GUO LAB B0021 WEEKLY SWIPES & SURVEYS

Revised 10/4/2018

Week #	51	Dates:	12/16/2018-12/22/2018	Counted On	12/20/2018
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)=	8.77E-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	30	**********	*********	
2.	BACKGROUND 2	26	**********	*********	
3.	BACKGROUND 3	24	**********	*********	
4.	BACKGROUND 4	26	**********	*********	
5.	BACKGROUND 5	30	**********	*********	
6.	BACKGROUND 6	31	**********	*********	
7.	ELEVATOR ENTRANCE	29	M	M	
8.	FENCED GATE	25	M	M	
9.	EAST FLOOR	27	M	M	
10.	NORTH BENCH TOP	30	M	M	
11.	WEST LAB FLOOR	26	M	M	
12.	WORK PLATFORM	26	M	M	
13.	CALORIMETER	25	M	M	
14.	COMPUTERS	29	M	M	
15.	DSC/TGA	30	M	M	
16.	SOUTH BENCH TOP	28	M	M	

Notes: NONE

^{36}Cl SOURCE 09/14/1971	50164	**********	**********	
	101.15%	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: B. Tanner	REVIEWED BY: Corey Hines
SIGN/DATE: 12/20/18	SIGN/DATE: 12/20/2018

Assay Definition-

Assay Description:

Assay Type: CPM
Report Name: Report1
Output Data Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20181220_0349
Raw Results Path: C:\Packard\Tricarb\Results\CSE\Reactor Weekly\20181220_0349\20181220_0349.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	12/20/2018	3:50:50 AM	1	5.00	26	4	30	222.53	
1	12/20/2018	3:57:05 AM	2	5.00	23	4	26	165.80	
1	12/20/2018	4:03:19 AM	3	5.00	20	4	24	194.53	
1	12/20/2018	4:09:33 AM	4	5.00	22	4	26	210.00	
1	12/20/2018	4:15:41 AM	5	5.00	25	6	30	229.44	
1	12/20/2018	4:21:49 AM	6	5.00	24	7	31	334.57	
1	12/20/2018	4:28:03 AM	7	5.00	23	6	29	274.16	
1	12/20/2018	4:34:14 AM	8	5.00	21	4	25	164.78	
1	12/20/2018	4:40:30 AM	9	5.00	22	6	27	252.52	
1	12/20/2018	4:46:38 AM	10	5.00	24	6	30	229.38	
1	12/20/2018	4:52:55 AM	11	5.00	22	4	26	198.05	
1	12/20/2018	4:59:07 AM	12	5.00	22	4	26	224.48	

1	12/20/2018	5:05:27 AM	13	5.00	21	4	25	183.30
1	12/20/2018	5:11:39 AM	14	5.00	23	6	29	243.26
1	12/20/2018	5:17:50 AM	15	5.00	23	7	30	271.43
1	12/20/2018	5:24:03 AM	16	5.00	23	4	28	264.83
1	12/20/2018	5:29:43 AM	17	5.00	14505	35660	50164	1003.72

LABORATORY SURVEY

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

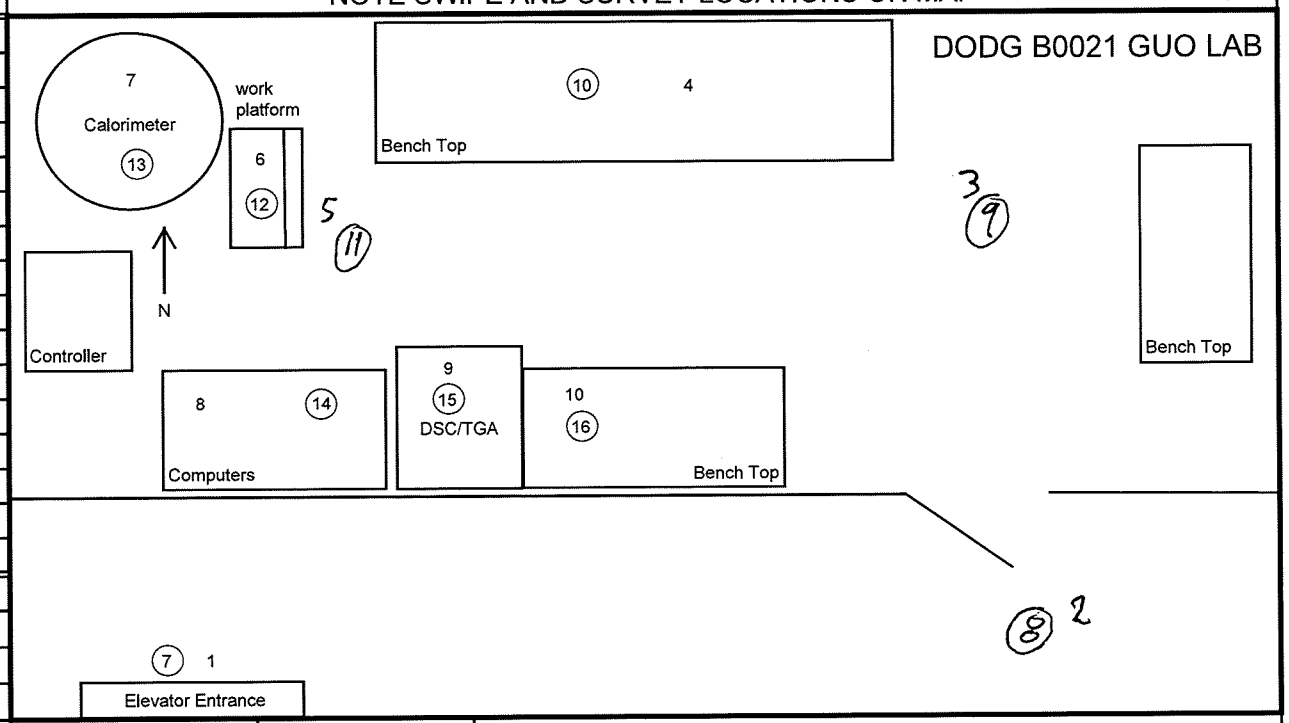
Building	Room	Lab Class	Survey Instrument	Serial No.	Radiation Detected
Dodgen Research Facility	B0021 - GUO	D	GM Detector Model 3	58680	Gamma
Authorized User	**Date**	**Time**	**Swipe Instrument**	**Serial No.**	**Radiation Detected**
Xiaofeng Guo	12/19/18	1635	Quantasmart	073396	Beta/Gamma

Reactor Status (Check One)
ON ☒ OFF ☐

LSC Printout Date: 12/20/2018

Survey #	Location	CPM
1	Elevator Entrance	120
2	South Floor	150
3	East Floor	240
4	North Bench Top	100
5	West Floor	90
6	Work Platform	110
7	Calorimeter	110
8	Computers	60
9	DSC/TGA	110
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: BT	Date: 12/19/18	Notes
Swiped By: BT	Date: 12/19/18	
Reviewed By: [signature]	Date: 12/20/2018	

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