is part of an undetermined solution
 X = nuclide rejected by the interference analysis
 @ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.96 sigma

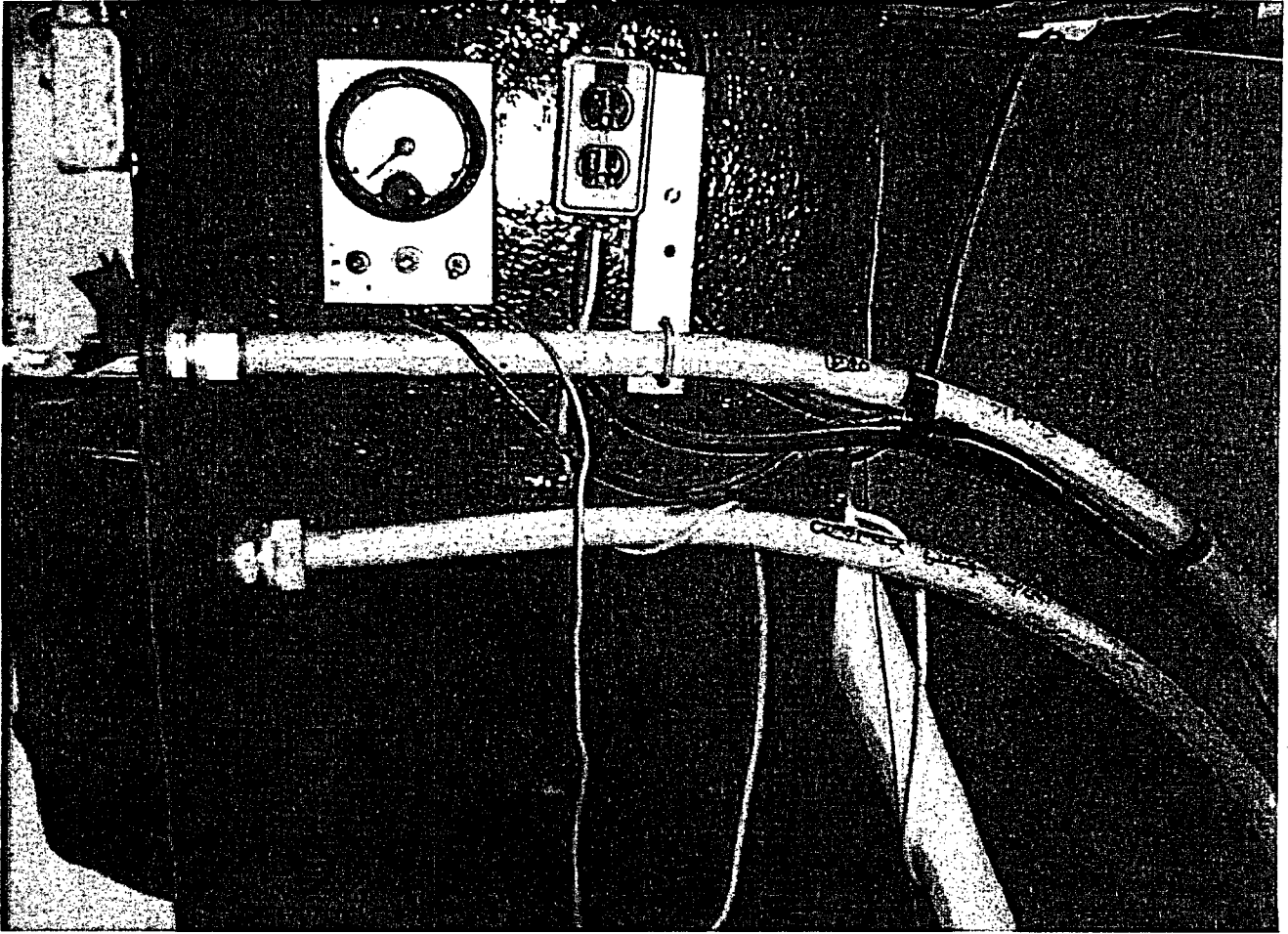
No peak search results available for nuclide analysis.

Section 5

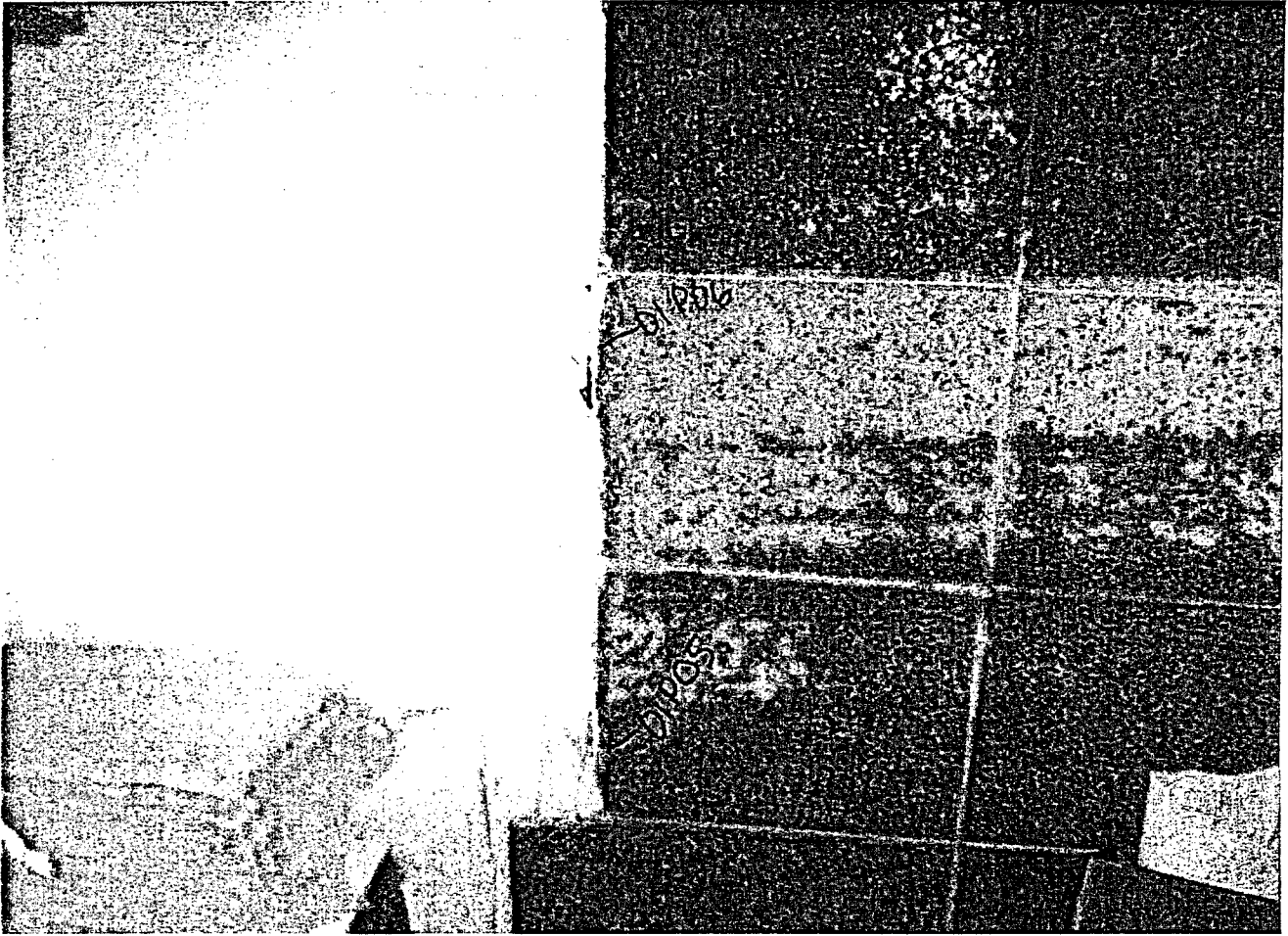
Photos of the Survey Area



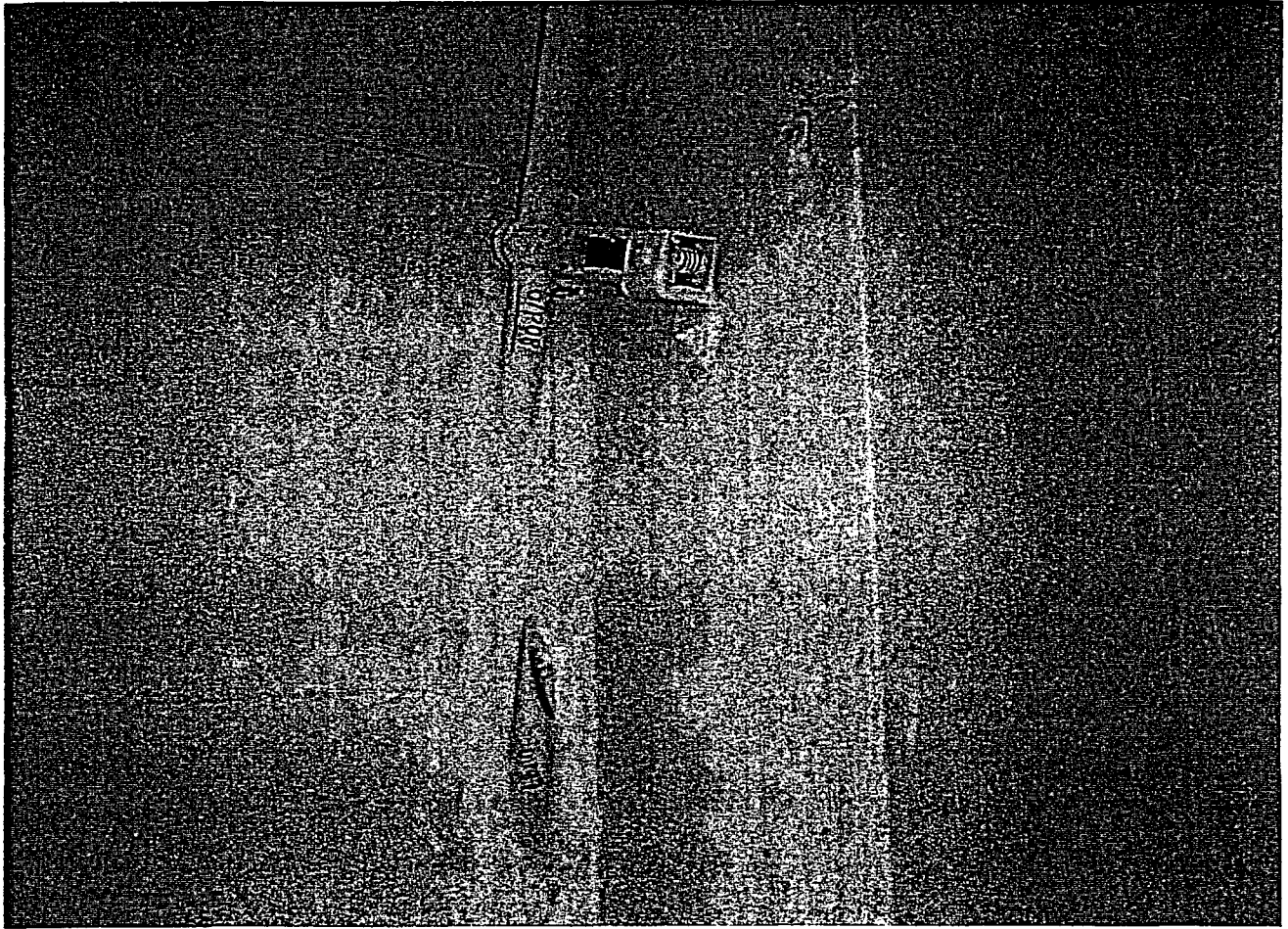
dec13_43



dec13_44



dec13_45



dec13_46

Alan J. Blotcky Research Reactor

Characterization Survey Package N0001

Background Materials

Alan J. Blotcky Reactor Facility
CHARACTERIZATION SURVEY PACKAGE N0001
(Background Materials)

TABLE OF CONTENTS

1.0	Survey Package Worksheet for the Background Materials.....	3
2.0	Material Code B0001.....	9
3.0	Material Code B0002.....	15
4.0	Material Code B0005.....	25
5.0	Material Code B0006.....	31
6.0	Material Code B0008.....	37
7.0	Material Code B0009.....	43
8.0	Material Code B0010.....	52
9.0	Material Code B0011.....	58
10.0	Material Code B9999.....	65

Section 1

Survey Package Worksheet for the Background Materials

ATTACHMENT 6.2
CHARACTERIZATION SURVEY PACKAGE WORKSHEET

PACKAGE ID NO.: N0001	PREPARED BY: Paul Jones	DATE: 11/04/02
LOCATION: Veterans Affairs Medical Center	APPROVED BY: Betsy Langille	DATE: 11/05/02
FLOOR/ELEVATION: Various	BUILDING:	AREA:

Area Description

This package includes various areas outside the reactor facility that contain construction materials similar to those of the reactor facility.

Historical Information

The Alan J. Blotcky Reactor was used to support nuclear medicine and research programs conducted at the medical center. The total reactor operation was approximately 515,000 kilowatt hours from 1959 to 2001.

The purpose of this survey package is to determine natural radioactivity in the construction materials used in the reactor facility using areas unaffected by reactor operations.

Survey Instructions

For the survey, perform measurements according to the Characterization Survey Plan Section 5.0 and applicable project procedures.

Background Survey Units

1. Collect 1 direct beta or alpha measurement at each survey measurement location (SML), as appropriate.
2. Mark the location of the direct beta or alpha measurements on a survey map.

Survey Instructions (continued)

General Survey Instructions

1. Use LMI Data Logger M2350-1 with M43-68 Gas Flow Proportional for direct beta survey measurements.
2. Perform one .5 minute shielded background measurement at each SML.
3. Verify that the direct measurement MDA is less than 25% expected DCGL ($< 1,250 \text{ dpm}/100\text{cm}^2$) for direct beta measurements. If the field background is less than 1000 CPM. If the field background is greater than 1000 CPM, obtain further directions from the Project Manager or designee.
4. Download each M2350-1 at completion of the survey, shift and/or prior to performing surveys in another survey area (before changing L1 codes).
5. Use location codes provided below for direct beta measurements, as appropriate.
6. When all measurements, samples or scans are collected, initial and date the "MEASUREMENT TYPE" block on the survey package to indicate the measurements or samples were collected.
7. Note any problems, comments, or other information pertinent to the data or sample collection under the "NOTES" section.

Survey performance (initial and date as each survey is complete)										
Location Code					General Description	Area Classification	Direct Beta	Smear Gross β/γ	Direct Alpha	Other
L1	L2	L3	L8	L6						
Background Package for Reactor Materials										
N0001	ZZZZZ	TSB01	1 thru 30	B0001	Painted Concrete	Non-Impacted	30 <i>H. Finn</i>			
N0001	ZZZZZ	TSB01	1 thru 30	B0002	Bare Concrete	Non-Impacted	30 <i>H. Finn</i>			
N0001	ZZZZZ	TSB01	1 thru 30	B0004	Painted Concrete Block	Non-Impacted	30 (*)			
N0001	ZZZZZ	TSB01	1 thru 30	B0005	Asphalt	Non-Impacted	30 <i>H. Finn</i>			
N0001	ZZZZZ	TSB01	1 thru 30	B0006	Beige Glazed Tile	Non-Impacted	30 <i>H. Finn</i>			
N0001	ZZZZZ	TSB01	1 thru 30	B0007	Beige Granite Style Block	Non-Impacted	30 (*)		N A	
N0001	ZZZZZ	TSB01	1 thru 30	B0008	~1'x1' Painted Brick	Non-Impacted	30 <i>H. Finn</i>			
N0001	ZZZZZ	TSB01	1 thru 30	B0009	~2"x8" Painted Brick	Non-Impacted	30 <i>H. Finn</i>			
N0001	ZZZZZ	TSB01	1 thru 30	B0010	~2"x8" Unpainted Brick	Non-Impacted	30 <i>H. Finn</i>			

(*) See notes section *A9-6*

Survey performance (initial and date as each survey is complete)										
Location Code					General Description	Area Classification	Direct Beta	Smear Gross β/g	Direct Alpha	Other
L1	L2	L3	L8	L6						
N0001	ZZZZZ	TSB01	1 thru 30	B0011	White 2'x2' drop ceiling tiles	Non-Impacted	30 <i>H. Fern</i>			
N0001	ZZZZZ	TSB01	1 thru 30	B9999	1'x1' tile floor	Non-Impacted	30 <i>H. Fern</i>			

Section 2

Material Code B0001

Duratek Beta Survey Report

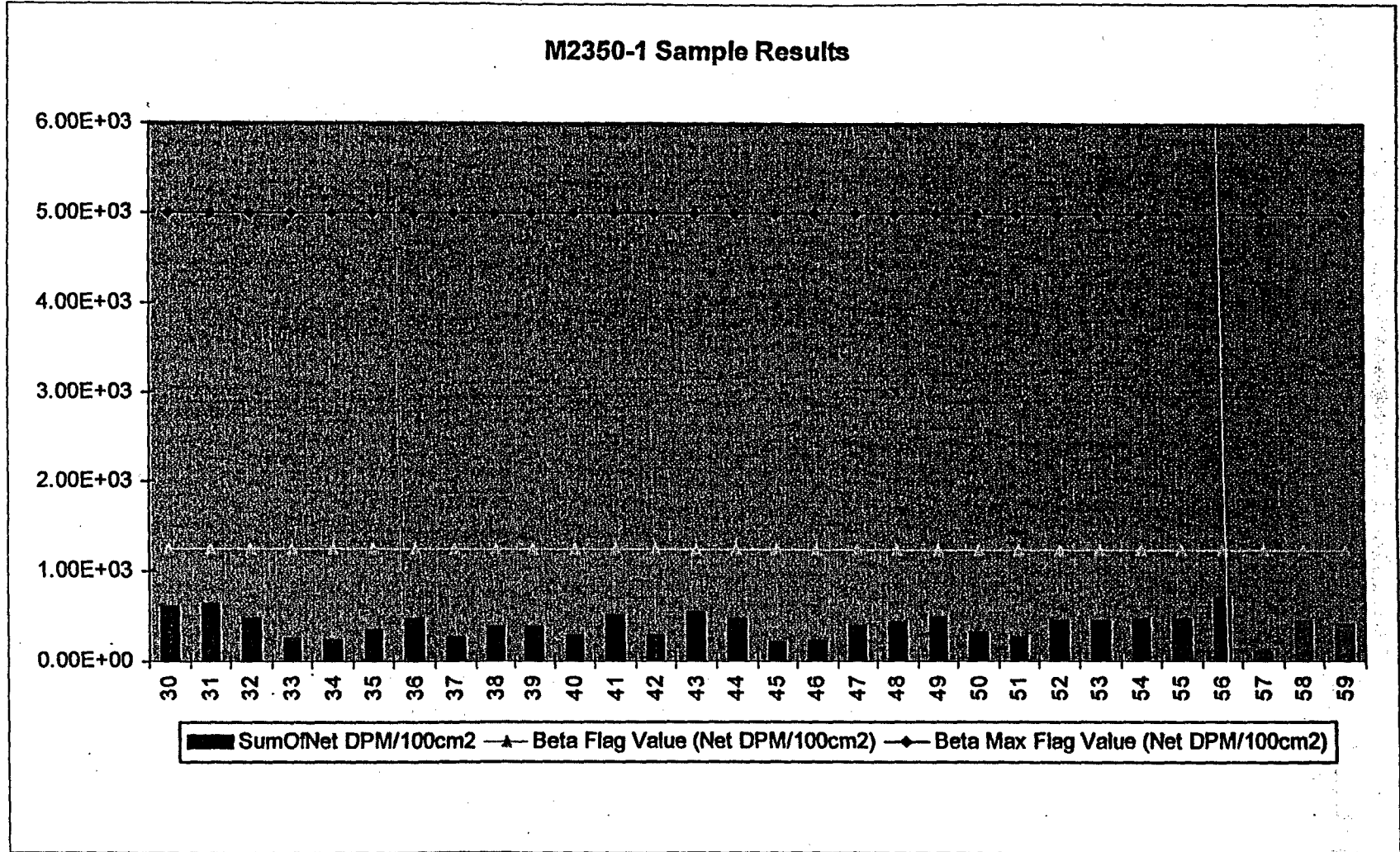
Download File Name: 00000005

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	30	203.0	30	FLDCT	B0001	ZZZZ	1	224	607
N0001	ZZZZ	31	224.0	30	FLDCT	B0001	ZZZZ	2	254	647
N0001	ZZZZ	32	170.0	30	FLDCT	B0001	ZZZZ	3	196	480
N0001	ZZZZ	33	166.0	30	FLDCT	B0001	ZZZZ	4	256	253
N0001	ZZZZ	34	173.0	30	FLDCT	B0001	ZZZZ	5	276	233
N0001	ZZZZ	35	188.0	30	FLDCT	B0001	ZZZZ	6	272	347
N0001	ZZZZ	36	182.0	30	FLDCT	B0001	ZZZZ	7	222	474
N0001	ZZZZ	37	177.0	30	FLDCT	B0001	ZZZZ	8	268	287
N0001	ZZZZ	38	189.0	30	FLDCT	B0001	ZZZZ	9	260	393
N0001	ZZZZ	39	180.0	30	FLDCT	B0001	ZZZZ	10	246	380
N0001	ZZZZ	40	166.0	30	FLDCT	B0001	ZZZZ	11	244	293
N0001	ZZZZ	41	214.0	30	FLDCT	B0001	ZZZZ	12	270	527
N0001	ZZZZ	42	193.0	30	FLDCT	B0001	ZZZZ	13	298	293
N0001	ZZZZ	43	211.0	30	FLDCT	B0001	ZZZZ	14	258	547
N0001	ZZZZ	44	183.0	30	FLDCT	B0001	ZZZZ	15	220	487
N0001	ZZZZ	45	181.0	30	FLDCT	B0001	ZZZZ	16	256	220
N0001	ZZZZ	46	169.0	30	FLDCT	B0001	ZZZZ	17	268	233
N0001	ZZZZ	47	182.0	30	FLDCT	B0001	ZZZZ	18	242	407
N0001	ZZZZ	48	183.0	30	FLDCT	B0001	ZZZZ	19	232	447
N0001	ZZZZ	49	178.0	30	FLDCT	B0001	ZZZZ	20	206	500
N0001	ZZZZ	50	162.0	30	FLDCT	B0001	ZZZZ	21	226	327
N0001	ZZZZ	51	179.0	30	FLDCT	B0001	ZZZZ	22	276	273
N0001	ZZZZ	52	193.0	30	FLDCT	B0001	ZZZZ	23	246	467
N0001	ZZZZ	53	182.0	30	FLDCT	B0001	ZZZZ	24	246	460
N0001	ZZZZ	54	186.0	30	FLDCT	B0001	ZZZZ	25	230	474
N0001	ZZZZ	55	186.0	30	FLDCT	B0001	ZZZZ	26	226	487
N0001	ZZZZ	56	210.0	30	FLDCT	B0001	ZZZZ	27	206	714
N0001	ZZZZ	57	157.0	30	FLDCT	B0001	ZZZZ	28	278	120
N0001	ZZZZ	58	165.0	30	FLDCT	B0001	ZZZZ	29	192	480
N0001	ZZZZ	59	180.0	30	FLDCT	B0001	ZZZZ	30	234	420

Beta Flag	1250	-	_____
Beta Max Flag	5000		

Download Name: 00000005

Survey Description: Poured Concrete Wall/Column HV/Compressor Rm. Bsm



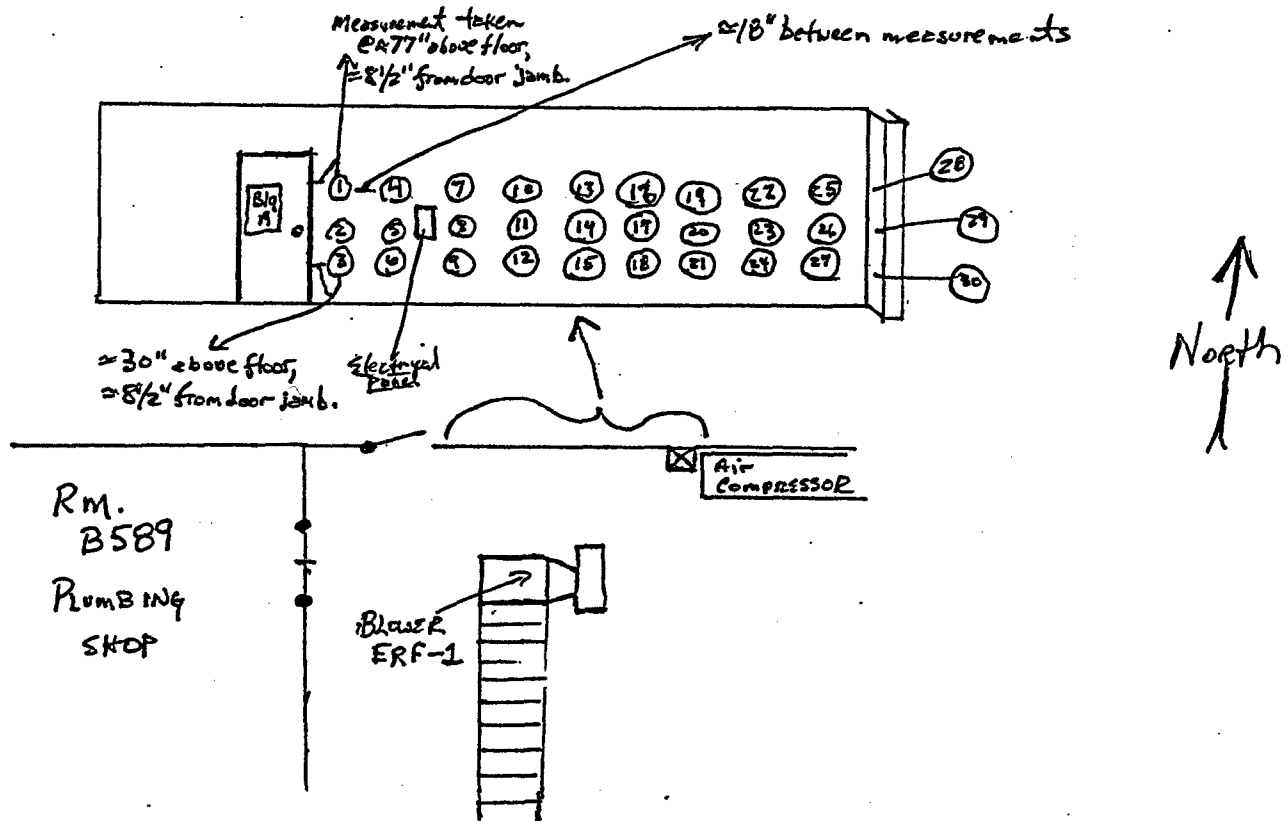
Page 3 of 3

Package # BKG - N0001
 Download # 05
 Material Id # B0001
 Location: Basement/Well

Date: 11-1-02 (P8)

Material Desc.: Poured Concrete / Painted

* Note: 1 shielded and 1 unshielded measurement taken at each location denoted by (#).
Not to scale.



Rm.
B589
Plumbing
Shop

Blower
ERF-1

Air
Compressor

North ↑

Material Code: B0001

Painted concrete



Section 3

Material Code B0002

Duratek Beta Survey Report

Download File Name: 0000013

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	13	203.0	30	FLDCT	B0002	ZZZZ	22	382	79
N0001	ZZZZ	14	255.0	30	FLDCT	B0002	ZZZZ	23	402	354
N0001	ZZZZ	15	269.0	30	FLDCT	B0002	ZZZZ	24	356	597
N0001	ZZZZ	16	305.0	30	FLDCT	B0002	ZZZZ	25	388	728
N0001	ZZZZ	17	295.0	30	FLDCT	B0002	ZZZZ	26	370	722
N0001	ZZZZ	18	320.0	30	FLDCT	B0002	ZZZZ	27	346	964
N0001	ZZZZ	19	294.0	30	FLDCT	B0002	ZZZZ	28	436	498
N0001	ZZZZ	20	266.0	30	FLDCT	B0002	ZZZZ	29	342	623
N0001	ZZZZ	21	224.0	30	FLDCT	B0002	ZZZZ	30	308	459

Beta Flag

1250 - _____

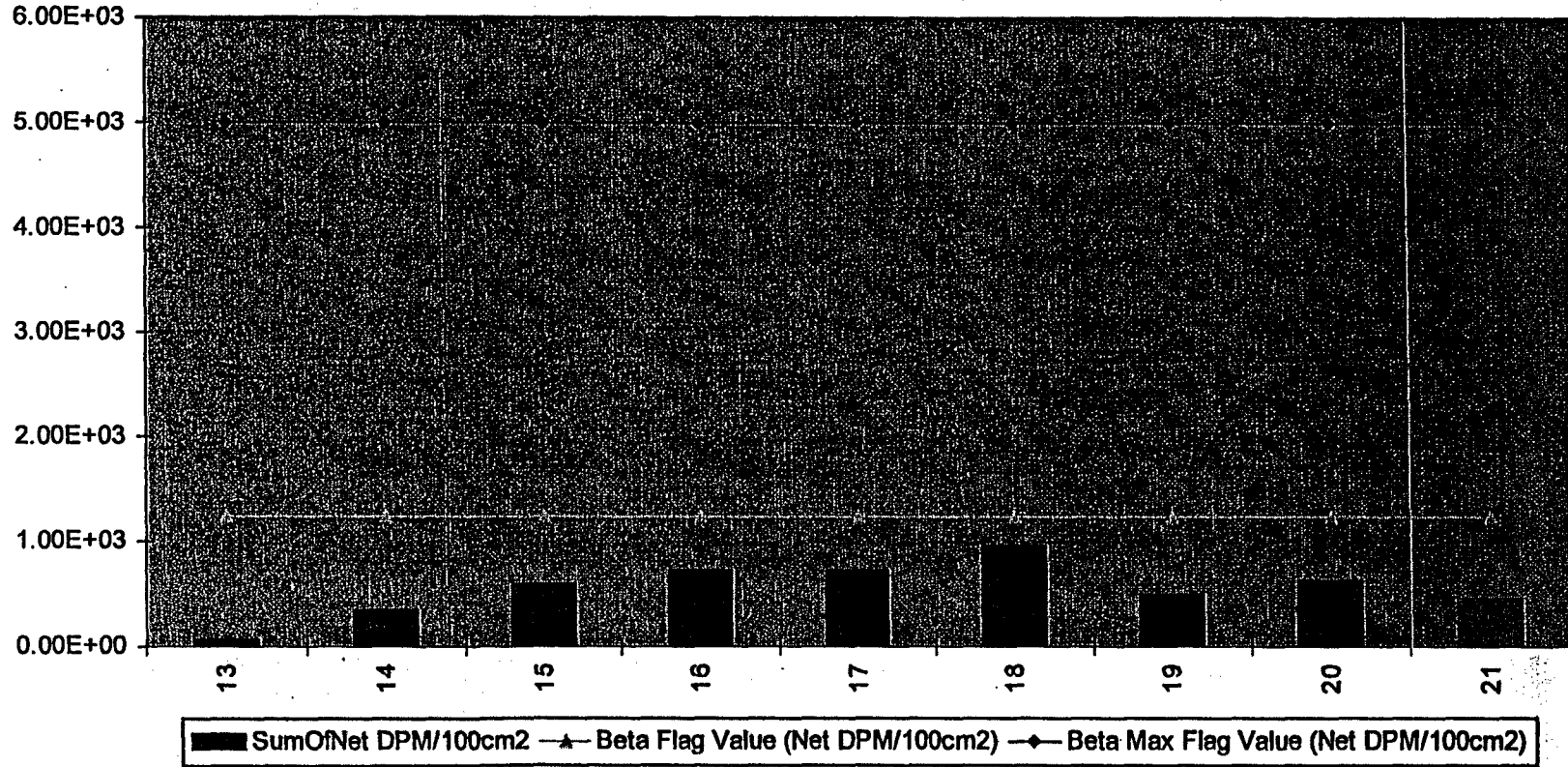
Beta Max Flag

5000 

Download Name: 00000013

Survey Description: Bkg.Pkg. N0001-Resurvey of Pts.22-30/ConcreteSidew

M2350-1 Sample Results

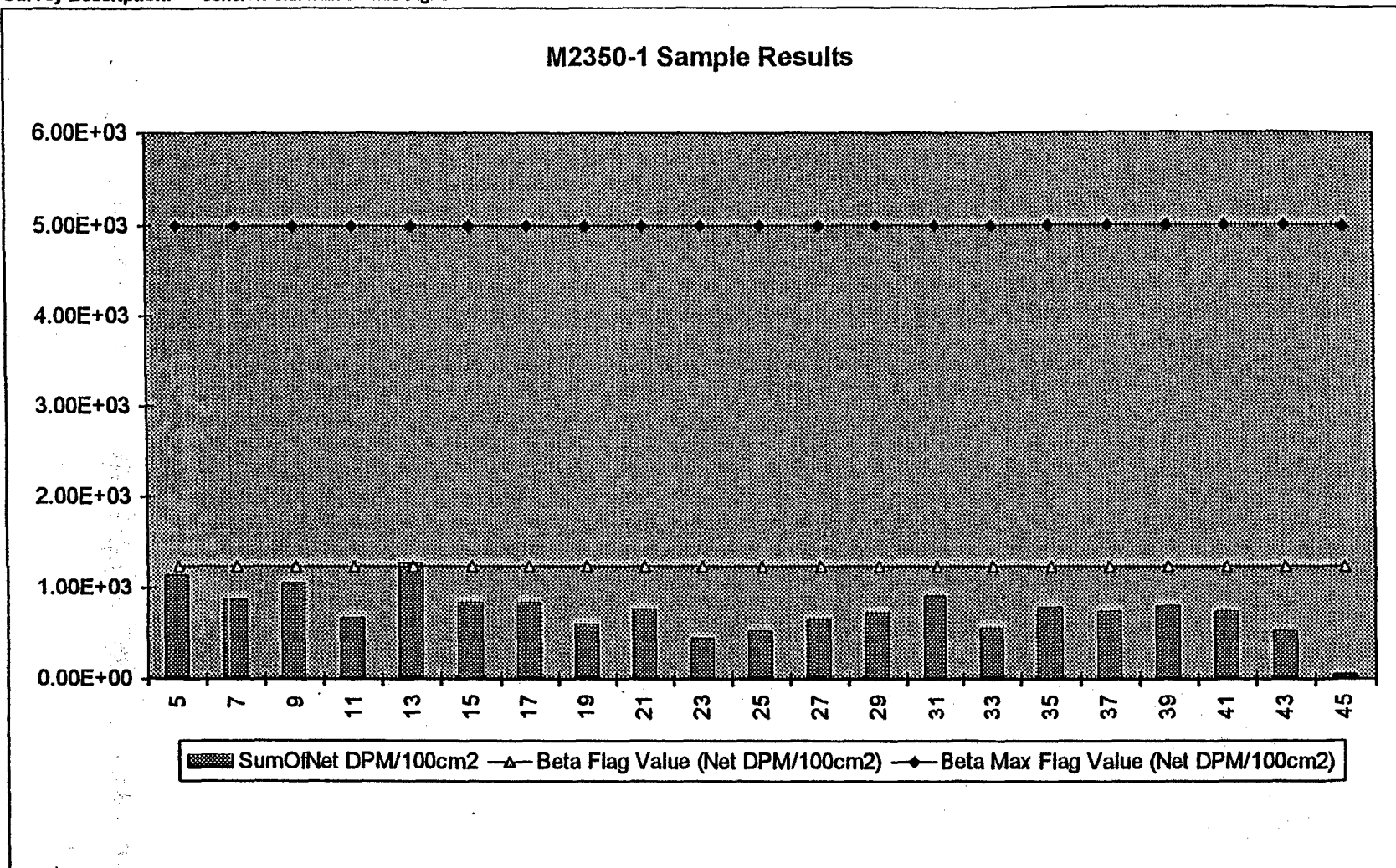


Page 3 of 3

Download Name: 00000003

Survey Description: Concrete sidewalk outside Bldg. 6

Page 2 of 3



Duratek Beta Survey Report

Download File Name: 00000003

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	5	325.0	30	FLDCT	B0002	ZZZZ	1	316	1,143
N0001	ZZZZ	7	318.0	30	FLDCT	B0002	ZZZZ	2	384	862
N0001	ZZZZ	9	316.0	30	FLDCT	B0002	ZZZZ	3	326	1,047
N0001	ZZZZ	11	250.0	30	FLDCT	B0002	ZZZZ	4	306	664
N0001	ZZZZ	13	327.0	30	FLDCT	B0002	ZZZZ	5	278	1,286
N0001	ZZZZ	15	266.0	30	FLDCT	B0002	ZZZZ	6	290	828
N0001	ZZZZ	17	233.0	30	FLDCT	B0002	ZZZZ	7	222	835
N0001	ZZZZ	19	220.0	30	FLDCT	B0002	ZZZZ	8	266	595
N0001	ZZZZ	21	226.0	30	FLDCT	B0002	ZZZZ	9	228	766
N0001	ZZZZ	23	205.0	30	FLDCT	B0002	ZZZZ	10	282	438
N0001	ZZZZ	25	189.0	30	FLDCT	B0002	ZZZZ	11	228	513
N0001	ZZZZ	27	222.0	30	FLDCT	B0002	ZZZZ	12	254	650
N0001	ZZZZ	29	239.0	30	FLDCT	B0002	ZZZZ	13	268	718
N0001	ZZZZ	31	248.0	30	FLDCT	B0002	ZZZZ	14	232	903
N0001	ZZZZ	33	220.0	30	FLDCT	B0002	ZZZZ	15	276	561
N0001	ZZZZ	35	225.0	30	FLDCT	B0002	ZZZZ	16	224	773
N0001	ZZZZ	37	244.0	30	FLDCT	B0002	ZZZZ	17	270	746
N0001	ZZZZ	39	238.0	30	FLDCT	B0002	ZZZZ	18	242	800
N0001	ZZZZ	41	224.0	30	FLDCT	B0002	ZZZZ	19	232	739
N0001	ZZZZ	43	190.0	30	FLDCT	B0002	ZZZZ	20	226	527
N0001	ZZZZ	45	116.0	30	FLDCT	B0002	ZZZZ	21	214	62

Beta Flag	1250	-	_____
Beta Max Flag	5000		

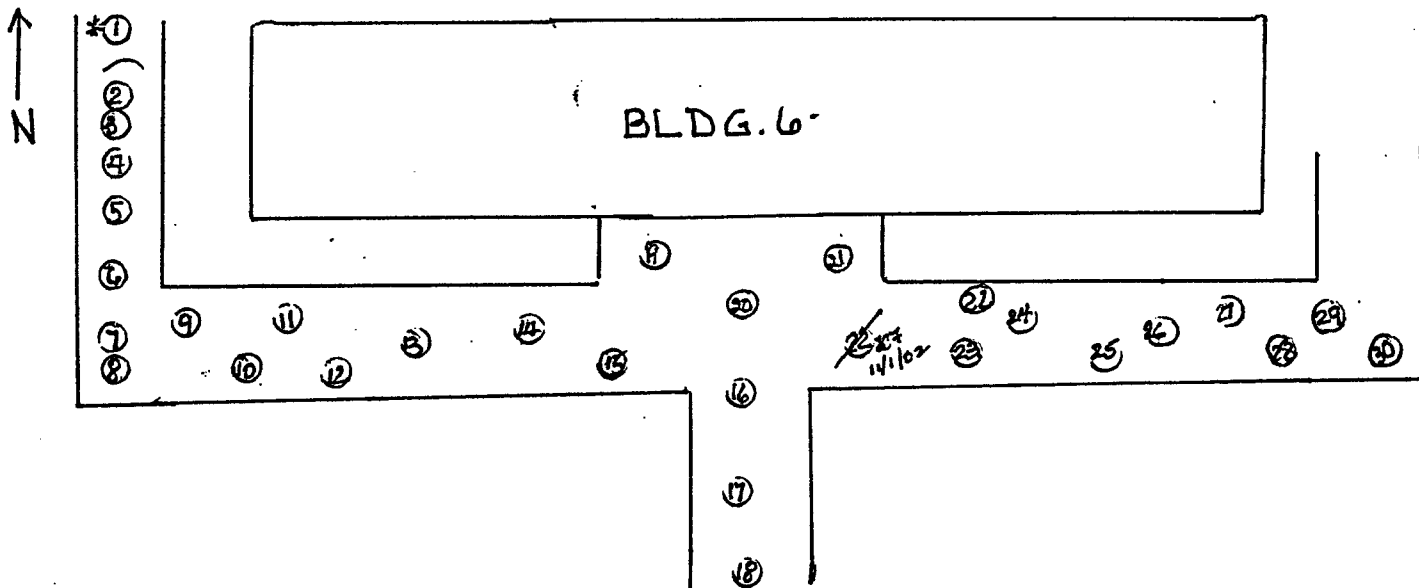
Material Code: B0002



Material Code: B0002



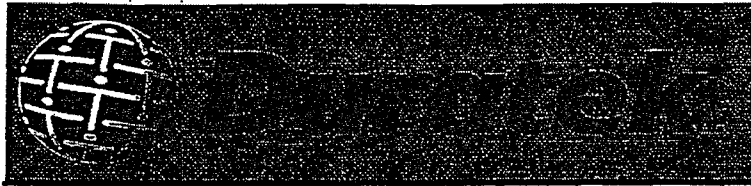
LOCATION _____
OUTSIDE of Bldg. 6
N0001
(CONCRETE SIDEWALKS) material Code B0002



*Note: Shielded and unshielded reading TAKEN in same LOCATIONS as per ①

Section 4

Material Code B0005



M2350-1 Download BETA Report

File Name : 00000055		Survey Description : N0001 Parking Lot Asphalt	
Survey Reason : Characterization			
User ID : JLM9424		Technician Name : Jack Mucia	
Instrument Model : 2350-1	Instrument S/N : 95340	Instrument Cal. Due : 1/22/03	
Detector Model : 43-68B	Detector S/N : 133988	Detector Cal. Due : 4/9/03	
Measurement Type : BETA	Detector Type : 02200 : 126 cm2 Gas Proportional Detector		
Detector Area : 126	Efficiency : 0.229	Survey Date : 12/7/02	

Paul Jones
Jack Mucia-A
 Print Name

[Signature]
 Signature

12/8/02
 Date

 Print Name

 Signature

 Date

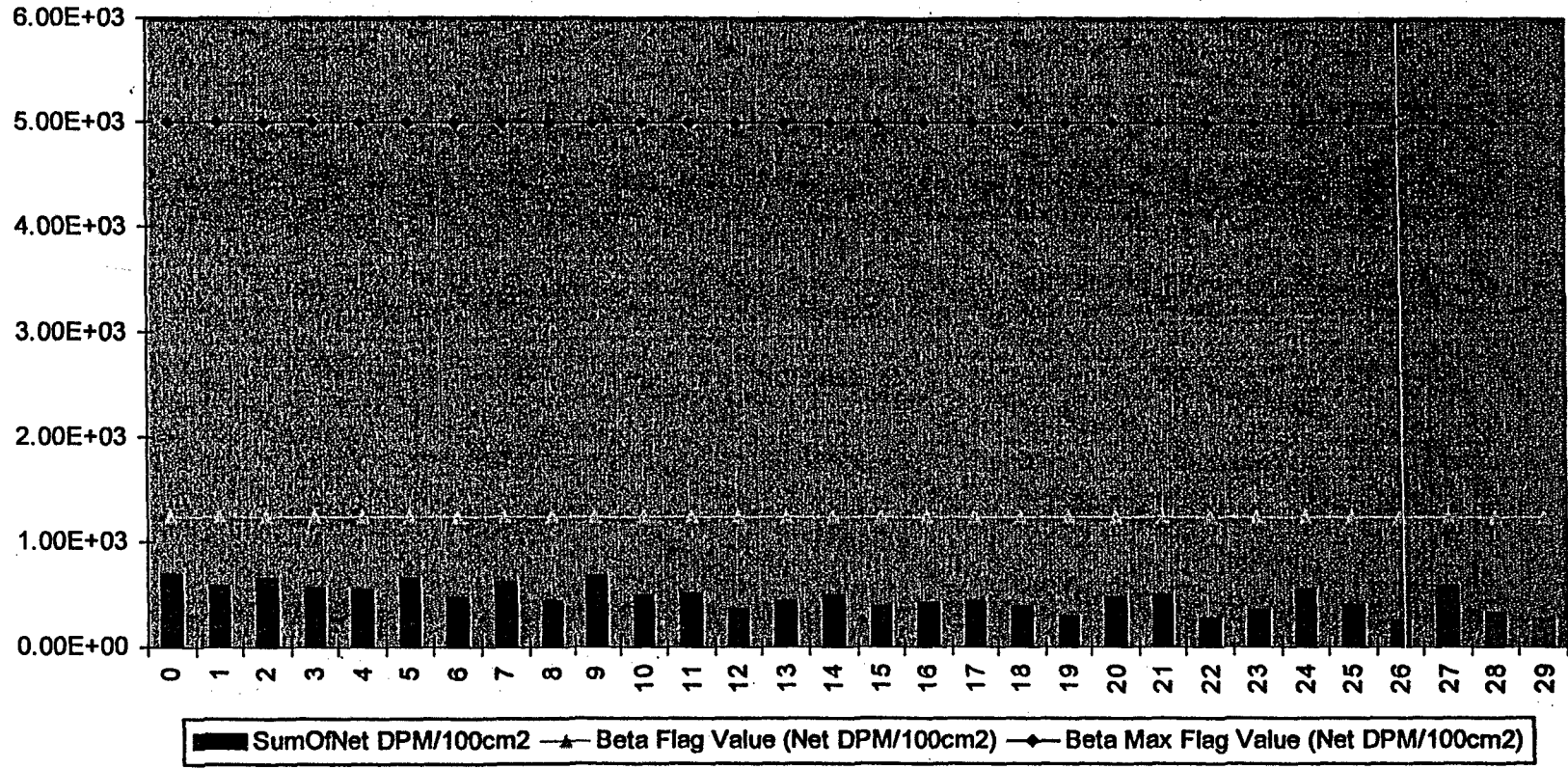
Comments:

Sign-Off Linda C. Finkel RC. Lamm 12-08-02
 Print Name Signature Date

Download Name: 0000055

Survey Description: N0001 Parking Lot Asphalt

M2350-1 Sample Results



2 of 3

Duratek Beta Survey Report

Download File Name: 00000055

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	B0005	0	523.0	60	FLDCT	B0005	ZZZZ	1	319	707
N0001	B0005	1	490.0	60	FLDCT	B0005	ZZZZ	2	319	593
N0001	B0005	2	514.0	60	FLDCT	B0005	ZZZZ	3	319	676
N0001	B0005	3	485.0	60	FLDCT	B0005	ZZZZ	4	319	575
N0001	B0005	4	480.0	60	FLDCT	B0005	ZZZZ	5	319	558
N0001	B0005	5	514.0	60	FLDCT	B0005	ZZZZ	6	319	676
N0001	B0005	6	457.0	60	FLDCT	B0005	ZZZZ	7	319	478
N0001	B0005	7	499.0	60	FLDCT	B0005	ZZZZ	8	319	624
N0001	B0005	8	445.0	60	FLDCT	B0005	ZZZZ	9	319	437
N0001	B0005	9	518.0	60	FLDCT	B0005	ZZZZ	10	319	690
N0001	B0005	10	462.0	60	FLDCT	B0005	ZZZZ	11	319	496
N0001	B0005	11	469.0	60	FLDCT	B0005	ZZZZ	12	319	520
N0001	B0005	12	428.0	60	FLDCT	B0005	ZZZZ	13	319	378
N0001	B0005	13	447.0	60	FLDCT	B0005	ZZZZ	14	319	444
N0001	B0005	14	464.0	60	FLDCT	B0005	ZZZZ	15	319	503
N0001	B0005	15	430.0	60	FLDCT	B0005	ZZZZ	16	319	385
N0001	B0005	16	441.0	60	FLDCT	B0005	ZZZZ	17	319	423
N0001	B0005	17	449.0	60	FLDCT	B0005	ZZZZ	18	319	451
N0001	B0005	18	432.0	60	FLDCT	B0005	ZZZZ	19	319	392
N0001	B0005	19	404.0	60	FLDCT	B0005	ZZZZ	20	319	295
N0001	B0005	20	456.0	60	FLDCT	B0005	ZZZZ	21	319	475
N0001	B0005	21	463.0	60	FLDCT	B0005	ZZZZ	22	319	499
N0001	B0005	22	401.0	60	FLDCT	B0005	ZZZZ	23	319	284
N0001	B0005	23	418.0	60	FLDCT	B0005	ZZZZ	24	319	343
N0001	B0005	24	480.0	60	FLDCT	B0005	ZZZZ	25	319	558
N0001	B0005	25	436.0	60	FLDCT	B0005	ZZZZ	26	319	405
N0001	B0005	26	394.0	60	FLDCT	B0005	ZZZZ	27	319	260
N0001	B0005	27	488.0	60	FLDCT	B0005	ZZZZ	28	319	586
N0001	B0005	28	414.0	60	FLDCT	B0005	ZZZZ	29	319	329
N0001	B0005	29	399.0	60	FLDCT	B0005	ZZZZ	30	319	277

Beta Flag	1250 - _____
Beta Max Flag	5000 

Material Code: B0005



Package # N0001

Material: Asphalt

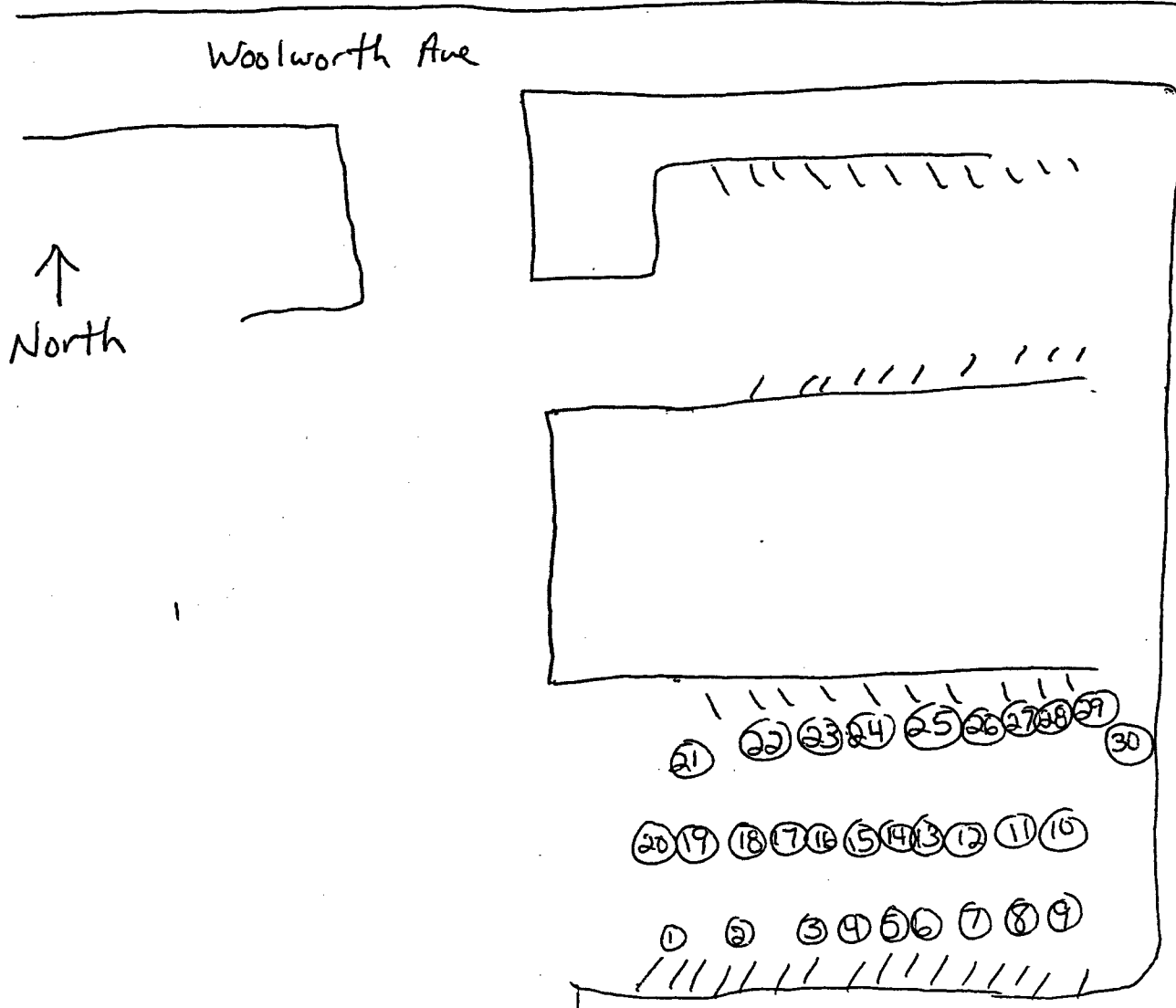
Download # 55

Material ID# B0005

P. Jones

Location North Parking Lot #2

Note: 3 background measurements taken during
survey; 1)
 2)
 3)



Section 5

Material Code B0006

Duratek Beta Survey Report

Download File Name: 00000004

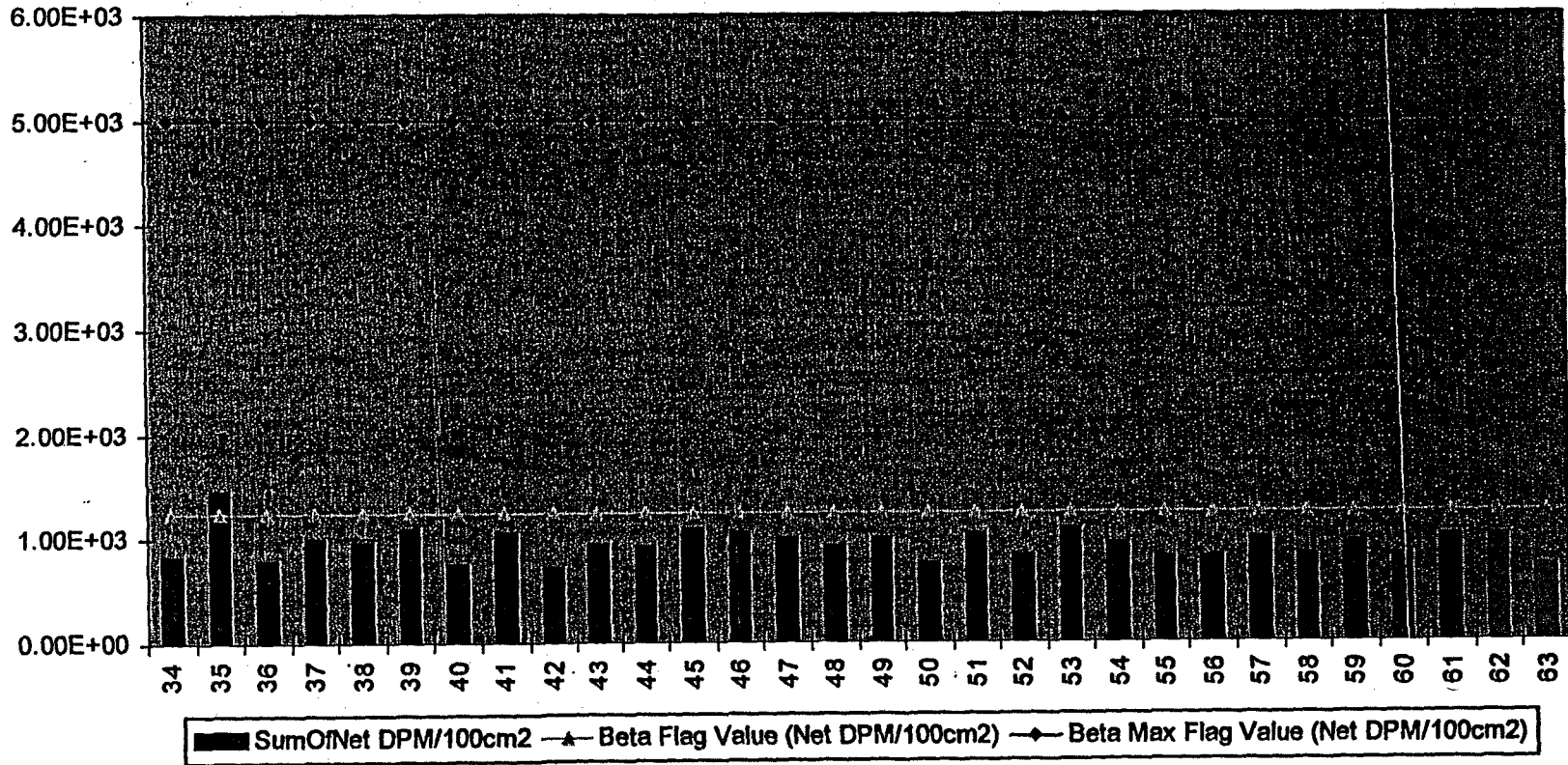
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	34	286.0	30	FLDCT	B0006	ZZZZ	1	320	840
N0001	ZZZZ	35	372.0	30	FLDCT	B0006	ZZZZ	2	308	1,454
N0001	ZZZZ	36	278.0	30	FLDCT	B0006	ZZZZ	3	318	794
N0001	ZZZZ	37	310.0	30	FLDCT	B0006	ZZZZ	4	322	994
N0001	ZZZZ	38	284.0	30	FLDCT	B0006	ZZZZ	5	278	957
N0001	ZZZZ	39	303.0	30	FLDCT	B0006	ZZZZ	6	278	1,094
N0001	ZZZZ	40	263.0	30	FLDCT	B0006	ZZZZ	7	298	760
N0001	ZZZZ	41	289.0	30	FLDCT	B0006	ZZZZ	8	262	1,054
N0001	ZZZZ	42	279.0	30	FLDCT	B0006	ZZZZ	9	342	720
N0001	ZZZZ	43	272.0	30	FLDCT	B0006	ZZZZ	10	262	940
N0001	ZZZZ	44	265.0	30	FLDCT	B0006	ZZZZ	11	292	834
N0001	ZZZZ	45	342.0	30	FLDCT	B0006	ZZZZ	12	356	1,094
N0001	ZZZZ	46	299.0	30	FLDCT	B0006	ZZZZ	13	282	1,054
N0001	ZZZZ	47	285.0	30	FLDCT	B0006	ZZZZ	14	272	994
N0001	ZZZZ	48	290.0	30	FLDCT	B0006	ZZZZ	15	304	920
N0001	ZZZZ	49	297.0	30	FLDCT	B0006	ZZZZ	16	296	994
N0001	ZZZZ	50	276.0	30	FLDCT	B0006	ZZZZ	17	322	767
N0001	ZZZZ	51	317.0	30	FLDCT	B0006	ZZZZ	18	324	1,034
N0001	ZZZZ	52	298.0	30	FLDCT	B0006	ZZZZ	19	346	834
N0001	ZZZZ	53	303.0	30	FLDCT	B0006	ZZZZ	20	280	1,067
N0001	ZZZZ	54	274.0	30	FLDCT	B0006	ZZZZ	21	266	940
N0001	ZZZZ	55	264.0	30	FLDCT	B0006	ZZZZ	22	284	814
N0001	ZZZZ	56	271.0	30	FLDCT	B0006	ZZZZ	23	298	814
N0001	ZZZZ	57	285.0	30	FLDCT	B0006	ZZZZ	24	272	994
N0001	ZZZZ	58	302.0	30	FLDCT	B0006	ZZZZ	25	356	827
N0001	ZZZZ	59	316.0	30	FLDCT	B0006	ZZZZ	26	344	960
N0001	ZZZZ	60	282.0	30	FLDCT	B0006	ZZZZ	27	312	840
N0001	ZZZZ	61	300.0	30	FLDCT	B0006	ZZZZ	28	296	1,014
N0001	ZZZZ	62	287.0	30	FLDCT	B0006	ZZZZ	29	270	1,014
N0001	ZZZZ	63	278.0	30	FLDCT	B0006	ZZZZ	30	342	714

Beta Flag	1250 - _____
Beta Max Flag	5000 

Download Name: 00000004

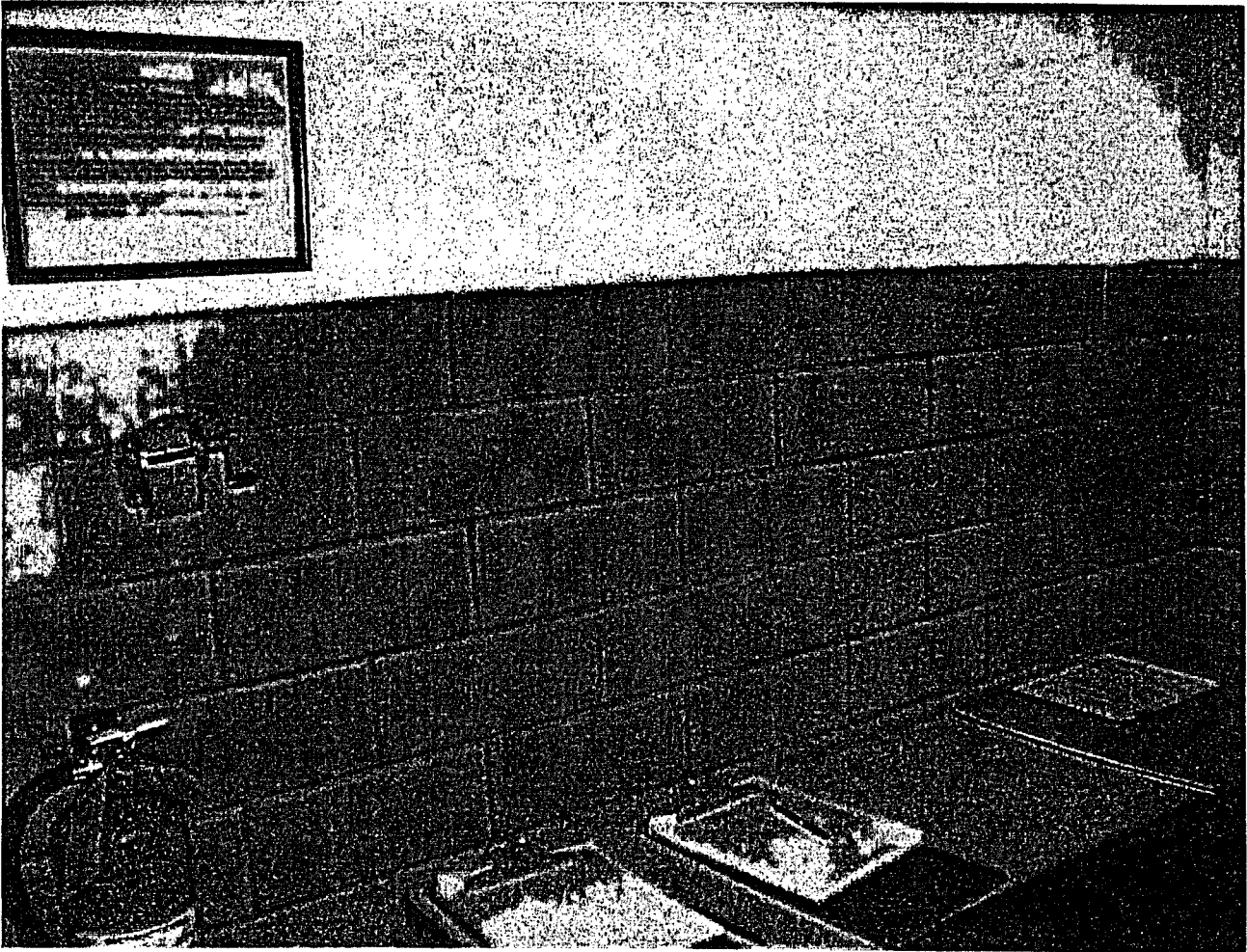
Survey Description: Tile Walls /S Rm B009

M2350-1 Sample Results



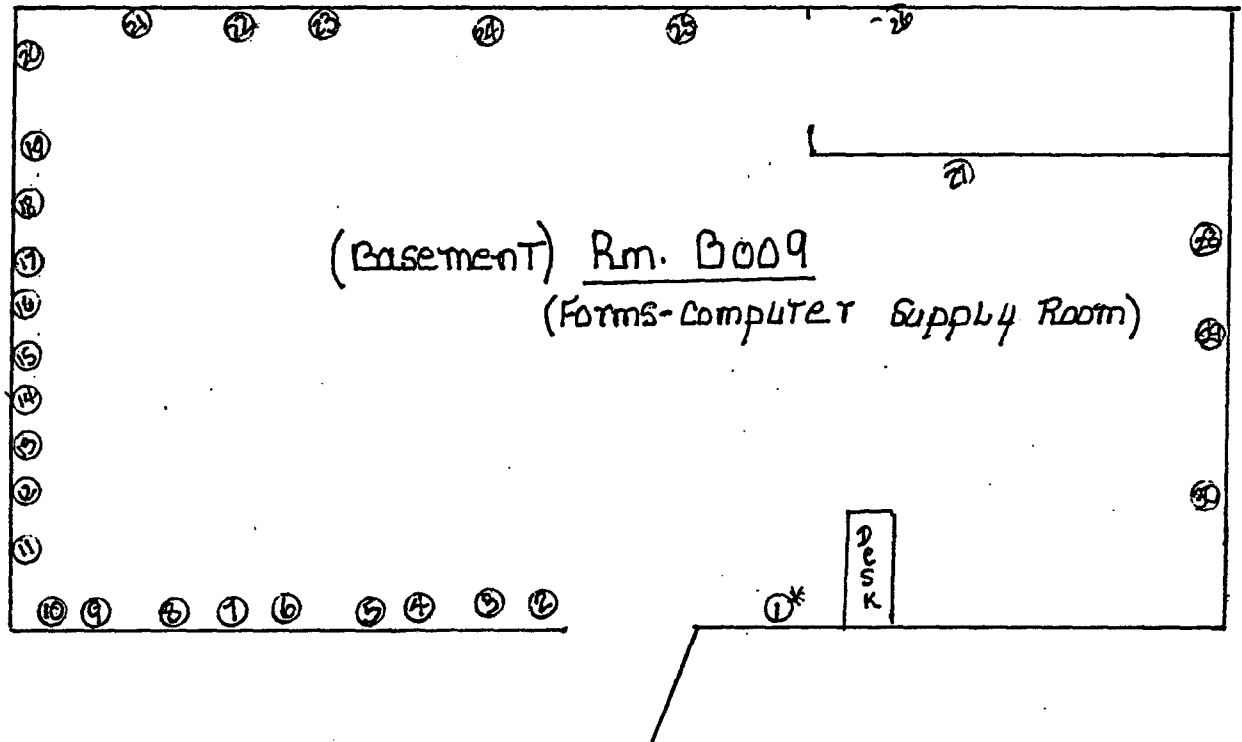
Page 3 of 3

Material Code: B0006



LOCATION _____
NO001.

(GLAZED TILE) material Code B0006
(ON WALLS)



* Note: Shielded and unshielded reading taken in
Same locations as per ②

Section 6

Material Code B0008

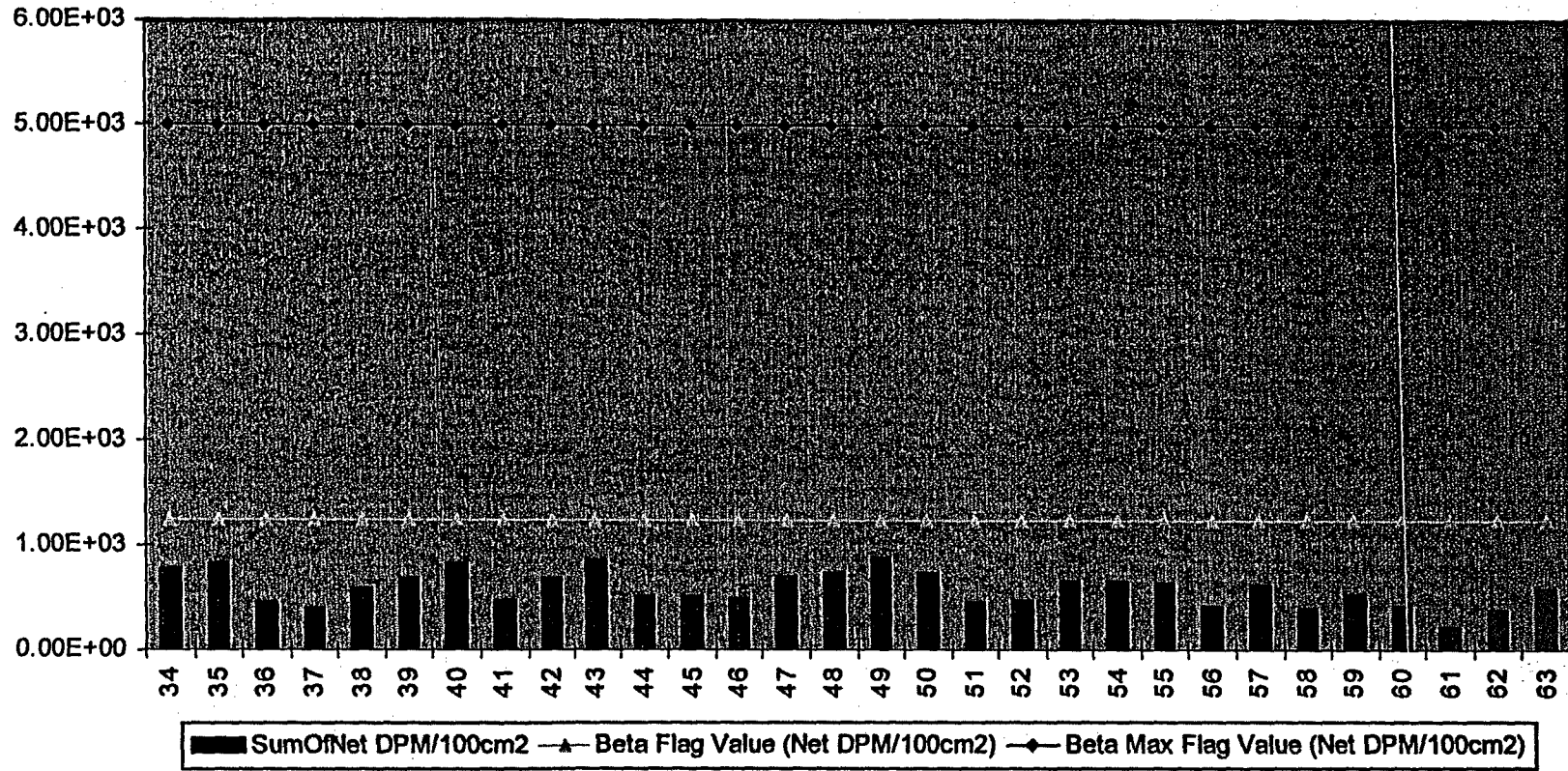
Duratek Beta Survey Report

Download File Name: 00000007

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	34	257.0	30	FLDCT	B0006	ZZZZ	1	286	787
N0001	ZZZZ	35	288.0	30	FLDCT	B0008	ZZZZ	2	336	828
N0001	ZZZZ	36	206.0	30	FLDCT	B0008	ZZZZ	3	280	455
N0001	ZZZZ	37	202.0	30	FLDCT	B0008	ZZZZ	4	284	414
N0001	ZZZZ	38	230.0	30	FLDCT	B0008	ZZZZ	5	288	594
N0001	ZZZZ	39	225.0	30	FLDCT	B0008	ZZZZ	6	250	690
N0001	ZZZZ	40	241.0	30	FLDCT	B0008	ZZZZ	7	242	828
N0001	ZZZZ	41	229.0	30	FLDCT	B0008	ZZZZ	8	318	483
N0001	ZZZZ	42	259.0	30	FLDCT	B0008	ZZZZ	9	320	683
N0001	ZZZZ	43	259.0	30	FLDCT	B0008	ZZZZ	10	268	863
N0001	ZZZZ	44	227.0	30	FLDCT	B0008	ZZZZ	11	304	518
N0001	ZZZZ	45	248.0	30	FLDCT	B0008	ZZZZ	12	346	518
N0001	ZZZZ	46	214.0	30	FLDCT	B0008	ZZZZ	13	282	504
N0001	ZZZZ	47	236.0	30	FLDCT	B0008	ZZZZ	14	266	711
N0001	ZZZZ	48	254.0	30	FLDCT	B0008	ZZZZ	15	292	745
N0001	ZZZZ	49	288.0	30	FLDCT	B0008	ZZZZ	16	320	883
N0001	ZZZZ	50	246.0	30	FLDCT	B0008	ZZZZ	17	276	745
N0001	ZZZZ	51	223.0	30	FLDCT	B0008	ZZZZ	18	312	462
N0001	ZZZZ	52	215.0	30	FLDCT	B0008	ZZZZ	19	290	483
N0001	ZZZZ	53	237.0	30	FLDCT	B0008	ZZZZ	20	282	663
N0001	ZZZZ	54	244.0	30	FLDCT	B0008	ZZZZ	21	294	669
N0001	ZZZZ	55	242.0	30	FLDCT	B0008	ZZZZ	22	296	649
N0001	ZZZZ	56	210.0	30	FLDCT	B0008	ZZZZ	23	298	421
N0001	ZZZZ	57	224.0	30	FLDCT	B0008	ZZZZ	24	266	628
N0001	ZZZZ	58	222.0	30	FLDCT	B0008	ZZZZ	25	328	400
N0001	ZZZZ	59	215.0	30	FLDCT	B0008	ZZZZ	26	274	538
N0001	ZZZZ	60	235.0	30	FLDCT	B0008	ZZZZ	27	344	435
N0001	ZZZZ	61	204.0	30	FLDCT	B0008	ZZZZ	28	342	228
N0001	ZZZZ	62	210.0	30	FLDCT	B0008	ZZZZ	29	308	386
N0001	ZZZZ	63	228.0	30	FLDCT	B0008	ZZZZ	30	286	687

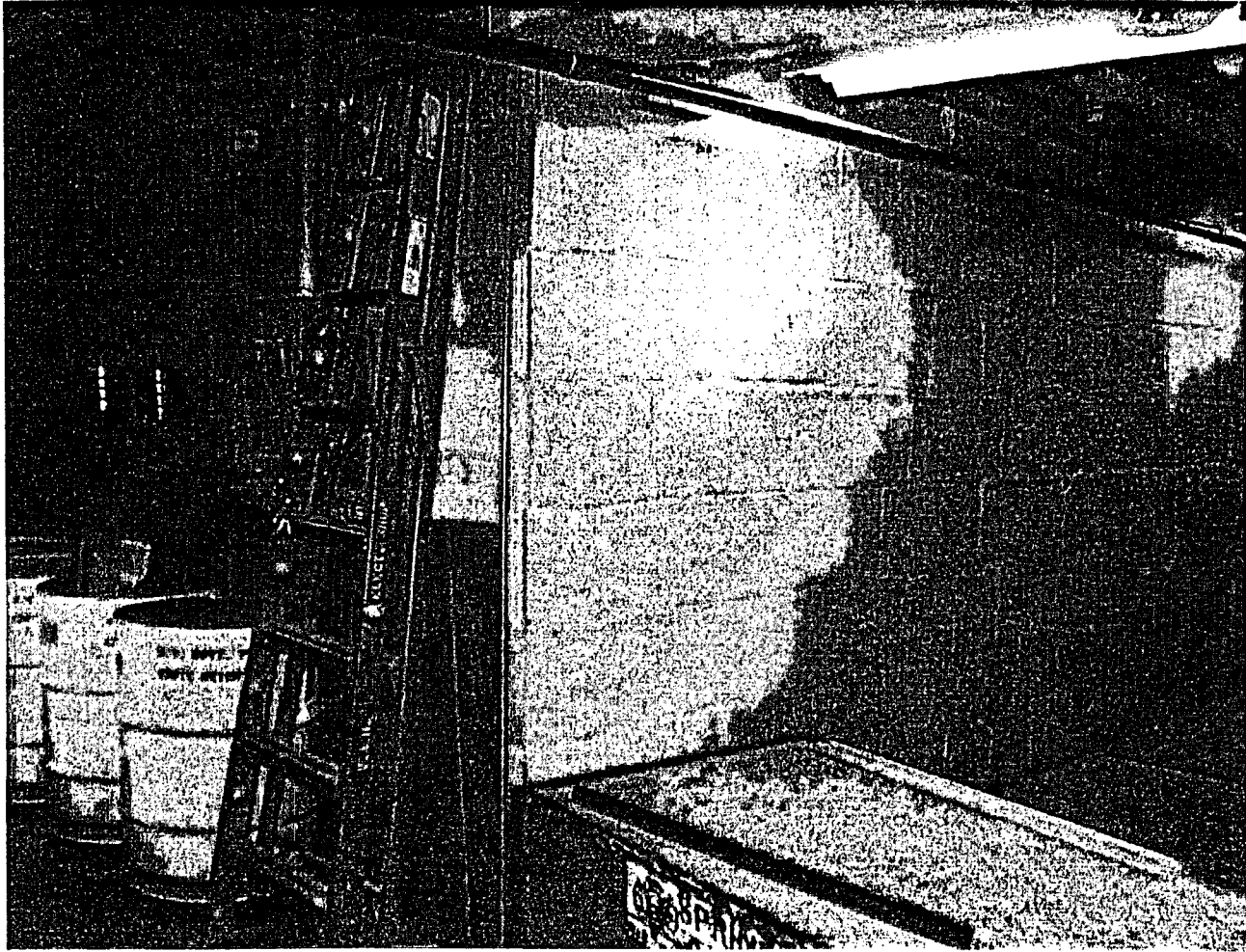
Beta Flag	1250 - _____
Beta Max Flag	5000 

M2350-1 Sample Results



Page 3 of 3

Material Code: B0008
(1'x1' Painted Brick)

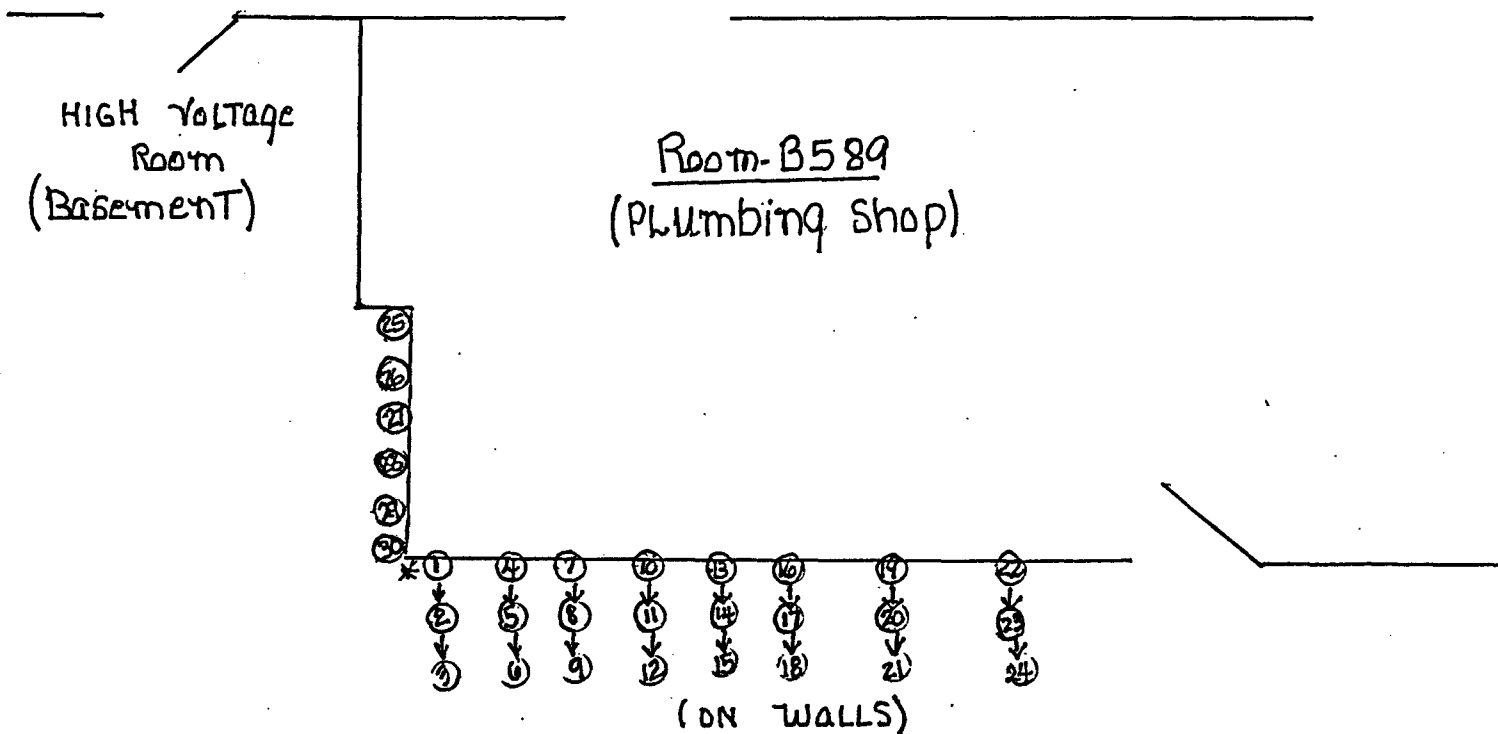


LOCATION Basement

P42

N0001

(11" x 11" Painted Brick walls) material code B0008



* Note: Shielded and unshielded reading taken in same location as per (#)

Section 7

Material Code B0009

Duratek Beta Survey Report

Download File Name: 00000009

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	44	307.0	30	FLDCT	B0009	ZZZZ	11	360	908
N0001	ZZZZ	45	277.0	30	FLDCT	B0009	ZZZZ	12	370	658
N0001	ZZZZ	46	287.0	30	FLDCT	B0009	ZZZZ	13	344	822
N0001	ZZZZ	47	273.0	30	FLDCT	B0009	ZZZZ	14	398	529
N0001	ZZZZ	48	289.0	30	FLDCT	B0009	ZZZZ	15	412	593
N0001	ZZZZ	49	251.0	30	FLDCT	B0009	ZZZZ	16	360	508
N0001	ZZZZ	50	266.0	30	FLDCT	B0009	ZZZZ	17	366	593
N0001	ZZZZ	51	249.0	30	FLDCT	B0009	ZZZZ	18	342	558
N0001	ZZZZ	52	236.0	30	FLDCT	B0009	ZZZZ	19	314	565
N0001	ZZZZ	53	196.0	30	FLDCT	B0009	ZZZZ	20	334	207
N0001	ZZZZ	54	266.0	30	FLDCT	B0009	ZZZZ	21	380	543
N0001	ZZZZ	55	274.0	30	FLDCT	B0009	ZZZZ	22	390	565
N0001	ZZZZ	56	296.0	30	FLDCT	B0009	ZZZZ	23	454	493
N0001	ZZZZ	57	286.0	30	FLDCT	B0009	ZZZZ	24	400	615
N0001	ZZZZ	58	260.0	30	FLDCT	B0009	ZZZZ	25	394	450
N0001	ZZZZ	59	259.0	30	FLDCT	B0009	ZZZZ	26	376	508
N0001	ZZZZ	60	276.0	30	FLDCT	B0009	ZZZZ	27	370	651
N0001	ZZZZ	61	260.0	30	FLDCT	B0009	ZZZZ	28	308	758
N0001	ZZZZ	62	238.0	30	FLDCT	B0009	ZZZZ	29	310	593
N0001	ZZZZ	63	263.0	30	FLDCT	B0009	ZZZZ	30	406	429

Beta Flag

1250 - _____

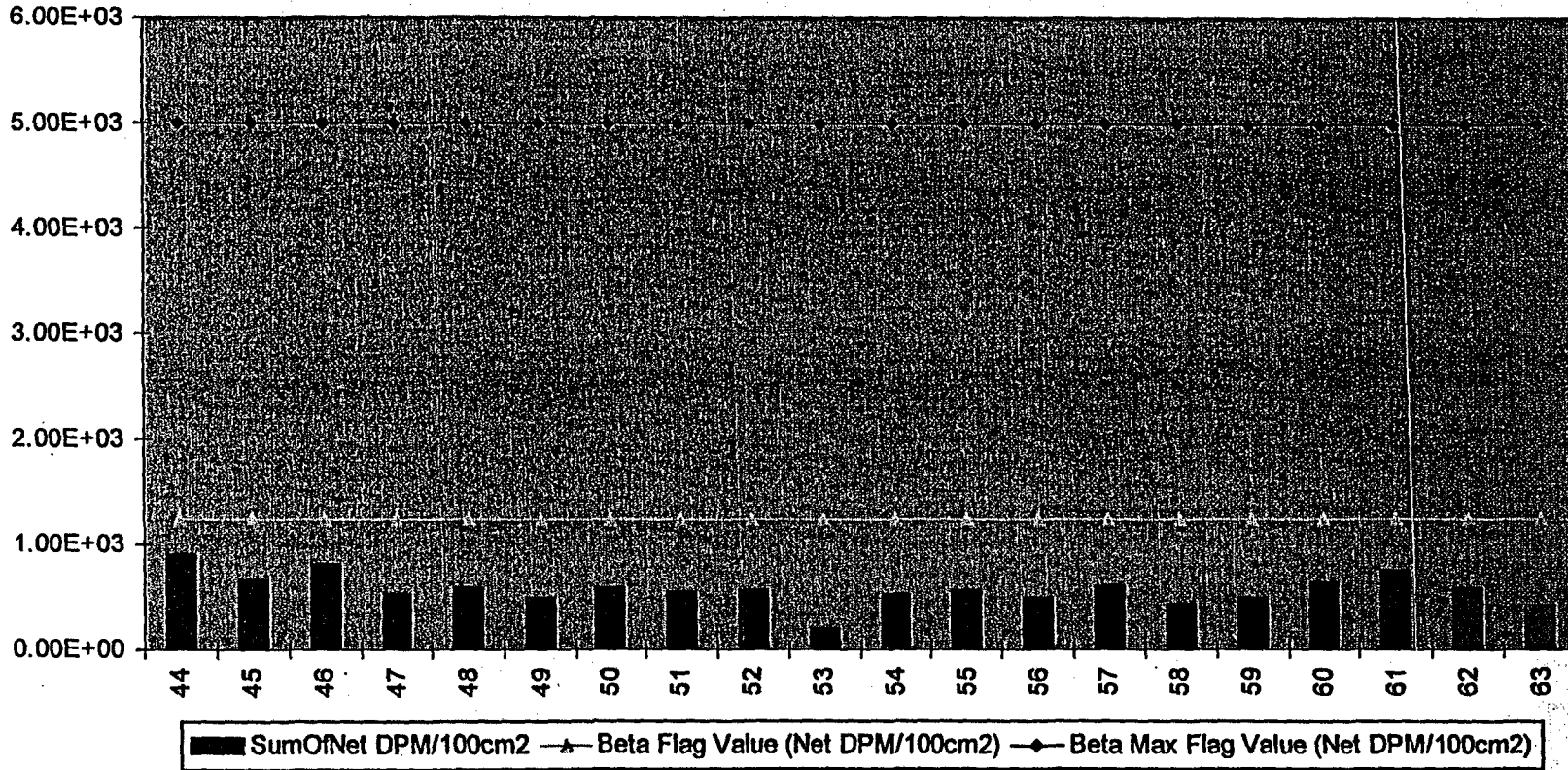
Beta Max Flag

5000 

Download Name: 00000009

Survey Description: BKG.PKG.#N0001-Painted Brick in Rm.B003/SafetyEng.

M2350-1 Sample Results



Page 3 of 3

Duratek Beta Survey Report

Download File Name: 00000010

Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	14	271.0	30	FLDCT	B0009	ZZZZ	1	350	674
N0001	ZZZZ	15	268.0	30	FLDCT	B0009	ZZZZ	2	334	709
N0001	ZZZZ	16	302.0	30	FLDCT	B0009	ZZZZ	3	338	934
N0001	ZZZZ	17	300.0	30	FLDCT	B0009	ZZZZ	4	366	822
N0001	ZZZZ	18	270.0	30	FLDCT	B0009	ZZZZ	5	338	709
N0001	ZZZZ	19	281.0	30	FLDCT	B0009	ZZZZ	6	330	815
N0001	ZZZZ	20	247.0	30	FLDCT	B0009	ZZZZ	7	390	365
N0001	ZZZZ	21	252.0	30	FLDCT	B0009	ZZZZ	8	414	316
N0001	ZZZZ	22	252.0	30	FLDCT	B0009	ZZZZ	9	384	421
N0001	ZZZZ	23	264.0	30	FLDCT	B0009	ZZZZ	10	362	583

Beta Flag

1250 - _____

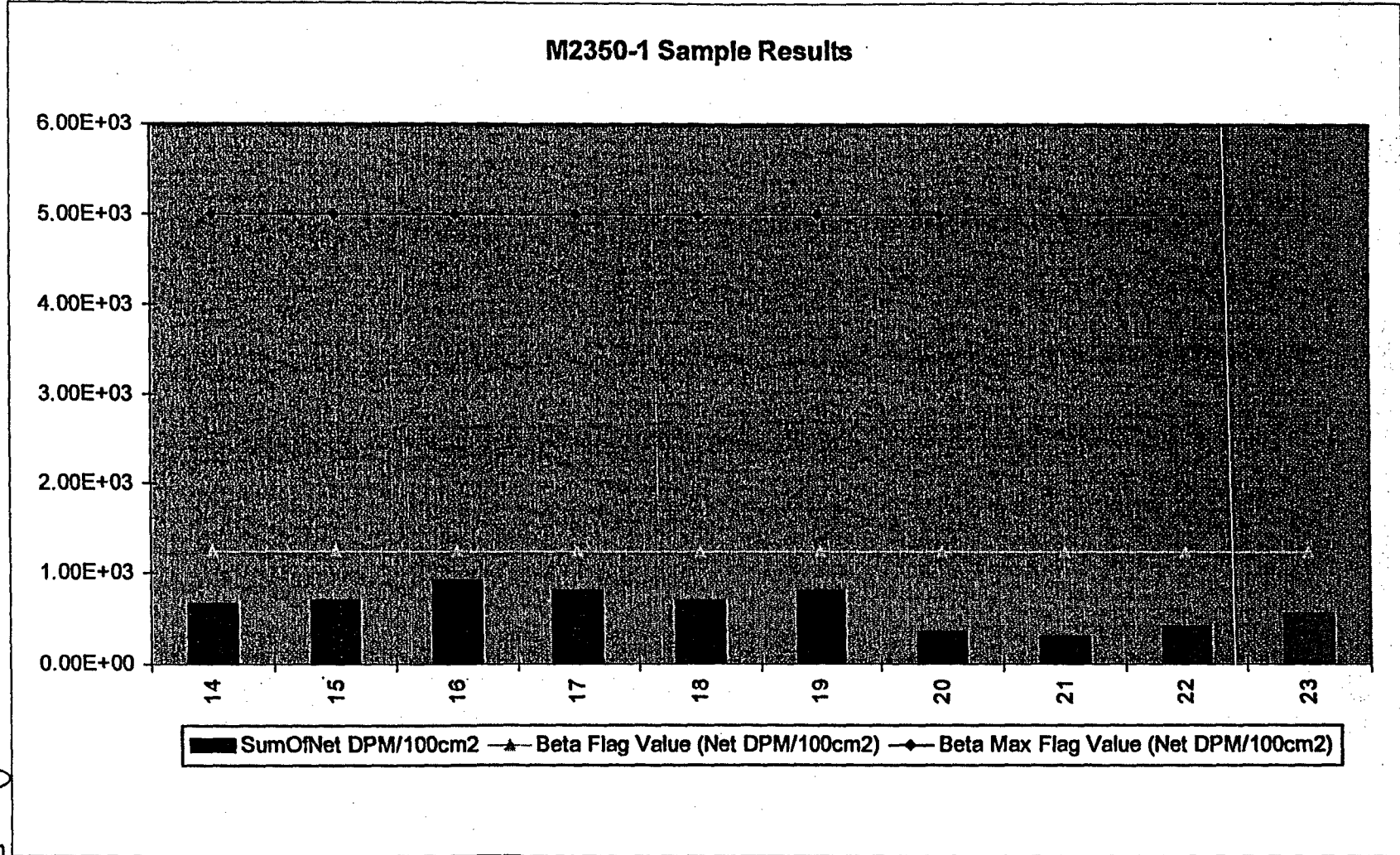
Beta Max Flag

5000 

Download Name: 00000010

Survey Description: Bkg.N0001-Resurvey on Pts.#1-10(brick)@Rm.B003

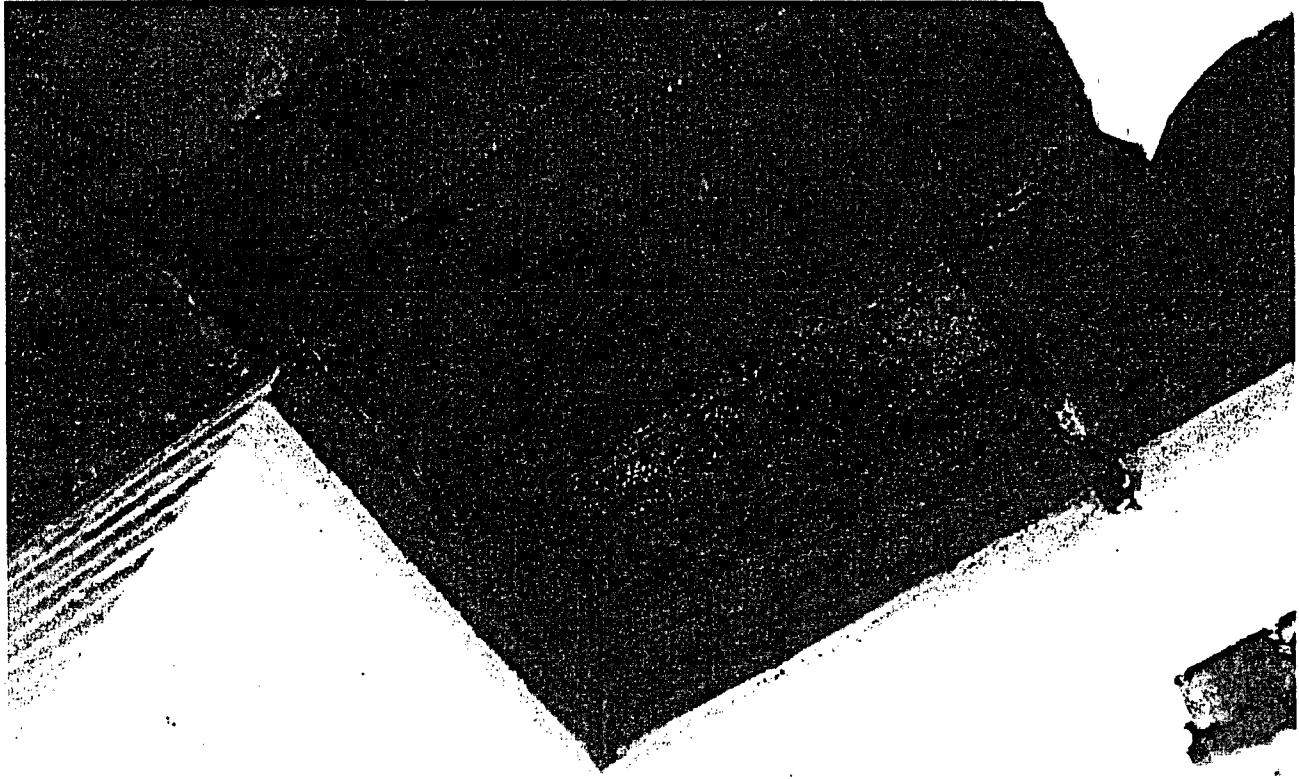
M2350-1 Sample Results



Page 3 of 3

Material Codes: B0009
and
B0010

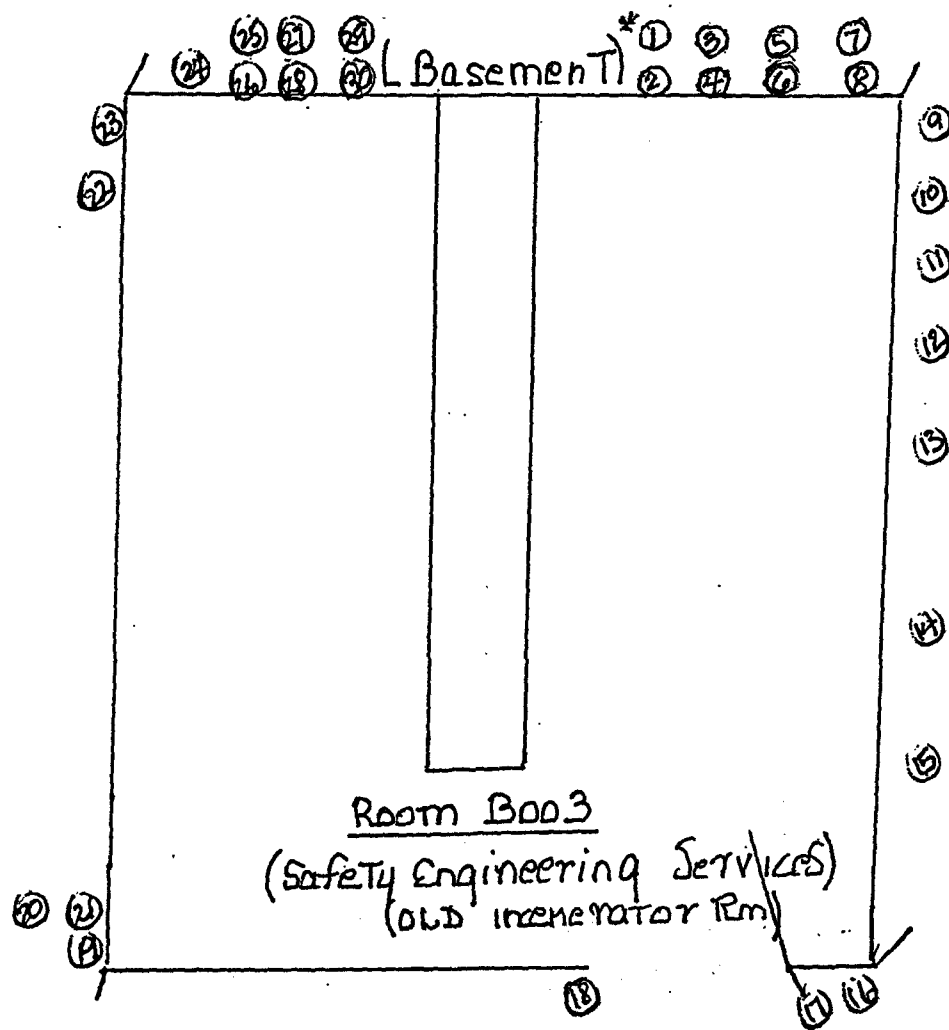
Painted + Bare Bruch



LOCATION _____

N0001

(Painted Brick Walls) Material Code B0009



* Note: shielded and unshielded reading taken in same location as per #


Section 8

Material Code B0010

Duratek Beta Survey Report

Download File Name: 00000008

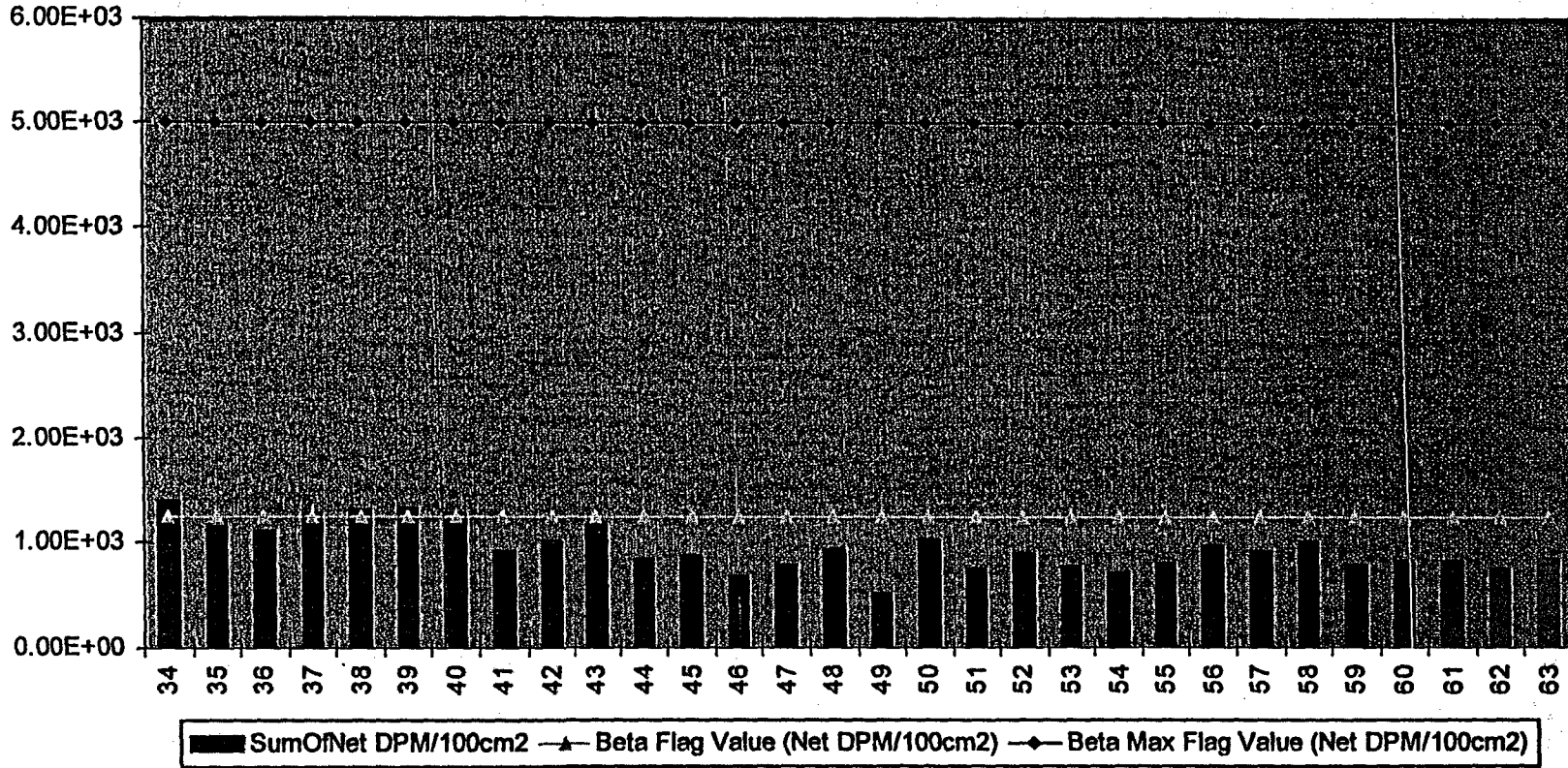
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	34	351.0	30	FLDCT	B0010	ZZZZ	1	288	1,404
N0001	ZZZZ	35	322.0	30	FLDCT	B0010	ZZZZ	2	306	1,146
N0001	ZZZZ	36	340.0	30	FLDCT	B0010	ZZZZ	3	350	1,119
N0001	ZZZZ	37	350.0	30	FLDCT	B0010	ZZZZ	4	324	1,275
N0001	ZZZZ	38	360.0	30	FLDCT	B0010	ZZZZ	5	330	1,323
N0001	ZZZZ	39	344.0	30	FLDCT	B0010	ZZZZ	6	294	1,336
N0001	ZZZZ	40	352.0	30	FLDCT	B0010	ZZZZ	7	326	1,282
N0001	ZZZZ	41	301.0	30	FLDCT	B0010	ZZZZ	8	328	929
N0001	ZZZZ	42	334.0	30	FLDCT	B0010	ZZZZ	9	370	1,011
N0001	ZZZZ	43	369.0	30	FLDCT	B0010	ZZZZ	10	394	1,167
N0001	ZZZZ	44	314.0	30	FLDCT	B0010	ZZZZ	11	376	855
N0001	ZZZZ	45	311.0	30	FLDCT	B0010	ZZZZ	12	362	882
N0001	ZZZZ	46	305.0	30	FLDCT	B0010	ZZZZ	13	410	676
N0001	ZZZZ	47	321.0	30	FLDCT	B0010	ZZZZ	14	406	800
N0001	ZZZZ	48	325.0	30	FLDCT	B0010	ZZZZ	15	372	943
N0001	ZZZZ	49	287.0	30	FLDCT	B0010	ZZZZ	16	420	522
N0001	ZZZZ	50	322.0	30	FLDCT	B0010	ZZZZ	17	336	1,045
N0001	ZZZZ	51	314.0	30	FLDCT	B0010	ZZZZ	18	404	760
N0001	ZZZZ	52	299.0	30	FLDCT	B0010	ZZZZ	19	332	902
N0001	ZZZZ	53	307.0	30	FLDCT	B0010	ZZZZ	20	382	787
N0001	ZZZZ	54	299.0	30	FLDCT	B0010	ZZZZ	21	384	726
N0001	ZZZZ	55	325.0	30	FLDCT	B0010	ZZZZ	22	412	807
N0001	ZZZZ	56	302.0	30	FLDCT	B0010	ZZZZ	23	312	990
N0001	ZZZZ	57	320.0	30	FLDCT	B0010	ZZZZ	24	368	923
N0001	ZZZZ	58	342.0	30	FLDCT	B0010	ZZZZ	25	382	1,024
N0001	ZZZZ	59	298.0	30	FLDCT	B0010	ZZZZ	26	360	800
N0001	ZZZZ	60	305.0	30	FLDCT	B0010	ZZZZ	27	364	834
N0001	ZZZZ	61	291.0	30	FLDCT	B0010	ZZZZ	28	334	841
N0001	ZZZZ	62	287.0	30	FLDCT	B0010	ZZZZ	29	350	760
N0001	ZZZZ	63	309.0	30	FLDCT	B0010	ZZZZ	30	368	848

Beta Flag	1250	-	_____
Beta Max Flag	5000		

Download Name: 00000008

Survey Description: Rm B003/ Safety Office / Bare Surface House Brick

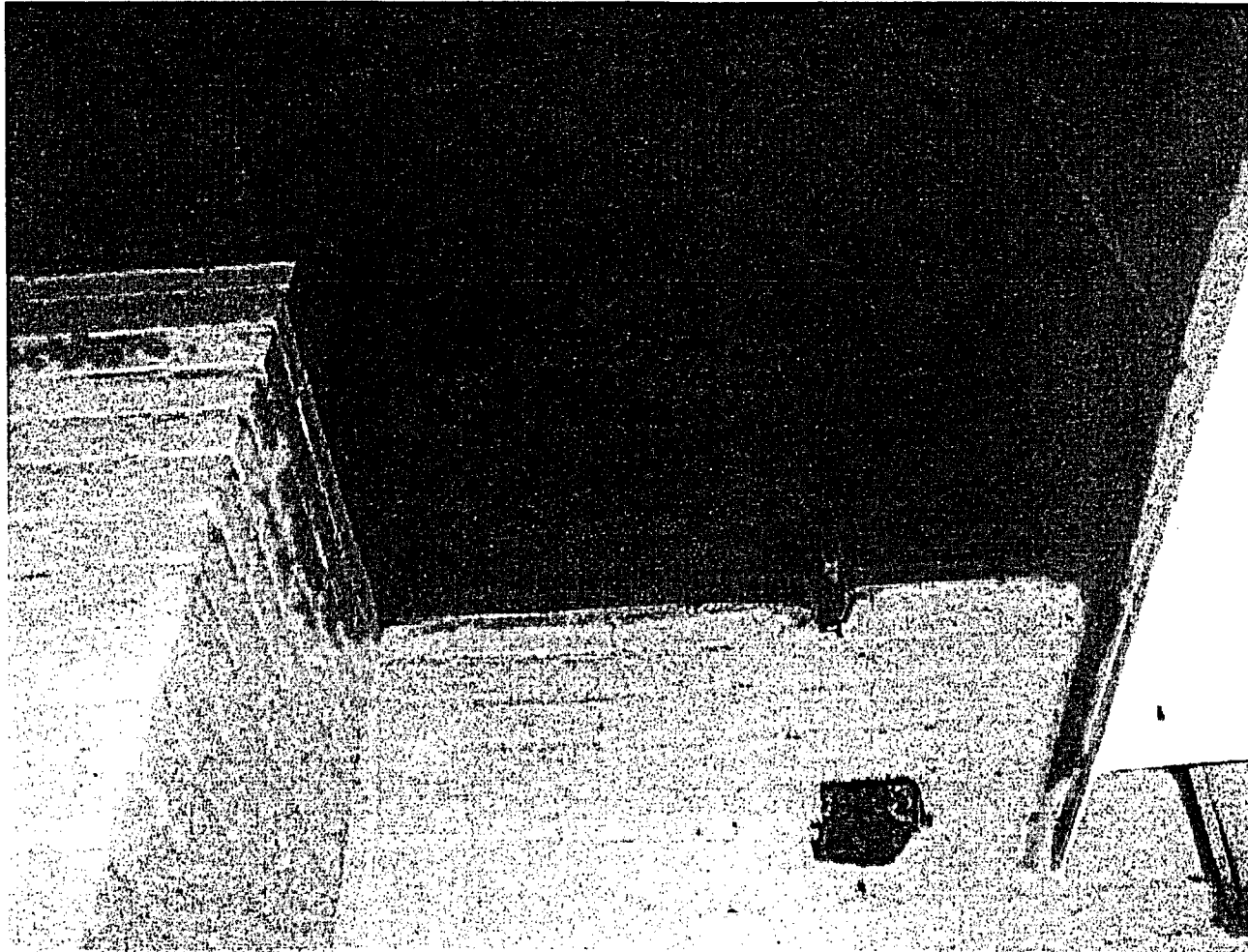
M2350-1 Sample Results



Page 3 of 3

Material Codes: B0009
and
B0010

Bare Bruch:



Date: 11-4-02

Package # BKG N0001

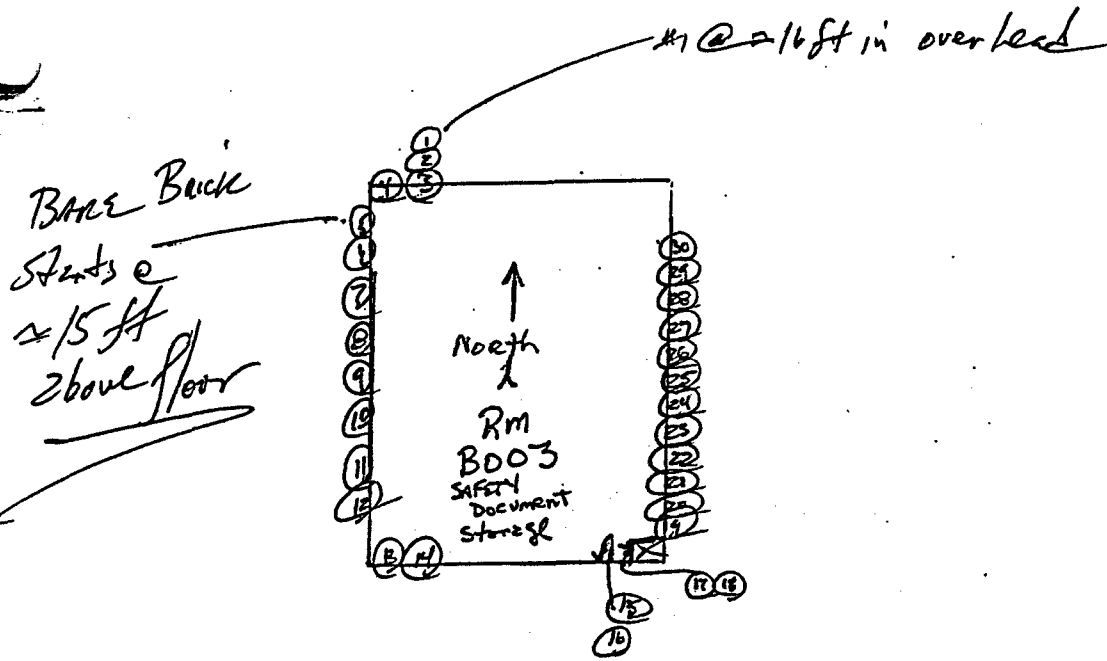
Download # 08

Material Id # B0010

Location: Basement

Material Desc.: House Brick/Unpainted

* Note: 1 shielded and 1 unshielded measurement taken at each location denoted by (#).
Not to scale



Section 9

Material Code B0011

Duratek Beta Survey Report

Download File Name: 0000011

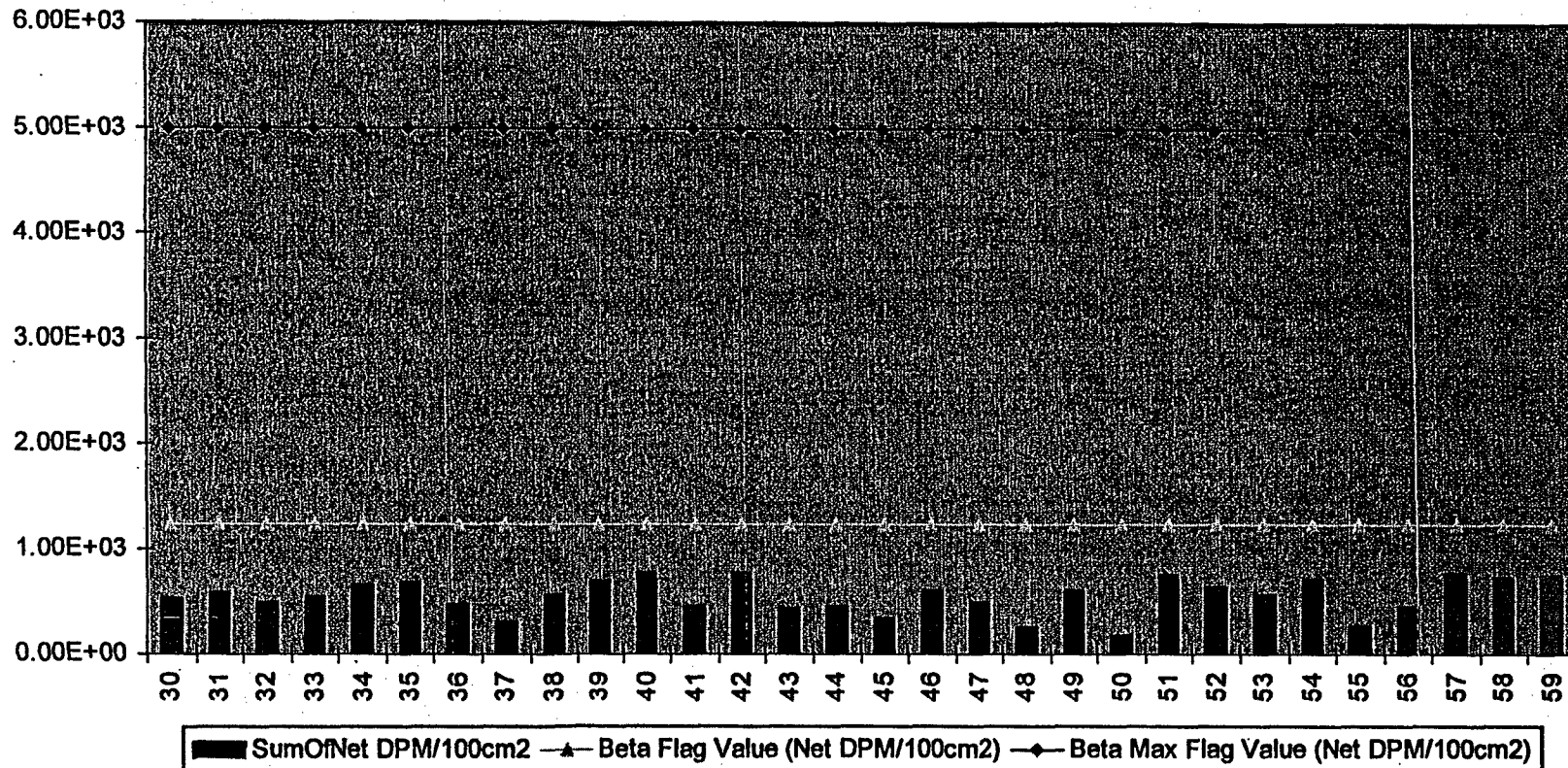
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	30	231.0	30	FLDCT	E0011	ZZZZ	1	308	541
N0001	ZZZZ	31	248.0	30	FLDCT	B0011	ZZZZ	2	324	590
N0001	ZZZZ	32	245.0	30	FLDCT	B0011	ZZZZ	3	346	506
N0001	ZZZZ	33	243.0	30	FLDCT	B0011	ZZZZ	4	328	555
N0001	ZZZZ	34	243.0	30	FLDCT	B0011	ZZZZ	5	298	660
N0001	ZZZZ	35	270.0	30	FLDCT	B0011	ZZZZ	6	346	681
N0001	ZZZZ	36	225.0	30	FLDCT	B0011	ZZZZ	7	314	478
N0001	ZZZZ	37	225.0	30	FLDCT	B0011	ZZZZ	8	362	309
N0001	ZZZZ	38	259.0	30	FLDCT	B0011	ZZZZ	9	354	576
N0001	ZZZZ	39	263.0	30	FLDCT	B0011	ZZZZ	10	324	709
N0001	ZZZZ	40	249.0	30	FLDCT	B0011	ZZZZ	11	274	787
N0001	ZZZZ	41	256.0	30	FLDCT	B0011	ZZZZ	12	362	457
N0001	ZZZZ	42	251.0	30	FLDCT	B0011	ZZZZ	13	280	780
N0001	ZZZZ	43	236.0	30	FLDCT	B0011	ZZZZ	14	344	450
N0001	ZZZZ	44	246.0	30	FLDCT	B0011	ZZZZ	15	360	464
N0001	ZZZZ	45	227.0	30	FLDCT	B0011	ZZZZ	16	354	351
N0001	ZZZZ	46	254.0	30	FLDCT	B0011	ZZZZ	17	332	618
N0001	ZZZZ	47	235.0	30	FLDCT	B0011	ZZZZ	18	328	499
N0001	ZZZZ	48	219.0	30	FLDCT	B0011	ZZZZ	19	366	253
N0001	ZZZZ	49	257.0	30	FLDCT	B0011	ZZZZ	20	338	618
N0001	ZZZZ	50	218.0	30	FLDCT	B0011	ZZZZ	21	382	190
N0001	ZZZZ	51	265.0	30	FLDCT	B0011	ZZZZ	22	312	766
N0001	ZZZZ	52	273.0	30	FLDCT	B0011	ZZZZ	23	362	646
N0001	ZZZZ	53	237.0	30	FLDCT	B0011	ZZZZ	24	308	583
N0001	ZZZZ	54	291.0	30	FLDCT	B0011	ZZZZ	25	378	716
N0001	ZZZZ	55	240.0	30	FLDCT	B0011	ZZZZ	26	402	274
N0001	ZZZZ	56	239.0	30	FLDCT	B0011	ZZZZ	27	346	464
N0001	ZZZZ	57	289.0	30	FLDCT	B0011	ZZZZ	28	358	773
N0001	ZZZZ	58	287.0	30	FLDCT	B0011	ZZZZ	29	362	744
N0001	ZZZZ	59	289.0	30	FLDCT	B0011	ZZZZ	30	360	766

Beta Flag	1250 - _____
Beta Max Flag	5000 

Download Name: 00000011

Survey Description: Bkg.Loc.#N0001-/O/H CeilingTiles in S.E.Basement

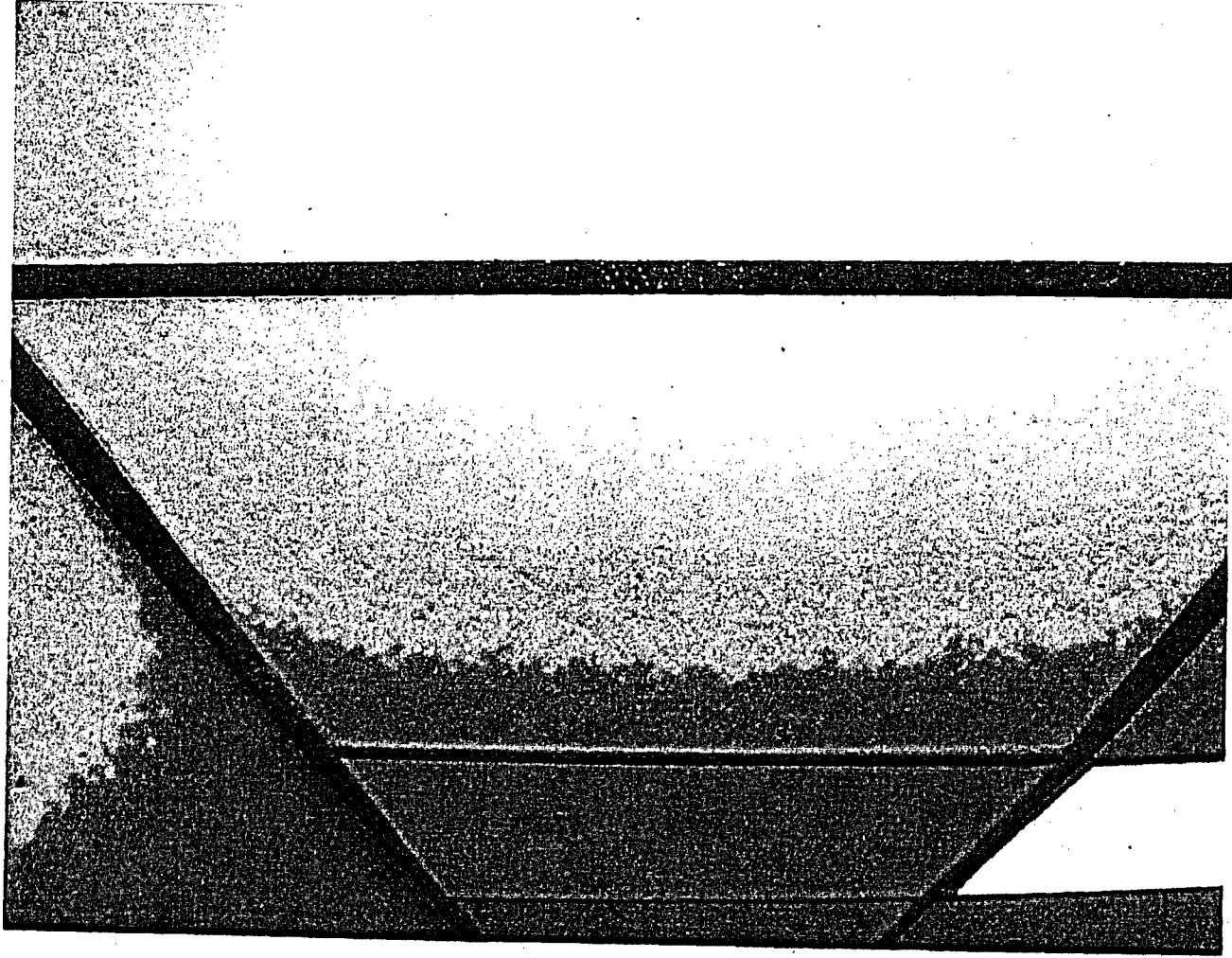
M2350-1 Sample Results



Page 3 of 3

P62

Material Code: B0011

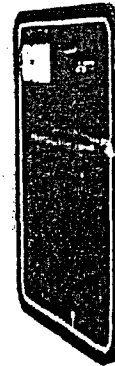
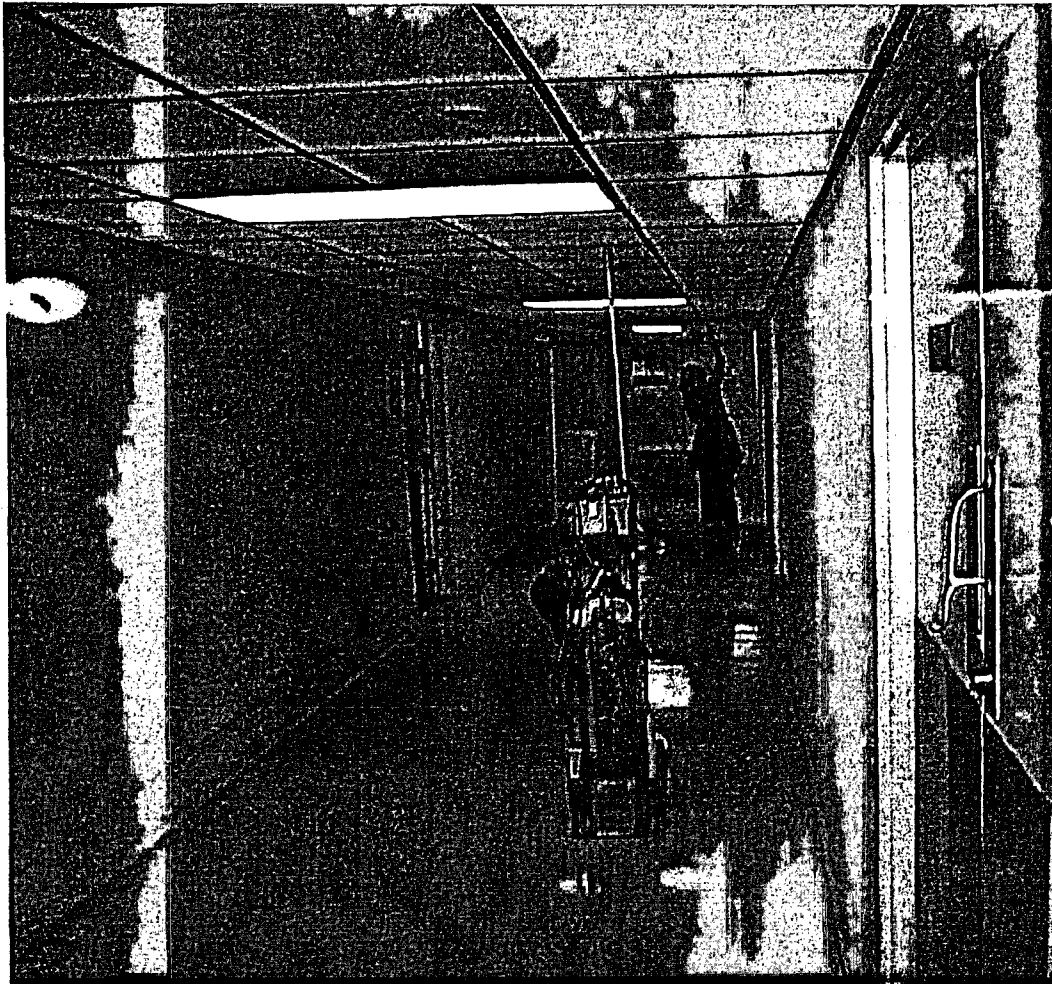


P63

Material Codes: B0011

and B9999

overhead Ceiling Tiles B0011

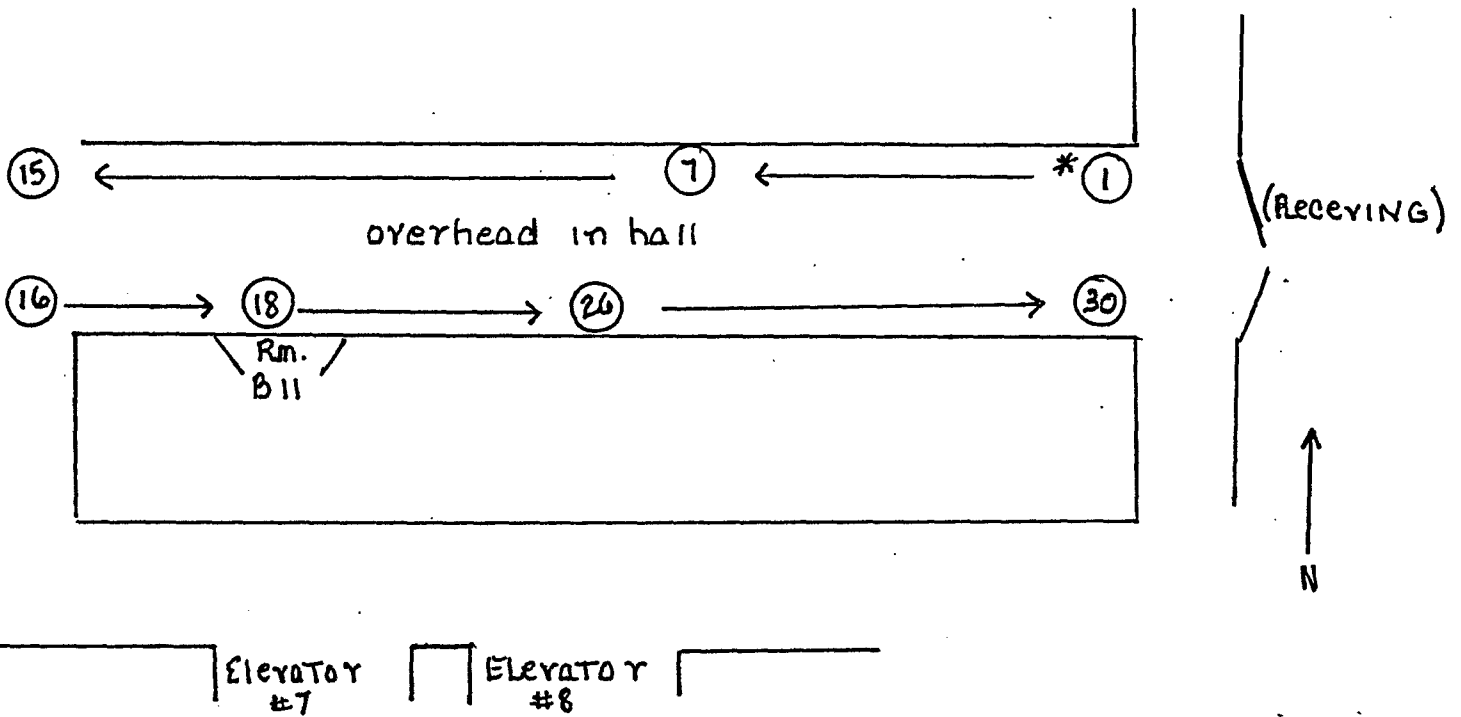


LOCATION _____

EAST/WEST HALL (in south end of basement)

MATERIAL (OVERhead ceiling Tiles)

Code (B0011)



* Note: Shielded and unshielded reading taken in same locations
Data points were approximately every other tile

Section 10

Material Code B9999

Duratek Beta Survey Report

Download File Name: 0000012

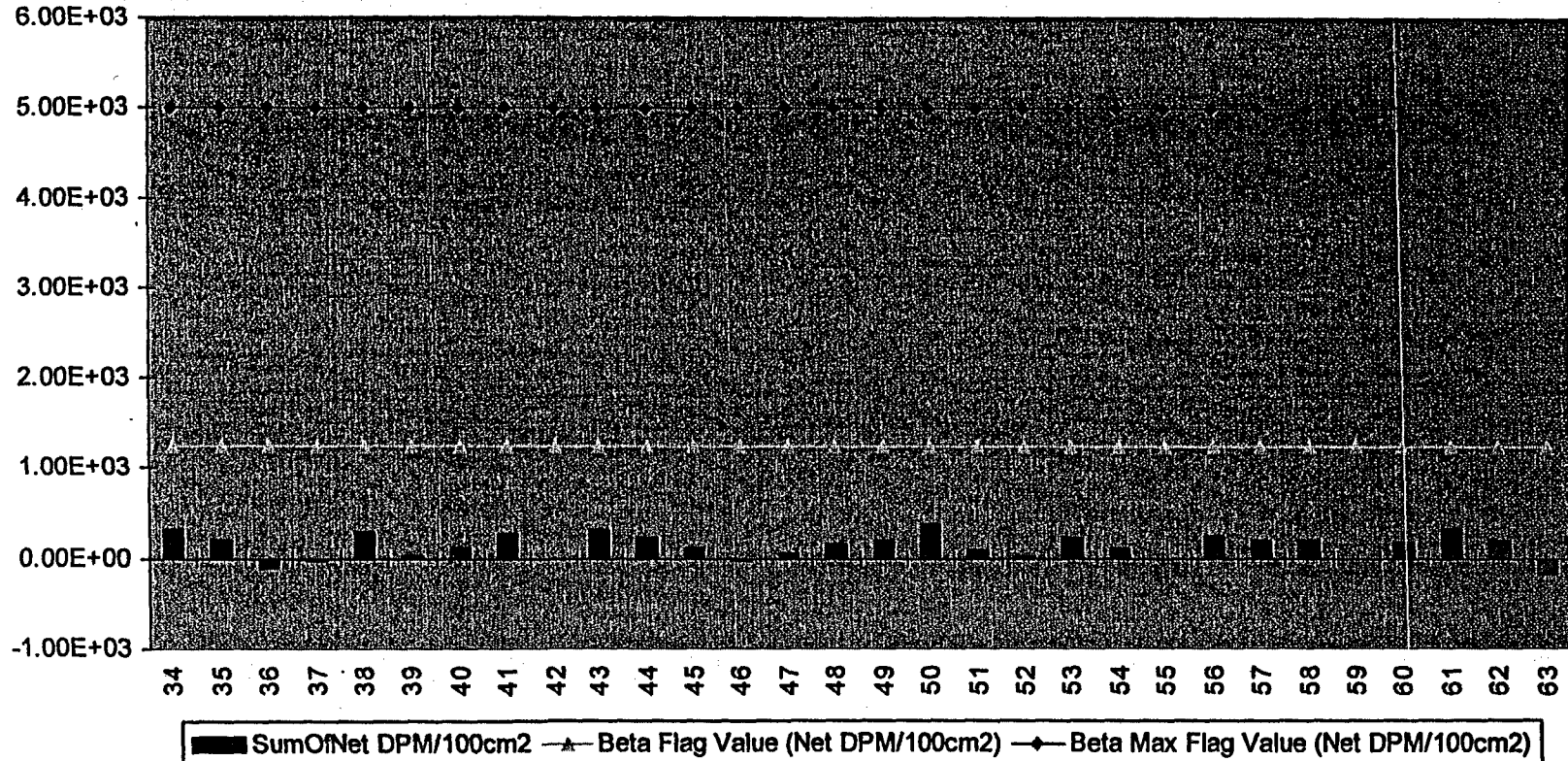
Package ID(L1)	Surface (L2)	Sample #	Counts	Time (sec)	Count Type(L5)	Material Type(L6)	Grid ID(L7)	Location # (L8)	Bkgd (cpm)	Net (DPM/100cm2)
N0001	ZZZZ	34	195.0	30	FLDCT	B9999	ZZZZ	1	296	310
N0001	ZZZZ	35	196.0	30	FLDCT	B9999	ZZZZ	2	330	200
N0001	ZZZZ	36	168.0	30	FLDCT	B9999	ZZZZ	3	374	-123
N0001	ZZZZ	37	182.0	30	FLDCT	B9999	ZZZZ	4	374	-32
N0001	ZZZZ	38	224.0	30	FLDCT	B9999	ZZZZ	5	358	290
N0001	ZZZZ	39	163.0	30	FLDCT	B9999	ZZZZ	6	312	45
N0001	ZZZZ	40	182.0	30	FLDCT	B9999	ZZZZ	7	324	129
N0001	ZZZZ	41	219.0	30	FLDCT	B9999	ZZZZ	8	356	265
N0001	ZZZZ	42	182.0	30	FLDCT	B9999	ZZZZ	9	368	-13
N0001	ZZZZ	43	208.0	30	FLDCT	B9999	ZZZZ	10	318	316
N0001	ZZZZ	44	190.0	30	FLDCT	B9999	ZZZZ	11	310	226
N0001	ZZZZ	45	169.0	30	FLDCT	B9999	ZZZZ	12	302	116
N0001	ZZZZ	46	152.0	30	FLDCT	B9999	ZZZZ	13	310	-19
N0001	ZZZZ	47	181.0	30	FLDCT	B9999	ZZZZ	14	346	52
N0001	ZZZZ	48	178.0	30	FLDCT	B9999	ZZZZ	15	306	161
N0001	ZZZZ	49	186.0	30	FLDCT	B9999	ZZZZ	16	304	219
N0001	ZZZZ	50	210.0	30	FLDCT	B9999	ZZZZ	17	300	387
N0001	ZZZZ	51	157.0	30	FLDCT	B9999	ZZZZ	18	284	97
N0001	ZZZZ	52	190.0	30	FLDCT	B9999	ZZZZ	19	366	45
N0001	ZZZZ	53	178.0	30	FLDCT	B9999	ZZZZ	20	284	232
N0001	ZZZZ	54	176.0	30	FLDCT	B9999	ZZZZ	21	314	123
N0001	ZZZZ	55	171.0	30	FLDCT	B9999	ZZZZ	22	342	0
N0001	ZZZZ	56	194.0	30	FLDCT	B9999	ZZZZ	23	308	258
N0001	ZZZZ	57	196.0	30	FLDCT	B9999	ZZZZ	24	324	219
N0001	ZZZZ	58	202.0	30	FLDCT	B9999	ZZZZ	25	340	206
N0001	ZZZZ	59	164.0	30	FLDCT	B9999	ZZZZ	26	332	-13
N0001	ZZZZ	60	204.0	30	FLDCT	B9999	ZZZZ	27	348	194
N0001	ZZZZ	61	200.0	30	FLDCT	B9999	ZZZZ	28	298	329
N0001	ZZZZ	62	179.0	30	FLDCT	B9999	ZZZZ	29	290	219
N0001	ZZZZ	63	158.0	30	FLDCT	B9999	ZZZZ	30	374	-187

Beta Flag	1250	-	_____
Beta Max Flag	5000		

Download Name: 0000012

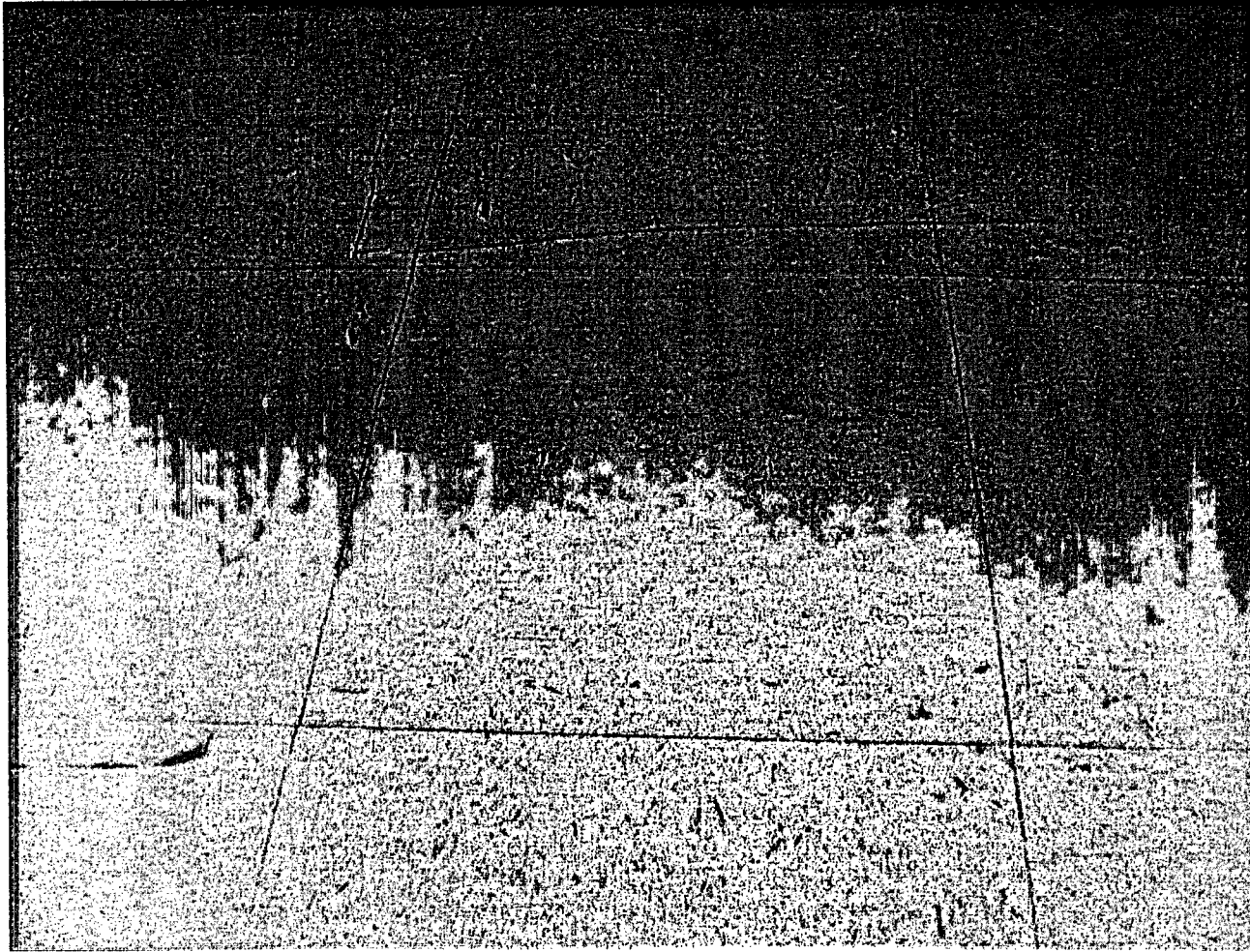
Survey Description: Bsmt. SE Corridor - Tile Floor

M2350-1 Sample Results



Page 3 of 3

Material Code: B9999



Package # 10001

Date: 11-5-02

Download # 012

Material Id # B9999

Material Desc.: 12" x 12" Floor Tile

Location: East end of South Hall ch. 217'

* Note: 1 shielded and 1 unshielded measurement taken at each location denoted by (#).
Hallway is (8) eight tiles wide.
Map to scale

