



September 22, 2015

Luke Wells  
Western Utility Contractors, Inc.  
2565 Palmer Ave.  
University Park, IL 60466

RE: 225 N. Columbus Drive Thorium Monitoring

Dear Mr. Wells:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and installation of a utility duct at 225 N. Columbus Dr. in Chicago, Illinois. The monitoring was performed on September 21, 2015.

#### Instrumentation

Surface gamma scans were performed by Brian Schmidt using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 126496) with attached 2"x2" NaI probe (6" lead shielded). The instrument was calibrated on October 17, 2014. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,037 counts per minute (cpm).

The average background count rate for this location was found to be 1,448 cpm.

#### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Data was collected by monitoring the soil in each 18 inch lift as it was removed from the excavation and recording the highest count rate for the floor and walls to an excavation depth of 5 feet. No soil was stockpiled during the project and all excavated materials were loaded directly into the truck after screening.

The maximum gamma count rates for each 18 inch lift are detailed on the attached Radiation Survey Form. The count rates in the excavation ranged from 1,100 cpm to 2,500 cpm. No count rates were found at any time that exceeded the threshold limit of 7,037 cpm.

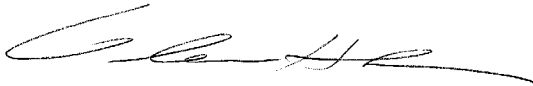
#### Additional Monitoring

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.

You will need to forward a copy of this report to the City of Chicago Department of Public Health (Attn: Rahmatunsia Begum) with the CDOT Permit Number in the subject line. I will be providing a copy of this report to 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 - ELECTRICAL SERVICE INSTALL. - S. WATER ST. + CONNINGER DR.

Date: 9/21/15

Technician: BRIAN SCHMIDT

Inst Model: LUDLUM-2221

Serial No. : 126496

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

Lift Elevation: 0-42"

Background 1448 cpm

Action Level: 7037 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.

