

GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	3	Dates:	1/17/2021-1/23/2021	Counted On	1/19/2021
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)=		8.82E-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	37	*****	*****	
2.	BACKGROUND 2	27	*****	*****	
3.	BACKGROUND 3	28	*****	*****	
4.	BACKGROUND 4	29	*****	*****	
5.	BACKGROUND 5	23	*****	*****	
6.	BACKGROUND 6	27	*****	*****	
7.	B021 ELEVATOR ENTRANCE	25	M	M	
8.	B021 FENCED GATE	27	M	M	
9.	B021 RAM SAFE	25	M	M	
10.	B021 EAST FLOOR	49	2.87E-05	2.87E-07	
11.	B021 NORTH BENCH TOP	29	M	M	
12.	B021 WEST LAB FLOOR	32	M	M	
13.	B021 WORK PLATFORM	30	M	M	
14.	B021 CALORIMETER	22	M	M	
15.	B021 COMPUTERS	22	M	M	
16.	B021 DSC/TGA	28	M	M	
17.	B021 SOUTH BENCH TOP	29	M	M	
18.	121 DOORWAY	27	M	M	
19.	121 GLOVE BOX- FLOOR	23	M	M	
20.	121 GLOVE BOX	26	M	M	
21.	121 WEST BENCH TOP	28	M	M	
22.	121 CENTER OF LAB	29	M	M	
23.	122 EAST BENCH TOP	28	M	M	
³⁶ CI SOURCE 09/14/1971		50124	*****	*****	
		101.07%	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> 1/20/21			SIGN/DATE: <i>Maddison 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\20210119_1607

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210119_1607\20210119_1607.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	1/19/2021	4:08:31 PM	1	5.00		27	10	37	343.47	
1	1/19/2021	4:14:52 PM	2	5.00		21	6	27	292.59	
1	1/19/2021	4:21:15 PM	3	5.00		23	5	28	210.60	
1	1/19/2021	4:27:36 PM	4	5.00		24	5	29	230.57	
1	1/19/2021	4:33:56 PM	5	5.00		19	4	23	288.66	
1	1/19/2021	4:40:17 PM	6	5.00		21	6	27	269.86	
1	1/19/2021	4:46:42 PM	7	5.00		21	4	25	189.12	
1	1/19/2021	4:53:02 PM	8	5.00		24	4	27	172.71	
1	1/19/2021	4:59:22 PM	9	5.00		20	5	25	344.44	
1	1/19/2021	5:05:45 PM	10	5.00		44	5	49	147.16	
1	1/19/2021	5:12:09 PM	11	5.00		25	4	29	224.33	
1	1/19/2021	5:18:31 PM	12	5.00		27	4	32	148.16	

Protocol# 1 - Reactor Weekly.lsa

User: CSE

1	1/19/2021	5:24:50 PM	13	5.00	24	6	30	222.48
1	1/19/2021	5:31:13 PM	14	5.00	18	4	22	301.17
1	1/19/2021	5:37:36 PM	15	5.00	19	3	22	281.60
1	1/19/2021	5:43:50 PM	16	5.00	23	6	28	237.78
1	1/19/2021	5:50:12 PM	17	5.00	25	5	29	225.65
1	1/19/2021	5:56:35 PM	18	5.00	24	4	27	160.26
1	1/19/2021	6:02:59 PM	19	5.00	19	4	23	329.49
1	1/19/2021	6:09:24 PM	20	5.00	22	4	26	226.22
1	1/19/2021	6:15:49 PM	21	5.00	22	6	28	290.04
1	1/19/2021	6:22:12 PM	22	5.00	22	7	29	287.06
1	1/19/2021	6:28:35 PM	23	5.00	22	6	28	284.30
1	1/19/2021	6:34:17 PM	24	5.00	14492	35632	50124	1014.28

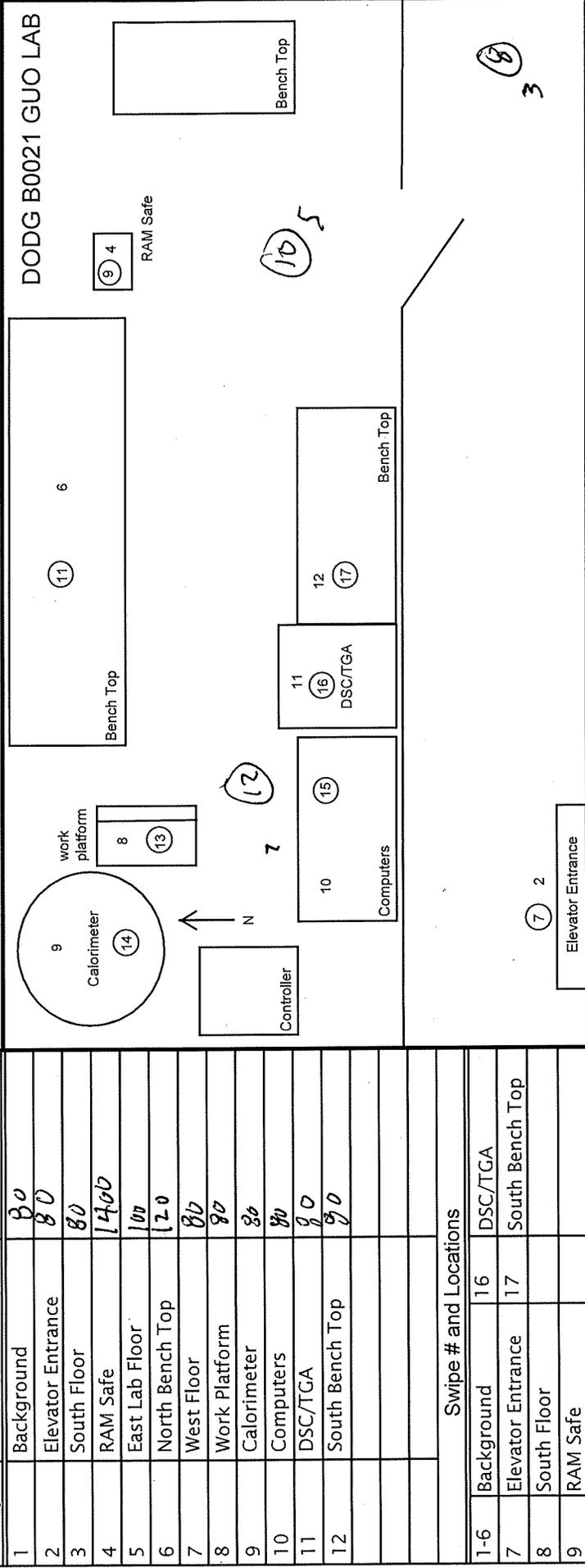
LABORATORY SURVEY

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 1/19/21	Time 1544	Swipe Instrument Quantasmat	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One) <input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF <input type="checkbox"/>					

LSC Printout Date 1/19/21

NOTE SWIPE AND SURVEY LOCATIONS ON MAP



Survey #	Location	CPM	Surveys
1	Background	80	
2	Elevator Entrance	80	
3	South Floor	80	
4	RAM Safe	1400	
5	East Lab Floor	100	
6	North Bench Top	120	
7	West Floor	80	
8	Work Platform	80	
9	Calorimeter	30	
10	Computers	80	
11	DSC/TGA	90	
12	South Bench Top	90	
13	Background		
14	Elevator Entrance		
15	South Floor		
16	RAM Safe		
17	East Lab Floor		
18	North Bench Top		
19	West Lab Floor		
20	Work Platform		
21	Calorimeter		
22	Computers		

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		

Surveys By: B.T. Date: 1/19/21
 Swiped By: B.T. Date: 1/19/21
 Reviewed By: W. H. H. H. Date: 1/21/21
m. H. H. H.

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

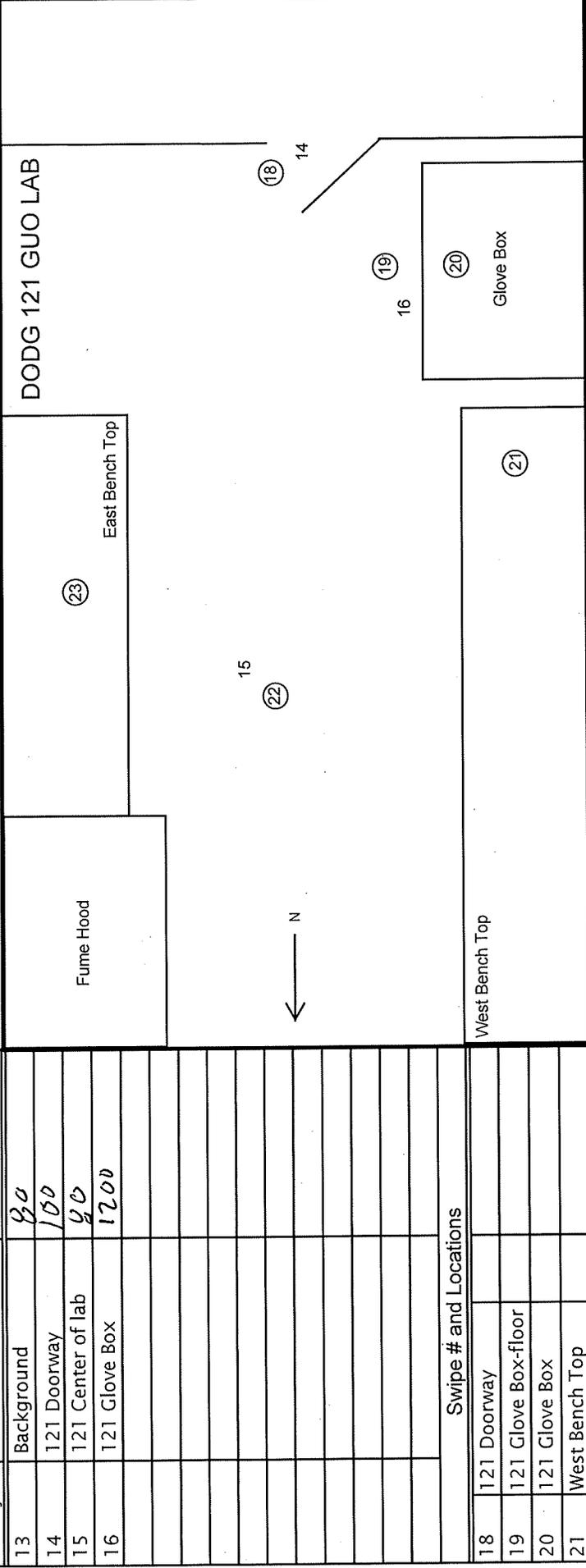
LABORATORY SURVEY

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 1/19/21	Time 1557	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 1/19/21

NOTE SWIPE AND SURVEY LOCATIONS ON MAP



Survey #	Location	CPM	Surveyed By:	Date:	Notes
13	Background	80	BT	1/19/21	
14	121 Doorway	100			
15	121 Center of lab	20			
16	121 Glove Box	1200			
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:	Date:	
			<i>M. Heine</i>	1/21/21	

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