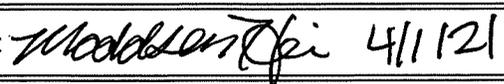


GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	13	Dates:	3/28/2021-4/03/2021	Counted On	3/29/2021
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)=		8.92E-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	26	*****	*****	
3.	BACKGROUND 3	30	*****	*****	
4.	BACKGROUND 4	41	*****	*****	
5.	BACKGROUND 5	26	*****	*****	
6.	BACKGROUND 6	29	*****	*****	
7.	B021 ELEVATOR ENTRANCE	29	M	M	
8.	B021 FENCED GATE	24	M	M	
9.	B021 RAM SAFE	47	2.40E-05	2.40E-07	
10.	B021 EAST FLOOR	24	M	M	
11.	B021 NORTH BENCH TOP	30	M	M	
12.	B021 WEST LAB FLOOR	30	M	M	
13.	B021 WORK PLATFORM	40	1.42E-05	1.42E-07	
14.	B021 CALORIMETER	24	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	33	M	M	
19.	121 GLOVE BOX- FLOOR	27	M	M	
20.	121 GLOVE BOX	28	M	M	
21.	121 WEST BENCH TOP	25	M	M	
22.	121 CENTER OF LAB	29	M	M	
23.	122 EAST BENCH TOP	31	M	M	
³⁶ CI SOURCE 09/14/1971		50111	*****	*****	
		101.04%	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:  3/29/21			SIGN/DATE:  4/1/21		

Assay Definition-

Assay Description:

Assay Type: CPM
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210329_1028
Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210329_1028\20210329_1028.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	3/29/2021	10:29:37 AM	1	5.00	23	4	27	210.40		
1	3/29/2021	10:36:00 AM	2	5.00	23	3	26	167.15		
1	3/29/2021	10:42:13 AM	3	5.00	27	3	30	160.71		
1	3/29/2021	10:48:36 AM	4	5.00	33	7	41	146.90		
1	3/29/2021	10:55:01 AM	5	5.00	20	5	26	324.21		
1	3/29/2021	11:01:22 AM	6	5.00	23	6	29	250.02		
1	3/29/2021	11:07:35 AM	7	5.00	26	3	29	143.11		
1	3/29/2021	11:13:49 AM	8	5.00	20	5	24	184.19		
1	3/29/2021	11:20:12 AM	9	5.00	41	5	47	128.33		
1	3/29/2021	11:26:29 AM	10	5.00	20	4	24	190.86		
1	3/29/2021	11:32:40 AM	11	5.00	26	4	30	182.33		
1	3/29/2021	11:39:01 AM	12	5.00	26	4	30	113.46		

Protocol# 1 - Reactor Weekly.lsa

User: CSE

1	3/29/2021	11:45:24 AM	13	5.00	36	4	40	97.56
1	3/29/2021	11:51:40 AM	14	5.00	18	6	24	228.84
1	3/29/2021	11:58:08 AM	15	5.00	24	4	28	151.63
1	3/29/2021	12:04:28 PM	16	5.00	21	6	27	259.93
1	3/29/2021	12:10:48 PM	17	5.00	22	4	26	135.82
1	3/29/2021	12:17:09 PM	18	5.00	27	6	33	205.03
1	3/29/2021	12:23:27 PM	19	5.00	22	4	27	135.03
1	3/29/2021	12:29:46 PM	20	5.00	23	5	28	208.18
1	3/29/2021	12:36:13 PM	21	5.00	21	3	25	112.15
1	3/29/2021	12:42:35 PM	22	5.00	24	5	29	164.78
1	3/29/2021	12:48:58 PM	23	5.00	25	5	31	189.00
1	3/29/2021	12:54:39 PM	24	5.00	14569	35543	50111	1011.33

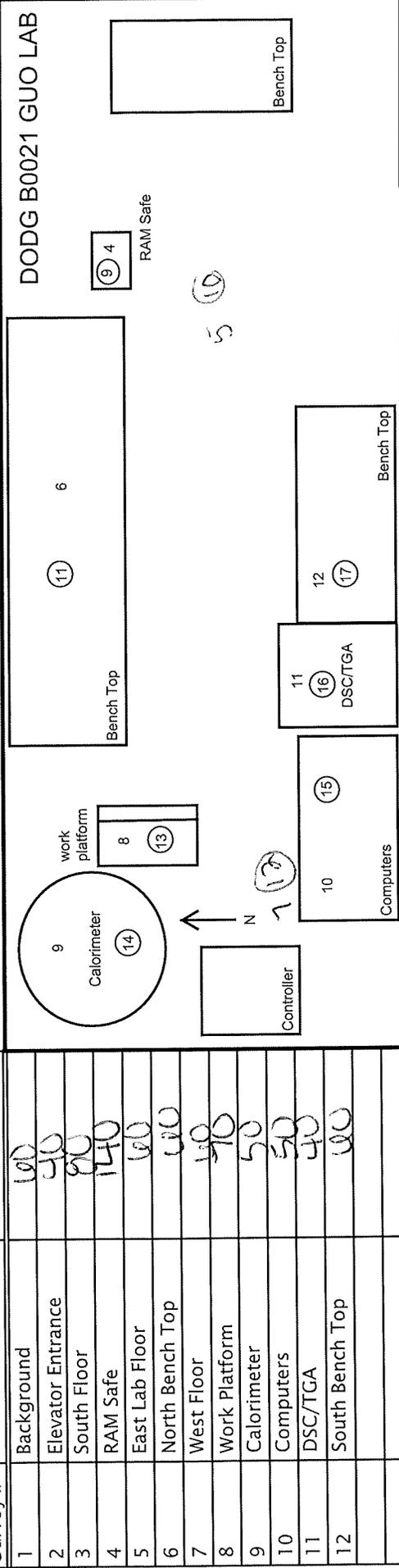
LABORATORY SURVEY

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 03/29/2021	Time 0627	Swipe Instrument Quantasart	Serial No. 073396	Radiation Detected Beta/Gamma
Reactor Status (Check One)					
ON <input type="checkbox"/> OFF <input checked="" type="checkbox"/>					

LSC Printout Date 3/29/21

NOTE SWIPE AND SURVEY LOCATIONS ON MAP



Survey #	Location	CPM
1	Background	60
2	Elevator Entrance	30
3	South Floor	20
4	RAM Safe	140
5	East Lab Floor	60
6	North Bench Top	60
7	West Floor	70
8	Work Platform	50
9	Calorimeter	50
10	Computers	40
11	DSC/TGA	40
12	South Bench Top	60

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: 03/29/2021	Notes
Swiped By: RB	Date: 03/29/2021	
Reviewed By: <i>[Signature]</i>	Date: 4/1/21	

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

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 03/29/2021	Time 8:09	Swipe Instrument Quantasmat	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 3/29/21

Survey #	Location	CPM	NOTE SWIPE AND SURVEY LOCATIONS ON MAP		
13	Background	76			
14	121 Doorway	90			
15	121 Center of lab	100			
16	121 Glove Box	220			
Swipe # and Locations					
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: 03/29/2021 Swiped By: RB Date: 03/29/2021 Reviewed By: <i>[Signature]</i> Date: 4/1/21		

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