



November 5, 2013

Gregory Preisch  
Hydro-Exc. Inc.  
8248 Wright St.  
Merrillville, IN 46410

RE: Fairbanks and Erie, Chicago, IL. Thorium Monitoring November 4, 2013

Dear Mr. Preisch:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation of a utility excavation at Fairbanks Ct. and Erie St., in Chicago, Illinois. The monitoring was performed on November 4, 2013.

#### Instrumentation

Surface gamma scans were performed by Joel Ahrweiler using a Ludlum Model 2221 Scaler / Ratemeter with attached 2"x2" NaI probe (unshielded). The instrument was calibrated on October 18, 2013. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 18,425 counts per minute (cpm).

The average background count rate for this location was found to be between 4,800 cpm and 5,700 cpm over the concrete sidewalk and street pavement.

#### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Data was collected by lowering the detector into the utility excavation after each 18-inch lift and recording the highest count rate for the floors and walls to a maximum excavation depth of 4.5 feet. The utility excavated was 4 feet wide x 5.5 feet long. A vacuum truck was utilized to perform the excavation.

The maximum gamma count rate for each 1.5-foot lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 4,900 cpm to 10,800 cpm. No count rates were found at any time that exceeded the threshold limit of 18,425 cpm.

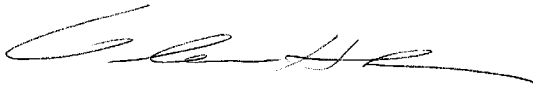
#### Additional Monitoring

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 'G. Huber', with a long horizontal flourish extending to the right.

Glenn Huber, CHP  
President

### Radiation Survey Form

Location/ Project ID: Hydro - Exc. Job # CC-13-002-1 Erie + Fairbanks

Date: 11/4/2013

Technician: Joel Ahrweiler

Inst Model: 2221

Serial No. : 126497

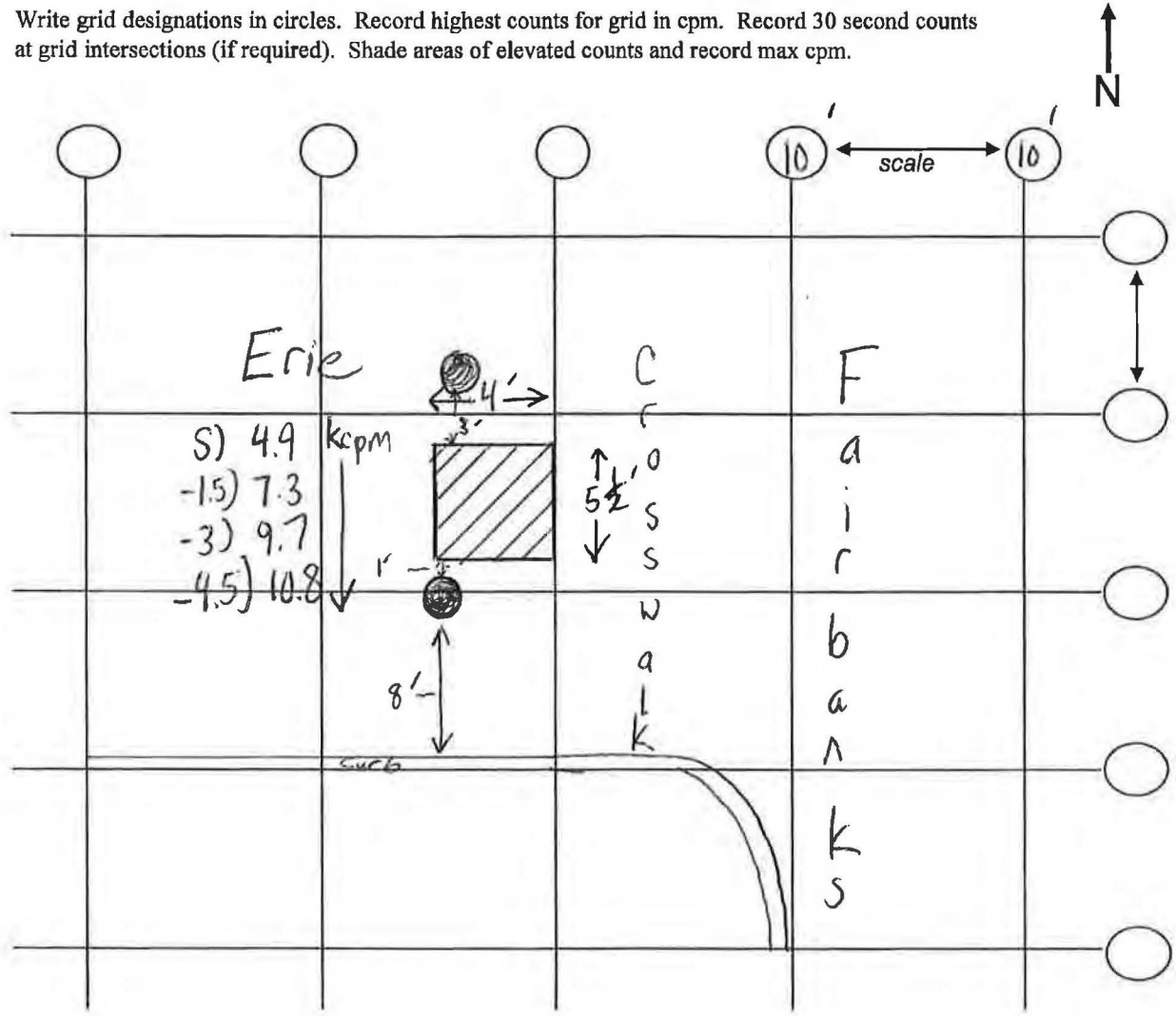
Probe Type: 1"x1" NaI  Shielded / 2"x2" NaI  Not Shielded

Lift Elevation: Max depth -4.5 feet

Background 4.8 - 5.7 kcpm

Action Level: 18,425 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.



= Manhole      = Excavated Area