

GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	20	Dates:	5/16/2021-5/22/2021	Counted On	5/17/2021
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 ² = CPM:C * Control Factor / 100		
Limit of quantification (LOQ)=		8.72E-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	26	*****	*****	
2.	BACKGROUND 2	24	*****	*****	
3.	BACKGROUND 3	26	*****	*****	
4.	BACKGROUND 4	32	*****	*****	
5.	BACKGROUND 5	26	*****	*****	
6.	BACKGROUND 6	29	*****	*****	
7.	B021 ELEVATOR ENTRANCE	24	M	M	
8.	B021 FENCED GATE	30	M	M	
9.	B021 RAM SAFE	26	M	M	
10.	B021 EAST FLOOR	20	M	M	
11.	B021 NORTH BENCH TOP	29	M	M	
12.	B021 WEST LAB FLOOR	27	M	M	
13.	B021 WORK PLATFORM	30	M	M	
14.	B021 CALORIMETER	28	M	M	
15.	B021 COMPUTERS	29	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	28	M	M	
21.	121 WEST BENCH TOP	27	M	M	
22.	121 CENTER OF LAB	25	M	M	
23.	122 EAST BENCH TOP	25	M	M	
³⁶ CI SOURCE 09/14/1971		50156	*****	*****	
		101.13%	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:  05/19/2021			SIGN/DATE:  6/1/21		

Assay Definition-

Assay Description:

Assay Type: CPM

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210517_1615

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210517_1615\20210517_1615.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	5/17/2021	4:16:56 PM	1	5.00	22	4	26	201.22		
1	5/17/2021	4:23:20 PM	2	5.00	20	4	24	208.34		
1	5/17/2021	4:29:32 PM	3	5.00	19	7	26	385.40		
1	5/17/2021	4:35:48 PM	4	5.00	27	6	32	198.10		
1	5/17/2021	4:42:10 PM	5	5.00	21	5	26	282.17		
1	5/17/2021	4:48:35 PM	6	5.00	23	6	29	216.71		
1	5/17/2021	4:55:01 PM	7	5.00	21	3	24	180.06		
1	5/17/2021	5:01:25 PM	8	5.00	23	6	30	279.69		
1	5/17/2021	5:07:51 PM	9	5.00	20	5	26	316.61		
1	5/17/2021	5:14:14 PM	10	5.00	16	4	20	239.45		
1	5/17/2021	5:20:35 PM	11	5.00	25	5	29	225.68		
1	5/17/2021	5:26:55 PM	12	5.00	23	4	27	198.28		

Protocol# 1 - Reactor Weekly.lsa

User: CSE

1	5/17/2021	5:33:12 PM	13	5.00	24	6	30	273.67
1	5/17/2021	5:39:35 PM	14	5.00	23	5	28	241.04
1	5/17/2021	5:45:58 PM	15	5.00	24	6	29	236.95
1	5/17/2021	5:52:15 PM	16	5.00	23	5	28	233.86
1	5/17/2021	5:58:38 PM	17	5.00	23	3	26	178.17
1	5/17/2021	6:04:59 PM	18	5.00	21	5	25	194.18
1	5/17/2021	6:11:19 PM	19	5.00	25	3	28	156.92
1	5/17/2021	6:17:41 PM	20	5.00	24	4	28	136.94
1	5/17/2021	6:24:03 PM	21	5.00	22	5	27	344.10
1	5/17/2021	6:30:29 PM	22	5.00	21	4	25	220.01
1	5/17/2021	6:36:47 PM	23	5.00	20	5	25	234.68
1	5/17/2021	6:42:27 PM	24	5.00	14570	35586	50156	1009.11

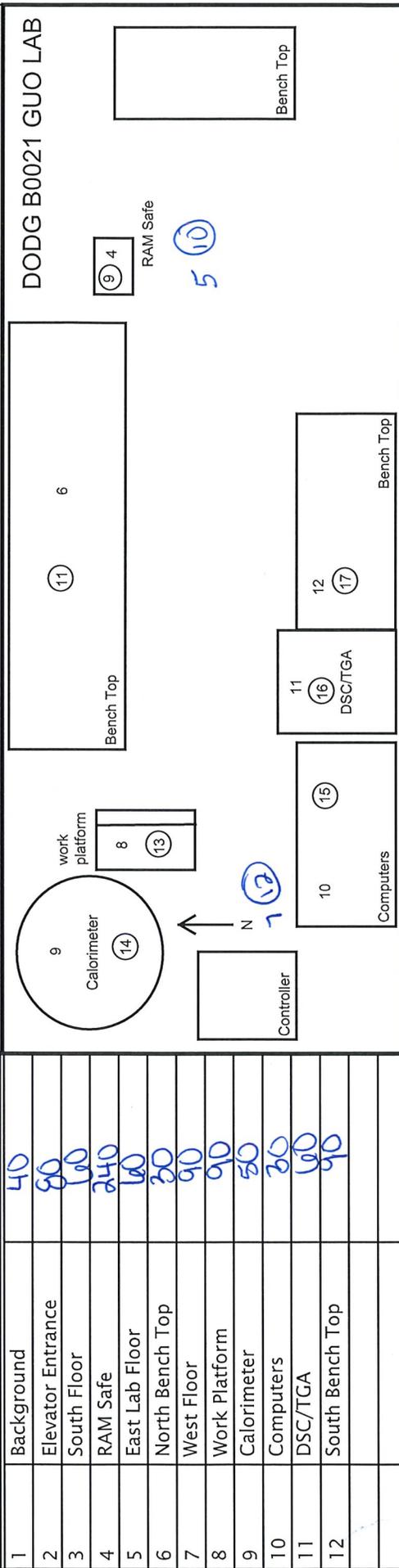
LABORATORY SURVEY

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 05/17/2021	Time 11:15	Swipe Instrument Quantasmart	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One) ON <input checked="" type="checkbox"/> OFF <input type="checkbox"/>					

LSC Printout Date 05/17/2021

NOTE SWIPE AND SURVEY LOCATIONS ON MAP



Survey #	Location	CPM
1	Background	40
2	Elevator Entrance	80
3	South Floor	60
4	RAM Safe	240
5	East Lab Floor	60
6	North Bench Top	30
7	West Floor	90
8	Work Platform	90
9	Calorimeter	50
10	Computers	30
11	DSC/TGA	60
12	South Bench Top	90

Swipe # and Locations	Surveyed By:	Date:	Notes
1-6 Background 16 DSC/TGA	RB	05/17/21	
7 Elevator Entrance 17 South Bench Top	RB	05/17/21	
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			

Reviewed By: *[Signature]* Date: 06/11/21

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