

GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	29	Dates:	7/18/2021-7/24/2021	Counted On	7/19/2021
INSTRUMENT USED: Quantasmart (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)=		9.46E-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	30	*****	*****	
2.	BACKGROUND 2	59	*****	*****	
3.	BACKGROUND 3	36	*****	*****	
4.	BACKGROUND 4	30	*****	*****	
5.	BACKGROUND 5	42	*****	*****	
6.	BACKGROUND 6	32	*****	*****	
7.	B021 ELEVATOR ENTRANCE	28	M	M	
8.	B021 FENCED GATE	49	1.52E-05	1.52E-07	
9.	B021 RAM SAFE	47	1.24E-05	1.24E-07	
10.	B021 EAST FLOOR	41	M	M	
11.	B021 NORTH BENCH TOP	39	M	M	
12.	B021 WEST LAB FLOOR	29	M	M	
13.	B021 WORK PLATFORM	30	M	M	
14.	B021 CALORIMETER	24	M	M	
15.	B021 COMPUTERS	29	M	M	
16.	B021 DSC/TGA	28	M	M	
17.	B021 SOUTH BENCH TOP	33	M	M	
18.	121 DOORWAY	25	M	M	
19.	121 GLOVE BOX- FLOOR	31	M	M	
20.	121 GLOVE BOX	28	M	M	
21.	121 WEST BENCH TOP	29	M	M	
22.	121 CENTER OF LAB	26	M	M	
23.	122 EAST BENCH TOP	30	M	M	
³⁶ CI SOURCE 09/14/1971		50231		*****	*****
		101.28%		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: <i>R. Bergman</i> 7/19/21			SIGN/DATE: <i>M. Heine</i> 7/26/21		

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\20210719_0853

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210719_0853\20210719_0853.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	7/19/2021	8:55:03 AM	1	5.00		27	3	30	173.28	
1	7/19/2021	9:01:20 AM	2	5.00		48	11	59	238.89	
1	7/19/2021	9:07:38 AM	3	5.00		31	5	36	210.94	
1	7/19/2021	9:13:56 AM	4	5.00		25	5	30	252.43	
1	7/19/2021	9:20:16 AM	5	5.00		33	8	42	275.62	
1	7/19/2021	9:26:32 AM	6	5.00		26	6	32	230.18	
1	7/19/2021	9:32:51 AM	7	5.00		22	6	28	288.14	
1	7/19/2021	9:39:05 AM	8	5.00		41	8	49	241.83	
1	7/19/2021	9:45:24 AM	9	5.00		41	6	47	157.80	
1	7/19/2021	9:51:43 AM	10	5.00		33	8	41	237.62	
1	7/19/2021	9:57:58 AM	11	5.00		32	7	39	222.14	
1	7/19/2021	10:04:14 AM	12	5.00		26	4	29	218.66	

Protocol# 1 - Reactor Weekly.lsa

User: CSE

1	7/19/2021	10:10:55 AM	13	5.00	24	6	30	261.06
1	7/19/2021	10:17:13 AM	14	5.00	20	4	24	280.60
1	7/19/2021	10:23:25 AM	15	5.00	26	3	29	166.31
1	7/19/2021	10:29:44 AM	16	5.00	23	5	28	277.12
1	7/19/2021	10:36:02 AM	17	5.00	27	5	33	181.68
1	7/19/2021	10:42:22 AM	18	5.00	19	6	25	286.82
1	7/19/2021	10:48:34 AM	19	5.00	25	6	31	256.25
1	7/19/2021	10:54:49 AM	20	5.00	24	4	28	218.43
1	7/19/2021	11:01:08 AM	21	5.00	22	7	29	339.58
1	7/19/2021	11:07:23 AM	22	5.00	19	7	26	317.61
1	7/19/2021	11:13:45 AM	23	5.00	24	6	30	250.72
1	7/19/2021	11:19:27 AM	24	5.00	14516	35715	50231	1016.03

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 7/19/21	Time 0831	Swipe Instrument Quantasart	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One)		LSC Printout Date 7/19/21			
ON <input type="checkbox"/>	OFF <input checked="" type="checkbox"/>				

Survey #	Location	CPM	NOTE SWIPE AND SURVEY LOCATIONS ON MAP		
1	Background	100			
2	Elevator Entrance	100			
3	South Floor	50			
4	RAM Safe	200			
5	East Lab Floor	70			
6	North Bench Top	80			
7	West Floor	40			
8	Work Platform	100			
9	Calorimeter	90			
10	Computers	70			
11	DSC/TGA	100			
12	South Bench Top	100			
			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				

Surveyed By: RB	Date: 07/19/21	Notes
Swiped By: RB	Date: 07/19/21	
Reviewed By: [Signature]	Date: 7/20/21	

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

