

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 9, 2017

Jennifer Rogulich Western Utility Contractors, Inc. 2565 Palmer Ave. University Park, IL 60466

RE: 415-430 E. Erie St. Thorium Monitoring 11/1/17

CDOT Permit # 875116

Dear Ms. Rogulich:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation for a conduit repair at 415-430 E. Erie St. in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on November 1, 2017.

<u>Instrumentation</u>

Surface gamma scans were performed using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 126496) with attached 2"x2" Nal probe (w/ 6" collimated lead shield). The instrument was calibrated on October 11, 2017. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,366 counts per minute (cpm).

The average background count rate for this location was determined to be 1,877 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 an excavation depth of 2 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 Form. The count rates in the excavation ranged from 1,800 cpm to 3,200 cpm. No count rates were found at any time that exceeded the threshold limit of 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.

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Glenn Huber, CHP

President

sohci		Page of		
Stan & Huber Counsultants, Inc. Location/ Project ID: Williams Date: 11/1/17	Radiation	Survey For	M ST SERVICE	UTILITY CONDUST
Location/ Project ID: W	ESTERN UTILITY -	418 430 2000	C	RAD SULVEY
Date: 11/1/17		Technician: <u>BRI</u>	AN Schmot	<u> </u>
Inst Model: Lupum - 2221		Serial No. :2	<u> </u>	
Probe Type: 1"x1" Nal A	2"x2" Nal Not Shielded	Lift Elevation:	0-24"	
Background 1877	_cpm /	Action Level: 733	<u>ср</u> т	
Write grid designations in circles at grid intersections (if required).	. Record highest count Shade areas of elevate	ad accurate and encord may	r com	†
		BuiLoine STA	MWAY ENTRANES	N
	16'			
	9/ 4'			_ <u></u>
16'	4′	SIDEWAL	и	_
	E. Er	e St.	St. Cuas	—
EXERATION ID	<u>Дерги</u> 0-6" 6-24"	CPM 1800 (COJULTE 2900)	
	24-42"	3200		