



March 16, 2023

981449

Angel Camacho
SET Environmental
450 Sumac Road
Wheeling, Illinois 60090

RE: Thorium Monitoring – 129-153 E. Riverwalk
City of Chicago Dept. of Assets, Information, and Services (AIS)
CDOT Permit: N/A

Dear Mr. Camacho:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation of a drainage line at 129-153 E. Chicago Riverwalk. Monitoring was performed on March 14, 2023, by Brian Schmidt, SAHCI Health Physics Technician. 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 both 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 7,819 counts per minute (cpm).

The average background count rate for this location was 1,814 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by scanning the surface and walls of each 8 inch deep drainage trench and recording the highest count rate.

The maximum gamma count rate for each location was recorded on the attached Radiation Survey Form. The count rates ranged from 1,800 cpm to 3,000 cpm. No count rates were found at any time that exceeded the threshold limit of 7,819 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.

A handwritten signature in black ink, appearing to read 'Glenn Huber', with a long horizontal flourish extending to the right.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: RIVER WALK - DRAIN PIPE EXCAVATION - RADIOLOGICAL SOIL SURVEY

Date: 3/14/2023 Technician: BRIAN SCHMIOT

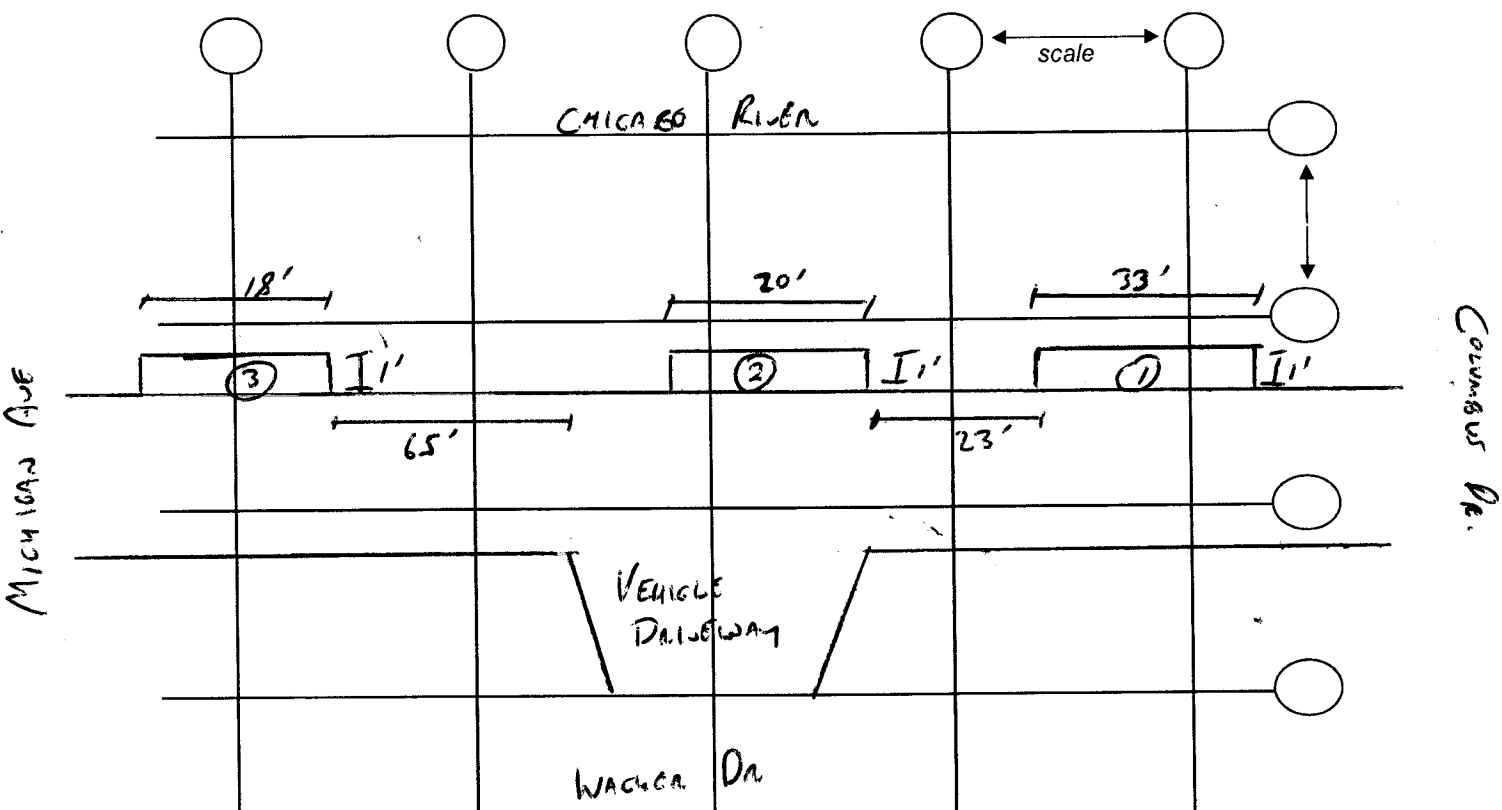
Inst Model: LUDLUM-2221 Serial No.: 126496

Probe Type: 1"x1" NaI / 2"x2" NaI / Not Shielded
Shielded

Lift Elevation: 0-8"

Background 1814 cpm Action Level: 7819 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"	1800
	8-26"	2200
②	0-18"	3000
	8-26"	2800
③	0-18"	2200
	8-26"	2700