



August 13, 2018

Greg Preisch
Electric Conduit Construction
816 Hicks Drive
Elburn, IL 60119

RE: Thorium Monitoring at 646 N. Michigan Avenue on August 11, 2018
CDOT Permit #990971

Dear Mr. Preisch:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation for installation of a fiber optic conduit and manhole at 646 N. Michigan Ave. in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on August 11, 2018.

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 October 11, 2017. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,366 counts per minute (cpm).

The background count rate for this location was found to average 1,697 cpm.

Soil Gamma Scans

Survey data was collected on by entering the excavation after each 18-inch lift and recording the highest count rate for the floors and walls to a maximum excavation depth of 4 feet below ground surface. All excavated material was 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 1,500 cpm to 3,100 cpm. No count rates were found at any time that exceeded the threshold limit of 7,366 cpm.

Additional Monitoring

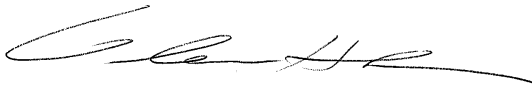
Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

Regulatory Notification of Survey Completion

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: ECC - 646 N. MICHIGAN AVE - CHICAGO, IL - UTILITY INVESTIGATION - ROW RAS SURVEY

Date: 8/11/2018

Technician: BRIAN SCHMIDT

Inst Model: WALUM-2221

Serial No.: 126496

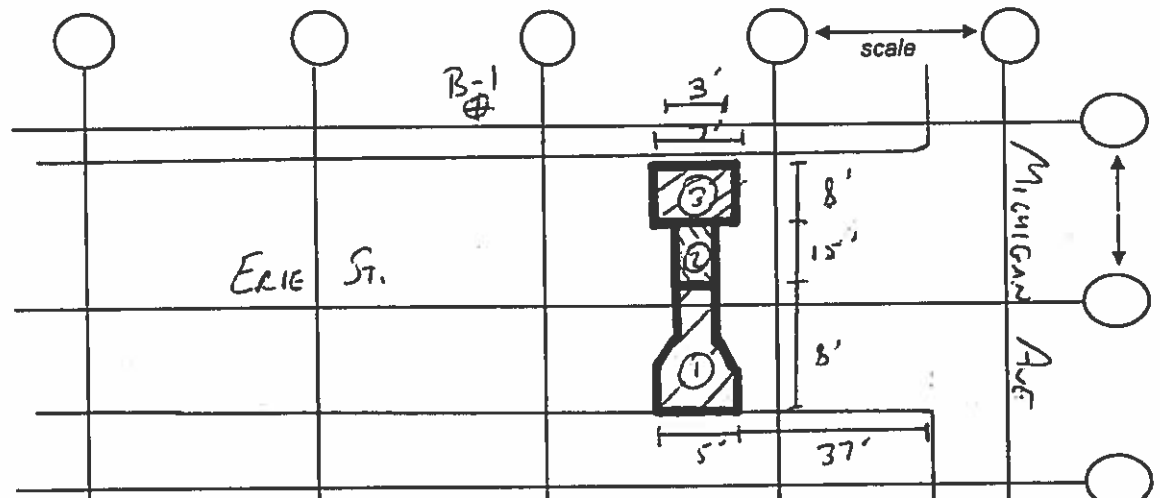
Probe Type: 1"x1" NaI 2"x2" NaI
Shielded / Not Shielded

Lift Elevation: 0-48"

Background 1697 cpm

Action Level: 7366 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.



ID	DEPTH	CPM	REMARKS
①	0-12"	1600	(CONCRETE)
	12-30"	2700	
	30-48"	2500	
②	0-12"	1500	(CONCRETE)
	12-30"	1800	
	30-48"	2400	
	36-54"	2800	
③	0-12"	1700	(CONCRETE)
	12-30"	3100	
	30-48"	2200	
	48-66"	2500	

B-1 = 1697 cpm (BACKGROUND / MIN COUNT)