

March 6, 2024

Ati Fathi
GEI Consultants, Inc.
8615 W. Bryn Mawr Ave., Suite 406
Chicago, IL 60631

706880

RE: Thorium Monitoring at 100 E. Ontario St.
CDOT permit 1918651

Dear Ms. Fathi:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiological monitoring during the performance of 2 geotechnical borings at 100 E. Ontario St. in Chicago, Illinois. The monitoring was performed by Jeremy Keiser, SAHCI Health Physics Technician, on February 22 and March 4, 2024.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 127242) with attached Ludlum Model 44-10 2"x2" NaI probe (w/ 6" collimated lead shield). The instrument was calibrated on May 9, 2023. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,368 counts per minute (cpm).

The average background count rate for this location was determined to be 1,832 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 of each core sample until native material was reached, 15 feet below ground surface for 1st boring and 7 feet for the second boring.

The maximum gamma count rate for each sampling interval was recorded on the attached Radiation Survey Form. A diagram showing the boring locations is also attached. The count rates of the core samples ranged from 1,300 cpm to 1,800 cpm. No count rates were found at any time that exceeded the instrument specific count rate threshold of 6,368 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: 100 E. Ontario

Date: Feb 22 & March 4, 2024 Technician: Jeremy Kieser

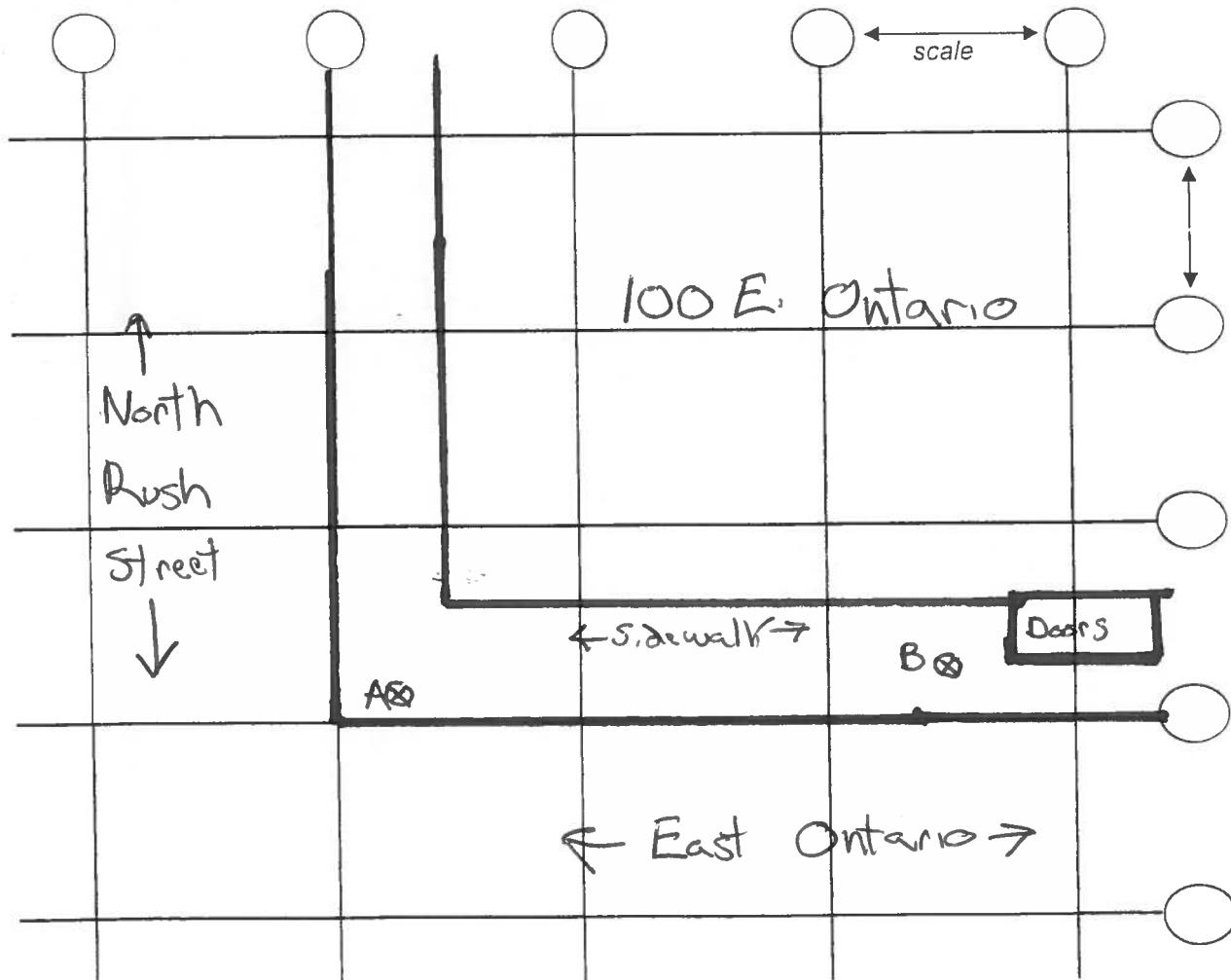
Inst Model: 2221 Serial No.: 127242

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

Background 1832 cpm Action Level: 6368 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.

↑
N



Location: 100 E. Ontario

Dates: Feb 22, & March 4, 2024

Surveyed By: Jeremy Kieser (SAHCl)

Client: GEI

Background: 1832 cpm

Action Level: 6368 cpm

Bore Location:		
Depth	A	B
Surface:	1800 cpm	1700 cpm
1 ft.	1500 cpm	1500 cpm
3 ft.	1500 cpm	1500 cpm
6 ft.	1600 cpm	1500 cpm
7 ft.	1600 cpm	1500 cpm
9 ft.	1300 cpm	
12 ft.	1300 cpm	
15 ft.	1300 cpm	