



May 5, 2018

Paul Duncan
Western Utility Contractors, Inc.
2565 Palmer Ave.
University Park, IL 60466

RE: 500-514 N. Peshtigo Ct. Thorium Monitoring 4/24/18 – 5/3/18
CDOT Permit # 927943

Dear Mr. Duncan:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation of a utility conduit trench at 500 – 514 N. Peshtigo Ct. in Chicago, Illinois. The monitoring was performed by Justin Maxwell and Brian Schmidt, SAHCI Health Physics Technicians, on April 24, 2018 – May 3, 2018.

Instrumentation

Surface gamma scans were performed using Ludlum Model 2221 Scaler / Ratemeters (serial no. 126496 and 126497) with attached Ludlum Model 44-10 2"x2" NaI detectors (w/ 6" collimated lead shields).

Both meters were calibrated on October 11, 2017. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for serial number 126496 is 7,366 counts per minute (cpm) and 6,542 cpm for serial number 126497.

The average background count rate for this location was determined to range from 1,456 cpm to 2,019 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeters described above. Survey data was collected by entering the excavation after each 18-inch lift and recording the highest count rate for the floors and walls to an excavation depth of 6 feet below ground surface. All soil was loaded directly into a truck for disposal.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Forms. The count rates in the excavation ranged from 1,800 cpm to 5,000 cpm. No count rates were found at any time that exceeded the instrument specific threshold limits of 6,542 and 7,366 cpm.

Additional Monitoring

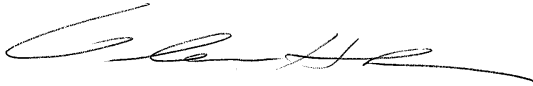
Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

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 USEPA, 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: Western Utility, E Grand Ave and N Peshtigo Ct

Date: April 24 and May 2, 2018 Technician: JUSTIN MAXWELL

Inst Model: Ludlum Model 2221 Serial No.: 126497 Probe: 171991

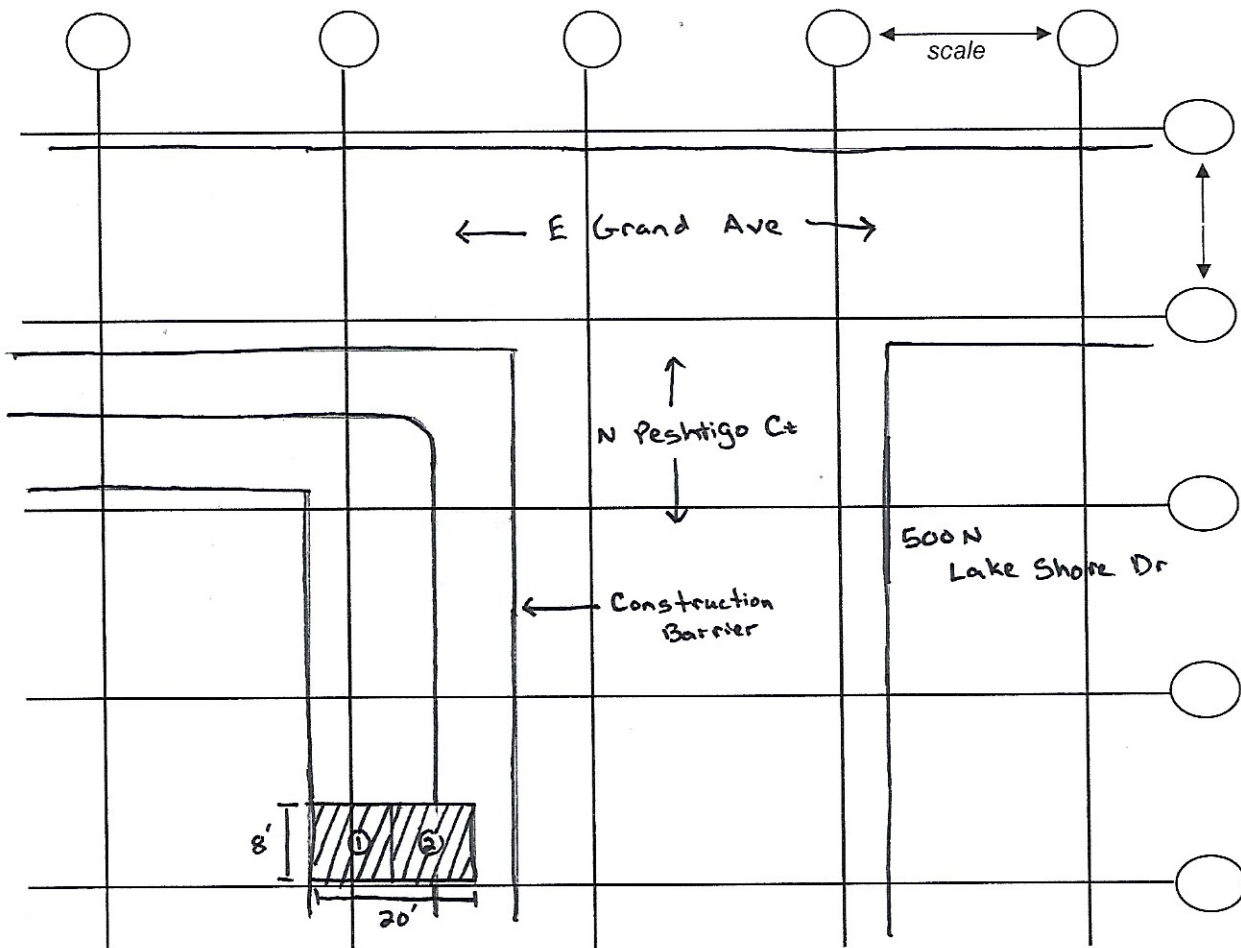
Probe Type: 1"x1" NaI / (2"x2" NaI)
Shielded Not Shielded

Lift Elevation: ①: surface - 6.0'
②: surface - 4.5'

Background 4/24: 1583 cpm
5/2: 1456

Action Level: 6542 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.



*Counts in CPM

	<u>1</u>	<u>2</u>
surface:	1800	1800
1.5':	2600	3800
3.0':	3100	2900
4.5':	2400	3400
6.0':	—	2100

Radiation Survey Form

Location/ Project ID: WESTERN UTILITY - COMMUNICATIONS UTILITY INSTALL - GRAND & PESHTIGO - CHICAGO, IL - ROAD RADIOLOGICAL SOIL SURVEY

Date: 5/3/2018 Technician: BRIAN SCHMIDT

Inst Model: UOLUM-2221 Serial No.: 126496

Probe Type: 1"x1" NaI / 2"x2" NaI Lift Elevation: 0-60"
Shielded / Not Shielded

Background 2019 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.

