

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

March 1, 2016

Rick McCarthy James McHugh Construction Co. 1737 S. Michigan Avenue Chicago, IL 60616

RE: Lakeshore East – Wanda Vista Field Drive Excavation Thorium Monitoring

Dear Mr. McCarthy:

Stan A. Huber Consultants, Inc. (SAHCI) was hired by your firm to provide radiation monitoring during utility location excavations at the Lakeshore East Development (Wanda Vista Field Drive Project) in Chicago, Illinois. The monitoring was performed on February 16, 2016 – February 24, 2016.

Instrumentation

Surface gamma scans were performed by Brian Schmidt using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 126496) with attached 2"x2" NaI probe with 6" lead shield. 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 found to be 3,317 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. 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 4 feet. Soil removed from depths of 4 feet to 12 feet was surveyed in the excavator bucket as it was removed from the excavation. Soil removed from the excavation was stockpiled onsite.

The maximum gamma count rate for each 1.5 foot lift was recorded on the attached Radiation Survey Forms. The count rates in the excavations ranged from 1,800 cpm to 5,700 cpm. No count rates were found at any time that exceeded the threshold limit of 7,054 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. Additionally, all thorium monitoring data should be retained for review by USEPA.

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.

Calledon .

Glenn Huber, CHP

President

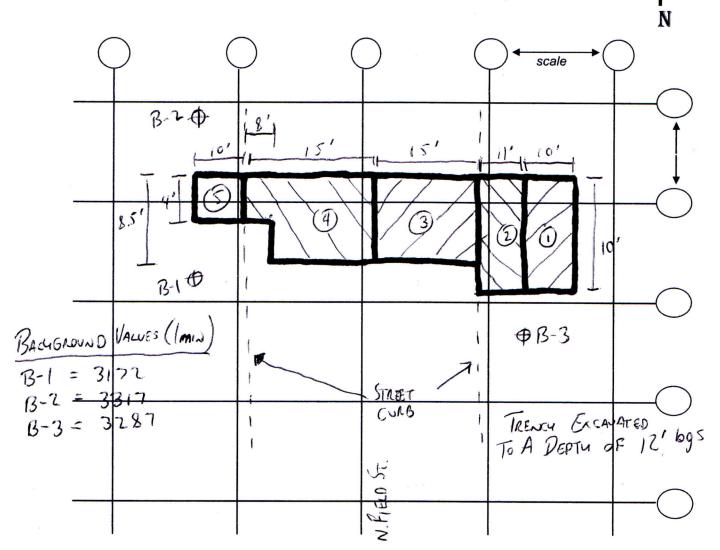
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Radiation Survey Form

Location/ Project ID:	WANDA FIEL	DRIVE	VEILLE-1 LECATION	TRENCH - CHICAGO, IL
Date: 2/16-17/2016		Techi	nician: Balas	Samo

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.



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Radiation Survey Form

Location/ Project ID: WANDA FIELD DANG VILLTY LOCATION TRENCH - CHICAGO, FL

Date: 2/16-17/2016

Technician: Balan Schniot

Inst Model: Lugum-7221

Serial No.: 14496

Probe Type: 1"x1" Nal / 2"x2" Na)

Shielded / Not Shielded

Lift Elevation: 0 -/44"

3317 Background ___ cpm Action Level: 70 54 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.

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Radiation Survey Form

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Location/ Pro	ject ID: WANDA FIELD	Drive Utility Loc	ATION TRENCH	- CHICAGO ,I	
the state of the s		Technician:			
Inst Model:	-10 cum - 2221	Serial No. :	26496		
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Radiation Survey Form						
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		: _2/23-24/		Technician:		
	inst	Model: Luncing	-1121	Serial No. : _/		Mahan saha maha maha dapa sajan saga saga saga
	Prob		/ 2'x2" Nal / Not Shielded	Lift Elevation:	0-144"	and the state of t
	Back	ground <u>3317</u>	cpm	Action Level:	<u>57</u> _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.						
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18-36-	1400 1400 1400	90-1 9 8 - 3600 108-1 4 - 3100 126-144- 3700 144-162 - 3400	36-57-3000 54-71-3600 71-90-3000	108-126-3500 126-144-3400 144-162-3600	90-108- 108-126- (TK 126-144- (DE 144-162-	Educy To 6' has
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