

# GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	43	Dates:	10/24/2021-10/30/2021	Counted On	10/26/2021
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 <sup>2</sup> = CPM:C * Control Factor / 100		
Limit of quantification (LOQ)=		9.25E-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	40	*****	*****	
2.	BACKGROUND 2	33	*****	*****	
3.	BACKGROUND 3	34	*****	*****	
4.	BACKGROUND 4	33	*****	*****	
5.	BACKGROUND 5	32	*****	*****	
6.	BACKGROUND 6	34	*****	*****	
7.	B021 ELEVATOR ENTRANCE	31	M	M	
8.	B021 FENCED GATE	28	M	M	
9.	B021 RAM SAFE	32	M	M	
10.	B021 EAST FLOOR	34	M	M	
11.	B021 NORTH BENCH TOP	30	M	M	
12.	B021 WEST LAB FLOOR	30	M	M	
13.	B021 WORK PLATFORM	31	M	M	
14.	B021 CALORIMETER	26	M	M	
15.	B021 COMPUTERS	31	M	M	
16.	B021 DSC/TGA	30	M	M	
17.	B021 SOUTH BENCH TOP	36	M	M	
18.	121 DOORWAY	34	M	M	
19.	121 GLOVE BOX- FLOOR	32	M	M	
20.	121 GLOVE BOX	32	M	M	
21.	121 WEST BENCH TOP	30	M	M	
22.	121 CENTER OF LAB	37	M	M	
23.	122 EAST BENCH TOP	34	M	M	
<sup>36</sup> CI SOURCE 09/14/1971		50034	*****	*****	
			100.88%	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: N. Hoss			REVIEWED BY: J. Cummings		
SIGN/DATE: <i>N. Hoss</i> 10/28/2021			SIGN/DATE: <i>J. Cummings</i> 10/29/21		

Assay Definition-

Assay Description:

Assay Type: CPM

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20211026\_0828

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20211026\_0828\20211026\_0828.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	10/26/2021	8:29:24 AM	1		5.00	34	6	40	95.49	
1	10/26/2021	8:35:57 AM	2		5.00	28	5	33	101.81	
1	10/26/2021	8:42:21 AM	3		5.00	29	5	34	163.79	
1	10/26/2021	8:48:48 AM	4		5.00	28	5	33	194.24	
1	10/26/2021	8:55:17 AM	5		5.00	25	6	32	118.80	
1	10/26/2021	9:01:38 AM	6		5.00	28	6	34	126.71	
1	10/26/2021	9:16:20 AM	7		5.00	24	6	31	178.63	
1	10/26/2021	9:22:46 AM	8		5.00	23	5	28	151.31	
1	10/26/2021	9:29:12 AM	9		5.00	26	5	32	132.36	
1	10/26/2021	9:35:48 AM	10		5.00	30	4	34	124.23	
1	10/26/2021	9:42:12 AM	11		5.00	23	7	30	245.86	
1	10/26/2021	9:48:36 AM	12		5.00	25	5	30	159.34	

Protocol# 1 - Reactor Weekly.lsa

User: CSE

1	10/26/2021	9:55:05 AM	13	5.00	25	6	31	247.34
1	10/26/2021	10:01:40 AM	14	5.00	23	4	26	129.56
1	10/26/2021	10:07:57 AM	15	5.00	26	5	31	191.95
1	10/26/2021	10:14:19 AM	16	5.00	24	6	30	232.90
1	10/26/2021	10:20:44 AM	17	5.00	29	7	36	218.23
1	10/26/2021	10:27:07 AM	18	5.00	27	7	34	222.48
1	10/26/2021	10:33:33 AM	19	5.00	25	7	32	173.89
1	10/26/2021	10:40:00 AM	20	5.00	26	6	32	199.98
1	10/26/2021	10:46:13 AM	21	5.00	25	5	30	201.80
1	10/26/2021	11:04:52 AM	22	5.00	33	4	37	103.27
1	10/26/2021	11:11:20 AM	23	5.00	27	7	34	219.92
1	10/26/2021	11:17:03 AM	24	5.00	14621	35413	50034	1017.20

# 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 312	Serial No. NH <del>68689</del> 172178	Radiation Detected Gamma
Authorized User Xiaofeng Guo	Date 10/25/2021	Time 14:52	Swipe Instrument Quantasmart	Serial No. NH <del>073396</del> 172178	Radiation Detected Beta/Gamma
Reactor Status (Check One) ON <input checked="" type="checkbox"/> OFF <input type="checkbox"/>					

Survey #		Location	CPM	LSC Printout Date 10/26/21	
1		Background	80		
2		Elevator Entrance	140		
3		South Floor	100		
4		RAM Safe	410		
5		East Lab Floor	180		
6		North Bench Top	80		
7		West Floor	110		
8		Work Platform	120		
9		Calorimeter	140		
10		Computers	140		
11		DSC/TGA	100		
12		South Bench Top	140		
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				

  

**NOTE SWIPE AND SURVEY LOCATIONS ON MAP**

DODG B0021 GUO LAB

Surveyed By: NH	Date: 10/25	Notes
Swiped By: NH	Date: 10/25	
Reviewed By: JC	Date: 10/27/2021	

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

