

GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	2	Dates:	1/10/2021-1/16/2021	Counted On	1/12/2021
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)=		8.54E-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	27	*****	*****	
2.	BACKGROUND 2	24	*****	*****	
3.	BACKGROUND 3	28	*****	*****	
4.	BACKGROUND 4	23	*****	*****	
5.	BACKGROUND 5	26	*****	*****	
6.	BACKGROUND 6	22	*****	*****	
7.	B021 ELEVATOR ENTRANCE	25	M	M	
8.	B021 FENCED GATE	34	1.26E-05	1.26E-07	
9.	B021 RAM SAFE	26	M	M	
10.	B021 EAST FLOOR	25	M	M	
11.	B021 NORTH BENCH TOP	34	1.26E-05	1.26E-07	
12.	B021 WEST LAB FLOOR	31	M	M	
13.	B021 WORK PLATFORM	29	M	M	
14.	B021 CALORIMETER	25	M	M	
15.	B021 COMPUTERS	28	M	M	
16.	B021 DSC/TGA	29	M	M	
17.	B021 SOUTH BENCH TOP	26	M	M	
18.	121 DOORWAY	26	M	M	
19.	121 GLOVE BOX- FLOOR	28	M	M	
20.	121 GLOVE BOX	30	M	M	
21.	121 WEST BENCH TOP	28	M	M	
22.	121 CENTER OF LAB	30	M	M	
23.	122 EAST BENCH TOP	26	M	M	
³⁶ CI SOURCE 09/14/1971		50054	*****	*****	
		100.92%	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/cm ² .					
SURVEY PREPARED BY: B. Tanner			REVIEWED BY: M. Heine		
SIGN/DATE: <i>B. Tanner</i> 1/14/2021			SIGN/DATE: <i>M. Heine</i> 1/21/21		

Assay Definition-

Assay Description:

Assay Type: CPM

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210112_1639

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210112_1639\20210112_1639.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	1/12/2021	4:40:35 PM	1	5.00	22	5	27	169.13		
1	1/12/2021	4:46:52 PM	2	5.00	18	5	24	220.92		
1	1/12/2021	4:53:11 PM	3	5.00	25	4	28	170.54		
1	1/12/2021	4:59:31 PM	4	5.00	20	3	23	262.59		
1	1/12/2021	5:05:54 PM	5	5.00	22	4	26	159.75		
1	1/12/2021	5:12:17 PM	6	5.00	18	4	22	197.43		
1	1/12/2021	5:18:43 PM	7	5.00	19	6	25	314.05		
1	1/12/2021	5:25:02 PM	8	5.00	27	6	34	261.53		
1	1/12/2021	5:31:20 PM	9	5.00	21	5	26	310.35		
1	1/12/2021	5:37:46 PM	10	5.00	21	3	25	170.66		
1	1/12/2021	5:44:08 PM	11	5.00	29	5	34	143.31		
1	1/12/2021	5:50:29 PM	12	5.00	27	5	31	177.58		

Protocol# 1 - Reactor Weekly.lsa

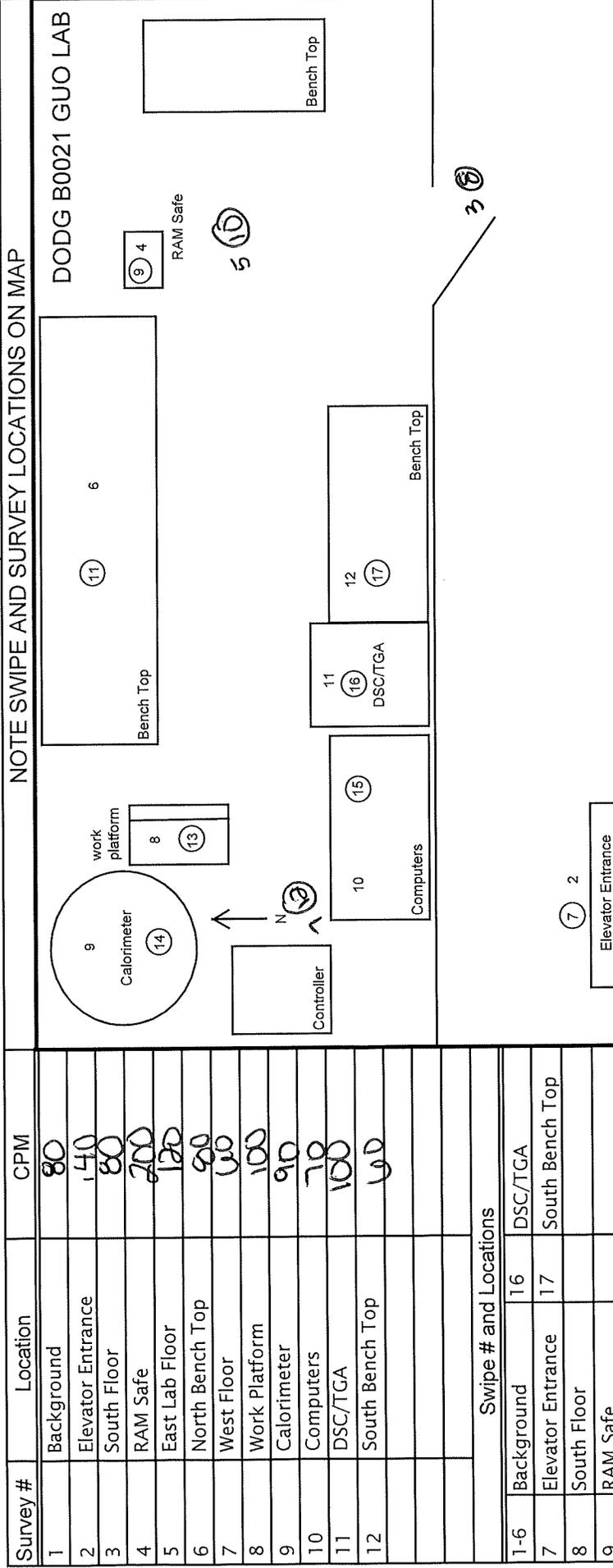
User: CSE

1	1/12/2021	5:56:53 PM	13	5.00	22	7	29	240.21
1	1/12/2021	6:03:15 PM	14	5.00	20	4	25	230.06
1	1/12/2021	6:09:39 PM	15	5.00	25	3	28	133.66
1	1/12/2021	6:15:52 PM	16	5.00	23	7	29	289.55
1	1/12/2021	6:22:13 PM	17	5.00	22	4	26	275.03
1	1/12/2021	6:28:33 PM	18	5.00	23	3	26	164.66
1	1/12/2021	6:34:54 PM	19	5.00	25	3	28	168.32
1	1/12/2021	6:41:16 PM	20	5.00	24	5	30	175.33
1	1/12/2021	6:47:44 PM	21	5.00	22	5	28	276.90
1	1/12/2021	6:54:02 PM	22	5.00	24	6	30	222.11
1	1/12/2021	7:00:20 PM	23	5.00	21	5	26	262.94
1	1/12/2021	7:06:02 PM	24	5.00	14440	35614	50054	1012.15

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 01/11/2021	Time 09:08	Swipe Instrument Quantasart	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One) ON <input checked="" type="checkbox"/> OFF <input type="checkbox"/>		LSC Printout Date 1/12/21			



Survey #	Location	CPM	Notes
1	Background	80	
2	Elevator Entrance	140	
3	South Floor	80	
4	RAM Safe	200	
5	East Lab Floor	120	
6	North Bench Top	60	
7	West Floor	60	
8	Work Platform	100	
9	Calorimeter	90	
10	Computers	70	
11	DSC/TGA	100	
12	South Bench Top	60	
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: 01/11/2021
Swiped By: RB	Date: 01/11/2021
Reviewed By: <i>[Signature]</i>	Date: 1/21/21

m. Heinen

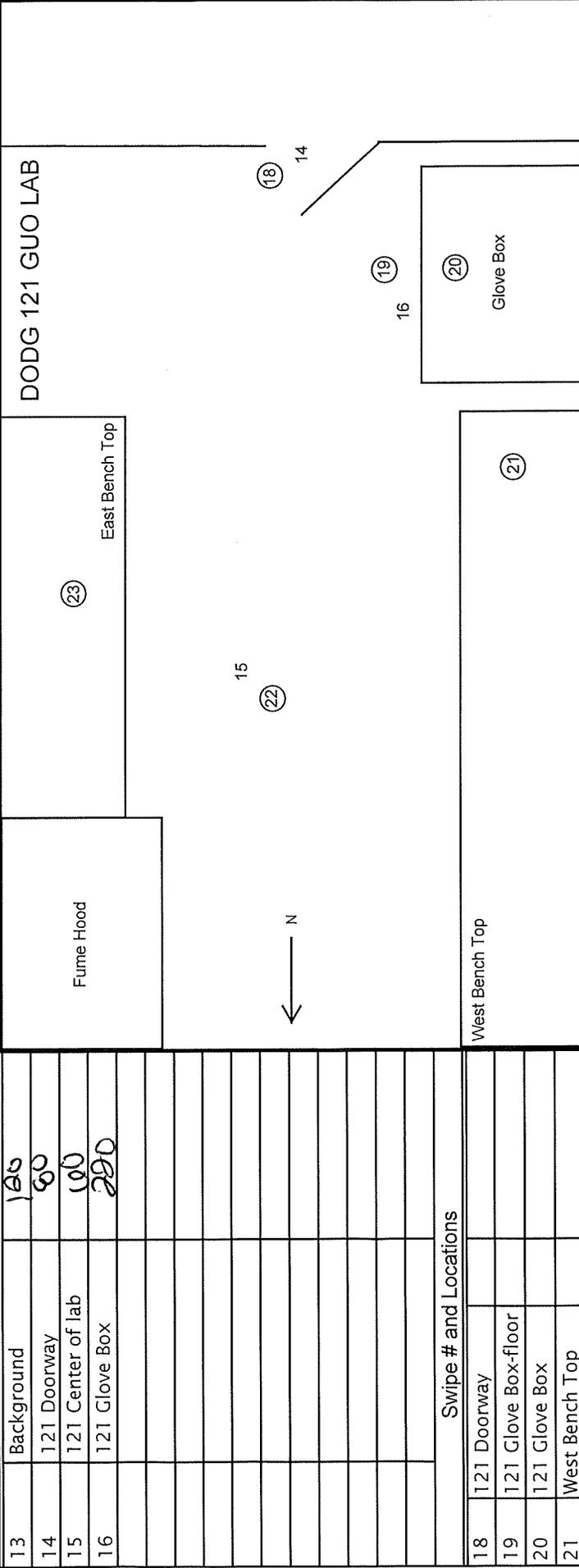
Circled numbers on map indicate a swipe area of 100 square cm. Numbers not circled indicate a survey location.

LABORATORY SURVEY

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 Washington State University
 Pullman, WA 99164-1302
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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 01/11/2021	Time 0920	Swipe Instrument Quantasmat	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One) ON <input type="checkbox"/> OFF <input checked="" type="checkbox"/>					

LSC Printout Date		1/21/21
NOTE SWIPE AND SURVEY LOCATIONS ON MAP		



Survey #	Location	CPM	Surveyed By:	Date:	Notes
13	Background	185	RB	01/11/2021	
14	121 Doorway	60	RB	01/11/2021	
15	121 Center of lab	100	RB	01/11/2021	
16	121 Glove Box	290	RB	01/11/2021	
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				
			Reviewed By:		
			<i>M. Heim</i>	1/21/21	

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