PHASE II ENVIRONMENTAL ASSESSMENT REPORT

For the Property located at 248 Tioronda Ave Beacon, NY 12508

Prepared for Berry Kohn 5 Quince Lane Suffern, NY 10901



March 2017

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1 INTRODUCTION

Integral Engineering, P. C. (Integral) has prepared this Phase II Environmental Site Assessment (ESA) for the property located at 248 Tioronda Ave and 465 Wolcott Avenue, Beacon, NY (Site). The Phase II ESA was performed in order to supplement the site redevelopment due diligence of the Phase I ESA performed in February 2017 by Environmental Affiliates Inc. (EAI). The aforementioned Phase I ESA indicated that the site was used as a tape manufacturer, Tuck Tape, between 1960 and 1989. Tuck Tape stored and used various chemicals in the production of the tape. Additionally, a solvent recovery system was used with of various drums and tanks at the Site. A Phase I ESA was completed in 1987 and a Phase II was completed in 1993 with maximum concentrations of toluene at 47,000 ppm. During this time period, New York State Department of Environmental Conservation (NYSDEC) placed the Site on the State Registry for Inactive Hazardous Waste Sites and began enforcement proceedings that required cleanup of the contamination. The Phase II ESA led to the preparation of an Interim Remedial Measure (IRM) to remediate the toluene impacts. The IRM was implemented between September 1995 to July 1997 and reportedly treated approximately 14,000 cubic yards of contaminated soil. The levels to which soil was reportedly treated were comparable to guidance at that time equivalent to petroleum cleanups which were over an order of magnitude lower than the recommended cleanup levels under the Technical Administrative Guidance Memorandum (TAGM) 4046 that typically applied to hazardous waste sites.

Following the completion of the IRM and satisfaction from confirmatory groundwater monitoring, the Site was delisted from the State Registry of Inactive Hazardous Waste Disposal Sites in May 2003. The Phase I ESA conducted by EAI did not present any specific recognized environmental conditions (RECs) at the Site, however, recommended that soil and groundwater conditions be tested at the Site due to the manufacturing history. Based upon this overall recommendation, Integral prepared an investigation that covered areas believed to be both in downgradient locations from former operations as well as in a number of cases, within the footprint of proposed buildings in order to make comparisons to indoor vapor intrusion from any impacts, should they be identified.

In March 2017, eleven direct push soil borings and five temporary monitoring wells were completed at the site. A total of six soil samples and five groundwater samples were collected and submitted for laboratory analysis. This report summarizes the results of the subsurface conditions.

This Phase II ESA includes a summary of Site history, a description of the regional geologic and hydrogeologic setting, a summary of previous environmental investigations that were available, sampling methodology, sample results, and recommendations for future Site development.

1.1 SITE DESCRIPTION

The Site is located in the city of Beacon in Dutchess County and is comprised of two lots, 248 Tioronda Avenue and 465 Wolcott Avenue, with an approximate area of 9.17 acres. The Site is an irregular parcel and is bounded to the north by Wolcott Avenue, to the west by Tioronda Avenue, to the east by Fishkill Creek, and a vacant lot to the south. A railway and associated right of way runs north to south along the western boundary of the Site.

The Site is currently zoned as LI (Light Industrial) and RD-3 (Residential) and is currently vacant with no permanent structures. All buildings and foundations formerly located on the site were reportedly demolished and crushed into a number of piles located across the property. The material was easily recognizable as containing brick, concrete and shale bedrock.

A USGS Topographic Map is included as Figure 1. A Site plan showing the Site property boundaries is included as Figure 2.

1.2 SITE HISTORY

Historical tax records show that the Site was listed as Granite Dam Mill of NY Rubber Co. from 1927 to 1946. Tape manufacturing operations began in 1947 and the Site was listed as Technical Tape Corporation in 1962 in the tax records. According to City Directories the Site was listed as commercial operations from 1975 to 2005 with Tuck Tape operating from 1960 to 1989.

Tuck Tape stored and used various chemicals in the production of the tape. Additionally, a solvent recovery system was used with various drums and tanks at the Site. A Phase I ESA was completed in 1987 and a Phase II in 1993 with maximum concentrations of toluene at 47,000 ppm. Following the Phase II ESA an Interim Remedial Measure (IRM) was proposed to NYSDEC, approved and implemented. The period during which this work reportedly took place was between September 1995 to July 1997. The overall project set cleanup goals at a level some 15 times lower than the goals under applicable guidance at that time. Following the completion of the treatment of 14,000 cubic yards of contaminated soil, the material was reportedly reused on the site. Following the IRM completion, the Site was delisted from the State Registry of Inactive Hazardous Waste Disposal Sites by NYSDEC in May 2003.

Following delisting in 2003, all of the former structures and foundations were demolished and the Site sits vacant with future plans including redeveloping the Site for residential or commercial residential purposes. Crushed concrete, brick and rock that was reported to have been generated from building demolition was staged on the site. This was reported by a former employee of the current owner present during the most recent investigation.

1.3 PHYSICAL SETTING

The entire property area is undeveloped and vacant. The area ground surface topography has

been disturbed and can be seen to have been filled at some time in the past and while the surrounding area has a consistent sloping grade to the east, the site ground surface may no longer reflect the original pre-development elevations. A mix of fill material and native sands, silts, glacial till and bedrock, is expected to underlay the Site and surrounding areas. The Site has three separate and general elevation tiers with the highest elevation located on the western edge along Tioronda Avenue and the lowest elevated tier along Fishkill Creek.

Integral obtained one investigation report that has recently been prepared for the Site, a Phase I ESA completed by EAI on February 10, 2017. Previous investigations were noted in the EAI Phase I ESA but copies were not included in the documentation provided to Integral.

Additional work performed at the Site include a Phase I ESA completed in 1987, a Phase II ESA in 1993, and an IRM was performed from September 1995 to July 1997. Integral did not have these additional documents at the time of the Phase II ESA.

Review of the Phase I ESA report indicated that there are were no specific RECs identified on the Site, however, EAI recommended additional soil and water testing around the Site since the Site has been delisted from the Hazardous Disposal Sites.

This Phase II ESA due diligence has been developed to identify if residual volatile organic compounds (VOCs) are present in the soil or groundwater that would trigger a concern for site redevelopment and may be related to the historic industrial use.

2 SCOPE OF WORK

Prior to performing the investigation, the potential future development layout was provided and this indicated the general locations for proposed buildings. Integral adjusted investigation locations to accommodate those locations in addition to looking at downgradient areas of the site. The site is also limited with respect to access and there appear to be cleared roadways along fairly level sections of the site. The remaining areas are either steep sloped land, areas covered with large piles of demolished building material and wooded.

The Phase II ESA investigation included the advancement of soil borings at eleven on-Site locations to evaluate the current Site soil and installation of five temporary groundwater monitoring wells to evaluate current groundwater conditions.

The following scope of work was implemented at the Site:

- Borings were advanced at 11 separate locations within the Site to refusal or the groundwater/soil interface.
- Borings were placed to provide spatial coverage in areas where proposed development is proposed for the evaluation of on-Site subsurface conditions.
- Soil and groundwater samples were collected across the Site for analysis of VOCs to determine if any residual contamination remains.
- Provide recommendations based on the results found at the Site.

3 METHODOLOGY

The activities described in this Phase II ESA were conducted on March 2, 2016. It included eleven direct push soil borings and five temporary groundwater wells, all conducted within the Site. Samples collected from within these various locations included; six soil samples and five groundwater samples. Figure 3 shows the soil and groundwater locations. All sampling was conducted in general accordance with New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER-10) guidance.

3.1 SOIL BORING INSTALLATION AND SOIL SAMPLING

On March 2, 2017 a total of eleven soil borings were installed over the property. The locations of the borings were chosen based on site access and the proposed areas of residential development. A map depicting soil boring locations is provided as Figure 3.

AARCO used a track-mounted Geoprobe rig to install the soil borings. Soil samples were obtained using a 2-inch diameter, five-foot steel sampler with dedicated PVC liners. The sampler was driven through the subsurface soil to collect soil cores in five feet intervals. Soil samples were advanced until the soil/groundwater interface or refusal. Each sampling core was split lengthwise and logged by Integral personnel. Logging consisted of describing the soil using the Unified Soil Classification System (USCS), noting any evidence of contamination (e.g., staining, sheens, odors) and screening for organic vapors using a calibrated photoionization detector (PID) and visual/olfactory indication. Boring logs are included in Appendix A.

Six soil samples were collected from eleven soil borings across the Site to account for observed soil conditions in the shallow soil/fill profile. Soil samples were collected if the soil or fill material exhibited obvious signs of impacts while still providing Site coverage where proposed areas of residential development are located.

Soil samples were containerized in accordance with Environmental Protection Agency (EPA) analytical protocols. Each sample was labeled, sealed and stored on ice to approximately four degrees Celsius for shipment to the laboratory. Soil samples were submitted to Alpha via courier service under standard chain-of-custody protocol and analyzed for the following parameters:

 VOCs via United States Environmental Protection Agency (USEPA) method 8260B + NYSDEC Part 375 List or BTEX;

Soil analytical results are provided in Table 1, with laboratory deliverables provided in Appendix B.

3.2 TEMPORARY WELL INSTALLATION AND GROUNDWATER SAMPLING

Five temporary monitoring (GW-2, GW-3, GW-7, GW-8, and GW-10) wells were installed concurrent with their respective soil borings and constructed of 1" diameter PVC riser with 10' of 0.020" slotted PVC screen that straddles the groundwater interface in order to collect samples in the saturated zone. The wells were installed to the depth of refusal at the soil boring.

The annular space around all wells installed was backfilled with No. 2 Morie quartz sand to a depth of 2' above the top of the well screen. Each well was purged and sampled the same day it was installed. Well construction logs are included as Appendix A. A map depicting monitoring well locations is provided as Figure 3.

Five groundwater samples were collected from each well to account for groundwater conditions across the Site. Groundwater samples were containerized in accordance with Environmental Protection Agency (EPA) analytical protocols. Each sample was labeled, sealed and stored on ice to approximately four degrees Celsius for shipment to the laboratory. Groundwater samples were submitted to Alpha via courier service under standard chain-of-custody protocol and analyzed for the following parameters:

 VOCs via United States Environmental Protection Agency (USEPA) method 8260B + NYSDEC Part 375 List or BTEX;

Groundwater analytical results are provided in Table 2, with laboratory deliverables provided in Appendix B.

4 RESULTS

The results of the Phase II ESA are discussed below and are summarized in Tables 1 and 2. Laboratory deliverables are included in Appendix B.

4.1 SOIL BORING

The shallow subsurface at the Site consists of a layer of manmade fill with varying thickness which was used as backfill over the historic use of the property. The fill stratum typically consists of medium compact, brown to black fine to coarse sand with various amounts of gravel, silt and miscellaneous debris (brick, concrete, slag). The fill stratum ranges from 1.5 to 11 feet deep across the Site.

The fill stratum is underlain by silts, sands, and glacial till. Bedrock is present at depths ranging in borings from approximately 6-17 ft-bsg and consists of intermediate to hard, slightly weathered to unweathered gray to reddish-brown shale. Two borings SN-3 and SB-8) located in one area near the middle portion of the site were noted to contain small spots or what appeared to be globules at the water interface. There was no appreciable other sign of impact and no or virtually no odor. Samples were specifically collected from soil and groundwater from these two locations. See Appendix A for soil boring logs.

4.1.1 Applicable Regulatory Standards for Soil

The results of the soil analysis were compared to the NYSDEC restricted Residential Use Soil Cleanup Objectives. The Restricted Residential SCOs are listed in 6 NYCRR Part 375-6.8(b). The Restricted Residential SCOs are use-based criteria that are compatible with the proposed residential development and surrounding land use in the area

4.1.2 Analytical Soil Boring Results

Five soil samples were collected across the site for BTEX, SB-1 (3-5), SB-3(2-4), SB-5 (4-5), SB-7 (7-8), and SB-11 (4-5). One soil sample, SB-8(8-9), was collected for total compound list (TCL) VOCs.

4.1.2.1 VOCs

VOCs were detected in three of the six soil boring samples. None of the analytes exceeded the Restricted Residentail SCOs. Toluene was found in two of the six samples with a maximum concentration of 0.34 mg/kg. The concentrations were below the criteria both used for prior remedial cleanup limits as well as the current NYSDEC Soil Cleanup Objectives for Restricted

Residential. No sample results were found to have exceeded cleanup criteria from past remedial goals or current standards for land use.

4.2 GROUNDWATER

Depth to groundwater varied across the Site from depths of approximately 5 feet below ground surface to approximately 12 feet below ground surface with shallower groundwater located near Fishkill Creek.

4.2.1 Applicable Regulatory Standards for Groundwater

The results of the groundwater analysis were compared to New York State Division of Water Technical and Operational Guidance Series (TOGS) Ambient Water Quality Standards (AWQSs). TOGS standards and guidance values are ambient water quality values that are set to protect the state's waters.

4.2.1.1 VOCs

One VOC, trichloroethene (TCE), was detected in one of the groundwater samples but did not exceed the TOGS AWQs drinking water standard (DWS).. No other VOCs were detected in the groundwater. No toluene was detected in any groundwater sample from the site.

5 CONCLUSIONS AND RECOMMENDATION

The Phase I ESA performed by EAI in February 2017 did not identify any RECs, however, based on historic Site usage and history recommended that soil and groundwater testing around the Site be completed since the Site has been delisted from the State Listing of being a Hazardous Disposal Sites. The goal of the Phase II ESA was to investigate to see if there was any residual soil or groundwater impacts located downgradient of the former industrial buildings. The Phase II ESA sample locations were biased towards areas where future redevelopment of residential properties is proposed.

Small spots of a dark brown liquid were observed in the boring SB-3 and the downgradient boring SB-8 at the water interface. This was encountered in a very narrow interval of soil just above the bedrock interface. No pronounced odor was noted and samples were analyzed from each boring in order to evaluate the potential for the presence of toluene which was the contaminant of concern for the site. Groundwater samples were also collected from wells installed in each of these borings. SB-8 was analyzed for the full list of VOCs and provided signatures of several low level degraded petroleum compounds at very low levels. None of the results were at or above the Restricted Residential Cleanup Objective under NYCRR Part 375. A long standing area of standing water one to two feet deep was located within 5 ft of the boring on the immediate downgradient side and no sign of any impact in this water was noted.

Toluene was reported at a low level in one sample and was not detected at any concentration in the other soil or water samples. The concentration was greater than 2 orders of magnitude below current NYSDEC Restricted Residential cleanup criteria (100 mg/kg for toluene). The sample results show that the site is virtually free of any remaining impact and that the remedy completed over a decade ago has been shown from this investigation to have left the site able to meet current cleanup standards.

One groundwater sample (GW-3) was reported with a trace concentration of TCE. There is no record of any use of solvents and this is considered a potential artifact. No other VOCs were detected in the groundwater. Based on the former industrial use, significant remedy, extensive demolition and disturbance that has occurred across the site, samples of both soil and groundwater from downgradient locations show the site to be virtually free of any organic impacts. The only identified impacts were very minor and do not indicate there is any actionable condition.

Following the lack of volatiles on the site that would present a need address their presence, bedrock was found to be at a rather shallow depth across the site. While it is not a requirement under the NYSDEC cleanup program, and sampling was not performed for other issues, radon is a naturally occurring gas that can be associated with construction on shallow bedrock. Integral suggests that one manner to mitigate radon is the incorporation of a passive venting

system beneath concrete foundations. This typically consists of aggregate placed beneath the foundation with some minor piping or duct to allow any gas that accumulates beneath the floor to vent to the atmosphere. A vapor barrier is typically placed between the foundation and aggregate to prevent vapors from entering the building space. This type of system is also used to mitigate minor volatile organic vapors when they are present.

Shallow soils located at the Site are considered as historic fill as defined by NYSDEC 6 NYCRR Part 375-1.2(x). Historic fill is considered under the regulatory definition to contain levels of semi-volatiles and metals that were present in the material prior to them being placed. Offsite removal and disposal of any excess material should be properly documented. In addition, there were significant piles of crushed material from the former buildings. This was noted to be recognizable as brick, concrete and stone or rock.

Following NYSDEC 6 NYCCR 360-1.15-b(11) beneficial use program, "recognizable, uncontaminated concrete and concrete products, asphalt pavement, brick, glass, soil and rock placed in commerce for service as a substitute for conventional aggregate" is not considered solid waste. During the Phase II ESA crushed concrete and other building demolition debris was observed.

Based upon the information that crushed material onsite was from the demolition of the former buildings, this material would be suitable to be beneficially used for aggregate on the site during future development.

6 REFERENCES

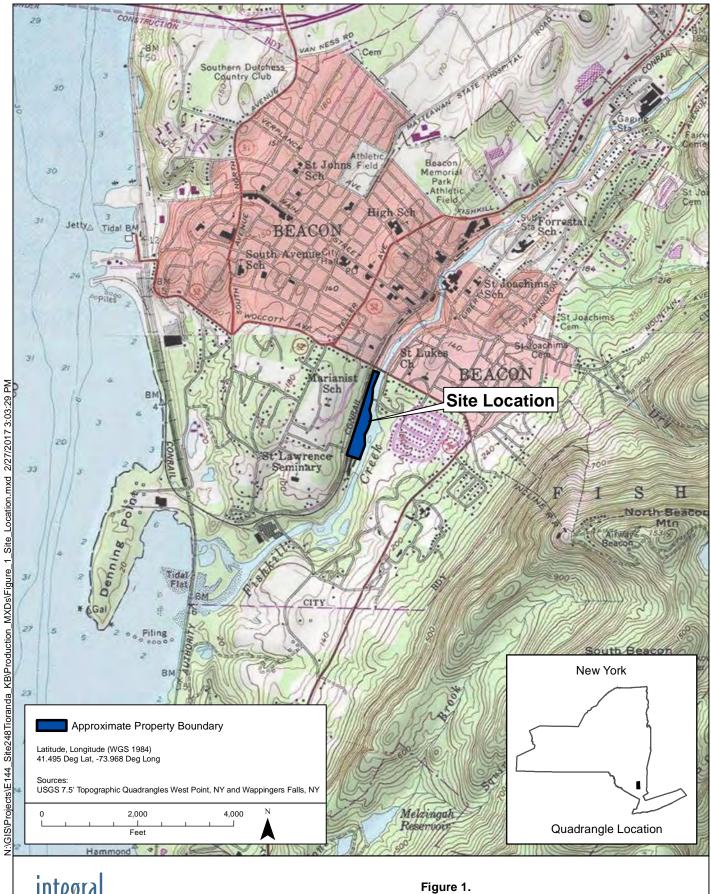
Environmental Affiliates Inc. February 2017. Phase I Environmental Site Assessment-248 Tioronda Avenue 465 Walcott Avenue, Beacon, New York 10977, February 2017.

NYSDEC 1998. Division of Water Technical and Operational Guidance Series (1.1.1) – Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations June 1998.

NYSDEC 1988. New York State Department of Environmental Conservation DEC Subpart 360-1 General Provisions. December 31, 1998 – Amended May 12, 2006.

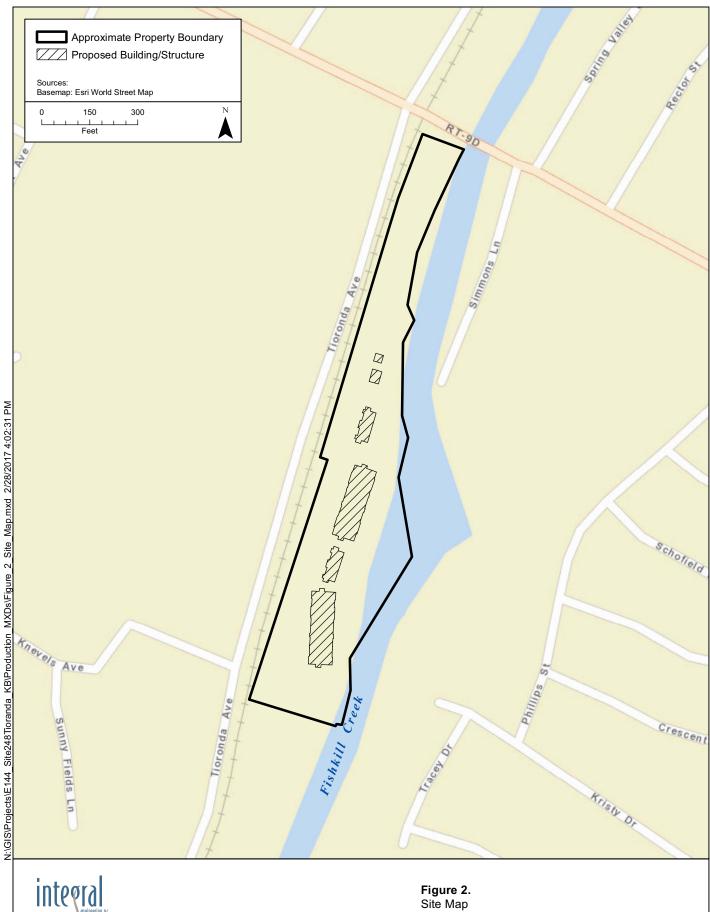
NYSDEC 2006. 6 NYCRR Part 375 Environmental Remediation Programs. Division of Environmental Remediation, December, 2006.

FIGURES



61 Broadway, Suite 1601 New York, New York 10006 www.integral-corp.com

Site Location Map 248 Tioronda Avenue and 465 Walcott Avenue Beacon, NY 10977



61 Broadway, Suite 1601 New York, New York 10006 www.integral-corp.com

Figure 2.
Site Map
248 Tioronda Avenue and 465 Walcott Avenue
Beacon, NY 10977

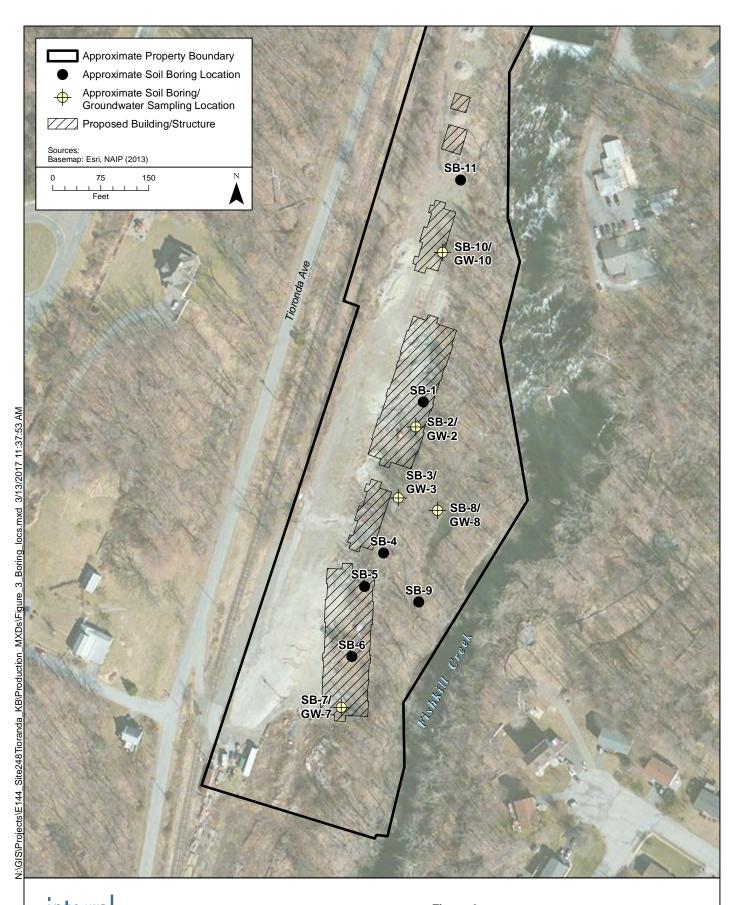




Figure 3.Soil Boring and Groundwater Sampling Locations 248 Tioronda Avenue and 465 Walcott Avenue Beacon, NY 10977

TABLES

Table 1 Soil Analytical Summery - VOCs Phase II ESA

248 Tioronda Avenue, Beacon, NY

246 Horonda Avenue, Beacon, NT								
Location		SB-1 (3-5)	SB-3 (2-4)	SB-5 (4-5)	SB-7 (7-8) L1706535-04	SB-8 (8-9) L1706535-05	SB-11 (4-5)	
Lab Sample ID Sampling Date	*NY-RESRR	L1706535-01 3/2/2017	L1706535-03 3/2/2017	L1706535-02 3/2/2017	3/2/2017	3/2/2017	L1706535-06 3/2/2017	
Sampling Date Sample Media		Soil	Soil	Soil	Soil	Soil	Soil	
Units of Measure	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Volatile Organics Compounds	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Methylene chloride	100	NA	NA	NA	NA	ND	NA	
1,1-Dichloroethane	26	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
Chloroform	49	NA	NA	NA NA	NA	ND	NA	
Carbon tetrachloride	2.4	NA	NA	NA	NA	ND	NA	
1,2-Dichloropropane	NS	NA	NA	NA	NA	ND	NA	
Dibromochloromethane	NS	NA	NA	NA	NA	ND	NA	
1,1,2-Trichloroethane	NS	NA	NA	NA	NA	ND	NA	
Tetrachloroethene	19	NA	NA	NA	NA	ND	NA	
Chlorobenzene	100	NA	NA	NA	NA	ND	NA	
Trichlorofluoromethane	NS	NA	NA	NA	NA	ND	NA	
1,2-Dichloroethane	3.1	NA	NA	NA	NA	ND	NA	
,1,1-Trichloroethane	100	NA	NA	NA	NA	ND	NA	
Bromodichloromethane	NS	NA	NA	NA	NA	ND	NA	
rans-1,3-Dichloropropene	NS	NA	NA	NA	NA	ND	NA	
cis-1,3-Dichloropropene	NS	NA	NA	NA	NA	ND	NA	
,3-Dichloropropene, Total	NS	NA	NA	NA	NA	ND	NA	
,1-Dichloropropene	NS	NA	NA	NA	NA	ND	NA	
Bromoform	NS	NA	NA	NA	NA	ND	NA	
1,1,2,2-Tetrachloroethane	NS	NA	NA	NA	NA	ND	NA	
Chloromethane	NS	NA	NA	NA	NA	ND	NA	
Bromomethane	NS	NA	NA	NA	NA	ND	NA	
/inyl chloride	0.9	NA	NA	NA	NA	ND	NA	
Chloroethane	NS	NA	NA	NA	NA	ND	NA	
,1-Dichloroethene	100	NA	NA	NA	NA	ND	NA	
rans-1,2-Dichloroethene	100	NA	NA	NA	NA	ND	NA	
Trichloroethene	21	NA	NA	NA	NA	ND	NA	
,2-Dichlorobenzene	100	NA	NA	NA	NA	ND	NA	
,3-Dichlorobenzene	49	NA	NA	NA	NA	ND	NA	
,4-Dichlorobenzene	13	NA	NA	NA	NA	ND	NA	
Methyl tert butyl ether	100	NA	NA	NA	NA	ND	NA	
(ylenes, Total	100	NA	NA	NA	NA	ND	NA	
cis-1,2-Dichloroethene	100	NA	NA	NA	NA	ND	NA	
,2-Dichloroethene, Total	NS	NA	NA	NA	NA	ND	NA	
Dibromomethane	NS	NA	NA	NA	NA	ND	NA	
Styrene	NS	NA	NA	NA	NA	ND	NA	
Dichlorodifluoromethane	NS 100	NA NA	NA	NA NA	NA NA	ND	NA NA	
Acetone	100	NA NA	NA NA	NA NA	NA NA	0.067 J	NA NA	
Carbon disulfide	NS 100	NA NA	NA NA	NA NA	NA NA	ND	NA NA	
2-Butanone /inyl acetate	100 NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
	NS NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
1-Methyl-2-pentanone 1,2,3-Trichloropropane	NS NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
2-Hexanone	NS NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
Bromochloromethane	NS NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
2,2-Dichloropropane	NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
1,2-Dibromoethane	NS NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
,3-Dichloropropane	NS NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
,1,1,2-Tetrachloroethane	NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
Bromobenzene	NS	NA NA	NA NA	NA NA	NA NA	ND ND	NA NA	
n-Butylbenzene	100	NA NA	NA NA	NA NA	NA NA	ND	NA NA	
sec-Butylbenzene	100	NA NA	NA NA	NA NA	NA NA	0.14	NA NA	
ert-Butylbenzene	100	NA	NA	NA NA	NA	0.037 J	NA NA	
-Chlorotoluene	NS	NA	NA	NA	NA	ND ND	NA	
o-Chlorotoluene	NS	NA	NA	NA	NA	ND	NA	
,2-Dibromo-3-chloropropane	NS	NA	NA	NA	NA	ND	NA	
Hexachlorobutadiene	NS	NA	NA	NA	NA	ND	NA	
sopropylbenzene	NS	NA	NA	NA	NA	ND	NA	
o-Isopropyltoluene	NS	NA	NA	NA	NA	ND	NA	
Naphthalene	100	NA	NA	NA	NA	0.33	NA	
Acrylonitrile	NS	NA	NA	NA	NA	ND	NA	
-Propylbenzene	100	NA	NA	NA	NA	ND	NA	
,2,3-Trichlorobenzene	NS	NA	NA	NA	NA	ND	NA	
,2,4-Trichlorobenzene	NS	NA	NA	NA	NA	ND	NA	
,3,5-Trimethylbenzene	52	NA	NA	NA	NA	ND	NA	
,2,4-Trimethylbenzene	52	NA	NA	NA	NA	ND	NA	
,4-Dioxane	13	NA	NA	NA	NA	ND	NA	
o-Diethylbenzene	NS	NA	NA	NA	NA	0.12 J	NA	
-Ethyltoluene	NS	NA	NA	NA	NA	ND	NA	
,2,4,5-Tetramethylbenzene	NS	NA	NA	NA	NA	ND	NA	
Ethyl ether	NS	NA	NA	NA	NA	ND	NA	
rans-1,4-Dichloro-2-butene	NS	NA	NA	NA	NA	ND	NA	
Benzene	4.8	ND	ND	0.038 J	ND	ND	ND	
oluene	100	ND	0.00043 J	0.34	ND	ND	ND	
Ethylbenzene	41	ND	ND	ND	ND	ND	ND	
/m-Xylene	NS	ND	ND	ND	ND	ND	ND	
o-Xylene	NS	ND	ND	ND	ND	ND	ND	

Notes:

*NY-RESRR: Restricted-Residential Criteria, New York Restricted use current as of 5/2007

ND = Not Detected

NA = Not Analyzed

NS = No Standard

Integral Engineering P.C. Page 1 of 1

Table 2 Groundwater Analytical Data-VOCs Phase II ESA 248 Tioronda Ave, Beacon, NY

			ve, Beacon, I			•
Client Sample ID	*NY-TOGS-	GW-2	GW-3	GW-7	GW-8	GW-10 3/2/2017
Sampling Date Lab Sample ID	GA	3/2/2017 L1706529-04	3/2/2017 L1706529-03	3/2/2017 L1706529-02	3/2/2017 L1706529-01	3/2/2017 L1706529-05
Sample Media	0.1	L1706529-04 Groundwater	Groundwater	L1706529-02 Groundwater	Groundwater	Groundwater
Units	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
Volatile Organics Compounds						
1,1,1,2-Tetrachloroethane	5	NA	ND	NA	ND	NA
1,1,1-Trichloroethane	5	NA NA	ND	NA NA	ND ND	NA NA
1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	5 1	NA NA	ND ND	NA NA	ND ND	NA NA
1,1-Dichloroethane	5	NA NA	ND	NA NA	ND	NA NA
1,1-Dichloroethene	5	NA	ND	NA	ND	NA
1,1-Dichloropropene	5	NA	ND	NA	ND	NA
1,2,3-Trichlorobenzene	5	NA	ND	NA	ND	NA
1,2,3-Trichloropropane	0.04	NA NA	ND	NA NA	ND	NA NA
1,2,4,5-Tetramethylbenzene 1,2,4-Trichlorobenzene	5 5	NA NA	ND ND	NA NA	ND ND	NA NA
1.2.4-Trimethylbenzene	5	NA NA	ND	NA NA	ND	NA NA
1,2-Dibromo-3-chloropropane	0.04	NA	ND	NA	ND	NA
1,2-Dibromoethane	0.0006	NA	ND	NA	ND	NA
1,2-Dichlorobenzene	3	NA	ND	NA	ND	NA
1,2-Dichloroethane	0.6	NA	ND	NA	ND	NA
1,2-Dichloroethene, Total	NS 1	NA NA	ND ND	NA NA	ND ND	NA NA
1,2-Dichloropropane 1,3,5-Trimethylbenzene	5	NA NA	ND ND	NA NA	ND ND	NA NA
1,3-Dichlorobenzene	3	NA NA	ND	NA NA	ND	NA NA
1,3-Dichloropropane	5	NA	ND	NA	ND	NA
1,3-Dichloropropene, Total	NS	NA	ND	NA	ND	NA
1,4-Dichlorobenzene	3	NA	ND	NA	ND	NA
1,4-Dioxane	NS F	NA NA	ND	NA NA	ND ND	NA NA
2,2-Dichloropropane 2-Butanone	5 50	NA NA	ND ND	NA NA	ND ND	NA NA
2-Butanone 2-Hexanone	50	NA NA	ND ND	NA NA	ND ND	NA NA
4-Methyl-2-pentanone	NS	NA NA	ND	NA NA	ND	NA NA
Acetone	50	NA	ND	NA	ND	NA
Acrylonitrile	5	NA	ND	NA	ND	NA
Benzene	1	ND	ND	ND	ND	ND
Bromobenzene	5	NA	ND	NA	ND	NA
Bromochloromethane Bromodichloromethane	5 50	NA NA	ND ND	NA NA	ND ND	NA NA
Bromoform	50	NA NA	ND ND	NA NA	ND ND	NA NA
Bromomethane	5	NA NA	ND	NA NA	ND	NA NA
Carbon disulfide	60	NA	ND	NA	ND	NA
Carbon tetrachloride	5	NA	ND	NA	ND	NA
Chlorobenzene	5	NA	ND	NA	ND	NA
Chloroethane Chloroform	5 7	NA NA	ND ND	NA NA	ND ND	NA NA
Chloromethane	NS	NA NA	ND ND	NA NA	ND ND	NA NA
cis-1,2-Dichloroethene	5	NA NA	ND	NA NA	ND	NA NA
cis-1,3-Dichloropropene	0.4	NA	ND	NA	ND	NA
Dibromochloromethane	50	NA	ND	NA	ND	NA
Dibromomethane	5	NA	ND	NA	ND	NA
Dichlorodifluoromethane	5	NA NA	ND	NA NA	ND ND	NA NA
Ethyl ether Ethylbenzene	NS 5	NA ND	ND ND	NA ND	ND ND	NA ND
Hexachlorobutadiene	0.5	NA NA	ND ND	NA NA	ND ND	NA NA
Isopropylbenzene	5	NA NA	ND	NA NA	ND	NA NA
Methyl tert butyl ether	10	NA	ND	NA	ND	NA
Methylene chloride	5	NA	ND	NA	ND	NA
n-Butylbenzene	5	NA	ND	NA	ND	NA
n-Propylbenzene	5	NA NA	ND	NA NA	ND	NA NA
Naphthalene o-Chlorotoluene	10 5	NA NA	ND ND	NA NA	ND ND	NA NA
o-Xylene	5	ND ND	ND ND	NA ND	ND ND	ND ND
p-Chlorotoluene	5	NA NA	ND	NA NA	ND	NA
p-Diethylbenzene	NS	NA	ND	NA	ND	NA
p-Ethyltoluene	NS	NA	ND	NA	ND	NA
p-lsopropyltoluene	5	NA	ND	NA	ND	NA
p/m-Xylene	5	ND	ND	ND NA	ND	ND NA
sec-Butylbenzene Styrene	5 930	NA NA	ND ND	NA NA	ND ND	NA NA
Styrene tert-Butylbenzene	5	NA NA	ND ND	NA NA	ND ND	NA NA
Tetrachloroethene	5	NA NA	ND ND	NA NA	ND	NA NA
Toluene	5	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	NA	ND	NA	ND	NA
trans-1,3-Dichloropropene	0.4	NA	ND	NA	ND	NA
trans-1,4-Dichloro-2-butene	5	NA	ND	NA	ND	NA
Trichloroethene Trichloroftuoromethene	5	NA NA	0.5	NA NA	ND ND	NA NA
Trichlorofluoromethane Vinyl acetate	5 NS	NA NA	ND ND	NA NA	ND ND	NA NA
Vinyl chloride	2	NA NA	ND ND	NA NA	ND ND	NA NA

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Notes:
NA = Not Analyzed
ND = Not Detected
NS = No Standard
* = NYSDEC TOGS 1.1.1. Ambient Water Quality Standards (AWQS)