

# 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

November 2, 2016

Greg Preisch Electric Conduit Construction 741 Hicks Drive Wheeling, Illinois 60090

RE: 230 E. Ontario St. Thorium Monitoring on 10/24/16

Dear Mr. Preisch:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and installation of an RCN conduit located 230 E. Ontario St. in Chicago, Illinois. The monitoring was performed by Steven Kowalczyk, SAHCI Health Physicist, on October 24, 2016.

### <u>Instrumentation</u>

Surface gamma scans were performed using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 127242) with attached 2"x2" Nal probe (w/ 6" lead collimator shield). The instrument was calibrated on August 8, 2016. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,738 counts per minute (cpm).

The average background count rate for this location was determined to be 2,043 cpm.

### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter 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 a maximum excavation depth of 4 feet. Soil was loaded directly in the truck for disposal and no soil was stockpiled onsite.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 2,621 cpm to 3,419 cpm. No count rates were found at any time that exceeded the threshold limit of 6,738 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.

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Glenn Huber, CHP

President

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# Radiation Survey Form

Location/ Project ID: Electric Co.	ndut Construction 230 E. Ontanio ST
Date: _/6/24/4	Technician: Steven Kowaleryk
Inst Model: Ludlum 2221	Serial No. : /27242
Probe Type: 1"x1" Nal / 2"x2" Nal Shielded / Not Shielded	Lift Elevation: /'- 4'
Background 2,043cpm	Action Level: <u>6,738</u> cpm
Write grid designations in circles. Record highest at grid intersections (if required). Shade areas of	
0 0	Private 230 E. N  Ontario  scale  N
Pepper Construction Bldg.	
"Blag.	
	~4'
	240'
Counts Per Minute	~4'
1'- 2621	
3'- 2813	24.
4'- 8419	
	1
	Ontario St.