

# GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	32	Dates:	8/15/2021-8/21/2021	Counted On	8/17/2021
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)=		8.72E-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	30	*****	*****	
2.	BACKGROUND 2	29	*****	*****	
3.	BACKGROUND 3	27	*****	*****	
4.	BACKGROUND 4	25	*****	*****	
5.	BACKGROUND 5	25	*****	*****	
6.	BACKGROUND 6	27	*****	*****	
7.	B021 ELEVATOR ENTRANCE	25	M	M	
8.	B021 FENCED GATE	31	M	M	
9.	B021 RAM SAFE	30	M	M	
10.	B021 EAST FLOOR	32	M	M	
11.	B021 NORTH BENCH TOP	24	M	M	
12.	B021 WEST LAB FLOOR	26	M	M	
13.	B021 WORK PLATFORM	28	M	M	
14.	B021 CALORIMETER	26	M	M	
15.	B021 COMPUTERS	22	M	M	
16.	B021 DSC/TGA	28	M	M	
17.	B021 SOUTH BENCH TOP	26	M	M	
18.	121 DOORWAY	25	M	M	
19.	121 GLOVE BOX- FLOOR	28	M	M	
20.	121 GLOVE BOX	25	M	M	
21.	121 WEST BENCH TOP	25	M	M	
22.	121 CENTER OF LAB	29	M	M	
23.	122 EAST BENCH TOP	28	M	M	
<sup>36</sup> CI SOURCE 09/14/1971		50141		*****	*****
		101.10%	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: R. Bergman			REVIEWED BY: M. Heine		
SIGN/DATE: <i>R. Bergman</i> 8/17/21			SIGN/DATE: <i>M. Heine</i> 8/19/21		

Protocol# 1 - Reactor Weekly.lsa

User: CSE

## Assay Definition-

## Assay Description:

Assay Type: CPM

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210817\_0812

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210817\_0812\20210817\_0812.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	8/17/2021	8:13:17 AM	1	5.00	25	5	30	225.16		
1	8/17/2021	8:19:36 AM	2	5.00	24	5	29	152.83		
1	8/17/2021	8:25:52 AM	3	5.00	23	4	27	190.66		
1	8/17/2021	8:32:13 AM	4	5.00	20	5	25	252.10		
1	8/17/2021	8:38:36 AM	5	5.00	19	6	25	242.25		
1	8/17/2021	8:45:01 AM	6	5.00	24	3	27	157.56		
1	8/17/2021	8:51:28 AM	7	5.00	20	5	25	240.88		
1	8/17/2021	8:57:51 AM	8	5.00	25	5	31	131.30		
1	8/17/2021	9:04:16 AM	9	5.00	26	4	30	88.49		
1	8/17/2021	9:10:42 AM	10	5.00	26	6	32	167.55		
1	8/17/2021	9:17:08 AM	11	5.00	19	5	24	209.69		
1	8/17/2021	9:23:30 AM	12	5.00	21	5	26	230.30		

1	8/17/2021	9:30:01 AM	13	5.00	24	4	28	208.21
1	8/17/2021	9:36:26 AM	14	5.00	21	4	26	184.40
1	8/17/2021	9:42:49 AM	15	5.00	19	3	22	161.93
1	8/17/2021	9:49:09 AM	16	5.00	23	5	28	252.73
1	8/17/2021	9:55:35 AM	17	5.00	20	6	26	303.52
1	8/17/2021	10:02:00 AM	18	5.00	20	5	25	182.18
1	8/17/2021	10:08:27 AM	19	5.00	23	5	28	187.72
1	8/17/2021	10:14:50 AM	20	5.00	20	5	25	125.88
1	8/17/2021	10:21:18 AM	21	5.00	20	6	25	223.20
1	8/17/2021	10:27:44 AM	22	5.00	24	6	29	263.95
1	8/17/2021	10:34:03 AM	23	5.00	22	6	28	271.95
1	8/17/2021	10:39:57 AM	24	5.00	14643	35498	50141	1034.21

# 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 8/10/21	Time 2:48	Swipe Instrument Quantasmat	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One)					
ON <input type="checkbox"/> OFF <input checked="" type="checkbox"/>					

Survey #	Location	CPM	NOTE SWIPE AND SURVEY LOCATIONS ON MAP		
1	Background	0p			
2	Elevator Entrance	100			
3	South Floor	100			
4	RAM Safe	500			
5	East Lab Floor	90			
6	North Bench Top	70			
7	West Floor	110			
8	Work Platform	90			
9	Calorimeter	90			
10	Computers	150			
11	DSC/TGA	90			
12	South Bench Top	80			
			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				

Notes

Surveyed By: NH Date: 08/10/21

Swiped By: RB Date: 08/10/21

Reviewed By: [Signature] Date: 8/19/21

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 8/16/21	Time 3:08	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 8/17/21			

Survey #	Location	CPM	NOTE SWIPE AND SURVEY LOCATIONS ON MAP		
13	Background	600			
14	121 Doorway	70			
15	121 Center of lab	90			
16	121 Glove Box	360			
			Fume Hood East Bench Top DODG 121 GUO LAB West Bench Top Glove Box		
			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				
			Surveyed By: RB Date: 08/16/21 Swiped By: NH/RB Date: 08/16/21 Reviewed By: [Signature] Date: 8/19/21		

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