



June 15, 2021

Angel Camacho  
SET Environmental  
450 Sumac Road  
Wheeling, Illinois 60090

RE: Thorium Monitoring – 407 E. River Dr. Tree Planting  
City of Chicago Dept. of Assets, Information, and Services (AIS)  
CDOT Permit: 1544503

Dear Mr. Camacho:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation for a tree planter at the 407 E. River Drive. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on June 8, 2021. All activities were conducted under the guidance of document *SET General Procedure for Thorium Monitoring*.

#### Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 126496) with attached Ludlum Model 44-10 2"x2" NaI Detector (w/ 6" collimated lead shield). The instrument was calibrated on April 21, 2021. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,754 counts per minute (cpm).

The average background count rate for these locations was measured at 2,242 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 for the floor and walls to a maximum depth of 24 inches 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 2,700 cpm to 4,000 cpm. No count rates were found at any time that exceeded the threshold limit of 6,754 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

**Radiation Survey Form**

Location/ Project ID: 7D - TREE PLANTER EXCAVATION - ROW RADIOLOGICAL Soil Study

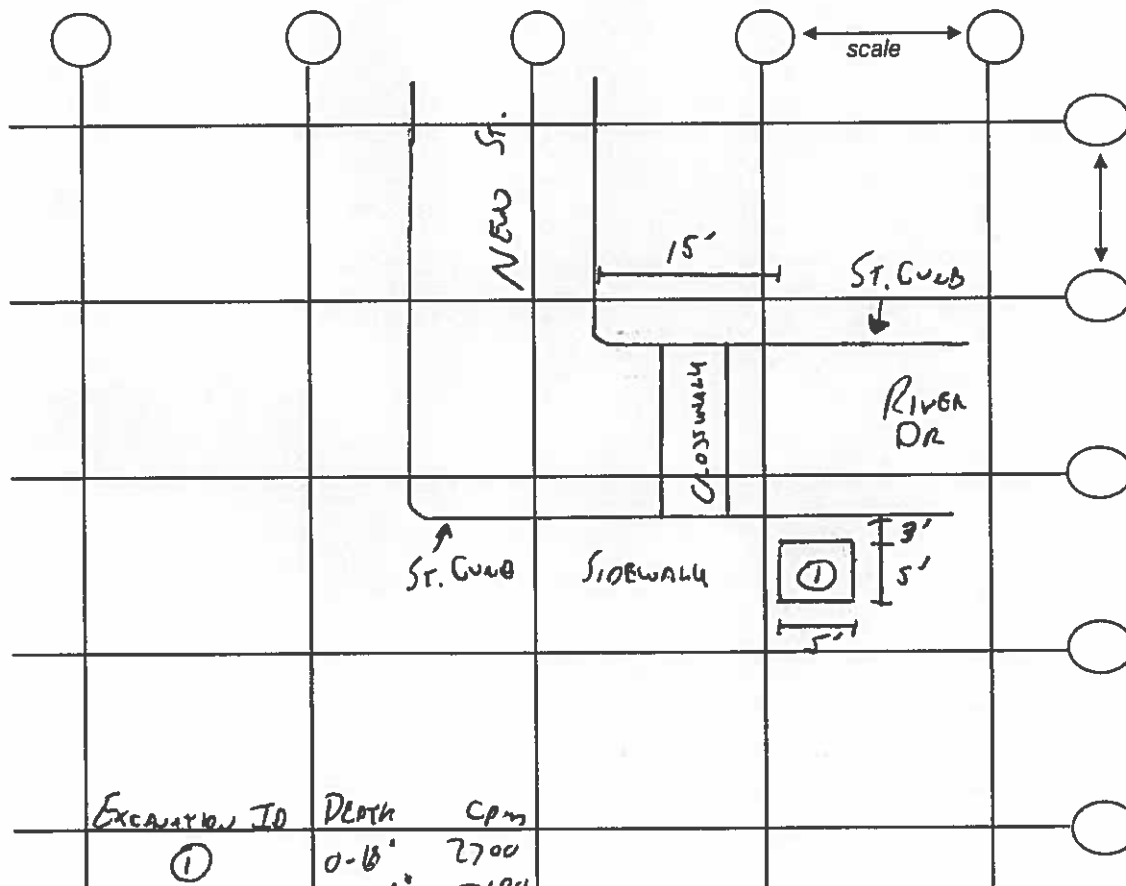
Date: 6/8/2021 Technician: BRIAN SCHMIDT

Inst Model: LUOWM-2221 Serial No.: 126496

Probe Type: 1"x1" NaI / 2"x2" NaI  
Shielded / Not Shielded Lift Elevation: 0-24"

Background 2242 cpm Action Level: 6754 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.



EXCAVATION ID	DEPTH	CPM
①	0-18"	2700
	18-36"	3600
	24-42"	4000