

GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	6	Dates:	2/7/2021-2/13/2021	Counted On	2/8/2021
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 ² = CPM:C * Control Factor / 100	
Limit of quantification (LOQ)=		9.15E-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	27	*****	*****	
2.	BACKGROUND 2	28	*****	*****	
3.	BACKGROUND 3	68	*****	*****	
4.	BACKGROUND 4	29	*****	*****	
5.	BACKGROUND 5	27	*****	*****	
6.	BACKGROUND 6	26	*****	*****	
7.	B021 ELEVATOR ENTRANCE	27	M	M	
8.	B021 FENCED GATE	88	7.54E-05	7.54E-07	
9.	B021 RAM SAFE	31	M	M	
10.	B021 EAST FLOOR	26	M	M	
11.	B021 NORTH BENCH TOP	21	M	M	
12.	B021 WEST LAB FLOOR	28	M	M	
13.	B021 WORK PLATFORM	28	M	M	
14.	B021 CALORIMETER	23	M	M	
15.	B021 COMPUTERS	29	M	M	
16.	B021 DSC/TGA	27	M	M	
17.	B021 SOUTH BENCH TOP	32	M	M	
18.	121 DOORWAY	30	M	M	
19.	121 GLOVE BOX- FLOOR	25	M	M	
20.	121 GLOVE BOX	31	M	M	
21.	121 WEST BENCH TOP	24	M	M	
22.	121 CENTER OF LAB	23	M	M	
23.	122 EAST BENCH TOP	26	M	M	
³⁶ Cl SOURCE 09/14/1971		50050	*****	*****	
		100.92%	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: B. Tanner			REVIEWED BY: M. Heine		
SIGN/DATE: <i>B. Tanner</i> 2/16/2021			SIGN/DATE: <i>M. Heine</i> 2/17/2021		

Assay Definition-

Assay Description:

Assay Type: CPM

Report Name: Report1

Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210208_0837

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210208_0837\20210208_0837.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	2/8/2021	8:39:11 AM	1	5.00		23	4	27	223.66	
1	2/8/2021	8:45:30 AM	2	5.00		23	5	28	279.88	
1	2/8/2021	8:51:46 AM	3	5.00		62	5	68	102.31	
1	2/8/2021	8:58:09 AM	4	5.00		24	5	29	192.96	
1	2/8/2021	9:04:29 AM	5	5.00		23	4	27	290.19	
1	2/8/2021	9:10:54 AM	6	5.00		22	4	26	195.70	
1	2/8/2021	9:17:08 AM	7	5.00		21	6	27	365.61	
1	2/8/2021	9:23:29 AM	8	5.00		72	16	88	194.64	
1	2/8/2021	9:29:54 AM	9	5.00		28	3	31	127.29	
1	2/8/2021	9:36:11 AM	10	5.00		22	4	26	236.75	
1	2/8/2021	9:42:32 AM	11	5.00		18	4	21	259.93	
1	2/8/2021	9:48:54 AM	12	5.00		24	4	28	193.33	

Protocol# 1 - Reactor Weekly.lsa

User: CSE

1	2/8/2021	9:55:16 AM	13	5.00	23	5	28	231.75
1	2/8/2021	10:01:39 AM	14	5.00	19	4	23	231.32
1	2/8/2021	10:08:03 AM	15	5.00	23	5	29	271.14
1	2/8/2021	10:14:18 AM	16	5.00	21	5	27	255.21
1	2/8/2021	10:20:38 AM	17	5.00	28	4	32	124.24
1	2/8/2021	10:27:03 AM	18	5.00	24	6	30	243.35
1	2/8/2021	10:33:26 AM	19	5.00	20	4	25	251.44
1	2/8/2021	10:39:51 AM	20	5.00	26	5	31	213.98
1	2/8/2021	10:46:14 AM	21	5.00	19	5	24	307.46
1	2/8/2021	10:52:35 AM	22	5.00	19	4	23	218.87
1	2/8/2021	10:58:47 AM	23	5.00	23	3	26	219.92
1	2/8/2021	11:04:29 AM	24	5.00	14577	35473	50050	1019.89

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 02/08/2021	Time 0820	Swipe Instrument Quantasmat	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One) ON <input type="checkbox"/> OFF <input checked="" type="checkbox"/>		LSC Printout Date 2-8-21			

Survey #	Location	CPM	NOTE SWIPE AND SURVEY LOCATIONS ON MAP		
13	Background	50			
14	121 Doorway	140			
15	121 Center of lab	40			
16	121 Glove Box	110			
Swipe # and Locations					
18	121 Doorway		West Bench Top		
19	121 Glove Box-floor		21		
20	121 Glove Box		20		
21	West Bench Top		21		
22	121 Center of lab		22		
23	East Bench Top		23		
			Notes		
	Surveyed By: RB	Date: 02/08/2021			
	Swiped By: RB	Date: 02/08/2021			
	Reviewed By: <i>M. Heind</i>	Date: 2/17/2021			

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