

# GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	10	Dates:	3/07/2021-3/13/2021	Counted On	3/8/2021
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)=		8.98E-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	26	*****	*****	
2.	BACKGROUND 2	41	*****	*****	
3.	BACKGROUND 3	31	*****	*****	
4.	BACKGROUND 4	28	*****	*****	
5.	BACKGROUND 5	31	*****	*****	
6.	BACKGROUND 6	27	*****	*****	
7.	B021 ELEVATOR ENTRANCE	25	M	M	
8.	B021 FENCED GATE	25	M	M	
9.	B021 RAM SAFE	24	M	M	
10.	B021 EAST FLOOR	27	M	M	
11.	B021 NORTH BENCH TOP	33	M	M	
12.	B021 WEST LAB FLOOR	30	M	M	
13.	B021 WORK PLATFORM	24	M	M	
14.	B021 CALORIMETER	25	M	M	
15.	B021 COMPUTERS	22	M	M	
16.	B021 DSC/TGA	27	M	M	
17.	B021 SOUTH BENCH TOP	25	M	M	
18.	121 DOORWAY	26	M	M	
19.	121 GLOVE BOX- FLOOR	23	M	M	
20.	121 GLOVE BOX	29	M	M	
21.	121 WEST BENCH TOP	22	M	M	
22.	121 CENTER OF LAB	25	M	M	
23.	122 EAST BENCH TOP	26	M	M	

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<sup>36</sup> CI SOURCE 09/14/1971	50221	*****	*****	
	101.26%	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:  3/8/2021	SIGN/DATE:  3/10/21

Assay Definition-

Assay Description:

Assay Type: CPM

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210308\_0920

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210308\_0920\20210308\_0920.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	3/8/2021	9:21:30 AM	1	5.00	21	5	26	290.14	
1	3/8/2021	9:27:52 AM	2	5.00	35	6	41	222.06	
1	3/8/2021	9:34:09 AM	3	5.00	28	3	31	117.40	
1	3/8/2021	9:40:29 AM	4	5.00	22	6	28	238.98	
1	3/8/2021	9:46:49 AM	5	5.00	26	5	31	174.34	
1	3/8/2021	9:53:16 AM	6	5.00	23	4	27	168.76	
1	3/8/2021	9:59:31 AM	7	5.00	21	4	25	273.62	
1	3/8/2021	10:05:49 AM	8	5.00	21	4	25	275.94	
1	3/8/2021	10:12:08 AM	9	5.00	21	4	24	281.27	
1	3/8/2021	10:18:27 AM	10	5.00	23	4	27	222.18	
1	3/8/2021	10:24:42 AM	11	5.00	26	7	33	264.41	
1	3/8/2021	10:31:03 AM	12	5.00	26	4	30	221.55	

Protocol# 1 - Reactor Weekly.lsa

User: CSE

1	3/8/2021	10:37:30 AM	13	5.00	18	6	24	288.03
1	3/8/2021	10:43:53 AM	14	5.00	21	4	25	292.53
1	3/8/2021	10:50:19 AM	15	5.00	18	5	22	351.79
1	3/8/2021	10:56:39 AM	16	5.00	22	5	27	268.80
1	3/8/2021	11:02:57 AM	17	5.00	21	5	25	206.87
1	3/8/2021	11:09:14 AM	18	5.00	21	4	26	209.56
1	3/8/2021	11:15:29 AM	19	5.00	20	3	23	181.94
1	3/8/2021	11:21:49 AM	20	5.00	26	3	29	193.23
1	3/8/2021	11:28:12 AM	21	5.00	18	4	22	217.86
1	3/8/2021	11:34:36 AM	22	5.00	20	5	25	264.74
1	3/8/2021	11:40:54 AM	23	5.00	20	6	26	261.45
1	3/8/2021	11:46:35 AM	24	5.00	14590	35632	50221	1012.58

# 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 03/08/2021	Time 08:14	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 1/8/21

**NOTE SWIPE AND SURVEY LOCATIONS ON MAP**

**DODG B0021 GUO LAB**

Survey #	Location	CPM
1	Background	90
2	Elevator Entrance	100
3	South Floor	70
4	RAM Safe	200
5	East Lab Floor	100
6	North Bench Top	50
7	West Floor	50
8	Work Platform	90
9	Calorimeter	70
10	Computers	100
11	DSC/TGA	50
12	South Bench Top	50
13	Background	
14	Elevator Entrance	
15	South Floor	
16	RAM Safe	
17	East Lab Floor	
18	North Bench Top	
19	West Lab Floor	
20	Work Platform	
21	Calorimeter	
22	Computers	

Surveys By: <u>ZB</u>	Date: <u>03/08/2021</u>	Notes
Swiped By: <u>ZB</u>	Date: <u>03/08/2021</u>	
Reviewed By: <u>[Signature]</u>	Date: <u>3/10/21</u>	

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

