

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

May 23, 2023

982861

Susan Lange Clarence Davids and Co. 22901 S. Ridgeland Ave. Matteson, IL 60443

RE: Thorium Monitoring – 633 N. Michigan Ave. CDOT Number: 1816984

Dear Ms. Lange:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the removal and replacement of a tree at 633 N. Michigan Ave. in Chicago, IL. Monitoring was performed on May 19, 2023, by Mark Dewald, SAHCI Health Physics Technician.

## Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 126497) with attached Ludlum Model 44-10 2"x2" Nal Detector (w/ 6" collimated lead shield). The instrument was both calibrated on May 9, 2023. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,043 counts per minute (cpm).

The average background count rate for this location was 1,734 cpm.

## Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by entering the excavation and recording the highest count rate on the floors and walls where the tree was planted to a depth of 18 inches below ground surface.

The maximum gamma count rate for each location was recorded on the attached Radiation Survey Form. The count rates ranged from 2,800 cpm to 3,200 cpm.

No count rates were found at any time that exceeded the threshold limit of 6,043 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.

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Glenn Huber, CHP President

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## **Radiation Survey Form**

Location/ Project ID: 633 N. Michigan Ave.

Date: 5/19/	2023	Technician:	Mark Dewald
Inst Model:	Ludlum 2221	Serial No. :	126497
Probe Type:	1"x1" Nal 2"x2" Nal Shielded / Not Shielded	Lift Elevation	Surface to -18" BGS
Background <u>1</u> ,		Action Level: 6	, 043 <b>cpm</b>

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.



	Area 1
0-18"	2800
18-36"	3200