

Stan A. Huber Consultants, Inc.

Health Physics and Radiation Safety Services

200 North Cedar Road - New Lenox, Illinois 60451-1751 - (800) 383-0468 or (815) 485-6161 - FAX (815) 485-4433 - Email sahci@sahci.com - Home Page www.sahci.com

November 30, 2022

978621

Denise Holland Christy Webber Landscapes 2900 W. Ferdinand St. Chicago, IL 60612

RE: Thorium Monitoring – 400 E. Monroe Dr. (Private Property)

Dig Ticket 601276611

Dear Ms. Holland:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the removal shrubs and trees at 400 E. Monroe Dr. in Chicago, Illinois. The monitoring was performed by Mark Dewald, SAHCI Health Physics Technician, on November 28,2022.

<u>Instrumentation</u>

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 99147) with attached Ludlum Model 44-10 2"x2" Nal Detector (w/ 6" collimated lead shield). The instrument was calibrated on May 3, 2022. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,936 counts per minute (cpm).

The average background count rate for this location was measured at 2,504 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by entering landscaped area before and after plant removal and recording the highest count rate for the floor and walls to a depth of 1 foot below ground surface.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 2,400 cpm to 3,200 cpm. No count rates were found at any time that exceeded the threshold limit of 6,936 cpm.

Additional Monitoring

Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

I will be providing a copy of this report to both the City of Chicago Department of Public Health and US Environmental Protection Agency, as required.

Thank you for your assistance with this project. If you have any questions or need additional information, please call me at (815) 485-6161.

Sincerely,

Stan A. Huber Consultants, Inc.

Glenn Huber, CHP

President



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Radiation Survey Form

Location/ Project ID: 400 E. Monroe Dr. Tree/Shrub Removal - Christy Webber Landscapes **Technician:** Mark Dewald **Date:** 11/28/22 Inst Model: Ludlum 2221 Serial No. : 99147 Probe Type: 2"x2" Nal Lift Elevation: Surface to -12" BGS Shielded Not Shielded Action Level: 6,936 2,504 Background _ _cpm Write grid designations in circles. Record highest counts for grid in cpm. Record 30 second counts at grid intersections (if required). Shade areas of elevated counts and record max cpm.

Morroe Dr.	\(\frac{1}{2}\)	to Chicago Vacho Club
	(i) 25,	
	219 mg,	
	(j) 52,	
	(g) 25'	
	Da,	

	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9
0-18"	2500	2900	2800	2400	2600	2500	2700	2500	2300
6-24"					3100	2700	3100	2800	
12-30"	2700	2900	2900	3000					3200