



Public Health Service
National Institutes of Health

September 23, 2021

Director, Office of Nuclear Material Safety and Safeguards
ATTN: Document Control Desk/GLTS
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Sir or Madam,

This is to notify you as per requirements of 10 CFR 31.5c (8) (ii) that on September 16, 2021, I was informed that NIH transferred the generally licensed source(s) listed below to the following licensee:

Eckert & Ziegler Analytics
1380 Seaboard Industrial Blvd
Atlanta, GA 30318
State of GA License # GA742-1

Please contact me at (301)594-1303 if you have any questions.

Catherine Ribaudo
Radiation Safety Officer, NIH

Device Detail:

Beckman LS6500 Liquid Scintillation Counter (S/N 7066011; ID Number: 01074704).

NM5510
NM55

DRS Clearance Record for Counter

Type of counter:	LSC			Gamma
Manufacturer	Beckman			
Model	LS6000IC			
Serial Number	7066011			
NIH ID Number	01074704			
Originating Bldg	TB 4	Room	3N-27	
Contact Person	Bill Huang (36578)			
Source:	Isotope	Activity	Date	
	Cs-137	30 micro-Ci	09-25-2004	(approximate)
Source Removed	YES	NO	N/A	
Disposition of source	OEM paperwork is attached			
Comments	Sent Source ID# 1720			

Health Physicist

Date _____

SAMPLE ANALYSIS REQUEST FORM													
Date Submitted: 8/6/21		Time Submitted: 1200 hrs		Analysis No.: 21-1605									
Customer Name: Matten / Huang (36578)				Organization: RS03									
Sample/Survey Location (Bldg/Rm): T84 3N-27													
Survey Area Type (Circle One): Restricted Unrestricted Both <u>N/A</u>													
Applicable Limits:		2200 dpm/100cm ²		220 dpm/100cm ²		22 dpm/100cm ²		1000 dpm/100cm ²					
		2000 dpm/100cm ²		200 dpm/100cm ²		20 dpm/100cm ²		Other: _____					
No. of Samples: 6		No. of Blanks: 1		Retain Samples? Yes <u>No</u>		Retain Smear Packet? Yes <u>No</u>		N/A					
Sample Description: (Check All That Apply) BECKMAN LSC		Smear	Swab	Liquid	Carboy	Tank	Mixed	X-check	Sealed Source				
		6											
		Air	Urine	Standards	Bkgd				Other: Please list in the comment box below.				
Comments: LSC clearance SN 7066011 1) RT side 3) Front 5) Inner RT. 2) LT side 4) TOP 6) Inner LT.													
Evaluate For Indicated Radionuclides: (CIRCLE All That Apply)		<u>³H</u>	<u>¹⁴C</u>	²² Na	<u>⁸³Rb</u>	<u>³²P</u>	³³ P	<u>⁴⁵Ca</u>	⁵¹ Cr	⁵⁵ Fe	⁵⁷ Co	⁶⁰ Co	⁶³ Ni
		⁷³ Se	<u>⁸⁶Rb</u>	^{99m} Tc	¹¹¹ In	¹²³ I	<u>¹²⁵I</u>	¹³¹ I	¹³³ Ba	¹³⁷ Cs	¹⁷⁷ Lu	¹⁹⁵ Au	²¹¹ At
		²¹² Bi	²³⁸ U	²⁴¹ Am	α	β	γ	PET	Cyclotron		Activation		
		<u>¹²⁹I</u>	<u>³⁶Cl</u>	Multi-Gamma	Other: CS-134, E-129 TR 204								
Comments:													

EXPEDITED COUNT REQUEST	
(Please Notify Lab Personnel Immediately When Requesting Expedited Processing)	
Justification: _____	
Date/Time Needed (Be specific): _____	

THIS SECTION FOR MCAB USE ONLY									
Instrument Data:		Counter:		Hidex				GSS	
		Serial #:		A 117222	B 2120212	C 2120254	D 2180115	E 2180116	F 2190058
(Check All That Apply) _____									
Analysis Data:		Started				Completed			
		Date: 8.4.21		Time: 1320		Date:		Time:	
Customer Notification:		Mode		Date		Time		Analyst Initials	
		Verbal							
		E-mail							
		Hard Copy							
Comments: <div style="font-size: 1.5em; margin-top: 10px;">Powers 8.4.21</div>									

Verification:	
Signature in this box constitutes a verification of this form and all supporting and attached documents.	
Signature: <u>Kimberly M. Powers-S</u>	Digitally signed by Kimberly M. Powers-S Date: 2021.08.06 14:32:54 -04'00'

Analysis Report Form

AN21-1605 Equipment Clearance S/N 7066011

LSC Count

All <MDA/MDCR

All <1000dpm/100cm(sq) β + gamma

Analysis Complete

JL Cross

8/6/2021

NIH/DRS Analytical Lab

Measurement file : AN21-1605 Lab Clearance HC.dat	Valid Assay	Measurement date : 8/6/2021
Template file : Smear 5 minute - Clearance.par		Measurement time : 1:20:25 PM

----- General Data -----

Measurement	Type: EndPoint, Time: 8/6/2021 / 1:20:25 PM, State: Valid Measurement 14 labels included, label No.1 selected
Template Files	Template loaded during measurement time : s:\mcab\...\smears\smear 5 minute - clearance.par; Modified template file Data file : AN21-1605 Lab Clearance HC.dat - 8/6/2021 / 14:06:38 - Operator was Unknown User - Created with Version 5.58 Template file : Smear 5 minute - Clearance.par - 10/24/2020 / 11:11:57 - Created by Unknown User - Created with Version 5.58
Reader	Hidex 300 SL, Driver Version: 5.12, Device Serial: 2120254, Firmware: 1.44 Installed features: LSC, External Standard, Activity Type: Standard Counting Time: 300 s, Maximum Counts: 3999999, Ionized Delay: 10 s, Coincidence Time: 35 ns, Delay Before Measurement: No Tray Size: 12x8, Well Repeats: 1, Range Repeats: 1 External Standard Used: No Screen CPM: None ROI Number: 1 - ROI1 Free Channel Limits 5 - 1020, Type Beta
Calculation Program	Calculation Status : Valid Assay, Calculation Time : 8/6/2021 / 14:06:38 MikroWin, Version 5.58; License No. : 017578 Assembly Code A : 001F 0200 0000 0000 0000 FFFF Assembly Code B : 0057 FF3F FEFF FFCF FFC0 FFFF
System Printer	Operating System Name : Windows 10, System User : drsannlab Printer Name : ORS086_21_143

----- Threshold Statistics -----

Group	Assay	Set	Threshold Limits
Group 1	Default	1	+oo > >MDCR >= 12.7416 > <MDCR > -oo
Group 1	Default	2	+oo > >MDA >= 29.0243 > <MDA > -oo
Group 1	Default	3	+oo > >MDA-Iodine >= 16.3354 > <MDA-Iodine > -oo

----- Definition Statistics -----

Definition Formula	Calculated Value
DEFINE Rb = 55	55.0000
DEFINE ts = 5	5.0000
DEFINE tb = 20	20.0000
DEFINE E = 0.439	0.4390
DEFINE E2 = 0.78	0.7800

Calibration Date = June 12, 2020

BKGD Mean = 55 cpm

MDCR = 12.742

MDA = 29.024

MDA(Reg Guide 8.23 Table 3) = 16.335

Table arranged data


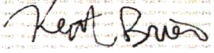
Sample ID	Position ID	CPM	CCPM	TDCR	DPM	Chemi	MDCR	MDA	MDA-Iodine
Background	A01	57							
1	A03	47	0	0.448	0	3.00	<MDCR	<MDA	<MDA-Iodine
2	A04	49	0	0.480	0	3.00	<MDCR	<MDA	<MDA-Iodine
3	A05	59	4	0.535	7	3.00	<MDCR	<MDA	<MDA-Iodine
4	A06	57	2	0.470	4	3.00	<MDCR	<MDA	<MDA-Iodine
5	A07	52	0	0.479	0	3.00	<MDCR	<MDA	<MDA-Iodine
6	A08	50	0	0.500	0	2.00	<MDCR	<MDA	<MDA-Iodine



CUSTOMER SUPPORT CALL
WWW.BECKMANCOULTER.COM

ACCOUNT	MODEL	SERIAL NUMBER	ID NUMBER
U S N I H 5625 FISHERS LN ROCKVILLE, MD 20852-1798	LS6000IC	7060828	222907
CUSTOMER CONTACT	PURCHASE ORDER	PROPERTY NUMBER	
Kirk Hines 301-443-1101	Credit Card		
AGREEMENT TYPE	AGREEMENT NUMBER	EFFECTIVE DATES	
		7/6/2021 to 7/6/2021	
CASE NUMBER	CREATED DATE/TIME		
CA-03526890	6/29/2021 2:00 PM		
WORK ORDER NUMBER	COMPLETION DATE	PERFORMED BY	INSTRUMENT CONDITION
WO-03361845	7/6/2021 10:30 AM	KENT BRIER	Down

SUMMARY OF WORK PERFORMED						
Reported Problem	soruce removal					
Symptom Summary	LS Counter decommission / source removal					
Problem Summary	Remove source and decommission instrument.					
Resolution Summary	Removed CS 137 source and ship FedEx to E and Z for disposal LS Counter Serial Number: 7060828 System ID: 222907 FedEx: 965943462097 RA: UWE25JUN21A					
Verification of Activity	Source removal complete. Signature Attached					
<p>SYSTEM VALIDATION: For Medical Devices - Regulatory requirements call for a final validation of instrument repair and system readiness. The final validation of instrument repair and system readiness can only be obtained through a successful QC run using the laboratory's quality control system. This repair record and the laboratory's quality control records comprise the quality documents associated with this instrument repair. Copies of these records may be required by Beckman Coulter or regulatory authorities to complete technical investigations or quality audits. We appreciate your cooperation if requested to provide copies of your QC data related to this repair.</p>						
START DATE	END DATE	DESCRIPTION	HOURS	RATE	TOTAL LINE PRICE	CUSTOMER CHARGE
7/6/2021 9:00 AM	7/6/2021 9:30 AM	SERVICE TRAVEL	0.5	475.00 USD	237.50 USD	0.00 USD
7/6/2021 9:30 AM	7/6/2021 10:30 AM	SERVICE LABOR	1	475.00 USD	475.00 USD	0.00 USD
LABOR/TRAVEL TOTAL					712.50 USD	0.00 USD
PART NUMBER	PART DESCRIPTION	QTY	PRICE	TOTAL LINE PRICE	CUSTOMER CHARGE	
DEINSTALLATION	Deinstallation Service Charge	1	2,500.00 USD	2,500.00 USD	2,500.00 USD	
PARTS/EXPENSES TOTAL				2,500.00 USD	2,500.00 USD	
TOTAL CHARGE				3,212.50 USD	2,500.00 USD	
Customer Call Originator: Kirk Hines Name of Person Signing Service Report:			Technician Name: KENT BRIER			

	
Customer Signature	Technician Signature

Total is an estimate only and does not include applicable sales tax and shipping charges.