



March 1, 2019

Buddy Hix
Western Utility Contractors, Inc.
2565 Palmer Ave.
University Park, IL 60466

RE: 62 – 120 E. Hubbard St. Thorium Monitoring 2/27/19 - 2/28/19
CDOT Permit # 1058274

Dear Mr. Hix:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation of a fiber optic utility conduit trench at 62-120 E. Hubbard St. in Chicago, Illinois. The monitoring was performed by Jeremy Kieser, SAHCI Health Physicist, on February 27, 2019 and February 28, 2019.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 126497) with attached Ludlum Model 44-10 2"x2" NaI probe (w/ 6" collimated lead shield). The instrument was calibrated on October 15, 2018. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,319 counts per minute (cpm).

The average background count rate for this location was determined to be 2,028 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 48 inches 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 1,900 cpm to 2,800 cpm. No count rates were found at any time that exceeded the instrument specific threshold limit of 6,319 cpm.

Additional Monitoring

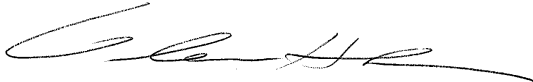
Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

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: DOT 1058274

Date: Feb 27, 2019

Technician: Jeremy Kieser

Inst Model: Ludlum 2221

Serial No.: 126497

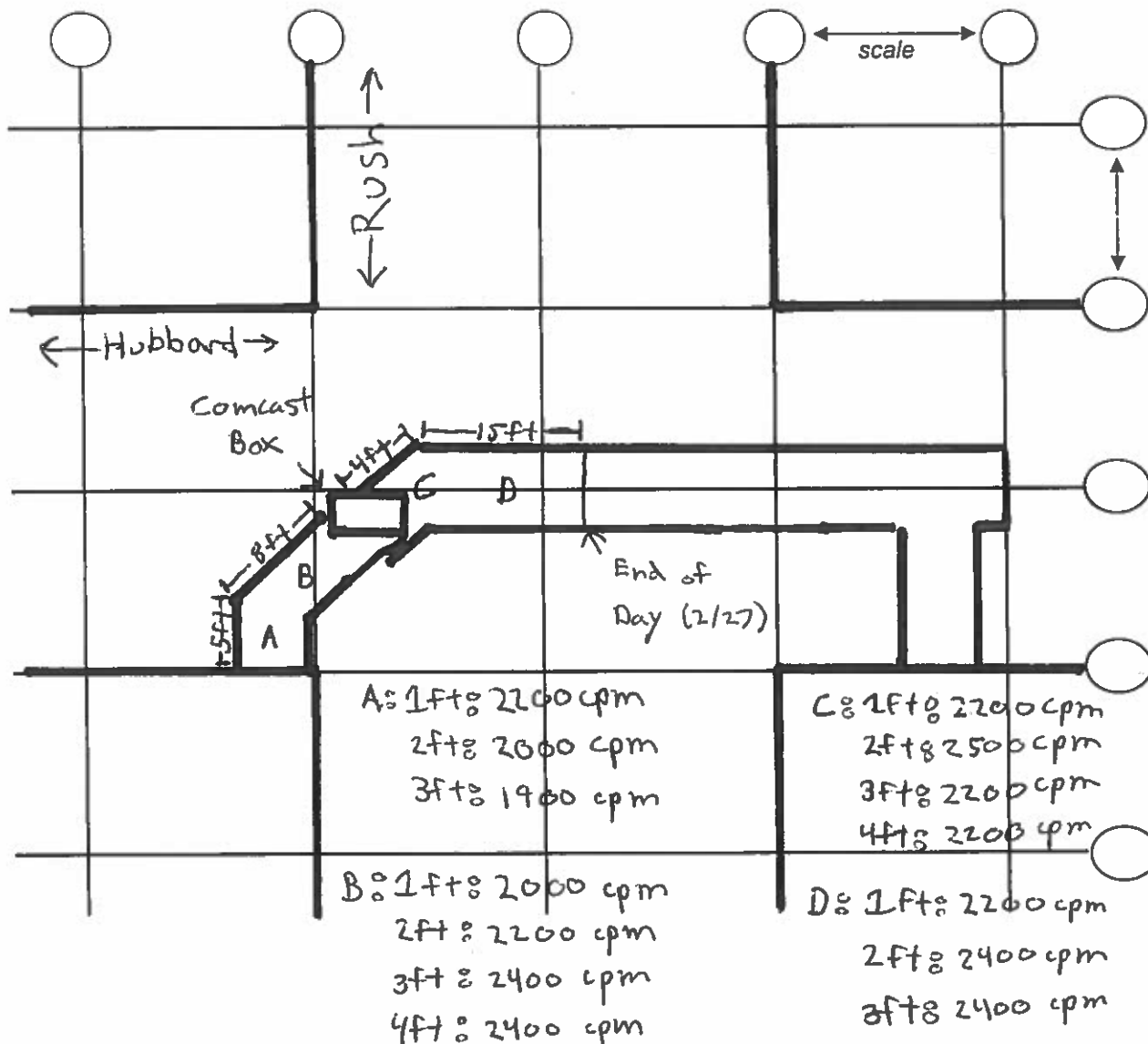
Probe Type: 1"x1" NaI / 2"x2" NaI
Shielded / Not Shielded

Lift Elevation: Surface to 42 inches

Background 2028 cpm

Action Level: 6319 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.



Radiation Survey Form

Location/ Project ID: DOT 105 8274

Date: Feb. 28, 2019

Technician: Jeremy Kieser

Inst Model: Ludlum 2221

Serial No.: 126497

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

Lift Elevation: Surface to 42 inches

Background 2063 cpm

Action Level: 6319 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.

