

February 18, 2024

988886

Matthew Ziegler  
AT&T  
4533 W. Roscoe St.  
Chicago, Illinois 60641

RE: Thorium Monitoring – AT&T 100-121 E. Erie St., 659-665 N. Rush St., 200-318 E. Erie St., and 649-658 N. St. Clair St.  
CDOT Permit: 1906710

Dear Mr. Ziegler:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation for repair of AT&T conduit at 10 locations at the addresses listed above in Chicago, Illinois. The monitoring was performed by Mark Dewald and Jeremy Kieser, SAHCI Health Physicist, on February 8 - 13, 2024.

#### Instrumentation

Surface gamma scans were performed using the following instruments:

- Ludlum Model 2221 Survey Meter (serial no. 127242) with attached Ludlum Model 44-10 2"x2" NaI Detector (w/ 6" collimated lead shield). The instrument was calibrated on May 9, 2023. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium is 6,368 counts per minute (cpm).
- Ludlum Model 2221 Survey Meter (serial no. 126497) with attached Ludlum Model 44-10 2"x2" NaI Detector (w/ 6" collimated lead shield). The instrument was calibrated on May 9, 2023. The US Environmental Protection Agency (USEPA) action level of 7.1 pCi/g total thorium is 6,043 cpm.

The background count rate for these locations ranged from 1,951 cpm to 2,012 cpm.

#### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeters described above. Survey data was collected by entering the excavations and recording the highest count rate for the floor and walls to a depth of 36 inches below ground surface. Material excavated below 36 inches, to a maximum depth of 90 inches, was surveyed either in the excavator bucket as it was removed or as it was stockpiled at the surface.

The maximum gamma count rates for each lift were recorded on the attached Radiation Survey Forms. The count rates in the excavations ranged from 1,600 cpm to 4,500 cpm. No count rates were found at any time that exceeded the threshold limits of 6,368 cpm and 6,043 cpm, respectively.

#### 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.

I will be providing a copy of this report to both the City of Chicago Department of Public Health and US Environmental Protection Agency, 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', written in a cursive style.

Glenn Huber, CHP  
President

## Radiation Survey Form

**Location/ Project ID:** 200-318 E. Erie St. AT&T Conduit Repair - HEI

**Date:** 2/8-9/2024

**Technician:** Mark Dewald

**Inst Model:** Ludlum 2221

**Serial No. :** 126497

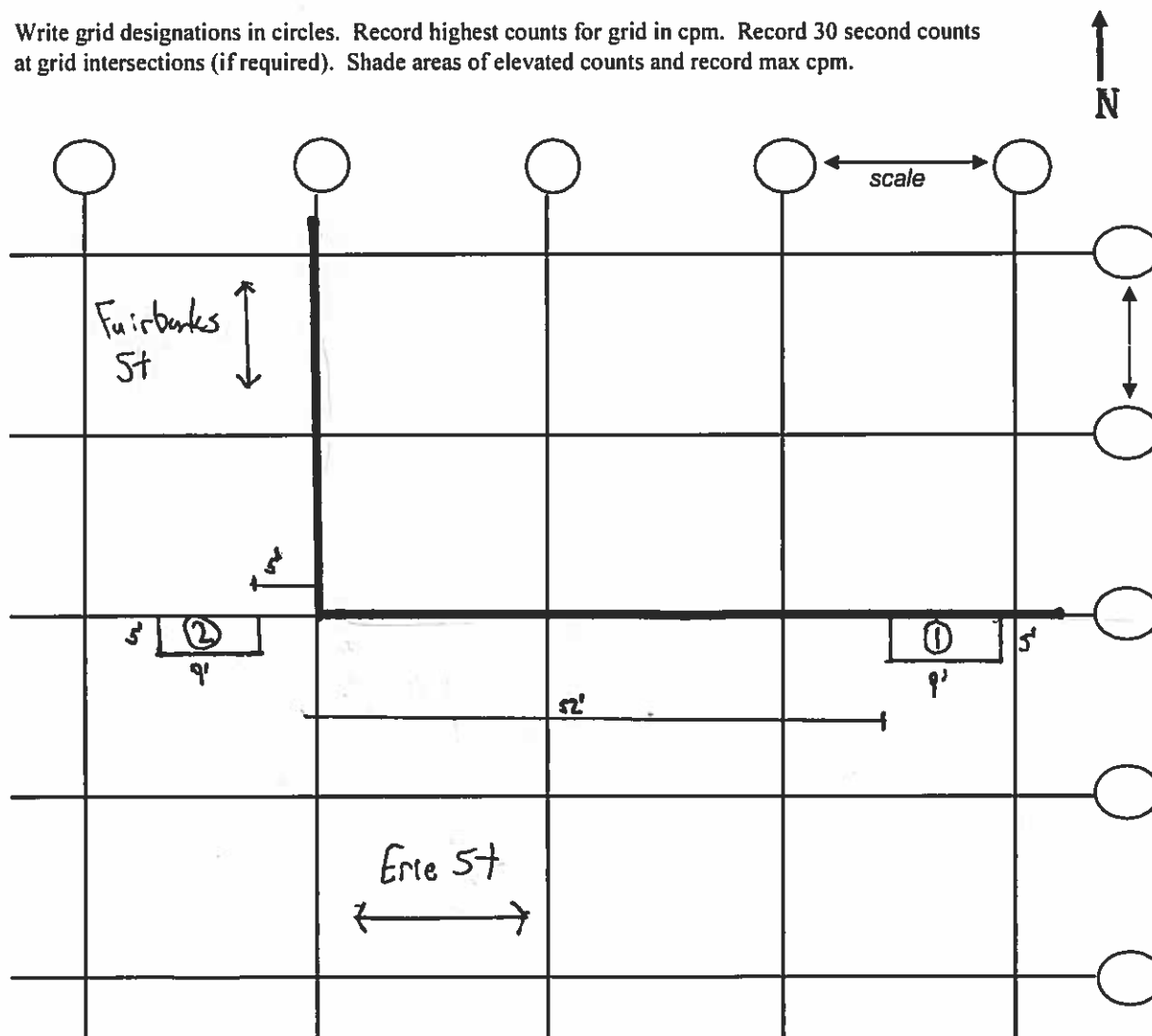
**Probe Type:** 1"x1" NaI 2"x2" NaI  
 Shielded  Not Shielded

**Lift Elevation:** Surface to -48" BGS

**Background** 1,951 cpm

**Action Level:** 6,043 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.



	0-12"	12-30"	30-48"	36-54"
Area 1	1700	3100	3400	4500
Area 2	1800	2100	2800	2100

## Radiation Survey Form

**Location/ Project ID:** 200-318 E. Erie St. AT&T Conduit Repair - HEI

**Date:** 2/8-9/2024

**Technician:** Mark Dewald

**Inst Model:** Ludlum 2221

**Serial No. :** 126497

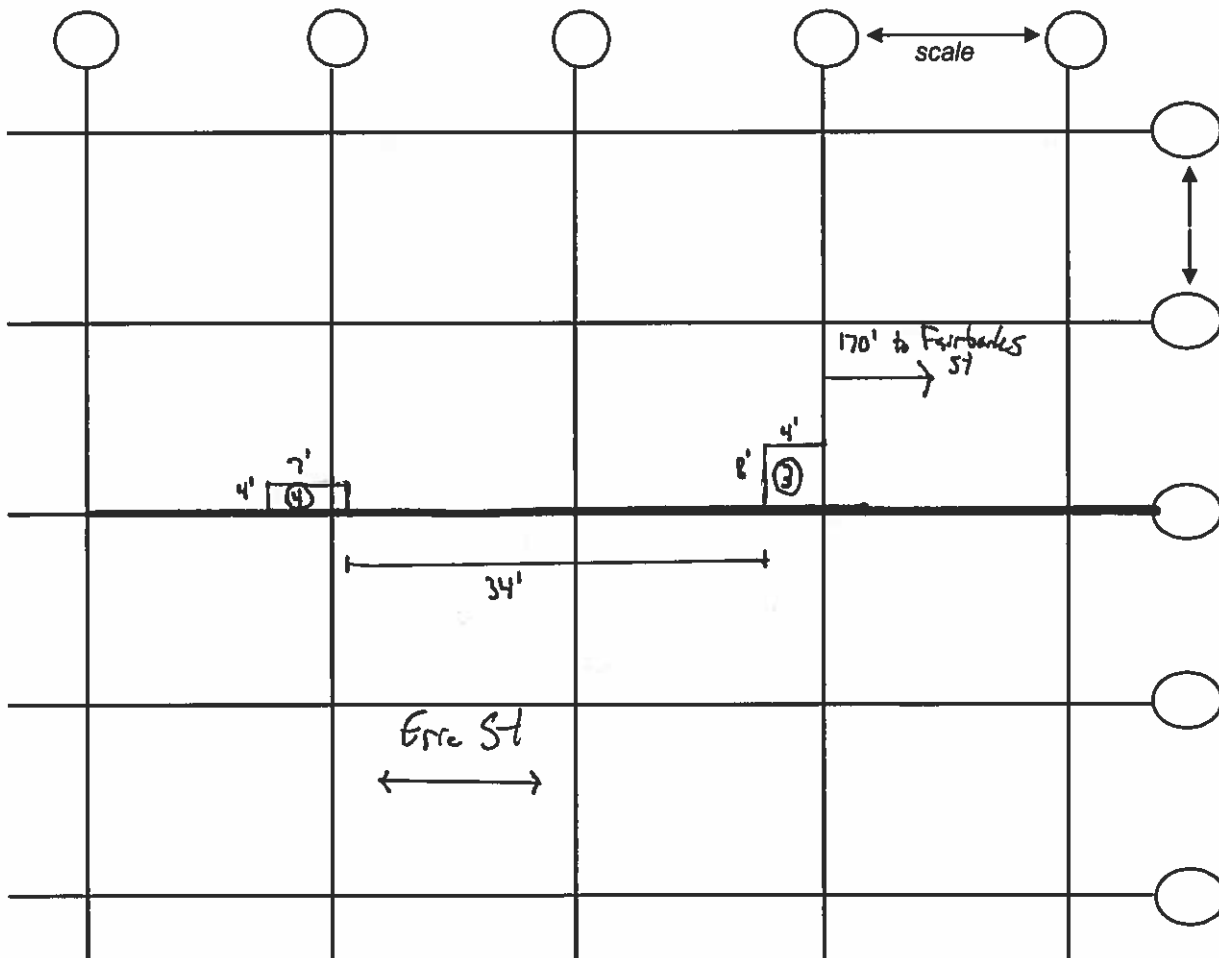
**Probe Type:** 1"x1" NaI 2"x2" NaI  
 Shielded  Not Shielded

**Lift Elevation:** Surface to -48" BGS

**Background** 1,951 cpm

**Action Level:** 6,043 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.



	0-12"	12-30"	30-48"	48-66"
Area 3	1800	2100	2200	2600
Area 4	1600	3000		

## Radiation Survey Form

**Location/ Project ID:** 200-318 E. Erie St. AT&T Conduit Repair - HEI

**Date:** 2/8-9/2024

**Technician:** Mark Dewald

**Inst Model:** Ludlum 2221

**Serial No.:** 126497

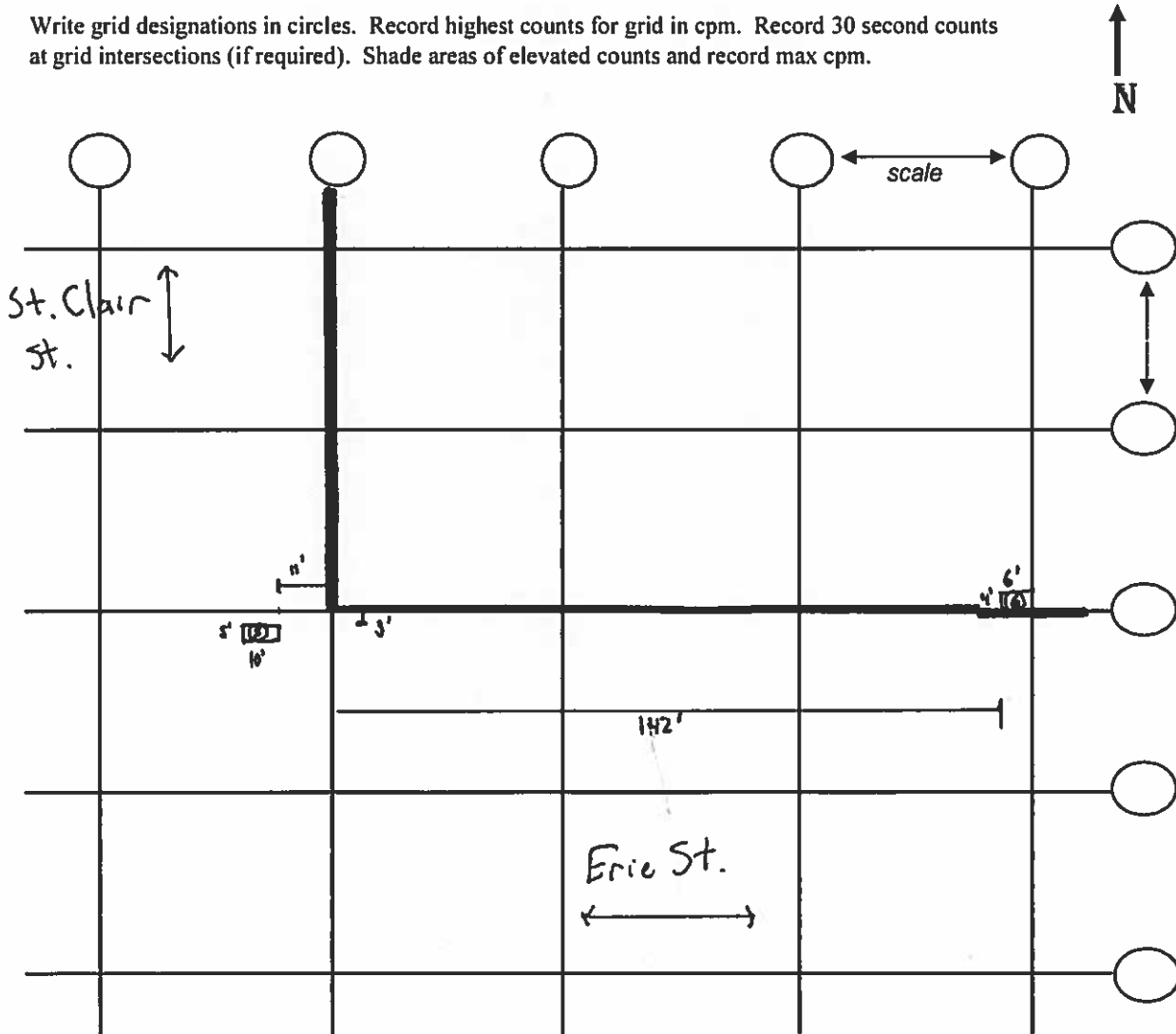
**Probe Type:** 1"x1" NaI 2"x2" NaI  
Shielded / Not Shielded

**Lift Elevation:** Surface to -48" BGS

**Background** 1,951 cpm

**Action Level:** 6,043 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.



	0-12"	12-30"	30-48"	48-66"
Area 5	1800	3300	3400	3600
Area 6	1600	2700	3100	3600

## Radiation Survey Form

Location/ Project ID: AO26STD - DOT1906710

Date: Feb 12 & 13, 2024

Technician: Jeremy Kieser

Inst Model: 2221

Serial No. : 127242

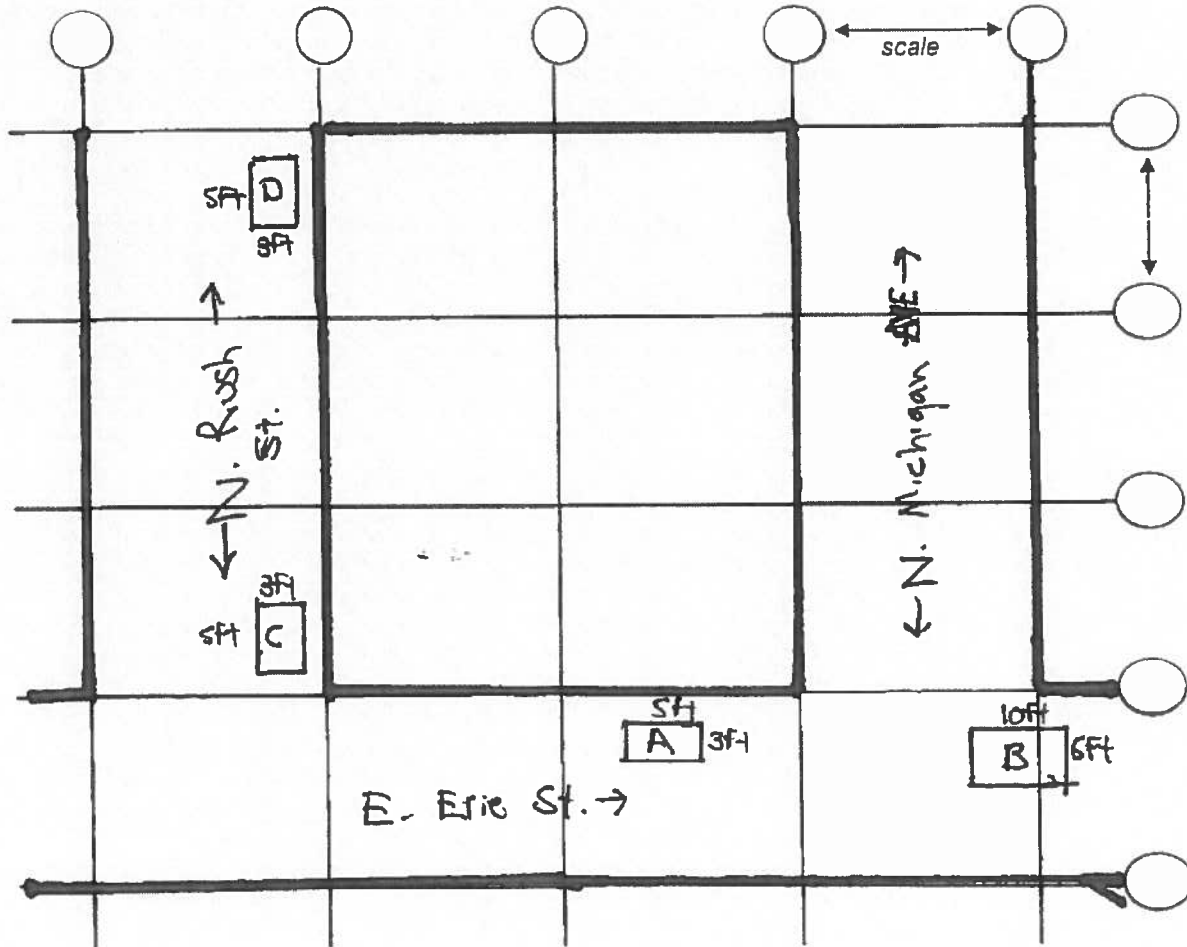
Probe Type: 1"x1" NaI / 2"x2" NaI  
Shielded / Not Shielded

Lift Elevation: Surface to 8ft

Background 2012 cpm

Action Level: 6368 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.



AT&T Survey, Project ID: A02G5TD-DOT1906710

By Jeremy Kieser (SAHCI)

Survey Date: February 12& 13, 2024

Instrument: Ludlum 2221, SN:127242

Action Level: 6368 cpm

Depth at Location:	Results in cpm:			
	A	B	C	D
Background	2012	2012	2012	2012
Surface	2100	2000	2000	2100
18 Inches	2300	1800	1900	2100
36 Inches	2300	1600	1900	1900
54 Inches	2200	1700	1700	2200
72 Inches		1800	2100	
90 Inches		1600		