

## 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 30, 2016

Bill Zebrauskas Western Utility Contractors, Inc. 2565 Palmer Ave. University Park, IL 60466

RE: 530 N. Lake Shore Drive Thorium Monitoring

Dear Mr. Zebrauskas:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and installation of an RCN utility duct at 530 N. Lake Shore Dr. in Chicago, Illinois. The monitoring was performed on June 16, 2016.

## Instrumentation

Surface gamma scans were performed by Brian Schmidt using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 126496) with attached 2"x2" Nal probe (6" lead shielded). The instrument was calibrated on October 15, 2015. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,054 counts per minute (cpm).

The average background count rate for this location was determined to be 1,979 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 2 feet below ground surface. 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 1,600 cpm to 3,100 cpm. No count rates were found at any time that exceeded the threshold limit of 7,054 cpm.

## <u>Additional Monitoring</u>

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.

Glenn Huber, CHP

President



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Radiation Survey Form

" ladia(ioi	ii Survey Form				
Location/ Project ID: 530 N. LANE SYORS DR - CUICAGO TL - RCN SERVICE INSTALLATION					
Date:	Technician: BAIAN SOULIST				
Inst Model: Lupium - 2221	Serial No.: 126 49 6				
D	Lift Elevation: 0-24" bgs				
Background 1979 cpm	Action Level: 70.54 cpm				
Write grid designations in circles. Record highest counts at grid intersections (if required). Shade areas of elevated	s for grid in cpm. Record 30 second counts and record max cpm.				
	Scale N				
81 6	Pesuro Cr.				
CINO CINO					
B-1 = BACHEROUND (IMIN C	TOUNT) = 19.79 CPM				
6-24"-1800	24-42"- 3100				