



August 3, 2021

Kendal Heldt
Western Utility Contractors
2565 Palmer Ave.
University Park, IL 60484

RE: 200-241 N. Lower Michigan Ave. Thorium Monitoring 7/29/21
CDOT Permit: 1535831

Dear Ms. Heldt.

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation of a trench for installation of conduit at 200-241 N. Lower Michigan Avenue in Chicago, Illinois. The monitoring was performed by Glenn Huber, SAHCI Health Physicist, on July 29, 2021.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 134542) with attached Ludlum Model 44-10 2"x2" NaI Detector (w/ 6" collimated lead shield). The instrument was calibrated on May 5, 2021. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,396 counts per minute (cpm).

The average background count rate for these locations was measured at 1,388 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 recording the highest count rate for the floor and walls to a maximum depth of 48 inches below ground surface. All asphalt, concrete, and soil were loaded directly into a truck for disposal.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavations ranged from 1,400 cpm to 3,500 cpm. No count rates were found at any time that exceeded the threshold limit of 7,396 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: 200-241 N. Lower Michigan Ave.

Date: 7/29/21

Technician: Glenn Huber

Inst Model: Ludlum 2221

Serial No. : 134542

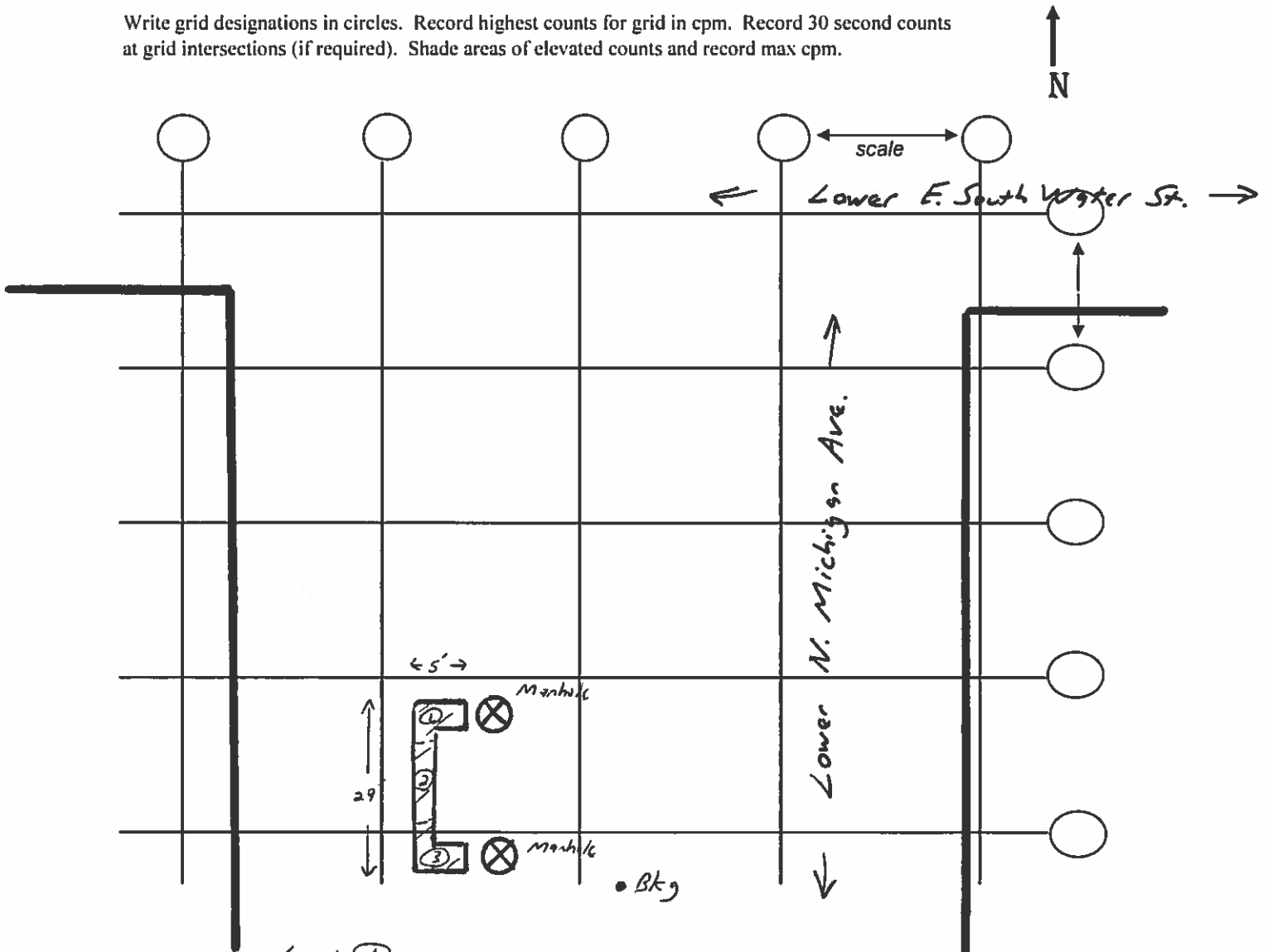
Probe Type: 1"x1" NaI / (2"x2" NaI)
Shielded / Not Shielded

Lift Elevation: Surface to -4'

Background 1,388 cpm

Action Level: 7,396 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.



Location ①

depth	cpm
5	1400
-1.5	2500
-3	2900
-4	2500

Location ②

depth	cpm
5	1500
-1.5	2000
3	2500

Location ③

depth	cpm
5	1400
-1.5	2600
-3	3000
-4	3100