



September 7, 2021

Jared Szajkowski
Western Utility Contractors
2565 Palmer Ave.
University Park, IL 60484

RE: 500 N. Michigan Ave. Thorium Monitoring 8/30/21 – 9/1/21
CDOT Permit: 1575417

Dear Mr. Szajkowski:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation for installation of a fiber optic conduit at 500 N. Michigan Ave. in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, August 30, 2021 to September 1, 2021

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 126497) 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 instrument serial number 132844 is 6,383 counts per minute (cpm).

The average background count rate this location was measured at 1,783 cpm.

Soil Gamma Scans

Gamma surface scans were performed in the excavation using the Ludlum Model 2221 Scaler / Ratemeter detailed above. Survey data was collected by entering the excavation and recording the highest count rate for the floor and walls to a maximum excavation depth of 3 feet 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 excavation ranged from 1,800 cpm to 3,300 cpm. No count rates were found at any time that exceeded the instrument specific count rate threshold limit of 6,383 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: WESTERN UTILITY - 500 N. MICHIGAN AVE - PIPER INSTALL - ROW RADIOLOGICAL SOIL SURVEY

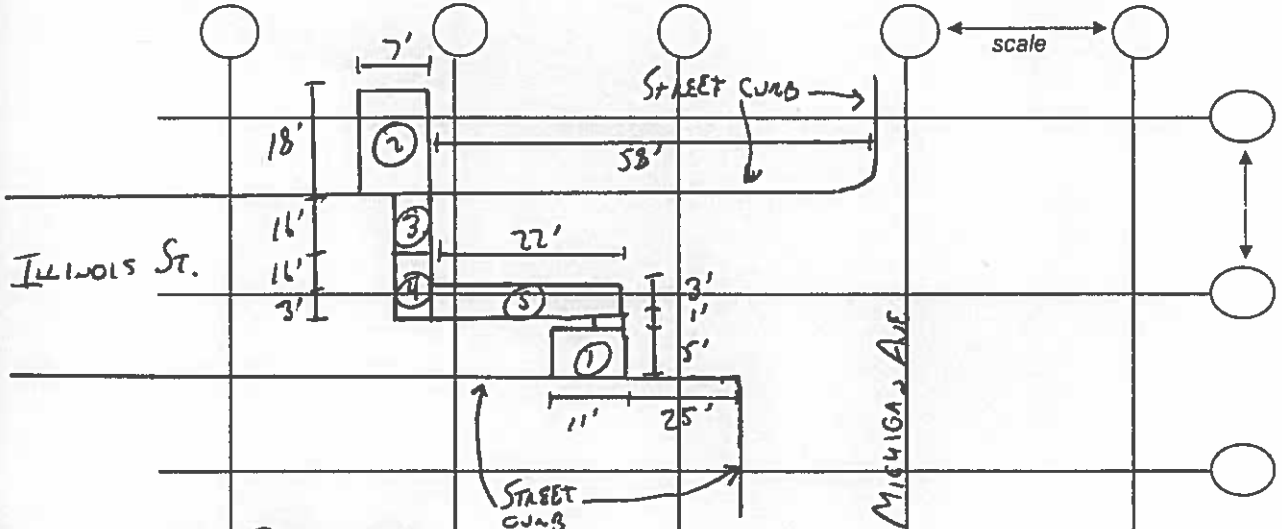
Date: 8/30/2021 - 9/1/2021 Technician: BRIAN SCHMIDT

Inst Model: LDOM - 222 Serial No.: 126497

Probe Type: 1"x1" NaI / 2"x2" NaI Lift Elevation: 0-36"
Shielded / Not Shielded

Background 1783 cpm Action Level: 6383 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	0-12"	2200
	12-30"	2900
②	0-6"	2400
	6-24"	3300
	24-42"	3100
	36-54"	2700
③	0-12"	2200
	12-30"	2800
	30-48"	2900
	36-54"	3100

Excavation ID	DEPTH	CPM
④	0-12"	2100
	12-30"	2400
	30-48"	2300
	36-54"	2600
⑤	0-12"	1800
	12-30"	2600
	30-48"	2500
	36-54"	2700