

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 16, 2012

Robert W. Acker GEI Consultants, Inc. 115 Lake Street, Unit 202 Libertyville, IL 60048

RE: Thorium Monitoring at 630 N. McClurg Ct. on 11/12/12 – 11/13/12

Dear Mr. Acker:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the drilling of four soil borings at 630 N. McClurg Ct. in Chicago, Illinois. The monitoring was performed on November 12, 2012 and November 13, 2012.

Instrumentation

Surface gamma scans were performed by Joel Ahrweiler using a Ludlum Model 2221 Scaler / Ratemeter with attached 2"x2" Nal probe. The instrument was calibrated on November 9, 2012. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 17,915 counts per minute (cpm). The average background count rate for this location was found to be between 4,700 cpm and 6,300 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Data was collected by surveying each split spoon soil sample as it was obtained from the boring. Any additional soil that was removed from the boring was also monitored.

The maximum gamma count rates for each split spoon are detailed on the attached Radiation Survey Form. The count rates for the boring ranged from 4,300 cpm to 6,800 cpm. No count rates were found at any time that exceeded the threshold limit of 17,915 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.

I will be forwarding a copy of this report to 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

GEI Consultants, Inc. - 630 N. McClurg Ct Thorium Monitoring Log

Instrument ID:

Ludlum Model 2221 (serial no. 126497) w/ 2"x2" Nal Detector (unshielded)

Background Count Rate: 7.1 pCi/g Threshold Value: 4,700 - 6300 cpm 17,915 cpm

Performed By:

Joel Ahrweiler (SAHCI)

November 12, 2012 9:45 am-2:00pm (B4 and B3) November 13, 2012 8:00am-2:00pm (B6 and B5)

Boring ID: B4		
Depth	kcpm	
0-5'	6.5	
5-7.5'	6.8	
7.5-10'	6.4	
10-12.5'	6.6	
12.5-15'	6.5	
20-22'	5.4	
25-26.5'	4.7	
30-31.5'	5.1	

Boring ID:	B3
Depth	kcpm
0.5-1'	4.7
1-2.5'	4.5
2.5-4'	4.6
5-6.5'	4.7
7.5-9'	5.1
9-11.5	4.6
10-15'	5.1
15-16.5'	4.3
20-21.5'	4.7
25-26.5'	4.4
30-31.5'	4.8
35-36.5'	5.1

Boring ID: B6		
Depth	kcpm	
1-2.5'	4.8	
2.5-4'	5.4	
5-6.5'	5.7	
7.5-9'	5.8	
10-11.5'	4.7	
12.5-14'	4.9	
15-16.5'	5.3	
20-21.5'	4.8	
25-26.5'	5.2	
30-31.5'	5.3	

Boring ID:	B5
Depth	kcpm
1-2.5'	4.8
5-6.5'	5.2
7.5-9'	5.4
10-11.5'	4.8
12.5-14'	5.1
15-16.5'	4.8
20-21.5'	4.7
Natural Fill	

