

GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	23	Dates:	6/06/2021-6/12/2021	Counted On	6/7/2021
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)=		8.88E-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	29	*****	*****	
3.	BACKGROUND 3	30	*****	*****	
4.	BACKGROUND 4	29	*****	*****	
5.	BACKGROUND 5	29	*****	*****	
6.	BACKGROUND 6	31	*****	*****	
7.	B021 ELEVATOR ENTRANCE	29	M	M	
8.	B021 FENCED GATE	30	M	M	
9.	B021 RAM SAFE	24	M	M	
10.	B021 EAST FLOOR	25	M	M	
11.	B021 NORTH BENCH TOP	26	M	M	
12.	B021 WEST LAB FLOOR	26	M	M	
13.	B021 WORK PLATFORM	27	M	M	
14.	B021 CALORIMETER	32	M	M	
15.	B021 COMPUTERS	28	M	M	
16.	B021 DSC/TGA	31	M	M	
17.	B021 SOUTH BENCH TOP	29	M	M	
18.	121 DOORWAY	31	M	M	
19.	121 GLOVE BOX- FLOOR	29	M	M	
20.	121 GLOVE BOX	24	M	M	
21.	121 WEST BENCH TOP	25	M	M	
22.	121 CENTER OF LAB	27	M	M	
23.	122 EAST BENCH TOP	26	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: R. Bergman			REVIEWED BY: M. Heine		
SIGN/DATE: <i>R. Bergman</i> 06/07/2021			SIGN/DATE: <i>M. Heine</i> 6/7/21		

Assay Definition-

Assay Description:

Assay Type: CPM

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210607_1130

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210607_1130\20210607_1130.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	6/7/2021	11:32:06 AM	1	5.00	22	5	27	231.92	
1	6/7/2021	11:38:29 AM	2	5.00	24	5	29	211.67	
1	6/7/2021	11:44:45 AM	3	5.00	24	6	30	226.84	
1	6/7/2021	11:51:01 AM	4	5.00	23	6	29	269.35	
1	6/7/2021	11:57:24 AM	5	5.00	24	5	29	249.51	
1	6/7/2021	12:03:49 PM	6	5.00	26	5	31	210.37	
1	6/7/2021	12:10:14 PM	7	5.00	24	5	29	288.53	
1	6/7/2021	12:16:38 PM	8	5.00	23	7	30	329.41	
1	6/7/2021	12:23:02 PM	9	5.00	20	4	24	259.36	
1	6/7/2021	12:29:28 PM	10	5.00	21	4	25	178.89	
1	6/7/2021	12:35:49 PM	11	5.00	22	4	26	181.15	
1	6/7/2021	12:42:09 PM	12	5.00	21	5	26	305.74	

Protocol# 1 - Reactor Weekly.lsa

User: CSE

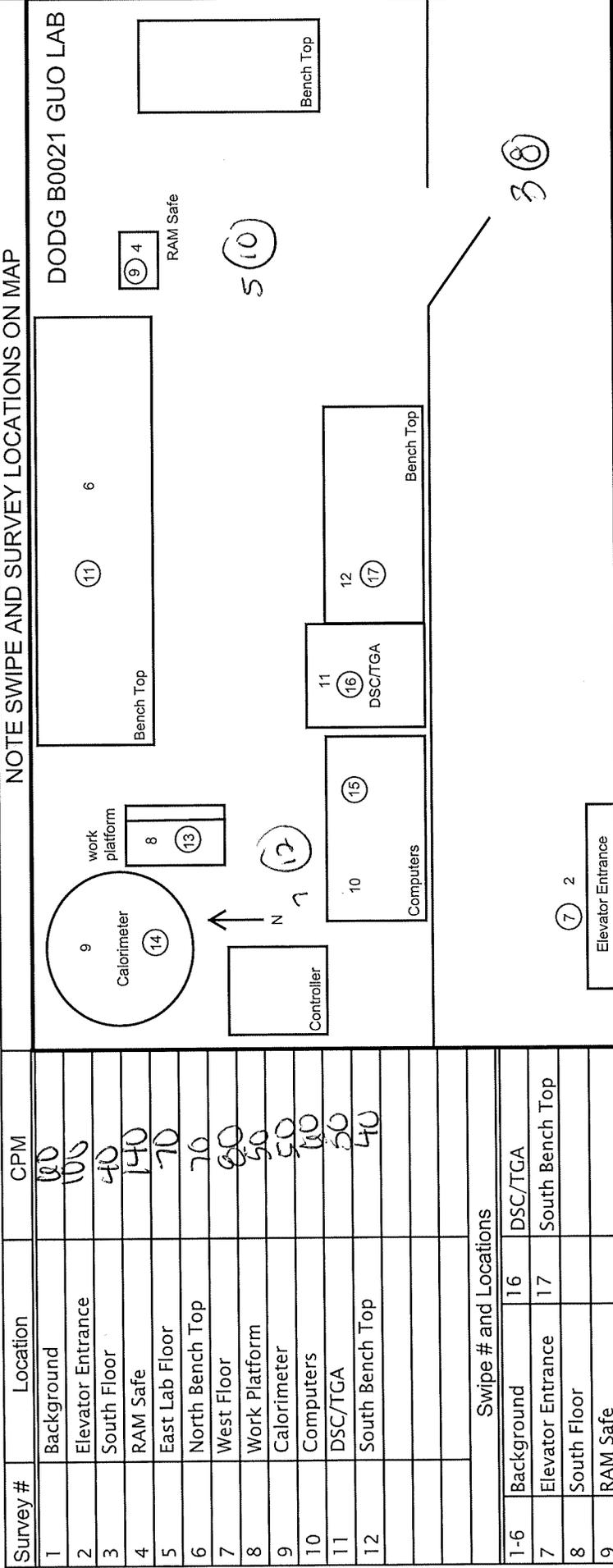
1	6/7/2021	12:48:30 PM	13	5.00	22	6	27	209.08
1	6/7/2021	1:21:11 PM	14	5.00	27	6	32	200.37
1	6/7/2021	1:35:11 PM	15	5.00	23	5	28	260.84
1	6/7/2021	1:49:15 PM	16	5.00	25	5	31	204.94
1	6/7/2021	1:55:36 PM	17	5.00	23	6	29	293.46
1	6/7/2021	2:01:58 PM	18	5.00	26	5	31	228.92
1	6/7/2021	2:08:18 PM	19	5.00	24	4	29	213.44
1	6/7/2021	2:14:40 PM	20	5.00	19	5	24	248.24
1	6/7/2021	2:21:03 PM	21	5.00	19	6	25	274.27
1	6/7/2021	2:27:32 PM	22	5.00	24	3	27	196.79
1	6/7/2021	2:33:52 PM	23	5.00	23	4	26	191.83
1	6/7/2021	2:39:33 PM	24	5.00	14374	35751	50124	1012.31

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 06/07/2021	Time 0814	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 06/07/2021



Survey #	Location	CPM	Swipe # and Locations	Notes
1	Background	60		
2	Elevator Entrance	105		
3	South Floor	40		
4	RAM Safe	140		
5	East Lab Floor	70		
6	North Bench Top	70		
7	West Floor	60		
8	Work Platform	50		
9	Calorimeter	50		
10	Computers	100		
11	DSC/TGA	50		
12	South Bench Top	40		
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: 06/07/2021

Swiped By: RB Date: 06/07/2021

Reviewed By: [Signature] Date: 6/7/21

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 09/07/2021	Time 0832	Swipe Instrument Quantasmat	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One)		LSC Printout Date 09/07/2021			
ON <input checked="" type="checkbox"/>	OFF <input type="checkbox"/>				

Survey #	Location	CPM	NOTE SWIPE AND SURVEY LOCATIONS ON MAP		
13	Background	ND			
14	121 Doorway	80			
15	121 Center of lab	80			
16	121 Glove Box	150			
			Swipe # and Locations 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		
18	121 Doorway		Surveyed By:	RB	Date: 09/07/2021
19	121 Glove Box-floor		Swiped By:	RB	Date: 09/07/2021
20	121 Glove Box		Reviewed By:	<i>[Signature]</i>	Date: 9/7/21
21	West Bench Top		Notes		
22	121 Center of lab				
23	East Bench Top				

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