GUO LAB B0021 WEEKLY SWIPES & SURVEYS

Revised 10/4/2018

Week #	42	Dates:	10/14/2018-10/20/2018	Counted On	10/18/2018
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)=	9.01E-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	36	**********	*********	
2.	BACKGROUND 2	35	**********	*********	
3.	BACKGROUND 3	29	**********	*********	
4.	BACKGROUND 4	32	**********	*********	
5.	BACKGROUND 5	28	**********	*********	
6.	BACKGROUND 6	26	**********	*********	
7.	ELEVATOR ENTRANCE	42	1.54E-05	1.54E-07	
8.	FENCED GATE	40	1.26E-05	1.26E-07	
9.		37	M	M	
10.		36	M	M	
11.		29	M	M	
12.		33	M	M	
13.		25	M	M	
14.		28	M	M	
15.		35	M	M	

Notes: NONE

^{36}Cl SOURCE 09/14/1971	50160	**********	**********	
	101.14%	CALIBRATION CHECK OK?	YES	

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

SURVEY PREPARED BY: Maddison Heine	REVIEWED BY: Corey Hines
SIGN/DATE: Maddison Heine 10/19/18	SIGN/DATE: [illegible] 10/19/2018

Assay Definition-

Assay Description:

Assay Type: CPM
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20181018_1321
Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20181018_1321\20181018_1321.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	10/18/2018	1:22:51 PM	1	5.00	27	9	36	330.70	
1	10/18/2018	1:29:06 PM	2	5.00	28	6	35	241.89	
1	10/18/2018	1:35:17 PM	3	5.00	22	6	29	306.03	
1	10/18/2018	1:41:33 PM	4	5.00	26	7	32	265.92	
1	10/18/2018	1:47:43 PM	5	5.00	24	4	28	174.55	
1	10/18/2018	1:53:56 PM	6	5.00	22	4	26	191.68	
1	10/18/2018	2:00:12 PM	7	5.00	28	14	42	362.59	
1	10/18/2018	2:06:25 PM	8	5.00	31	9	40	230.43	
1	10/18/2018	2:12:41 PM	9	5.00	29	9	37	238.27	
1	10/18/2018	2:18:54 PM	10	5.00	27	8	36	216.41	
1	10/18/2018	2:25:06 PM	11	5.00	23	6	29	286.65	
1	10/18/2018	2:31:23 PM	12	5.00	25	8	33	234.77	

1	10/18/2018	2:37:42 PM	13	5.00	20	5	25	223.40
1	10/18/2018	2:43:59 PM	14	5.00	22	6	28	218.80
1	10/18/2018	2:50:08 PM	15	5.00	28	7	35	197.34
1	10/18/2018	2:55:48 PM	16	5.00	14379	35781	50160	1013.33

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 3	305168	Gamma
Authorized User	**Date**	**Time**	**Swipe Instrument**	**Serial No.**	**Radiation Detected**
Xiaofeng Guo	10/18/18	1253	Quantasmart	073396	Beta/Gamma

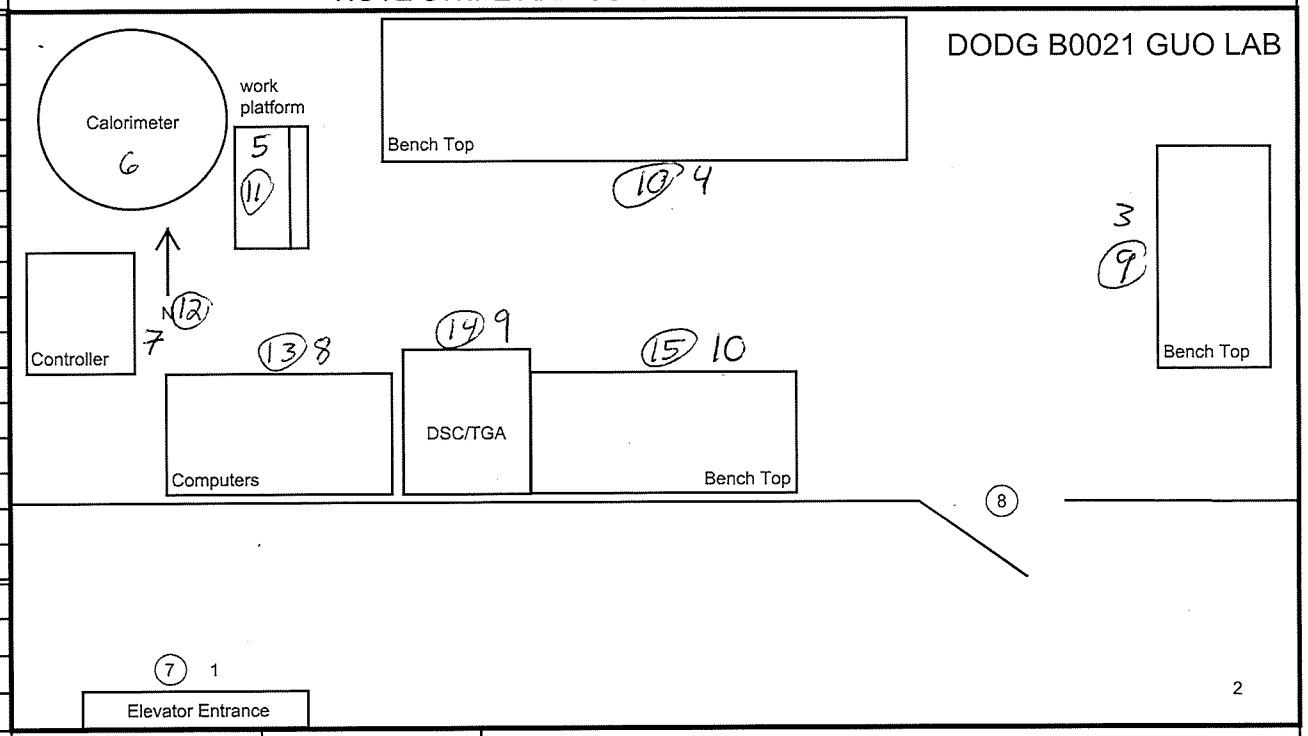
Reactor Status (Check One) ON ☐ OFF ☑

LSC Printout Date: 10/18/18

Survey #	Location	CPM
1	Elevator Entrance	130
2	Gated Fence	<100
3	East Bench Floor	<100
4	North Bench Floor	<100
5	Work Platform	<100
6	Calorimeter	<100
7	Controller floor	<100
8	Computer floor	<100
9	DSC/TGA floor	<100
10	South Bench Floor	<100

Swipe # and Locations			
7	Elevator Entrance		
8	Gated Fence		
9	East Bench Floor		
10	North Bench Floor		
11	Work Platform		
12	Controller floor		
13	Computer Floor		
14	DSC/TGA floor		
15	South Bench floor		

NOTE SWIPE AND SURVEY LOCATIONS ON MAP



Surveyed By:	Date:	Notes
SW/RW/CS	10/18/18	
Swiped By:	**Date:**	
AG/CS/SW	10/18/18	
Reviewed By:	**Date:**	
[signature]	10/19/2018	

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