

# GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	1	Dates:	1/03/2021-1/09/2021	Counted On	1/11/2021
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/cm2 = CPM:C * Control Factor / 100		
Limit of quantification (LOQ)=		8.70E-08 uCi/cm <sup>2</sup>		QUANTIFICATION BELOW REG GUIDE 8.23 LIMITS OK	
Swipe #	LOCATION: ROOM # & AREA/OBJECT	GROSS CPM CHANNEL C	uCi/swipe	uCi/cm <sup>2</sup>	NOTE:
1.	BACKGROUND 1	33	*****	*****	
2.	BACKGROUND 2	31	*****	*****	
3.	BACKGROUND 3	24	*****	*****	
4.	BACKGROUND 4	22	*****	*****	
5.	BACKGROUND 5	27	*****	*****	
6.	BACKGROUND 6	25	*****	*****	
7.	B021 ELEVATOR ENTRANCE	27	M	M	
8.	B021 FENCED GATE	31	M	M	
9.	B021 RAM SAFE	28	M	M	
10.	B021 EAST FLOOR	24	M	M	
11.	B021 NORTH BENCH TOP	32	M	M	
12.	B021 WEST LAB FLOOR	32	M	M	
13.	B021 WORK PLATFORM	33	M	M	
14.	B021 CALORIMETER	26	M	M	
15.	B021 COMPUTERS	31	M	M	
16.	B021 DSC/TGA	31	M	M	
17.	B021 SOUTH BENCH TOP	24	M	M	
18.	121 DOORWAY	28	M	M	
19.	121 GLOVE BOX- FLOOR	26	M	M	
20.	121 GLOVE BOX	31	M	M	
21.	121 WEST BENCH TOP	26	M	M	
22.	121 CENTER OF LAB	26	M	M	
23.	122 EAST BENCH TOP	23	M	M	
<sup>36</sup> CI SOURCE 09/14/1971		50050		*****	*****
		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 <sup>-6</sup> uCi/cm <sup>2</sup> .					
SURVEY PREPARED BY: B. Tanner			REVIEWED BY: M. Heine		
SIGN/DATE: <i>B. Tanner 1/14/2021</i>			SIGN/DATE:		

Assay Definition-

Assay Description:

Assay Type: CPM  
 Report Name: Report1  
 Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210111\_0857  
 Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210111\_0857\20210111\_0857.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	1/11/2021	8:59:02 AM	1	5.00	27	6	33	161.23		
1	1/11/2021	9:05:20 AM	2	5.00	25	6	31	180.73		
1	1/11/2021	9:11:43 AM	3	5.00	21	3	24	140.26		
1	1/11/2021	9:18:08 AM	4	5.00	19	3	22	165.52		
1	1/11/2021	9:24:23 AM	5	5.00	22	5	27	228.44		
1	1/11/2021	9:30:41 AM	6	5.00	20	5	25	294.19		
1	1/11/2021	9:37:04 AM	7	5.00	22	5	27	169.46		
1	1/11/2021	9:43:23 AM	8	5.00	26	5	31	168.15		
1	1/11/2021	9:49:42 AM	9	5.00	23	5	28	273.13		
1	1/11/2021	9:56:05 AM	10	5.00	20	4	24	147.88		
1	1/11/2021	10:02:24 AM	11	5.00	28	4	32	93.24		
1	1/11/2021	10:09:26 AM	12	5.00	27	4	32	132.47		

Protocol# 1 - Reactor Weekly.lsa

User: CSE

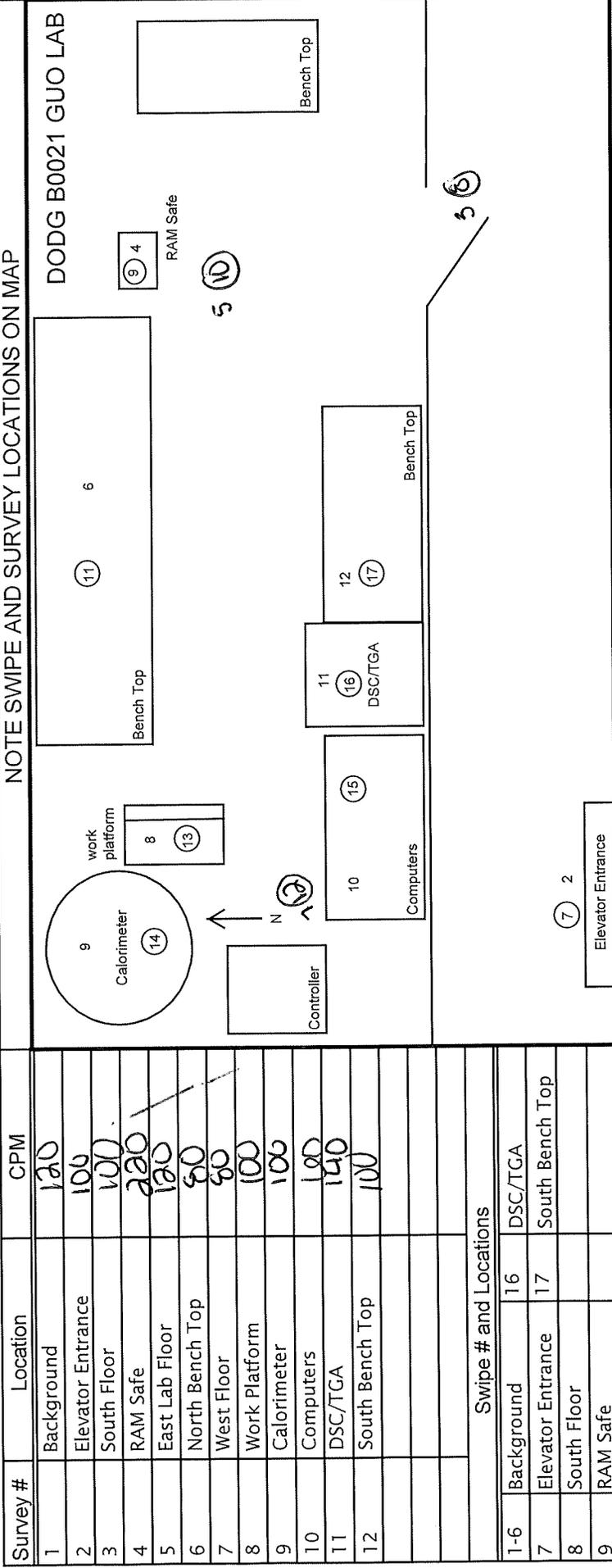
1	1/11/2021	10:15:47 AM	13	5.00	28	4	33	96.49
1	1/11/2021	10:22:12 AM	14	5.00	20	5	26	203.36
1	1/11/2021	10:28:31 AM	15	5.00	27	5	31	174.35
1	1/11/2021	10:34:47 AM	16	5.00	24	7	31	291.79
1	1/11/2021	10:41:07 AM	17	5.00	19	6	24	227.45
1	1/11/2021	10:47:24 AM	18	5.00	23	5	28	233.85
1	1/11/2021	10:53:43 AM	19	5.00	22	4	26	196.26
1	1/11/2021	11:00:04 AM	20	5.00	27	4	31	117.38
1	1/11/2021	11:06:24 AM	21	5.00	23	3	26	105.99
1	1/11/2021	11:12:42 AM	22	5.00	19	7	26	301.38
1	1/11/2021	11:18:59 AM	23	5.00	19	3	23	210.89
1	1/11/2021	11:24:40 AM	24	5.00	14488	35563	50050	1017.93

# 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 01/08/2021	Time 09:33	Swipe Instrument Quantasmart	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One)					
ON <input type="checkbox"/> OFF <input checked="" type="checkbox"/>					

LSC Printout Date: 1/11/21



Survey #	Location	CPM	Swipe # and Locations	Notes
1	Background	120		
2	Elevator Entrance	100		
3	South Floor	100		
4	RAM Safe	220		
5	East Lab Floor	120		
6	North Bench Top	50		
7	West Floor	50		
8	Work Platform	100		
9	Calorimeter	100		
10	Computers	100		
11	DSC/TGA	140		
12	South Bench Top	100		
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: 01/08/2021

Swiped By: RB Date: 01/08/2021

Reviewed By: *M. Hedin* Date: 1/21/21

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

