GUO LAB B0021 WEEKLY SWIPES & SURVEYS

Revised 10/4/2018

Week #	49	Dates:	12/2/2018-12/8/2018	Counted On	12/62018
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/cm2 = CPM:C * Control Factor / 100	
Limit of quantification (LOQ)=	8.88E-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	28	**********	*********	
2.	BACKGROUND 2	26	**********	*********	
3.	BACKGROUND 3	27	**********	*********	
4.	BACKGROUND 4	30	**********	*********	
5.	BACKGROUND 5	33	**********	*********	
6.	BACKGROUND 6	31	**********	*********	
7.	ELEVATOR ENTRANCE	30	M	M	
8.	FENCED GATE	28	M	M	
9.	EAST FLOOR	33	M	M	
10.	NORTH BENCH TOP	31	M	M	
11.	WEST LAB FLOOR	26	M	M	
12.	WORK PLATFORM	34	M	M	
13.	CALORIMETER	24	M	M	
14.	COMPUTERS	27	M	M	
15.	DSC/TGA	29	M	M	
16.	SOUTH BENCH TOP	33	M	M	

Notes: NONE

^{36}Cl SOURCE 09/14/1971	50203	**********	**********	
	101.22%	CALIBRATION CHECK OK?	YES	

Notes(s): M = below limit of quantification on the LSC. The limit of quantification is checked against lowest allowable containimination limit of 1 x 10^{-6} uCi/cm^2.

SURVEY PREPARED BY: B. Tanner	REVIEWED BY: Corey Hines
SIGN/DATE: 12 / 12/7/2018	SIGN/DATE: 12/7/2018

Assay Definition-

Assay Description:

Assay Type: CPM
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20181206_1547
Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20181206_1547\20181206_1547.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	12/6/2018	3:48:44 PM	1	5.00	22	6	28	213.61	
1	12/6/2018	3:54:57 PM	2	5.00	21	6	26	215.67	
1	12/6/2018	4:01:09 PM	3	5.00	23	4	27	167.77	
1	12/6/2018	4:07:20 PM	4	5.00	23	6	30	245.29	
1	12/6/2018	4:13:22 PM	5	5.00	28	5	33	182.01	
1	12/6/2018	4:19:28 PM	6	5.00	24	7	31	254.68	
1	12/6/2018	4:25:42 PM	7	5.00	23	7	30	178.49	
1	12/6/2018	4:31:55 PM	8	5.00	21	7	28	181.75	
1	12/6/2018	4:38:11 PM	9	5.00	25	8	33	301.17	
1	12/6/2018	4:44:19 PM	10	5.00	26	6	31	226.87	
1	12/6/2018	4:50:34 PM	11	5.00	23	4	26	184.75	
1	12/6/2018	4:56:44 PM	12	5.00	28	6	34	255.97	

1	12/6/2018	5:03:01 PM	13	5.00	20	4	24	202.56
1	12/6/2018	5:09:13 PM	14	5.00	23	4	27	186.80
1	12/6/2018	5:15:21 PM	15	5.00	24	5	29	257.70
1	12/6/2018	5:21:31 PM	16	5.00	27	6	33	218.06
1	12/6/2018	5:27:11 PM	17	5.00	14586	35616	50203	1007.32

LABORATORY SURVEY

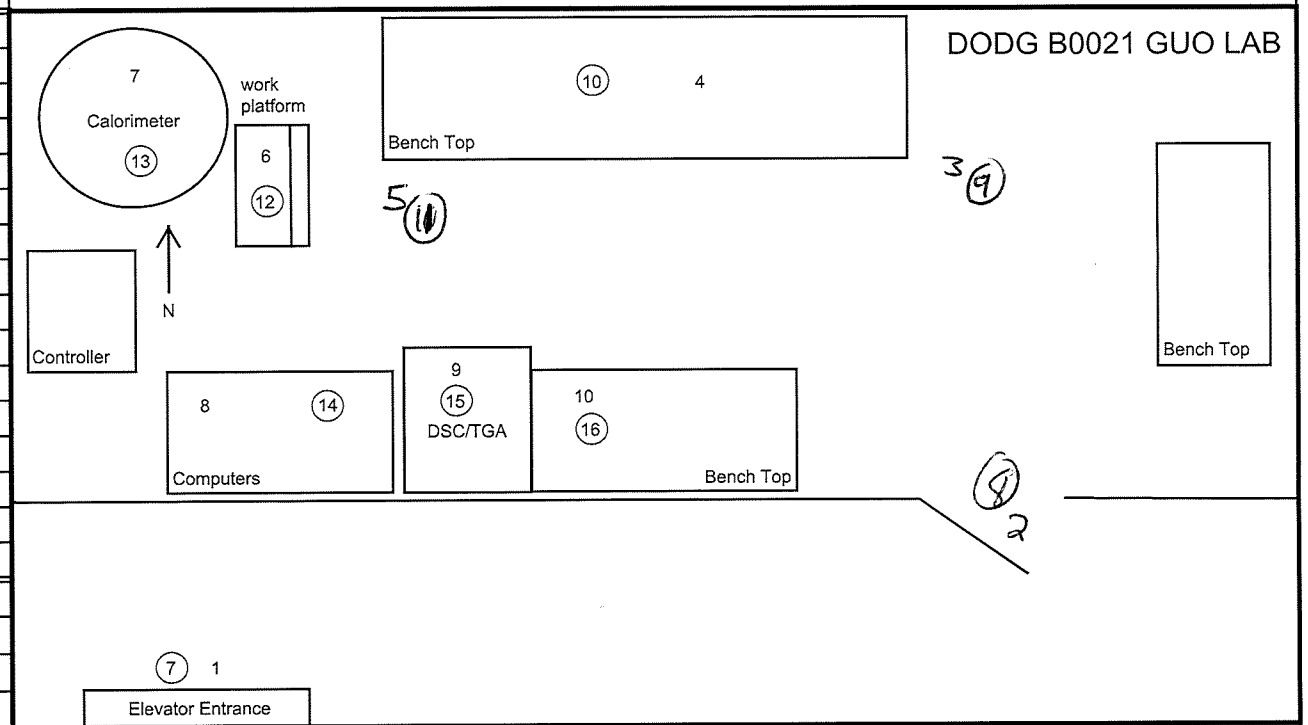
Radiation Safety Office
Washington State University
Pullman, WA 99164-1302
(509) 335 8916

Building	Room	Lab Class	Survey Instrument	Serial No.	Radiation Detected
Dodgen Research Facility	B0021 - GUO	D	GM Detector Model 3	58680	Gamma
Authorized User: Xiaofeng Guo	Date: 12/4/18	Time: 1215	Swipe Instrument: Quantasmart	Serial No. 073396	Radiation Detected: Beta/Gamma
Reactor Status (Check One) ON ☐ OFF ☒					

LSC Printout Date: ~~12/4/18~~ BT 12/6/18

Survey #	Location	CPM
1	Elevator Entrance	<100
2	South Floor	<100
3	East Floor	RT #4 1500
4	North Bench Top	<100
5	West Floor	<100
6	Work Platform	<100
7	Calorimeter	<100
8	Computers	<100
9	DSC/TGA	250
10	South Bench Top	<100

NOTE SWIPE AND SURVEY LOCATIONS ON MAP



Swipe # and Locations			
1-6	Background	16	South Bench Top
7	Elevator Entrance		
8	South Floor		
9	East Floor		
10	North Bench Top		
11	West Lab Floor		
12	Work Platform		
13	Calorimeter		
14	Computers		
15	DSC/TGA		

Surveyed By: AG	Date: 12/4/18
Swiped By: LD	Date: 12/4/18
Reviewed By: [signature]	Date: 12/7/2018

Notes: Radioactive material storage safe is located in survey spot #3

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