

GUO LAB DODGEN B021/121 WEEKLY SWIPES & SURVEYS

Revised 7/9/2019

Week #	22	Dates:	5/30/2021-6/05/2021	Counted On	6/2/2021
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)=		8.75E-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	27	*****	*****	
4.	BACKGROUND 4	27	*****	*****	
5.	BACKGROUND 5	28	*****	*****	
6.	BACKGROUND 6	30	*****	*****	
7.	B021 ELEVATOR ENTRANCE	27	M	M	
8.	B021 FENCED GATE	28	M	M	
9.	B021 RAM SAFE	23	M	M	
10.	B021 EAST FLOOR	27	M	M	
11.	B021 NORTH BENCH TOP	27	M	M	
12.	B021 WEST LAB FLOOR	35	1.05E-05	1.05E-07	
13.	B021 WORK PLATFORM	30	M	M	
14.	B021 CALORIMETER	29	M	M	
15.	B021 COMPUTERS	28	M	M	
16.	B021 DSC/TGA	28	M	M	
17.	B021 SOUTH BENCH TOP	29	M	M	
18.	121 DOORWAY	23	M	M	
19.	121 GLOVE BOX- FLOOR	23	M	M	
20.	121 GLOVE BOX	24	M	M	
21.	121 WEST BENCH TOP	28	M	M	
22.	121 CENTER OF LAB	27	M	M	
23.	122 EAST BENCH TOP	28	M	M	
³⁶ CI SOURCE 09/14/1971		50286		*****	*****
		101.39%	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>			SIGN/DATE: <i>M. Heine</i> 6/4/21		

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\20210602_0848

Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20210602_0848\20210602_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	6/2/2021	8:49:34 AM	1	5.00	24	3	27	156.80	
1	6/2/2021	8:55:56 AM	2	5.00	21	4	26	271.08	
1	6/2/2021	9:02:21 AM	3	5.00	23	4	27	251.62	
1	6/2/2021	9:08:43 AM	4	5.00	23	4	27	248.23	
1	6/2/2021	9:15:08 AM	5	5.00	22	6	28	294.26	
1	6/2/2021	9:21:33 AM	6	5.00	25	4	30	184.45	
1	6/2/2021	9:27:59 AM	7	5.00	21	6	27	266.06	
1	6/2/2021	9:34:22 AM	8	5.00	22	6	28	263.26	
1	6/2/2021	9:40:47 AM	9	5.00	17	6	23	403.39	
1	6/2/2021	9:47:12 AM	10	5.00	22	5	27	244.06	
1	6/2/2021	9:53:29 AM	11	5.00	22	6	27	249.79	
1	6/2/2021	9:59:51 AM	12	5.00	28	6	35	241.46	

Protocol# 1 - Reactor Weekly.lsa

User: CSE

1	6/2/2021	10:06:18 AM	13	5.00	25	5	30	202.44
1	6/2/2021	10:12:39 AM	14	5.00	24	5	29	274.32
1	6/2/2021	10:19:04 AM	15	5.00	22	5	28	248.47
1	6/2/2021	10:25:28 AM	16	5.00	24	5	28	247.15
1	6/2/2021	10:31:50 AM	17	5.00	24	5	29	273.38
1	6/2/2021	10:38:13 AM	18	5.00	20	3	23	228.03
1	6/2/2021	10:44:35 AM	19	5.00	20	4	23	157.72
1	6/2/2021	10:50:56 AM	20	5.00	19	5	24	294.10
1	6/2/2021	10:57:22 AM	21	5.00	24	4	28	238.82
1	6/2/2021	11:03:44 AM	22	5.00	23	4	27	202.17
1	6/2/2021	11:10:06 AM	23	5.00	22	5	28	230.14
1	6/2/2021	11:15:46 AM	24	5.00	14684	35602	50286	1020.63

LABORATORY SURVEY

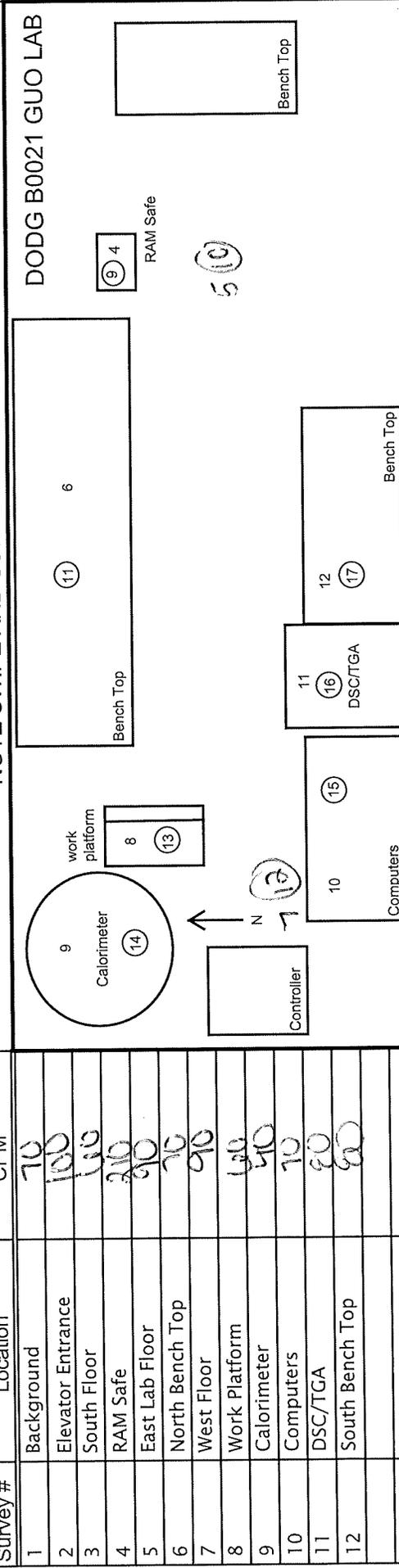
Radiation Safety Office
 Washington State University
 Pullman, WA 99164-1302
 (509) 335 8916

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 06/02/21	Time 0823	Swipe Instrument Quantasart	Serial No. 073396	Radiation Detected Beta/Gamma

Reactor Status (Check One)
 ON OFF

LSC Printout Date 06/02/21

NOTE SWIPE AND SURVEY LOCATIONS ON MAP



Survey #	Location	CPM
1	Background	70
2	Elevator Entrance	100
3	South Floor	70
4	RAM Safe	20
5	East Lab Floor	20
6	North Bench Top	70
7	West Floor	20
8	Work Platform	60
9	Calorimeter	40
10	Computers	70
11	DSC/TGA	20
12	South Bench Top	80

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: <i>RB</i>	Date: 06/02/2021	Notes
Swiped By: <i>RB</i>	Date: 06/02/2021	
Reviewed By: <i>Madhurya</i>	Date: 06/14/21	

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