

# GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	14	Dates:	4/04/2021-4/10/2021	Counted On	4/5/2021
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)=		8.87E-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	26	*****	*****	
3.	BACKGROUND 3	29	*****	*****	
4.	BACKGROUND 4	25	*****	*****	
5.	BACKGROUND 5	27	*****	*****	
6.	BACKGROUND 6	38	*****	*****	
7.	B021 ELEVATOR ENTRANCE	29	M	M	
8.	B021 FENCED GATE	30	M	M	
9.	B021 RAM SAFE	30	M	M	
10.	B021 EAST FLOOR	25	M	M	
11.	B021 NORTH BENCH TOP	27	M	M	
12.	B021 WEST LAB FLOOR	29	M	M	
13.	B021 WORK PLATFORM	26	M	M	
14.	B021 CALORIMETER	27	M	M	
15.	B021 COMPUTERS	28	M	M	
16.	B021 DSC/TGA	27	M	M	
17.	B021 SOUTH BENCH TOP	26	M	M	
18.	121 DOORWAY	26	M	M	
19.	121 GLOVE BOX- FLOOR	26	M	M	
20.	121 GLOVE BOX	25	M	M	
21.	121 WEST BENCH TOP	25	M	M	
22.	121 CENTER OF LAB	24	M	M	
23.	122 EAST BENCH TOP	24	M	M	
<sup>36</sup> CI SOURCE 09/14/1971		49990	*****	*****	
		100.80%	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> 04/09/2021			SIGN/DATE: <i>M. Heine</i> 4/26/21		

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\20210405\_0848

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210405\_0848\20210405\_0848.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	4/5/2021	8:49:29 AM	1	5.00		25	5	30	99.62	
1	4/5/2021	8:55:56 AM	2	5.00		22	4	26	170.84	
1	4/5/2021	9:02:11 AM	3	5.00		24	5	29	134.71	
1	4/5/2021	9:08:34 AM	4	5.00		19	6	25	171.99	
1	4/5/2021	9:14:56 AM	5	5.00		22	4	27	172.38	
1	4/5/2021	9:21:20 AM	6	5.00		32	6	38	137.75	
1	4/5/2021	9:27:36 AM	7	5.00		22	7	29	284.43	
1	4/5/2021	9:33:51 AM	8	5.00		23	7	30	290.68	
1	4/5/2021	9:40:13 AM	9	5.00		26	4	30	183.78	
1	4/5/2021	9:46:34 AM	10	5.00		21	4	25	276.08	
1	4/5/2021	9:52:48 AM	11	5.00		22	5	27	234.81	
1	4/5/2021	9:59:13 AM	12	5.00		25	4	29	216.33	

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1	4/5/2021	10:05:38 AM	13	5.00	21	5	26	224.72
1	4/5/2021	10:11:57 AM	14	5.00	21	6	27	291.95
1	4/5/2021	10:18:19 AM	15	5.00	23	5	28	177.16
1	4/5/2021	10:24:39 AM	16	5.00	22	4	27	253.26
1	4/5/2021	10:30:59 AM	17	5.00	21	5	26	257.52
1	4/5/2021	10:37:22 AM	18	5.00	21	5	26	218.51
1	4/5/2021	10:43:43 AM	19	5.00	21	5	26	197.02
1	4/5/2021	10:50:04 AM	20	5.00	19	7	25	301.60
1	4/5/2021	10:56:29 AM	21	5.00	21	4	25	174.69
1	4/5/2021	11:02:49 AM	22	5.00	18	6	24	290.80
1	4/5/2021	11:09:11 AM	23	5.00	19	6	24	287.99
1	4/5/2021	11:14:53 AM	24	5.00	14505	35485	49990	1008.61



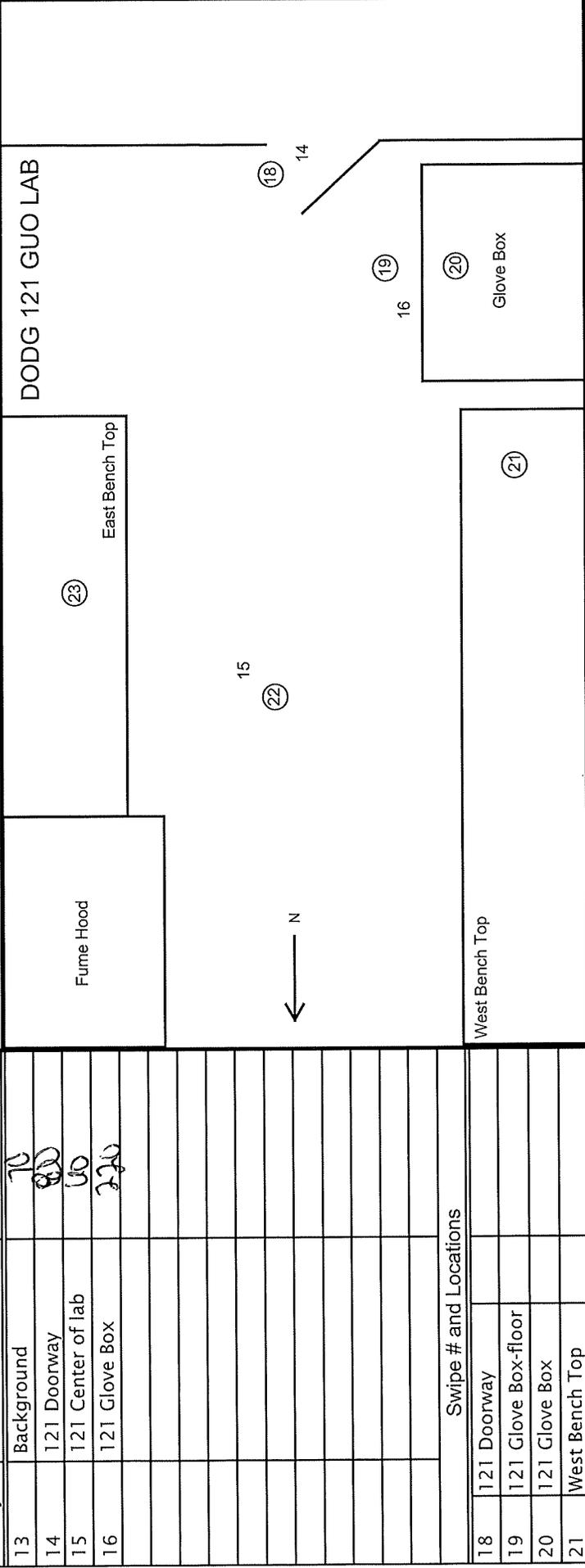
# LABORATORY SURVEY

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 04/05/2021	Time 0940	Swipe Instrument Quantasart	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One) <input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF <input type="checkbox"/>					

LSC Printout Date 4/5/2021

NOTE SWIPE AND SURVEY LOCATIONS ON MAP



Survey #	Location	CPM	Swipe # and Locations	Notes
13	Background	70		
14	121 Doorway	800		
15	121 Center of lab	600		
16	121 Glove Box	220		
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: 04/05/2021	
Swiped By: RB			Date: 04/05/2021	
Reviewed By: <i>[Signature]</i>			Date: 4/20/21	

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