Stan A. Huber Consultants, Inc.
Health Physics and Radiation Safety Services

200 North Cedar Road – New Lenox, Illinois 60451-1751 – (800) 383-0468 or (815) 485-6161 – FAX (815) 485-4433 – Email sahci@sahci.com – Home Page www.sahci.com

June 8, 2022

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

RE: Thorium Monitoring at 535 N. St. Clair St.
CDOT permit 1676176

Dear Ms. Fathi:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiological monitoring during the performance of 6 geotechnical borings at 535 N. St. Clair St. in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on May 17, 2022 through June 1, 2022.

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 probe (w/ 6" collimated lead shield). The instrument was 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 7,208 counts per minute (cpm).

The average background count rate for this location was determined to be 1,792 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 each of the split spoon samples and any spoils generated at the 6 boring locations, until native material was reached. There was no recovery for boring B-5 until 5 feet below ground surface.

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 1,400 cpm to 2,900 cpm. No count rates were found at any time that exceeded the instrument specific count rate threshold of 7,208 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

A copy of this report should be submitted 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

sahci
Stan A. Huber Consultants, Inc.

Radiation Survey Form

Location/ Project ID: GEI / Park 1 - Grand & St. Clair - Geotech Borings - Row Radiological Soil Survey

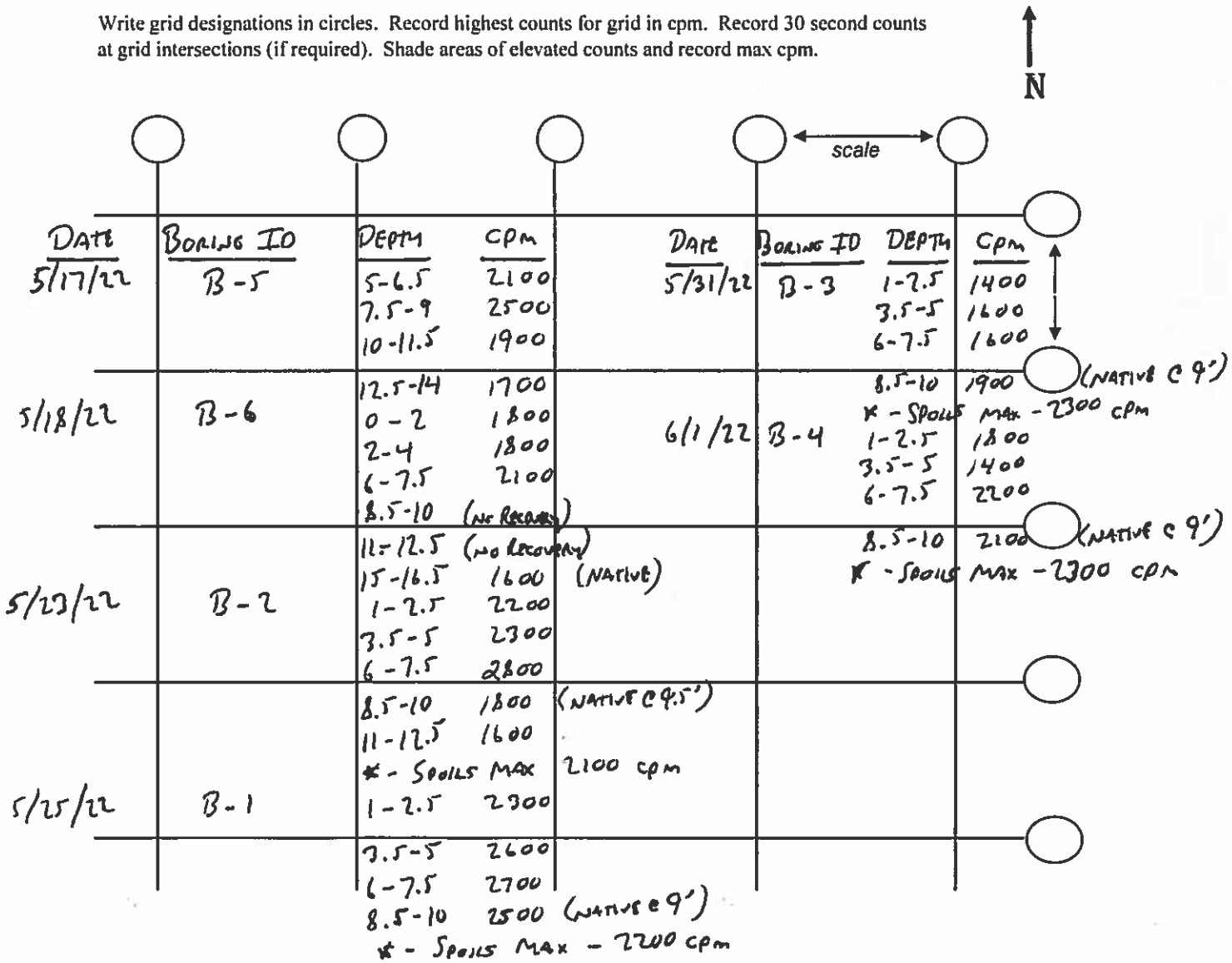
Date: 5/17/22 - 6/1/22 **Technician:** Brian Schmidt

Inst Model: Ludlum - 2221 **Serial No. :** 126497

Probe Type: 1"x1" NaI / (2"x2" NaI) (Shielded) / Not Shielded **Lift Elevation:** 0 - 16.5'

Background 1792 cpm **Action Level:** 7208 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.



Date	Boring ID	Depth	cpm	
5/17/22	B-5	5-6.5	2100	
		7.5-9	2500	
		10-11.5	1900	
		12.5-14	1700	
5/18/22	B-6	0-2	1800	
		2-4	1800	
		6-7.5	2100	
		8.5-10	(No Recovery)	
		11-12.5	(No Recovery)	
		15-16.5	1600	(Native)
5/23/22	B-2	1-2.5	2200	
		3.5-5	2300	
		6-7.5	2800	
		8.5-10	1800	(Native @ 9.5')
		11-12.5	1600	
		* - Spoils Max	2100 cpm	
5/25/22	B-1	1-2.5	2300	
		3.5-5	2600	
		6-7.5	2700	
		8.5-10	2500	(Native @ 9')
		* - Spoils Max - 2200 cpm		

Date	Boring ID	Depth	cpm	
5/31/22	B-3	1-2.5	1400	
		3.5-5	1600	
		6-7.5	1600	
		8.5-10	1900	(Native @ 9')
		* - Spoils Max - 2300 cpm		
6/1/22	B-4	1-2.5	1800	
		3.5-5	1400	
		6-7.5	2200	
		8.5-10	2100	(Native @ 9')
		* - Spoils Max - 2300 cpm		

N

Street Borings

Brings drilled from parking roof

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

535 N. St. Clair **Chicago, IL**	GEI Consultants	**FIGURE 1** **BORING LOCATION DIAGRAM**
MGW Streetville LLC **Chicago, IL**	Project No.	February 2022