

GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	4	Dates:	1/24/2021-1/30/2021	Counted On	1/25/2021
INSTRUMENT USED: Quantasart (Serial# 073396)		CONTROL FACTOR:		1.40E-06	
CHANNEL ENERGY RANGE (keV)		CH A: 4-200	CH B: 200-2000	CH C: 4-2000	
COUNTING TIME: 5 Min.		uCi/swipe = CPM:C * Control Factor		uCi/cm ² = CPM:C * Control Factor / 100	
Limit of quantification (LOQ)=		9.16E-08 uCi/cm ²		QUANTIFICATION BELOW REG GUIDE 8.23 LIMITS OK	

Swipe #	LOCATION: ROOM # & AREA/OBJECT	GROSS CPM CHANNEL C	uCi/swipe	uCi/cm ²	NOTE
1.	BACKGROUND 1	34	*****	*****	
2.	BACKGROUND 2	33	*****	*****	
3.	BACKGROUND 3	41	*****	*****	
4.	BACKGROUND 4	33	*****	*****	
5.	BACKGROUND 5	28	*****	*****	
6.	BACKGROUND 6	30	*****	*****	
7.	B021 ELEVATOR ENTRANCE	31	M	M	
8.	B021 FENCED GATE	28	M	M	
9.	B021 RAM SAFE	30	M	M	
10.	B021 EAST FLOOR	31	M	M	
11.	B021 NORTH BENCH TOP	35	M	M	
12.	B021 WEST LAB FLOOR	30	M	M	
13.	B021 WORK PLATFORM	27	M	M	
14.	B021 CALORIMETER	29	M	M	
15.	B021 COMPUTERS	26	M	M	
16.	B021 DSC/TGA	23	M	M	
17.	B021 SOUTH BENCH TOP	31	M	M	
18.	121 DOORWAY	27	M	M	
19.	121 GLOVE BOX- FLOOR	29	M	M	
20.	121 GLOVE BOX	29	M	M	
21.	121 WEST BENCH TOP	29	M	M	
22.	121 CENTER OF LAB	28	M	M	
23.	122 EAST BENCH TOP	32	M	M	

--	--	--	--	--

³⁶ Cl SOURCE 09/14/1971	50287	*****	*****	
	101.39%	CALIBRATION CHECK OK?		YES

Notes(s): M = below limit of quantification on the LSC. The limit of quantification is checked against lowest allowable contamination limit of 1 x 10⁻⁶ uCi/cm².

SURVEY PREPARED BY: B. Tanner	REVIEWED BY: M. Heine
SIGN/DATE: 1/26/2021	SIGN/DATE: 2/4/21

Assay Definition-

Assay Description:

Assay Type: CPM

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210125_0838

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210125_0838\20210125_0838.results

Assay File Name: C:\Packard\TriCarb\Assays\Reactor Weekly.lsa

Count Conditions-

Nuclide: Reactor

Quench Indicator: tSIE/AEC

External Std Terminator (sec): 0.5 2s%

Pre-Count Delay (min): 0.00

Quench Set: n/a

Count Time (min): 5.00

Count Mode: Normal

Assay Count Cycles: 1

Repeat Sample Count: 1

#Vials/Sample: 1

Calculate % Reference: Off

Background Subtract: Off

Low CPM Threshold: Off

2 Sigma % Terminator: Off

Regions	LL	UL
A	4.0	200.0
B	200.0	2000.0
C	4.0	2000.0

Count Corrections-

Static Controller: On

Luminescence Correction: Off

Colored Samples: n/a

Heterogeneity Monitor: n/a

Coincidence Time (nsec): 18

Delay Before Burst (nsec): 75

Half Life-

Half Life Correction: Off

Regions	Half Life	Units	Reference Date	Reference Time
A				
B				
C				

Cycle 1 Results

P#	DATE	TIME	S#	Count	Time	CPMA	CPMB	CPMC	SIS	MESSAGES
1	1/25/2021	8:40:09 AM	1	5.00	28	6	34	157.32		
1	1/25/2021	8:46:31 AM	2	5.00	29	4	33	136.41		
1	1/25/2021	8:52:54 AM	3	5.00	35	6	41	138.57		
1	1/25/2021	8:59:15 AM	4	5.00	27	6	33	208.43		
1	1/25/2021	9:05:39 AM	5	5.00	23	5	28	209.64		
1	1/25/2021	9:12:01 AM	6	5.00	24	6	30	216.01		
1	1/25/2021	9:18:17 AM	7	5.00	26	5	31	184.82		
1	1/25/2021	9:24:40 AM	8	5.00	22	5	28	118.15		
1	1/25/2021	9:31:05 AM	9	5.00	27	3	30	114.25		
1	1/25/2021	9:37:26 AM	10	5.00	26	5	31	147.22		
1	1/25/2021	9:43:47 AM	11	5.00	23	12	35	391.69		
1	1/25/2021	9:50:09 AM	12	5.00	24	6	30	206.55		

Protocol# 1 - Reactor Weekly.lsa

User: CSE

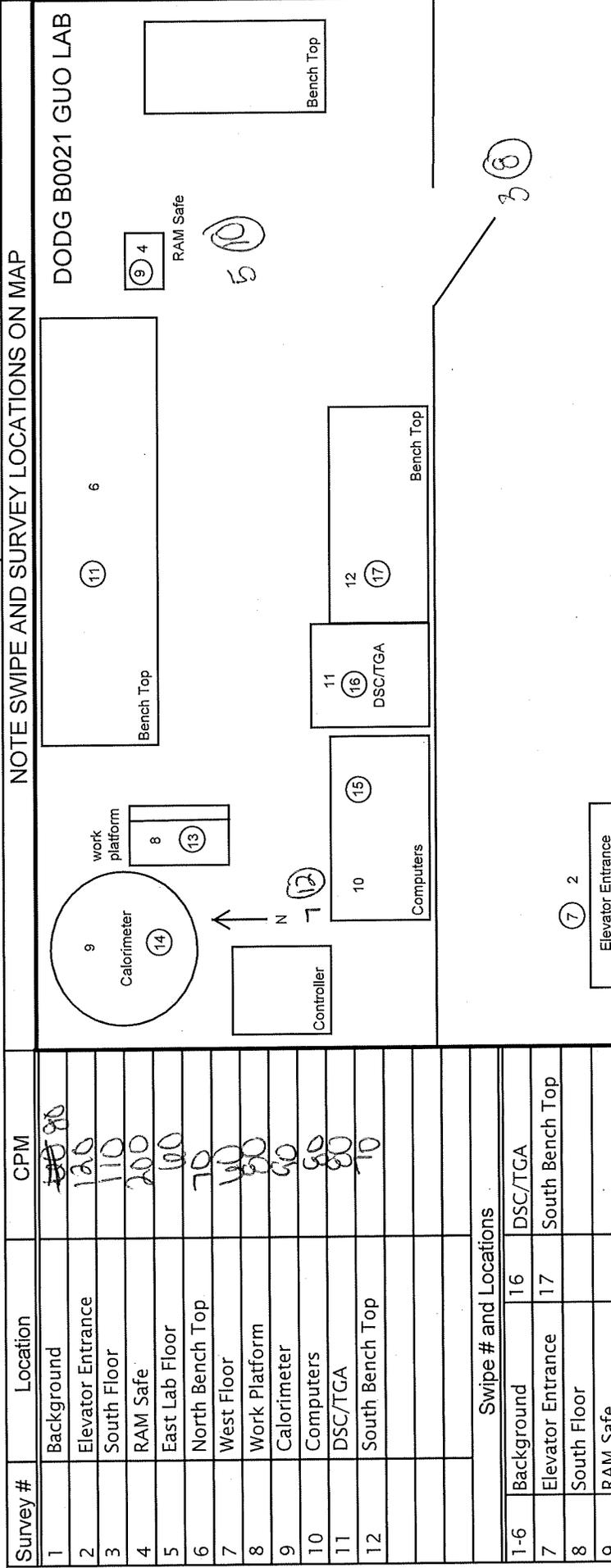
1	1/25/2021	9:56:35 AM	13	5.00	22	5	27	219.21
1	1/25/2021	10:02:57 AM	14	5.00	24	5	29	198.06
1	1/25/2021	10:09:12 AM	15	5.00	21	4	26	249.91
1	1/25/2021	10:15:32 AM	16	5.00	20	3	23	277.42
1	1/25/2021	10:21:53 AM	17	5.00	24	7	31	251.89
1	1/25/2021	10:28:18 AM	18	5.00	21	6	27	202.45
1	1/25/2021	10:34:36 AM	19	5.00	23	5	29	260.56
1	1/25/2021	10:40:55 AM	20	5.00	24	6	29	159.54
1	1/25/2021	10:47:23 AM	21	5.00	25	4	29	206.21
1	1/25/2021	10:53:42 AM	22	5.00	23	5	28	219.90
1	1/25/2021	11:00:04 AM	23	5.00	26	5	32	195.07
1	1/25/2021	11:05:46 AM	24	5.00	14736	35551	50287	1014.59

LABORATORY SURVEY

Radiation Safety Office
 Washington State University
 Pullman, WA 99164-1302
 (509) 335 8916

Building Dodgen Research Facility	Room B0021 - GUO	Lab Class D	Survey Instrument GM Detector Model 3	Serial No. 58680	Radiation Detected Gamma
Authorized User Xiaofeng Guo	Date 01/25/2021	Time 0800	Swipe Instrument Quantasart	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One)					
ON <input type="checkbox"/> OFF <input checked="" type="checkbox"/>					

LSC Printout Date 1/25/2021



Survey #	Location	CPM	Notes
1	Background	80	
2	Elevator Entrance	120	
3	South Floor	110	
4	RAM Safe	200	
5	East Lab Floor	100	
6	North Bench Top	70	
7	West Floor	100	
8	Work Platform	60	
9	Calorimeter	60	
10	Computers	80	
11	DSC/TGA	80	
12	South Bench Top	10	
Swipe # and Locations			
1-6	Background	16	DSC/TGA
7	Elevator Entrance	17	South Bench Top
8	South Floor		
9	RAM Safe		
10	East Lab Floor		
11	North Bench Top		
12	West Lab Floor		
13	Work Platform		
14	Calorimeter		
15	Computers		

Surveyed By: RB Date: 01/25/2021
 Swiped By: RB Date: 01/25/2021
 Reviewed By: M. Heine Date: 2/14/2021

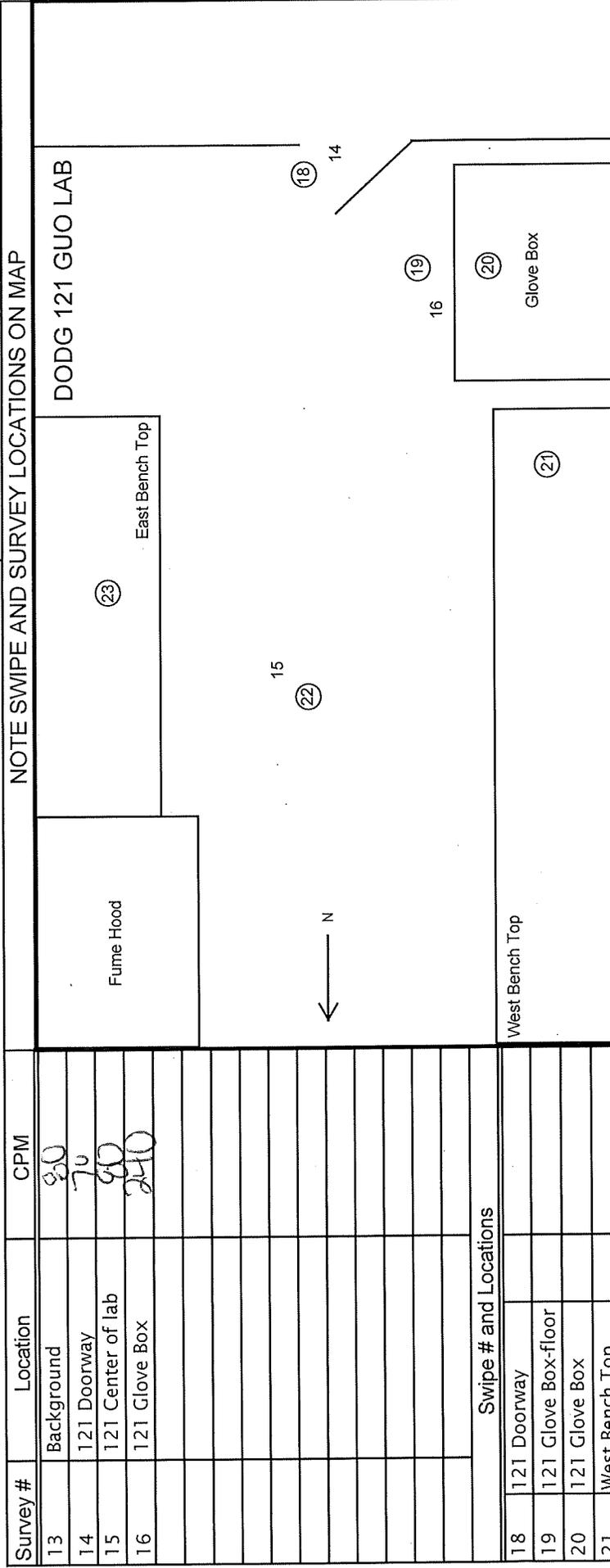
Circled numbers on map indicate a swipe area of 100 square cm. Numbers not circled indicate a survey location.

LABORATORY SURVEY

Radiation Safety Office
 Washington State University
 Pullman, WA 99164-1302
 (509) 335 8916

Building Dodgen Research Facility	Room 121- GUO	Lab Class D	Survey Instrument GM Detector Model 3	Serial No. 58680	Radiation Detected Gamma
Authorized User Xiaofeng Guo	Date 1/25/21	Time 0800	Swipe Instrument Quantasmat	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One) ON <input checked="" type="checkbox"/> OFF <input type="checkbox"/>					

LSC Printout Date: 1/25/2021



Survey #	Location	CPM	Notes
13	Background	80	
14	121 Doorway	70	
15	121 Center of lab	90	
16	121 Glove Box	240	
18	121 Doorway		
19	121 Glove Box-floor		
20	121 Glove Box		
21	West Bench Top		
22	121 Center of lab		
23	East Bench Top		
Surveyed By: RB			Date: 01/25/2021
Swiped By: RB			Date: 01/25/2021
Reviewed By: <i>M. Hein</i>			Date: 2/4/21

Circled numbers on map indicate a swipe area of 100 square cm. Numbers not circled indicate a survey location.