

### Record of Receipt of Radioactive Materials

Package Receipt Information	
Permit Holder: <i>University of St. Francis</i>	Researcher: <i>Jan Elick</i>
Date Received: <i>10-22-07</i>	Receiver Initials: <i>JME</i>
Req.#: <i>19617 - C. EXNER</i>	P.O.#: <i>19617 - C. EXNER</i>
Container #: <i>1</i>	Picked Up By (Write on All Copies): <i>T-Blair</i>

Isotope Information
Isotope: <i>32P</i>
Supplier: <i>GE Healthcare</i>
Catalog #: <i>PB163-250 µCi</i>
Lot #: <i>B0742X</i>
Amount: <i>250 µCi</i> µCi
Assay Date:
Concentration: <i>2</i> µCi / µl

Survey Tests			
<b>Survey Meter Results in Receiving Department</b>	1. meter from package	<i>0</i>	mR/hr
	Surface of package	<i>0</i>	mR/hr
	Background	<i>0</i>	mR/hr
<b>Results of Wipe Tests at Lab</b>	External package	<i>-</i>	dpm
	Stock Vial	<i>-</i>	dpm
	Background	<i>-</i>	dpm
<b>Survey Meter Results at Lab</b>	Surface of package	<i>-</i>	mR/hr
	Packing Materials / Inside Box	<i>-</i>	mR/hr
	Surveyor Name	<i>-</i>	
	Background	<i>-</i>	mR/hr

1. MDPH regulations mandate that radioactive materials shipments must be logged in by the stockroom within 3 hours of receipt.
2. Notify the RSO if the dose rate is > 1.0 mR/hr @ 1.0 meter or if the wipe test shows *2200 dpm/cm<sup>2</sup>*. Do not discard any packaging materials until all wipe tests and survey meter monitoring results are completed. Deface radioactive labels and discard packaging.

*COPY 7/19/16 PA*

*100 mg conc?*  
*TR Part 20*

RECEIVED JUL 26 2016

ID:SWAB NEW BOX

23 OCT 2007 14:13

USER: 1 COMMENT:ARIVAL OF NEW MATERIALS  
 PRESET TIME : 5.00  
 DATA CALC :DL DPM %REF H# :YES SAMPLE REPEATS: 1 PRINTER : STD  
 COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : OFF  
 TWO PHASE : NO AQC :YES CYCLE REPEATS : 1  
 SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0  
 LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

ISOTOPE 1: 3H %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0  
 ISOTOPE 2: 14C %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0  
 ISOTOPE 3: 32P %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

BACKGROUND QUENCH CURVE: Off COLOR QUENCH CORRECTION: Off

Quench Limits Low:12.882 High:315.06

SAM NO	POS	TIME MIN	H#	ISO	CORRECTED CPM	%ERROR	DPM	EFF-1	EFF-2	%REF	RATIO	LUMEX %	ELAPSED TIME
R1	1-1	5.00	82.1	3H	19.60	20.20	31.04	52.22	0.59		1.732	0.40	5.50
				14C	13.80	24.08	17.92	18.91	75.98				
				32P	10.80	27.22							
R2	1-2	5.00	83.4	3H	20.40	19.80	32.87	51.90	0.59		1.862	0.33	11.07
				14C	13.60	24.25	17.66	18.92	75.93				
				32P	11.60	26.26							
R3	1-3	5.00	83.3	3H	19.80	20.10	32.09	51.92	0.59		1.932	0.31	16.67
				14C	12.80	25.00	16.61	18.92	75.93				
				32P	16.20	22.22							
R4	1-4	5.00	86.6	3H	17.00	21.69	28.26	51.10	0.58		2.093	0.34	22.23
				14C	10.40	27.74	13.50	18.93	75.80				
				32P	13.60	24.25							
R5	1-5	5.00	83.0	3H	22.40	18.90	37.82	52.00	0.59		2.616	0.32	27.80
				14C	11.20	26.73	14.46	18.91	75.95				
				32P	14.80	23.25							
R6	1-6	5.00	59.3	3H	19.60	20.20	30.16	57.54	0.61		2.515	0.20	33.37
				14C	9.40	29.17	11.99	18.75	76.88				
				32P	12.60	25.20							

Reference Average 3H : 32.04 COEF. OF VAR: 10.153  
 Reference Average 14C : 15.36 COEF. OF VAR: 15.694

Copy 7/19/16

ID:SWAB NEW BOX

USER: 1 COMMENT:ARIVAL OF NEW MATERIALS  
 PRESET TIME : 5.00 CPM H# :YES SAMPLE REPEATS: 1 PRINTER : STD  
 DATA CALC : NO IC# : NO REPLICATES : 1 RS232 : OFF  
 COUNT BLANK : NO AQC : NO CYCLE REPEATS : 1  
 TWO PHASE : LIQUID LUMEX: NO LOW SAMPLE REJ: 0  
 SCINTILLATOR: NO HALF LIFE CORRECTION DATE: none  
 LOW LEVEL :

22 OCT 2007 14:39

ISOTOPE 1: 3H %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0  
 ISOTOPE 2: 14C %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0  
 ISOTOPE 3: 32P %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

SAM NO	POS	TIME MIN	H#	3H		14C		32P		LUMEX %	ELAPSED TIME
				CPM	%ERROR	CPM	%ERROR	CPM	%ERROR		
1	1-1	5.00	75.7	23.40	18.49	18.20	25.61	10.60	27.47	0.93	5.47
2	1-2	5.00	75.6	23.60	18.41	11.40	26.49	12.40	25.40	0.64	11.06
3	1-3	5.00	75.4	24.00	18.26	10.20	28.01	13.20	24.62	0.54	16.62
4	1-4	5.00	79.0	29.20	16.55	11.00	26.97	13.20	24.62	0.47	22.20
5	1-5	5.00	74.7	23.00	18.65	11.40	26.49	11.20	26.73	0.51	27.77
6	1-6	5.00	60.7	22.00	19.07						

### Personal Monitoring Log

Permit Holder: \_\_\_\_\_ Building / Room #: \_\_\_\_\_ Researcher: Jean Elick  
 Survey Meter SN: \_\_\_\_\_ Cal. Date: \_\_\_\_\_ Background Dose Rate \_\_\_\_\_ mR/hr  
 LSC SN: \_\_\_\_\_ Cal. Date: \_\_\_\_\_ Background: \_\_\_\_\_ dpm

Date	Isotope	Radiation Levels (Survey Meter)			Wipe Test Results		
		Hands / Clothing	Work Areas / Equipment	Floor	RP#	Item Description	dpm CPM
10-22	P <sup>32</sup>	Bkg	Bkg		1	Bench	16
		"	"		2	Floor	11
		"	"		3	Sink	17
		"	"		4	Freezer Handle	21
		"	"		5	Room Door	14
		"	"		6	Blank	15.6
10/30	P <sup>32</sup>	Bkg	Bkg				

- 1 Bench
- 2 Floor
- 3 Sink
- 4 Freezer Handle
- 5 Room Door

Copy 7/19/16  
TA

ID:SWAB NEW BOX

26 OCT 2007 16:35

USER: 1 COMMENT:ARIVAL OF NEW MATERIALS

PRESET TIME : 5.00

DATA CALC :DL DPM %REF H# :YES SAMPLE REPEATS: 1 PRINTER : STD

COUNT BLANK : NO IC# : NO REPLICATES : 1 RS232 : OFF

TWO PHASE : NO AQC :YES CYCLE REPEATS : 1

SCINTILLATOR: LIQUID LUMEX: NO LOW SAMPLE REJ: 0

LOW LEVEL : NO HALF LIFE CORRECTION DATE: none

ISOTOPE 1: 3H %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

ISOTOPE 2: 14C %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

ISOTOPE 3: 32P %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 0

BACKGROUND QUENCH CURVE: Off COLOR QUENCH CORRECTION: Off

Quench Limits Low:12.882 High:315.06

SAM NO	POS	TIME MIN	H#	ISO	CORRECTED CPM	%ERROR	DPM	EFF-1	EFF-2	%REF	RATIO	LUMEX %	ELAPSED TIME
R1	1-1	5.00	95.4	3H	40.00	14.14	73.34	48.93	0.58	3.380	28.03	5.61	
				14C	16.80	21.82	21.70	18.97	75.46				
				32P	16.00	22.35							
R2	1-2	5.00	90.4	3H	21.60	19.25	36.87	50.17	0.58	2.252	4.95	11.23	
				14C	12.60	25.20	16.37	18.95	75.66				
				32P	11.60	26.26							
R3	1-3	5.00	75.5	3H	23.40	18.49	37.98	53.81	0.59	2.418	1.76	16.82	
				14C	12.20	25.61	15.71	18.87	76.24				
				32P	17.40	21.44							
R4	1-4	5.00	74.6	3H	17.40	21.44	25.61	54.00	0.59	1.352	1.22	22.41	
				14C	14.60	23.41	18.94	18.86	76.27				
				32P	21.60	19.25							
R5	1-5	5.00	75.8	3H	20.00	20.00	32.52	53.73	0.59	2.429	1.69	28.00	
				14C	10.40	27.74	13.39	18.87	76.23				
				32P	14.20	23.74							
R6	1-6	5.00	60.4	3H	23.80	18.33	37.97	57.30	0.60	3.486	0.35	33.59	
				14C	8.60	30.50	10.89	18.76	76.84				
				32P	15.60	22.65							
Reference Average				3H :	40.72		COEF. OF VAR:		40.942				
Reference Average				14C :	16.17		COEF. OF VAR:		23.804				

BECKMAN INSTRUMENTS, INC.  
LS ANALYZER

28 OCT 2007 13:19

*Copy 2/19/16 PA*

Paula Avila - Chem



UNIVERSITY of  
SAINT FRANCIS

2701 Spring Street  
Fort Wayne, Indiana 46808

605 605 60532S N3-91

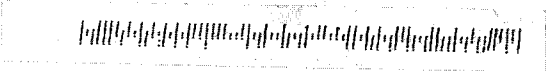


2

RETURN SERVICE REQUESTED

PSRT FIRST-CLASS MAIL  
US POSTAGE PAID  
Fort Wayne, IN  
PERMIT# 760

60532



ATTN: Frank Tran  
Region III / US Nuclear Regulatory Commission  
2443 Warrenville Rd.  
Lisle, IL 60532



RECEIVED JUL 26 2016