GUO LAB B0021 WEEKLY SWIPES & SURVEYS

Revised 10/4/2018

Week #	50	Dates:	12/9/2018-12/15/2018	Counted On	12/11/2018
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)=	9.37E-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	37	**********	*********	
2.	BACKGROUND 2	35	**********	*********	
3.	BACKGROUND 3	30	**********	*********	
4.	BACKGROUND 4	41	**********	*********	
5.	BACKGROUND 5	38	**********	*********	
6.	BACKGROUND 6	36	**********	*********	
7.	ELEVATOR ENTRANCE	35	M	M	
8.	FENCED GATE	53	2.36E-05	2.36E-07	
9.	EAST FLOOR	40	M	M	
10.	NORTH BENCH TOP	36	M	M	
11.	WEST LAB FLOOR	48	1.66E-05	1.66E-07	
12.	WORK PLATFORM	35	M	M	
13.	CALORIMETER	43	9.57E-06	9.57E-08	
14.	COMPUTERS	30	M	M	
15.	DSC/TGA	41	M	M	
16.	SOUTH BENCH TOP	33	M	M	

Notes: NONE

^{36}Cl SOURCE 09/14/1971	50191	**********	**********	
	101.20%	CALIBRATION CHECK OK?	YES	

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

SURVEY PREPARED BY: B. Tanner	REVIEWED BY: Corey Hines
SIGN/DATE: 12/11/2018	SIGN/DATE: 12/12/2018

Assay Definition-

Assay Description:

Assay Type: CPM
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20181211_1114
Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20181211_1114\20181211_1114.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	12/11/2018	11:15:45 AM	1	5.00	30	7	37	285.31	
1	12/11/2018	11:21:53 AM	2	5.00	29	5	35	280.33	
1	12/11/2018	11:28:10 AM	3	5.00	25	4	30	255.65	
1	12/11/2018	11:34:18 AM	4	5.00	33	8	41	230.71	
1	12/11/2018	11:40:28 AM	5	5.00	32	6	38	234.77	
1	12/11/2018	11:46:43 AM	6	5.00	28	8	36	318.57	
1	12/11/2018	11:53:02 AM	7	5.00	27	9	35	262.23	
1	12/11/2018	11:59:15 AM	8	5.00	42	12	53	297.77	
1	12/11/2018	12:05:32 PM	9	5.00	31	9	40	284.84	
1	12/11/2018	12:11:46 PM	10	5.00	26	10	36	381.01	
1	12/11/2018	12:18:03 PM	11	5.00	33	16	48	292.74	
1	12/11/2018	12:24:16 PM	12	5.00	26	9	35	287.90	

1	12/11/2018	12:30:34 PM	13	5.00	30	13	43	358.27
1	12/11/2018	12:36:49 PM	14	5.00	24	6	30	342.13
1	12/11/2018	12:43:00 PM	15	5.00	32	10	41	292.52
1	12/11/2018	12:49:12 PM	16	5.00	25	8	33	267.22
1	12/11/2018	12:54:51 PM	17	5.00	14498	35693	50191	1010.69

LABORATORY SURVEY

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

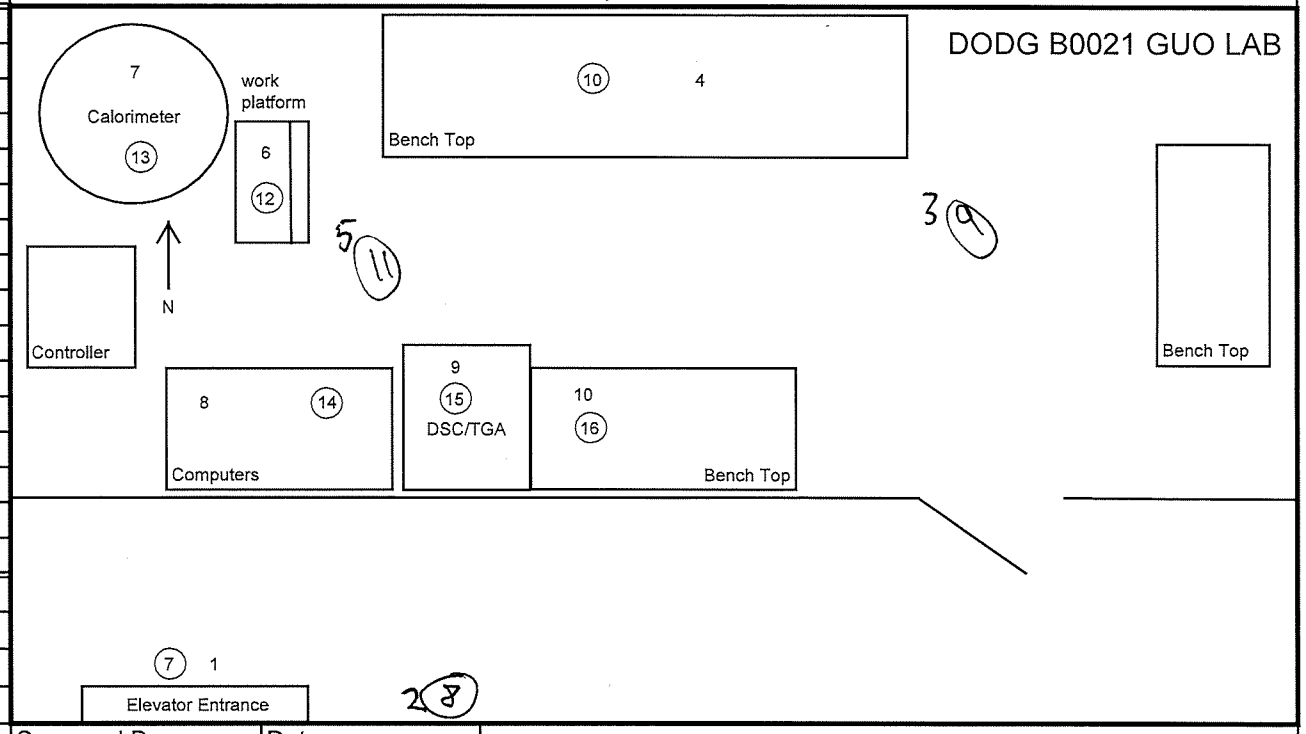
Building	Room	Lab Class	Survey Instrument	Serial No.	Radiation Detected
Dodgen Research Facility	B0021 - GUO	D	GM Detector Model 3	58680	Gamma
Authorized User	**Date**	**Time**	**Swipe Instrument**	**Serial No.**	**Radiation Detected**
Xiaofeng Guo	12/11/2018	1021	Quantasmart	073396	Beta/Gamma

Reactor Status (Check One)
ON ☐ OFF ☒

LSC Printout Date: 12/11/2018

Survey #	Location	CPM
1	Elevator Entrance	120
2	South Floor	330
3	East Floor	330
4	North Bench Top	120
5	West Floor	140
6	Work Platform	150
7	Calorimeter	140
8	Computers	120
9	DSC/TGA	130
10	South Bench Top	140

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:	Date:	Notes
JC	12/11/2018	
Swiped By:	**Date:**	
LD/PP	12/11/2018	
Reviewed By:	**Date:**	
[illegible]	12/12/2018	

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