

SOIL GAS INVESTIGATION REPORT

We Care Cleaners
17 Wentworth Street
Kittery, ME 03904

Prepared for:

We Care Cleaners
17 Wentworth Street
Kittery, ME 03904
Contact: Chong & Edmund Arnold
207-439-4131

Prepared by:

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April 4, 2017
StoneHill Project No. 26045



Allen Wyman
Project Manager



Timothy Stone, PG
President



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April 4, 2017

StoneHill Project No. 26045

Mr. Edmund and Mrs. Chong Arnold
We Care Cleaners
17 Wentworth Street
Kittery, ME 03904

RE: Soil Gas Investigation Report
We Care Dry Cleaners
17 Wentworth Street, Kittery, ME

Dear Mr. and Mrs. Arnold:

Enclosed please find a copy of the Soil Gas Investigation Report completed by StoneHill Environmental, Inc. relative to the historical release of dry cleaning solvent contamination in soil and groundwater at the above referenced property. This report, and the work detailed in this report, was prepared in anticipation of We Care Dry Cleaners (We Care) upcoming application to the Maine Department of Environmental Protection (MEDEP) Voluntary Response Action Program (VRAP).

Please do not hesitate to call us with any questions you may have concerning the report.

Sincerely,

StoneHill Environmental, Inc.

Timothy S. Stone
President

Enclosure: Soil Gas Investigation Report

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We Care Cleaners
Kittery, ME

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SITE INVESTIGATION REPORT

We Care Cleaners

Kittery, ME

1.0 INTRODUCTION

This Soil Gas Investigation (SGI) Report was prepared for the We Care Cleaners located at 17 Wentworth Street, Kittery, Maine (Site), the location of a laundry and dry cleaners establishment since 1910. The Site is located in a mixed commercial/residential area known as Kittery Foreside in Kittery, Maine (Figure 1).

The SGI was completed in accordance with a Scope of Work (SOW) dated June 28, 2016 prepared by StoneHill Environmental, Inc. (StoneHill). The SOW was developed in consultation with Troy Smith of the Maine Department of Environmental Protection (MEDEP).

In accordance with the SOW, the following tasks were completed and are summarized herein:

- Municipal utilities information was obtained and a field visit conducted to approximate the water and sewer utility connections to buildings along Wentworth Street, Traip Avenue, Central Avenue, and Dame Street. Utilities were marked out where known by Kittery Dept. of Public Works employees.
- StoneHill collected soil gas field screening measurements at twenty locations primarily where residential sewer and/or water utility lines were estimated to connect with the main utility lines at several locations along the streets identified above (Figure 2).
- Based on the soil gas field screening measurement results, and in consultation with Troy Smith, StoneHill collected two rounds of sub-slab soil gas screening measurements beneath the basement concrete slabs at the residence at 4 Traip Avenue, and beneath the boiler room at the Rice Library, at 8 Wentworth Avenue.
- Based on the sub-slab soil gas field screening results, StoneHill collected a sub-slab soil gas Summa canister sample from beneath the basement floor in the boiler room at the Rice Library and submitted the sample for laboratory analysis.

2.0 BACKGROUND

In July 2006, tetrachloroethene (PCE) and associated degradation products were detected in soil and groundwater samples collected from the We Care property. As detailed in the StoneHill Site Investigation Report, dated September 3, 2008:

- Overburden soil and groundwater impacted with chlorinated solvents are mostly confined to the Site property.
- A shallow bedrock chlorinated solvent groundwater contaminant plume extends to the southeast beneath the Rice Library property located southeast of the Site.
- PCE impacted soil gas was measured along the sewer utility main under Wentworth Street and southern portion of Traip Avenue (See attached Figure 3, Copy of Figure 10 from the SI Report, StoneHill Environmental, Inc., September 3, 2008). As was documented at the time, a soil gas concentration of 4,900 ug/m³ PCE was noted at the

eastern end of the former We Care Cleaners building location (closest Wentworth Street), as high as 450 ug/m³ along Wentworth Street in front of the Rice Library, and 760 ug/m³ approximately 350 feet to the south at the corner of Traip Avenue, near the residence at 4 Traip Avenue.

Subsequently, GeoInsight of Manchester, NH was retained by We Care to assess whether the sewer and/or utility lines beneath the We Care property were acting as a preferential pathway for the PCE detected beneath Wentworth Street. In 2015 GeoInsight completed another soil gas survey confirming StoneHill's previous findings that the sewer line running along the north end of Kittery Town Pizza (along the southeastern property boundary of the We Care property) was facilitating the migration of PCE contaminated groundwater and soil gas into the utilities along Wentworth Avenue and possibly toward the newly constructed We Care Cleaners building on the western portion of the property (See attached Figure 4 – Copy of GeoInsight Figure 2, June 22, 2015). Given this finding, the MEDEP requested additional assessment into the extent of soil gas migration within the sewer lines beyond the We Care property to the west along Dame Street, to the east along Wentworth Street, and beneath Traip Avenue to the southeast.

3.0 2016 SOIL GAS INVESTIGATION

During the summer of 2016, StoneHill worked with the Town of Kittery to identify and map the sewer and water line connections beneath four roadways in the vicinity of the We Care property; Dame Avenue, Central Avenue, Wentworth Street, and Traip Avenue. Sanitary sewer, storm sewer and municipal water line maps provided by the town are provided in Appendix A. On August 29, 2016, StoneHill was joined by Troy Smith of the MEDEP to collect soil gas measurements adjacent the sewer and water connections at several locations beneath these roadways. To obtain a soil gas sample, a ½-inch diameter by two foot long hole was drilled through the concrete walk or street paving at each location. A 3/8-inch diameter stainless steel probe was advanced into the hole and a clay seal placed around the probe at the ground surface to prevent ambient air from entering into the probe hole and thus diluting the sample. Prior to collecting each soil gas sample, oxygen and carbon dioxide levels were collected as a measure of the adequacy of the surface seal. Each sample was collected using the vacuum produced by the measuring instrument to draw soil gas through the metal probe and into the instrument. A RKI Eagle IR 5K was used to measure oxygen and carbon dioxide and a ppbRAE3000 was used to measure volatile organic compounds. The soil gas sample locations and results are shown on Figure 2 and results are summarized in Table 1. While it is assumed the PID is measuring primarily PCE and other chlorinated volatile organic compound (cVOC) degradation products, it must be recognized that other sources of VOCs may be measured that are not associated with the historic We Care operations.

The sample locations were chosen based upon the possibility of soil gas migrating from the We Care property (Map 4-Lot 92) outward along the utility lines beneath the roadways and into surrounding structures via individual utility service lines. As such, soil gas measurements were collected from the back of the We Care property, along Dame Street as well as from the front of the We Care property, along Wentworth Street. The soil gas sample (SG-2) collected along Dame Street, adjacent the sewer utility line service connection to the back of the new We Care

Cleaners building, revealed a sustained measurement of 55 parts per billion by volume (ppbv). However, the soil gas measurements to the north along the sewer line beneath Dame Street (SG-5) and south (SG-3), revealed sustained measurements of 0 ppbv. This indicates that PCE impacted soil gas is not migrating via the utility lines beyond these two soil gas locations and thus is not likely migrating to structures along Dame Street. Further, given the sustained reading of 55 ppbv at SG-2, well below the action level of 500 ppbv (as agreed upon with Troy Smith), no further investigation relative to the migration of soil gas crossing or along Dame Street was deemed necessary.

The previous StoneHill Investigation revealed that soil gas was impacting the crawl space beneath Kittery Town Pizza (Map 4-Lot 91). Indoor air sample results from the pizzeria were not above the applicable standards, resulting in no further investigation. The previous investigation also revealed no vapor intrusion risk to buildings located at 2 (Map 4-Lot 89) and 9 (Map 4-Lot 90) Wentworth Street, further south down Wentworth Street from the pizzeria. However, to assess the possibility that soil gas contamination might be migrating via the sewer lines to the south down Wentworth Street, soil gas measurement (SG-1) was collected in front of the pizzeria. The sampling revealed a sustained measurement of 0 ppbv. This indicates that contaminated soil gas does not migrate within the existing sewer lines to the south along Wentworth Street, to or beyond the pizzeria. Therefore, further soil gas screening within the main sewer line south of 15 Wentworth Street is not warranted. To assess the sewer main as a migration pathway to the north along Wentworth Street, StoneHill completed additional soil gas sampling locations SG-6 through SG-13. A sustained soil gas measurement of 700 ppbv (SG-6) was found approximately 100 feet to the north of SG-1, at the intersection with Central Avenue. Although the concentration at SG-6 appears to be site related, the Town of Kittery Sewer Outfall Map (Appendix A) reveals that the path of the existing sewer line terminates at the corner of Wentworth Street and Central Avenue. The sewer lines from the homes and businesses north of SG-6 are connected to the sewer main along Pine Street and not the main line under Wentworth Street. Thus, there is no risk of soil gas intrusion into the surrounding receptors via the individual sewer connections and no further investigation is warranted.

Of additional note is the measurement of 6,200 ppbv measured within the soil gas probe at SG-9, located further north on Wentworth Avenue. The probe was advanced immediately adjacent to, and likely encountered, creosote covered landscaping railroad ties and thus was not considered representative of the soil gas in the sewer line at that location. As such, an additional soil gas probe and measurement (SG-9R) was collected approximately three feet away from the landscape ties, immediately adjacent Wentworth Avenue. This measurement revealed a sustained measurement of 0 ppbv and is believe to be representative of the soil gas within the sewer line path at this location. No additional soil gas exceedances related to the Site were noted along Wentworth Avenue, thus the continuing investigation was focused on the possible impacts of soil gas along the sewer lines servicing the Rice Library and the parts of Traip Avenue south and east of the Rice Library.

To assess whether soil gas containing VOCs was impacting the sewer main beneath Traip Avenue, soil gas was collected adjacent a manhole southeast of the Rice Library (SG-18). This revealed a sustained measurement of 630 ppbv, raising the concern of soil gas contamination

migrating north and south along Traip Avenue as well as along the service line into the eastern foundation of the Rice Library. However, soil gas measurements collected along the eastern foundation of the Rice Library (SG-16 and SG-17) were 0 ppbv. Further, additional soil gas measurements to the north (SG-19) and south (SG-14, SG-15 and SG-20) of SG-18, along the sewer line under Traip Avenue and service line to 4 Traip Avenue (Lot 4-83) were also 0 ppbv. As such, PCE impacted soil gas is not migrating toward residences north, south, and east of Traip Avenue, via the main sewer line beneath Traip Avenue, or via the service line into the Rice Library.

While soil gas results along the sewer service lines leading into the Rice Library and the residence at 4 Traip Avenue were 0 ppbv, the additional collection of soil gas measurements from beneath these two structures was deemed appropriate to assess the possible presence of VOCs in soil gas resulting from the shallow bedrock groundwater contaminant plume identified in the 2008 StoneHill investigation.

4.0 SUBSLAB SOIL GAS INVESTIGATION

On January 11, 2017, StoneHill conducted a subslab investigation beneath the Rice Library and the residence at 4 Traip Avenue (Figure 5). To obtain soil gas from beneath the basement slab at the Rice Library, three ½-inch diameter holes were drilled through the concrete floor in the boiler room (Figure 6). One of the holes (SG-3) was advanced adjacent a 3-inch diameter iron sewer pipe coming up through the southeast corner of the boiler room floor, another in the middle of the room (SG-2), and the third in the western corner of the boiler room (SG-1), closest Wentworth Avenue. As with the soil gas probes completed along the sewer lines in the street, soil gas samples were collected via a stainless steel probe placed into the hole and sealed with clay at the floor surface. A ppbRAE3000 was used to draw and measure VOCs in soil gas drawn from these holes.

Soil gas samples SG-1 and SG-2 equilibrated between 0 ppbv and 416 ppbv, respectively. Soil gas sample S-3 peaked at 10,410 ppbv, slowly decreasing to approximately 6,800 ppbv after several minutes. Based on this result, a decision was made to return at a later date to repeat the soil gas PID sampling, measure CO₂ and O₂, and collect a summa canister sample from SG-3 for laboratory analysis.

Also on January 11, 2017, StoneHill drilled three ½-inch diameter holes (SG-4, 5, and 6) into the basement cement floor at 4 Traip Avenue (Figure 7). One of the holes was advanced adjacent a 3-inch diameter iron sewer pipe coming up through the floor and the other two were advanced at either end of the basement. None of the PID measurements at the three locations were above 0 ppbv. A decision was made to return at a later date to confirm the results while measuring CO₂ and O₂ at each location. However, because the sub-slab soil gas PID field results were below the 500 ppbv action level, a summa canister sample would not be collected from beneath the basement.

On January 18, 2017, StoneHill returned to the Rice library to repeat the sub-slab soil gas sampling and measure the CO₂ and O₂ levels within SG-1, SG-2, and SG-3. After several

minutes of equilibration, the CO₂ measurements from each of the three soil gas holes were noted as being greater than 5,000, 980 and 1,880 ppm in SG-1, SG-2, and SG-3, respectively. Ambient CO₂ within the basement was 420 ppmv. The oxygen levels measured in the three soil gas holes were 20.9%, identical to ambient measurements within the boiler room. Upon equilibration of CO₂ levels, a soil gas measurement was collected from within each probe hole using the ppbRAE3000 PID. The soil gas results were 0 ppbv within both SG-1 and SG-2 and 1,176 ppbv within SG-3.

Based upon the soil gas results a Summa canister soil gas sample, drawn over a period of approximately 50 minutes, was collected from SG-3. The Summa canister laboratory data sheets are attached. In accordance with “Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances,” Table 2 February 5, 2016, the soil gas analytical results were adjusted by an attenuation factor of 0.03 and compared with the RAGs. The adjusted results for tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene were 5.61 ug/m³, 0.64 ug/m³, and 0.12 ug/m³, respectively. These are below the residential RAGs of 42 ug/m³, 2.1 ug/m³, and 63 ug/m³, respectively.

**Sub-Slab Summa Canister Laboratory Results
Adjusted for Indoor Air
Rice Library, 8 Wentworth Avenue**

cVOC	RAGS Commercial	RAGS Residential	Adjusted for Indoor Air	Sub-slab Concentration
PCE	180	42	5.61	187
TCE	8.8	2.1	0.64	21.3
1,2 cis DCE	260	63	0.12	3.96

All values are in ug/m³

RAGS - Maine Remedial Action Guidelines for the Indoor Air Exposure Pathway (2012)

Adjusted for Indoor Air – Recommended vapor attenuation factor of 0.03 for risk-based screening of the vapor intrusion pathway, MEDEP “Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air,” June 2015.

Also on January 18, 2017, StoneHill returned to 4 Traip Avenue to confirm the sub-slab soil gas results from January 11, 2017 and to measure CO₂ and O₂ within SG-4, 5, and 6. The oxygen level in each was 20.9 percent, identical to the ambient oxygen level within the basement. The CO₂ results were 380, 1,280, and 3,020 ppm for SG-4, SG-5 and SG-6, respectively. The ambient CO₂ measured within the basement was 380 ppm. The ppbRAE results at each of the three holes were 0 ppbv.

5.0 SUMMARY

StoneHill completed a soil gas survey assessing the possible migration of cVOC contaminated soil gas from the We Care property, through the surrounding sewer main lines, onto neighboring properties. The field soil gas measurements collected along the east and the west boundary of the We Care property revealed that chlorinated contaminated soil gas is not migrating from the We

Care property via the sewer lines beneath Dame Street, Wentworth Street and Traip Avenue at concentrations that present a vapor intrusion risk to off-site buildings.

StoneHill also completed a soil gas survey assessing the possible migration of PCE impacted soil gas emanating from the shallow bedrock contaminated groundwater in to the main sewer lines adjacent a sewer man hole in Traip Avenue (SG-18), east of the Rice Library. The field soil gas measurements collected (SG-18) and SG-19 and SG-20 collected along the sewer main beneath Traip Avenue to the north and south of SG-18, indicate that contaminated soil gas is not impacting structures beyond what was discovered adjacent the Rice Library. The possible migration of VOC contaminated soil gas via the sewer service line into the Rice Library was assessed via sampling soil gas along the estimated location of the sewer service line entering the eastern wall of the Rice Library. These results revealed no detectable migration of VOC impacted soil gas into the Rice Library from Traip Avenue. Given this and the possibility of a plume of shallow bedrock PCE contaminated groundwater passing beneath the southwestern corner of library as mapped previously in 2008 by StoneHill, three soil gas samples were collected from beneath the furnace room floor to assess for the existence VOCs in soil gas. Of the three samples collected, the soil gas sample collected adjacent to the sewer service line exiting the floor was found to contain VOCs elevated enough to justify confirmation via the collection and laboratory analysis of a sub-slab soil gas sample. The laboratory results confirmed that the soil gas beneath the library at this location was impacted by PCE and associated breakdown products; however the concentration adjusted for migration to indoor air were well below both commercial and residential exposure guidelines established by MEDEP. As such, the cVOC soil gas concentrations are not indicative of risk to the individuals within the building.

Soil gas samples collected adjacent to the residence at 4 Traip Ave and beneath the residence basement floor revealed no indication of VOC contamination impacting the soil gas adjacent to or beneath the residence.

6.0 RECOMMENDATIONS

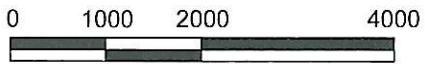
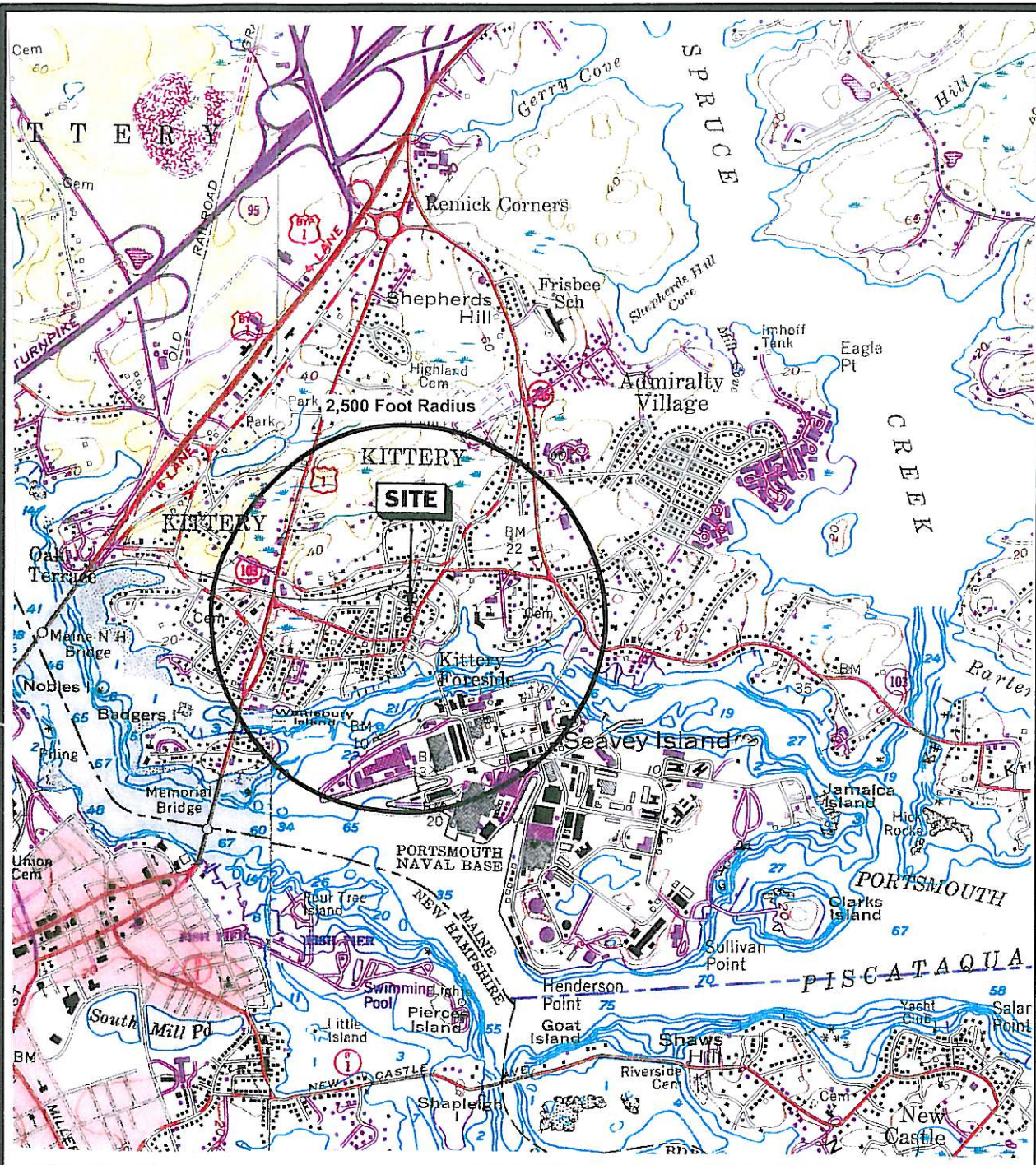
StoneHill recommends, as required by the MEDEP for consideration of liability relief via the Voluntary Response Action Program (VRAP), We Care complete a Site Investigation Report summarizing all site related data and events occurring since the prior 2008 StoneHill Site Investigation Report. In addition, based upon StoneHill's discussions with Troy Smith, the significance of the sub-slab contaminant concentrations measured in soil gas beneath the Rice Library requires either confirmation and/or mitigation. Two methods of confirmation include one year of seasonal sampling of the indoor air within the boiler room or high vacuum sub-slab sampling and analysis of soil gas across a wider area of the basement. In lieu of these confirmation options, a radon-type sub-slab depressurization system can be installed in the Rice Library furnace room to mitigate the potential migration of cVOCs into the building.

7.0 LIMITATIONS

This soil gas investigation was conducted to evaluate migration pathways for chlorinated solvent contamination associated with a historical release from former dry cleaning operations at 17

Wentworth Street, Kittery, Maine. The investigation is not intended to be a complete environmental site assessment, audit or industrial hygiene survey which would ascertain compliance with federal and state regulations other than those explicitly stated herein.

It should be noted that the findings and conclusions of this investigation do not constitute scientific certainties, but rather probabilities based upon our professional judgement concerning data gathered during the course of the investigation. Information obtained from further investigative activities beyond the scope of this investigation could result in a modification of the findings stated above. This report was prepared in accordance with generally accepted site investigation practices and a degree of care and skill exercised by other environmental consulting firms undertaking similar studies at the same time in the same geographical area. No other warranty, expressed or implied, is made.



approximate scale in feet
Contour Interval 20 feet

Map Source:
U.S.G.S. Topographic Quadrangle
7.5 Minute Series

Kittery, ME - NH, Photorevised 1989
Portsmouth, NH - ME, Photorevised 1988



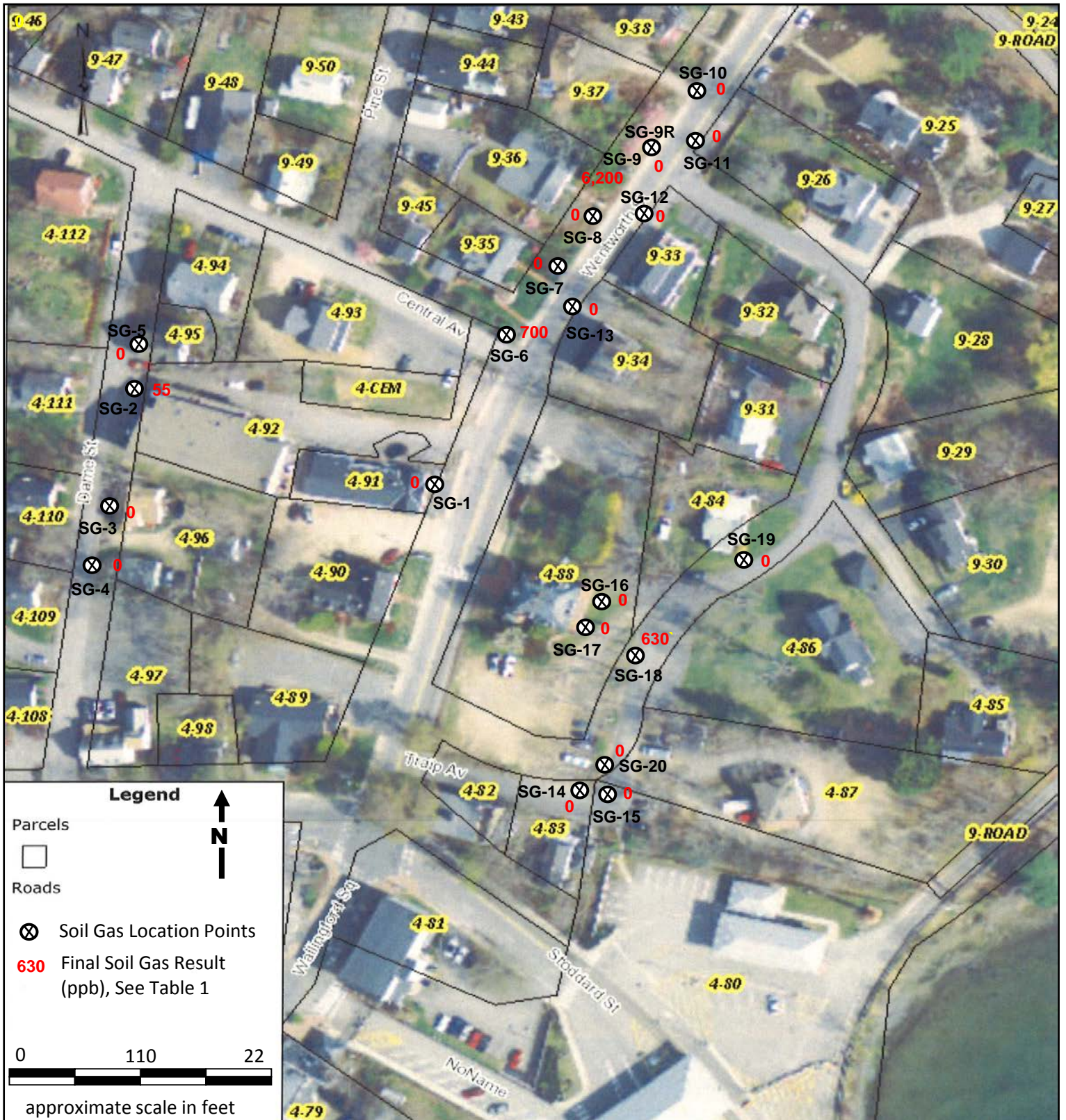
FIGURE 1

SITE LOCATION MAP

We Care Cleaners
17 Wentworth Street
Kittery, ME

Prepared by:
StoneHill Environmental, Inc.
Project No. 26045

FIGURE 2
WE CARE
SOIL GAS SAMPLE LOCATIONS



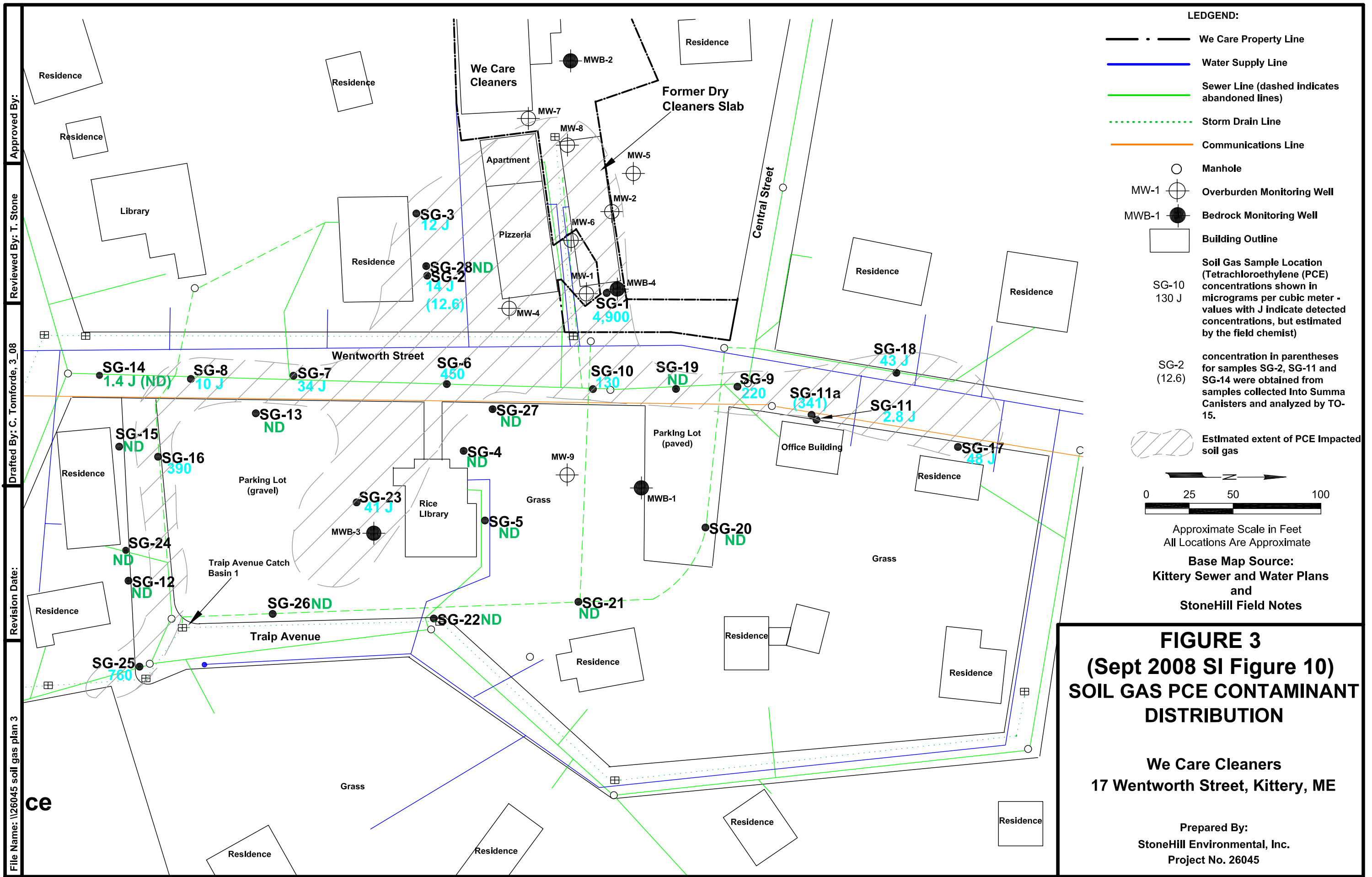


FIGURE 3
(Sept 2008 SI Figure 10)
SOIL GAS PCE CONTAMINANT
DISTRIBUTION

We Care Cleaners
17 Wentworth Street, Kittery, ME

Prepared By:
StoneHill Environmental, Inc.
Project No. 26045

File Name: \26045 soil gas plan 3
Revision Date:
Drafted By: C. Tomforde, 3_08
Reviewed By: T. Stone
Approved By:

ce

Notations Added by:
StoneHill Environmental, Inc.
Soil Gas Samples Collected

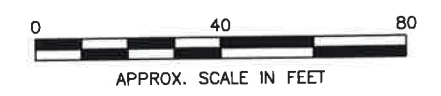
06/09/2015
 3190 ppbv PID
 (Field Measurement)
 [877/73] PCE/TCE ppbv
 (TO-15 Analyses)

LEGEND

- MW-1 OVERBURDEN MONITORING WELL
- MWB-1 BEDROCK MONITORING WELL
- MW-3 DESTROYED MONITORING WELL
- SG-32 SOIL GAS POINT
- ⊙ APPROXIMATE SEWER MANHOLE LOCATION
- ⊞ APPROXIMATE CATCH BASIN LOCATION
- Ⓜ APPROXIMATE WATER SHUTOFF LOCATION
- S—S— APPROXIMATE SEWER LINE LOCATION
- - - - - APPROXIMATE ABANDONED SEWER LINE LOCATION
- D-D- APPROXIMATE STORMWATER DRAIN LINE LOCATION
- W-W- APPROXIMATE PORTSMOUTH SHIPYARD 12" WATER LINE LOCATION
- - - - - PROPERTY BOUNDARY
- x-x- FENCE
- ⊙ 2008 IMPACTED SOIL EXCAVATION (5 FEET BELOW GRADE ≈ BEDROCK)
- ⊗ APPROXIMATE LOCATION OF SUMMA AIR SAMPLES

NOTES:

1. THIS FIGURE WAS BASED UPON AN APRIL 2007 SITE PLAN PREPARED BY STONEHILL ENVIRONMENTAL, INC.

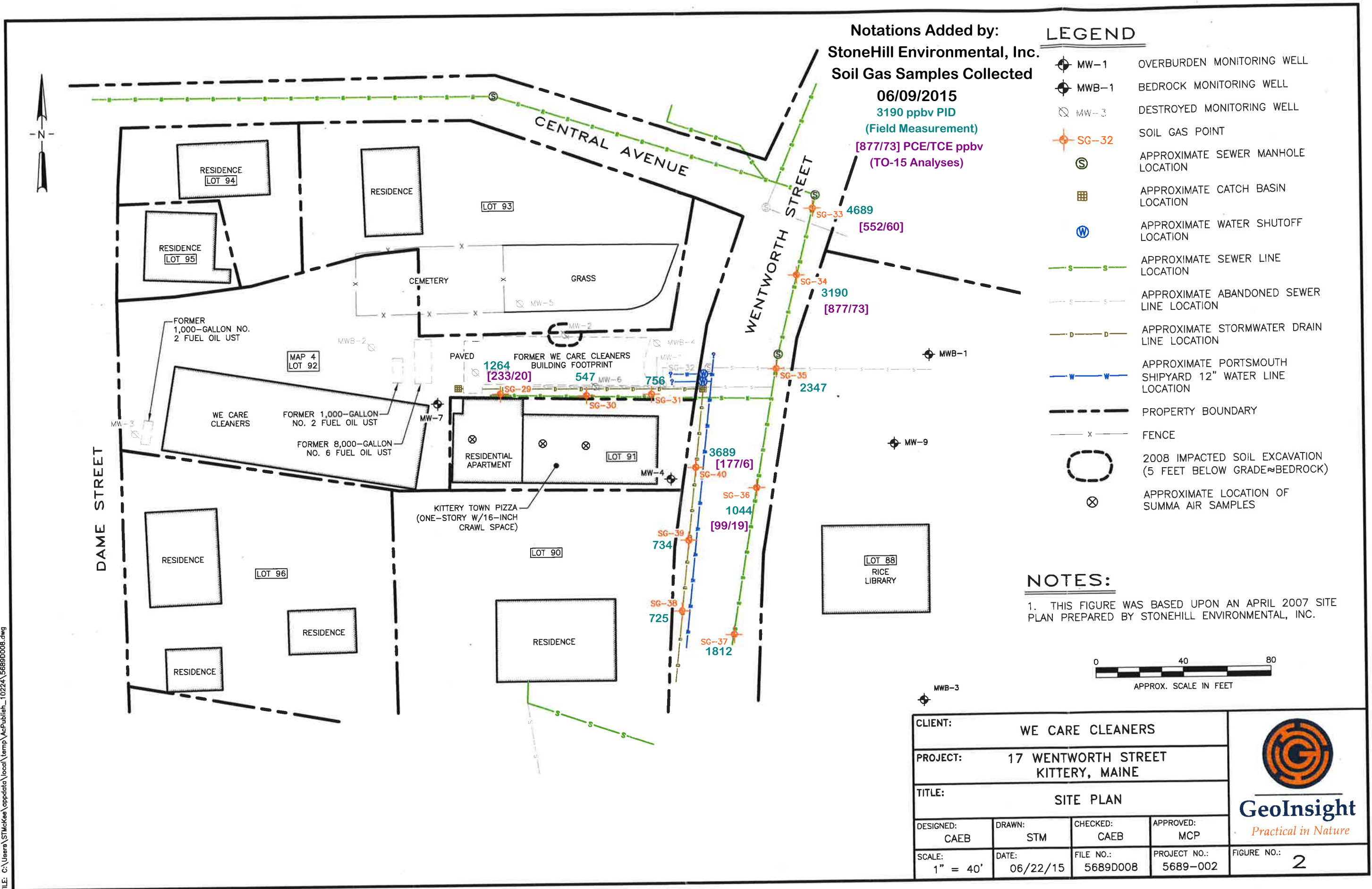


CLIENT:		WE CARE CLEANERS	
PROJECT:		17 WENTWORTH STREET KITTERY, MAINE	
TITLE:		SITE PLAN	
DESIGNED:	DRAWN:	CHECKED:	APPROVED:
CAEB	STM	CAEB	MCP
SCALE:	DATE:	FILE NO.:	PROJECT NO.:
1" = 40'	06/22/15	5689D008	5689-002



FIGURE NO.: 2

PLOT DATE: 6-22-15
 FILE: C:\Users\StHill\OneDrive\apps\data\local\temp\AcPublish_10224\5689D008.dwg



StoneHill Figure 4

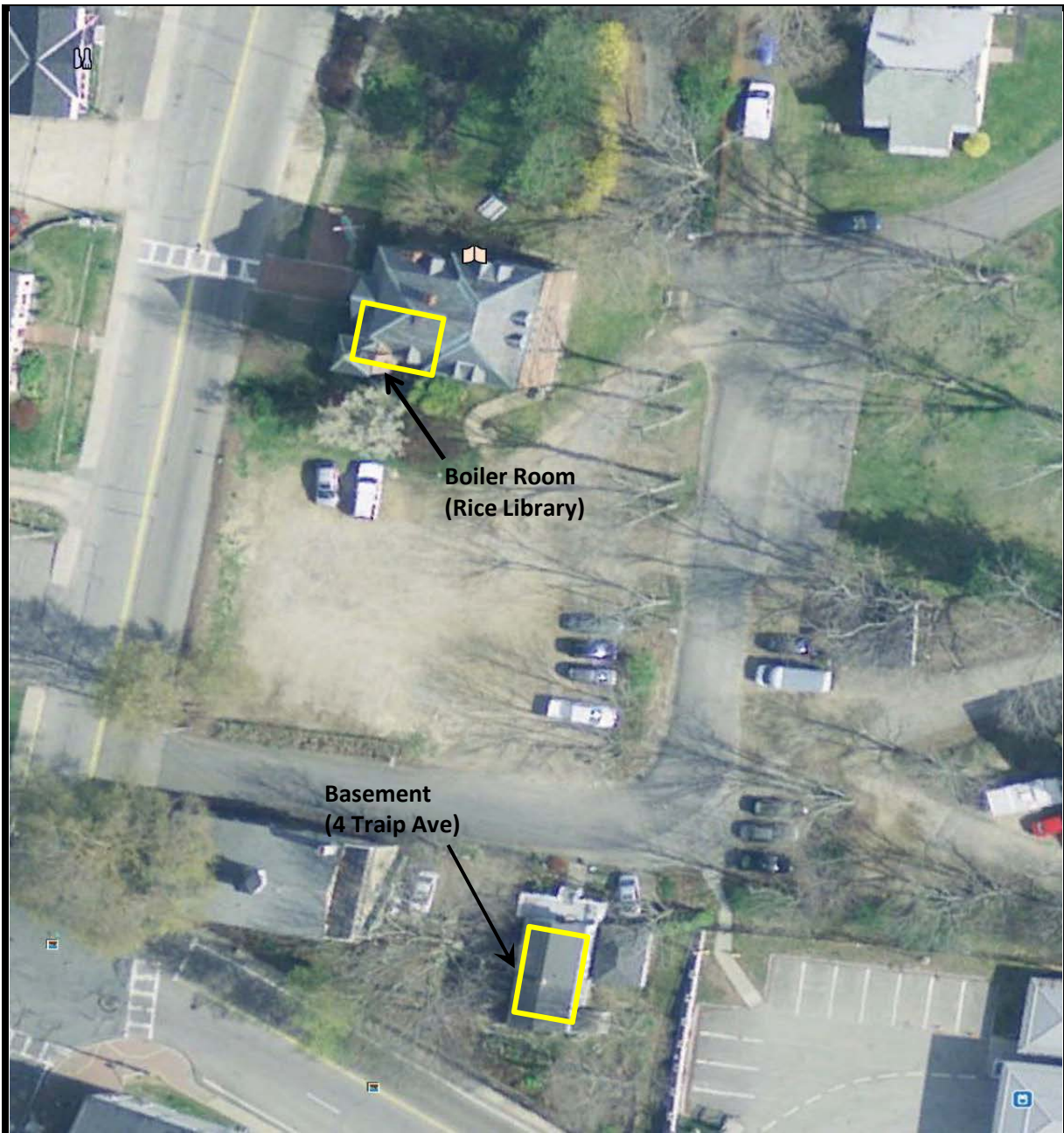


FIGURE 5

SITE LOCATION MAP

**Rice Library &
4 Traip Ave
Kittery, ME**

**Prepared by:
StoneHill Environmental, Inc.
Project No. 26045**



**approximate scale in feet
Contour Interval 10 feet**

**Map Source:
Google Earth 2012
Maine GeoLibrary 2016**



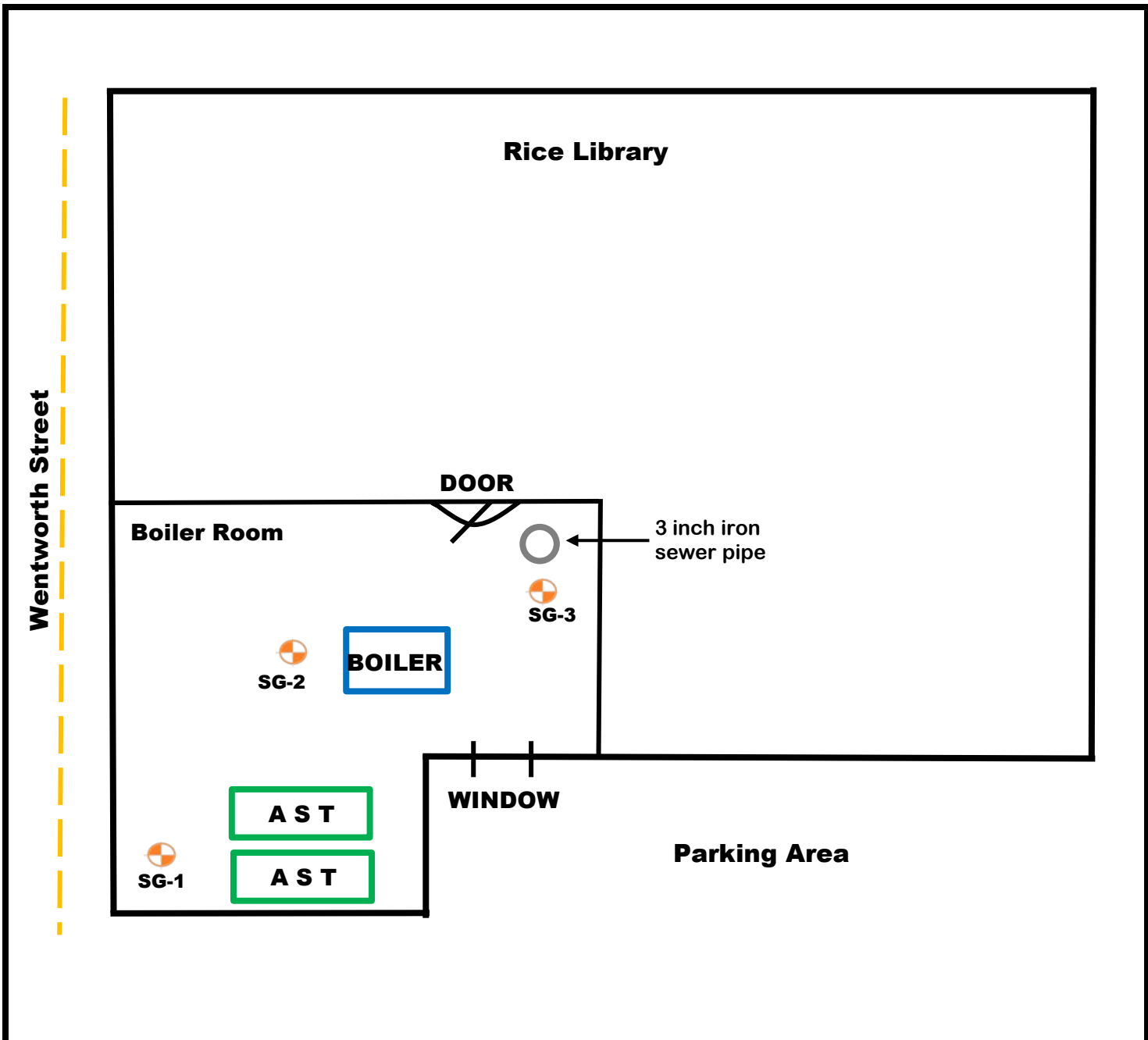


FIGURE 6

Subslab Soil Gas Probe Locations

Rice Public Library
Kittery, ME

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 - Soil gas probe location



Figure not to scale

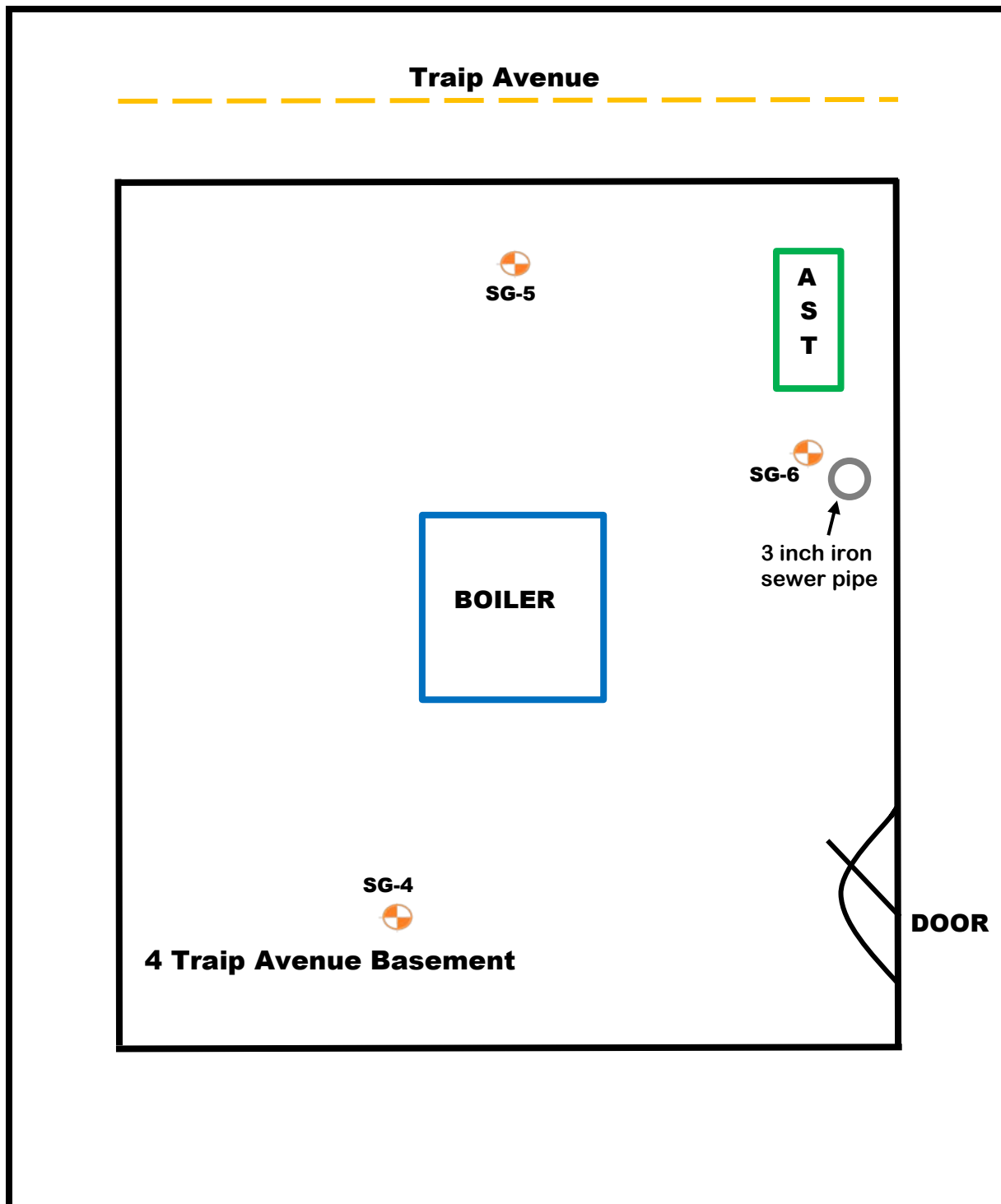


FIGURE 7

Subslab Soil Gas Probe Locations

**4 Traip Avenue
Kittery, ME**

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Project No. 26045

 -Soil gas probe location



Figure not to scale

TABLE 1
WE CARE
Soil Gas Sample Results
Kittery, Maine

Probe ID	Probe CO ₂ / Probe O ₂ (%)	Initial PID / Final PID (ppbV)	Description
SG-1	1.04/19.5	120/0	
SG-2	1.14/19.4	340/55	
SG-3	1.25/19.9	27/0	
SG-4	0.6/20	120/0	
SG-5	1.6/18.5	160/0	
SG-6	2.9/15	1,100/700	
SG-7	2.3/17.5	0/0	
SG-8	1.28/19.9	130/0	
SG-9	1.20/20.2	8800/6200	Adjacent to creosote railroad ties, local source of VOCs
SG-9R	2.17/18.6	400/0	Collected sidewalk/road curb, away from the railroad ties
SG-10	2.15/18.7	80/0	
SG-11	1.35/18	90/0	
SG-12	1/19	6/0	
SG-13	1.6/14	24/0	
SG-14	1.3/20 1.9/18	0/0 0/0	4 Traip Avenue
SG-15	1.3/18.6	322/0	Northeast of 4 Traip Ave.
SG-16	9.31/20.4	0/0	Sewer line on map, 3' from library footer
SG-17	9.70/18	0/0	3' in from corner of library, corner toward 4 Traip Ave. Sewer hole by library, side closest to 4 Traip Ave. approximately 2.5' from center of the manhole
SG-18	2.3/18.2	734/630	
SG-19	1.4/18	61/0	Next sewer manhole northeast from SG-18
SG-20	2.6/17.1	86/0	Next sewer manhole south from SG-18

Notes

The initial instrument reading was taken upon placing the measurement probe into the soil gas hole.

The instrument readings immediately dropped significantly, equilibrating at the Final PID reading.

PID - ppbRAE 3000 Photolonization Detector used to measure soil gas

CO₂/O₂ - RKI Eagle IR 5K used to measure CO₂/O₂

ppbV - Parts per billion by volume of air

SG9 - The source of the VOCs is believed to emanate from the adjacent railroad ties.

SG14 - The soil gas boring was advanced adjacent the likely location of the 4 Traip Avenue sewer hookup.

SG15 - The soil gas boring was advanced adjacent the continuation of the sewer line from Traip Avenue.

SG20 - The soil gas boring was advanced adjacent a man hole.

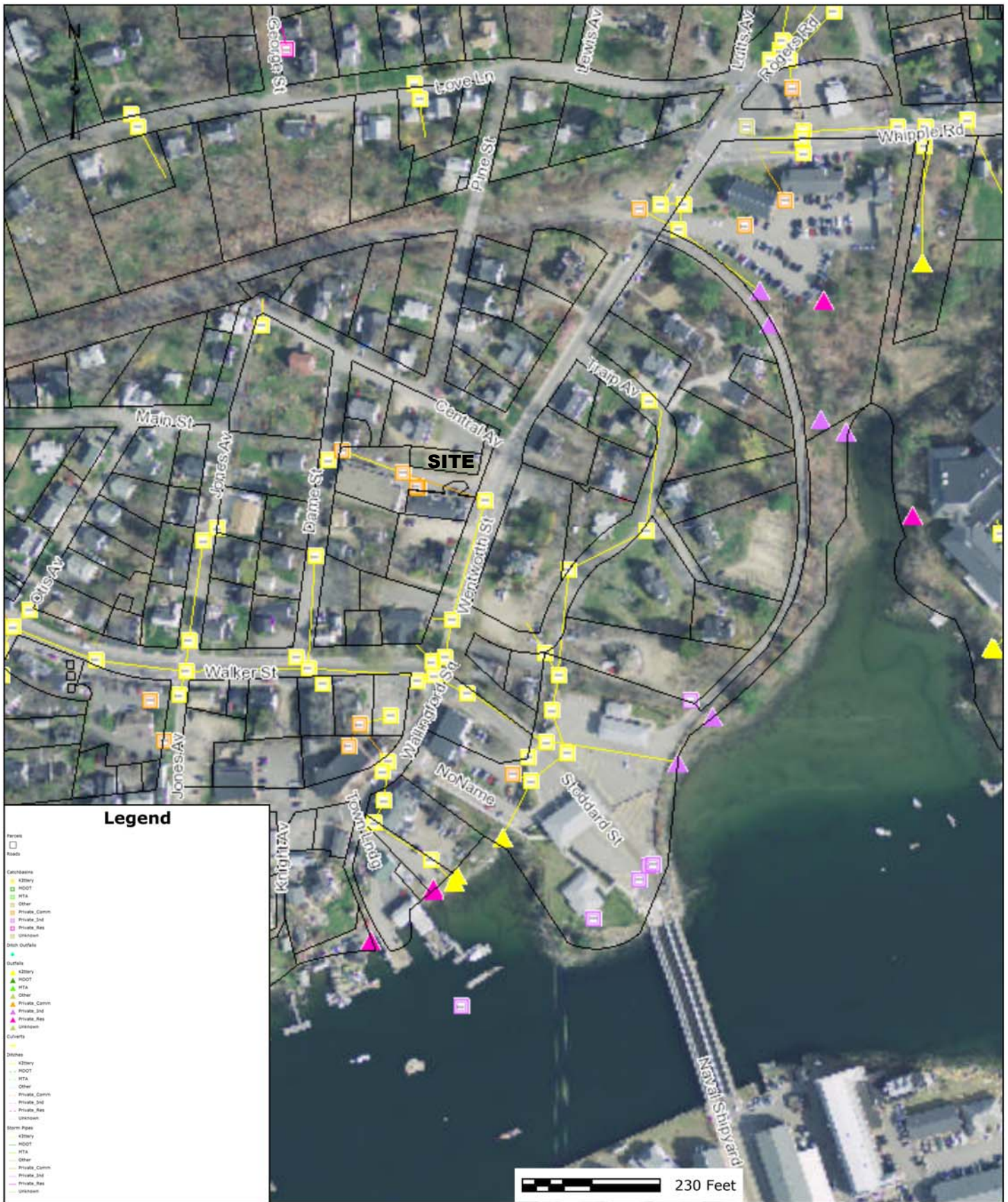
APPENDIX A



Sewer Outfalls

Town of Kittery, Maine

This information has been compiled from various public and private sources. While every attempt has been made to provide accurate information, neither the municipality nor the service host guarantee the accuracy of information provided herein.



**Town of Kittery,
Maine**

Storm System

This information has been compiled from various public and private sources. While every attempt has been made to provide accurate information, neither the municipality nor the service host guarantee the accuracy of information provided herein.



**Town of Kittery,
Maine**

This information has been compiled from various public and private sources. While every attempt has been made to provide accurate information, neither the municipality nor the service host guarantee the accuracy of information provided herein.

APPENDIX B



ANALYTICAL REPORT

Lab Number:	L1701897
Client:	StoneHill Environmental Incorporated 600 State Street Suite 2 Portsmouth, NH 03801
ATTN:	Al Wyman
Phone:	(603) 433-1935
Project Name:	WE CARE
Project Number:	26045
Report Date:	01/26/17

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Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1701897-01	RICE LIBRARY SUB SLAB NEAR PIPE IN FLOOR BOILER RM	SOIL_VAPOR	KITTERY, ME	01/18/17 16:24	01/19/17

Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on January 17, 2017. The canister certification results are provided as an addendum.

The WG972521-3 LCS recoveries for Trichlorofluoromethane (132%), 1,2,4-Trichlorobenzene (140%) and Hexachlorobutadiene (142%) are above the upper 130% acceptance limit. The response for these compounds was elevated however they were not detected in any of the associated samples therefore no further action was required.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 01/26/17

AIR

Project Name: WE CARE**Lab Number:** L1701897**Project Number:** 26045**Report Date:** 01/26/17**SAMPLE RESULTS**

Lab ID: L1701897-01
 Client ID: RICE LIBRARY SUB SLAB NEAR PIP
 Sample Location: KITTERY, ME
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 01/26/17 09:15
 Analyst: MB

Date Collected: 01/18/17 16:24
 Date Received: 01/19/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
cis-1,2-Dichloroethene	1.00	0.200	--	3.96	0.793	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Trichloroethene	3.97	0.200	--	21.3	1.07	--		1
Tetrachloroethene	27.6	0.200	--	187	1.36	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	84		60-140
Bromochloromethane	76		60-140
chlorobenzene-d5	85		60-140



Project Name: WE CARE

Lab Number: L1701897

Project Number: 26045

Report Date: 01/26/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/25/17 15:11

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG972521-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1

Project Name: WE CARE

Lab Number: L1701897

Project Number: 26045

Report Date: 01/26/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/25/17 15:11

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG972521-4								
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: WE CARE

Lab Number: L1701897

Project Number: 26045

Report Date: 01/26/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/25/17 15:11

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG972521-4								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: WE CARE

Lab Number: L1701897

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Report Date: 01/26/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/25/17 15:11

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG972521-4								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1



Project Name: WE CARE

Lab Number: L1701897

Project Number: 26045

Report Date: 01/26/17

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 01/25/17 15:11

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG972521-4								
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Lab Control Sample Analysis

Batch Quality Control

Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG972521-3								
Chlorodifluoromethane	85		-		70-130	-		
Propylene	84		-		70-130	-		
Dichlorodifluoromethane	105		-		70-130	-		
Chloromethane	89		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	113		-		70-130	-		
Methanol	75		-		70-130	-		
Vinyl chloride	89		-		70-130	-		
1,3-Butadiene	94		-		70-130	-		
Butane	78		-		70-130	-		
Bromomethane	102		-		70-130	-		
Chloroethane	94		-		70-130	-		
Ethyl Alcohol	85		-		70-130	-		
Dichlorofluoromethane	97		-		70-130	-		
Vinyl bromide	112		-		70-130	-		
Acrolein	84		-		70-130	-		
Acetone	100		-		70-130	-		
Acetonitrile	76		-		70-130	-		
Trichlorofluoromethane	132	Q	-		70-130	-		
iso-Propyl Alcohol	103		-		70-130	-		
Acrylonitrile	85		-		70-130	-		
Pentane	75		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG972521-3								
Ethyl ether	74		-		70-130	-		
1,1-Dichloroethene	107		-		70-130	-		
tert-Butyl Alcohol	98		-		70-130	-		
Methylene chloride	96		-		70-130	-		
3-Chloropropene	94		-		70-130	-		
Carbon disulfide	100		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	116		-		70-130	-		
trans-1,2-Dichloroethene	89		-		70-130	-		
1,1-Dichloroethane	96		-		70-130	-		
Methyl tert butyl ether	103		-		70-130	-		
Vinyl acetate	110		-		70-130	-		
2-Butanone	87		-		70-130	-		
cis-1,2-Dichloroethene	108		-		70-130	-		
Ethyl Acetate	86		-		70-130	-		
Chloroform	113		-		70-130	-		
Tetrahydrofuran	88		-		70-130	-		
2,2-Dichloropropane	106		-		70-130	-		
1,2-Dichloroethane	120		-		70-130	-		
n-Hexane	72		-		70-130	-		
Isopropyl Ether	74		-		70-130	-		
Ethyl-Tert-Butyl-Ether	73		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG972521-3								
1,1,1-Trichloroethane	100		-		70-130	-		
1,1-Dichloropropene	80		-		70-130	-		
Benzene	76		-		70-130	-		
Carbon tetrachloride	107		-		70-130	-		
Cyclohexane	72		-		70-130	-		
Tertiary-Amyl Methyl Ether	73		-		70-130	-		
Dibromomethane	85		-		70-130	-		
1,2-Dichloropropane	73		-		70-130	-		
Bromodichloromethane	97		-		70-130	-		
1,4-Dioxane	81		-		70-130	-		
Trichloroethene	97		-		70-130	-		
2,2,4-Trimethylpentane	74		-		70-130	-		
Methyl Methacrylate	82		-		70-130	-		
Heptane	72		-		70-130	-		
cis-1,3-Dichloropropene	88		-		70-130	-		
4-Methyl-2-pentanone	77		-		70-130	-		
trans-1,3-Dichloropropene	82		-		70-130	-		
1,1,2-Trichloroethane	90		-		70-130	-		
Toluene	89		-		70-130	-		
1,3-Dichloropropane	79		-		70-130	-		
2-Hexanone	85		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG972521-3								
Dibromochloromethane	112		-		70-130	-		
1,2-Dibromoethane	100		-		70-130	-		
Butyl Acetate	71		-		70-130	-		
Octane	81		-		70-130	-		
Tetrachloroethene	111		-		70-130	-		
1,1,1,2-Tetrachloroethane	103		-		70-130	-		
Chlorobenzene	100		-		70-130	-		
Ethylbenzene	94		-		70-130	-		
p/m-Xylene	98		-		70-130	-		
Bromoform	121		-		70-130	-		
Styrene	98		-		70-130	-		
1,1,2,2-Tetrachloroethane	92		-		70-130	-		
o-Xylene	101		-		70-130	-		
1,2,3-Trichloropropane	84		-		70-130	-		
Nonane (C9)	75		-		70-130	-		
Isopropylbenzene	96		-		70-130	-		
Bromobenzene	84		-		70-130	-		
o-Chlorotoluene	99		-		70-130	-		
n-Propylbenzene	97		-		70-130	-		
p-Chlorotoluene	92		-		70-130	-		
4-Ethyltoluene	99		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: WE CARE

Project Number: 26045

Lab Number: L1701897

Report Date: 01/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG972521-3								
1,3,5-Trimethylbenzene	101		-		70-130	-		
tert-Butylbenzene	103		-		70-130	-		
1,2,4-Trimethylbenzene	110		-		70-130	-		
Decane (C10)	82		-		70-130	-		
Benzyl chloride	112		-		70-130	-		
1,3-Dichlorobenzene	118		-		70-130	-		
1,4-Dichlorobenzene	117		-		70-130	-		
sec-Butylbenzene	96		-		70-130	-		
p-Isopropyltoluene	96		-		70-130	-		
1,2-Dichlorobenzene	118		-		70-130	-		
n-Butylbenzene	97		-		70-130	-		
1,2-Dibromo-3-chloropropane	101		-		70-130	-		
Undecane	86		-		70-130	-		
Dodecane (C12)	98		-		70-130	-		
1,2,4-Trichlorobenzene	140	Q	-		70-130	-		
Naphthalene	114		-		70-130	-		
1,2,3-Trichlorobenzene	123		-		70-130	-		
Hexachlorobutadiene	142	Q	-		70-130	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: WE CARE

Project Number: 26045

Lab Number: L1701897

Report Date: 01/26/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG972521-5 QC Sample: L1701897-01 Client ID: RICE LIBRARY SUB SLAB NEAR PIPE IN FLOOR BOILER RM						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	1.00	1.06	ppbV	6		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Trichloroethene	3.97	4.14	ppbV	4		25
Tetrachloroethene	27.6	29.3	ppbV	6		25

Project Name: WE CARE

Project Number: 26045

Serial_No:01261712:53
Lab Number: L1701897

Report Date: 01/26/17

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1701897-01	RICE LIBRARY SUB SLAB NEAR PIP	0192	#90 SV	01/17/17	235482		-	-	-	Pass	68	46	39
L1701897-01	RICE LIBRARY SUB SLAB NEAR PIP	2195	2.7L Can	01/17/17	235482	L1701407-02	Pass	-29.6	-5.0	-	-	-	-

Project Name:
Project Number: CANISTER QC BAT

Lab Number: L1701407
Report Date: 01/26/17

Air Canister Certification Results

Lab ID: L1701407-02
 Client ID: CAN 203 SHELF 14
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 01/14/17 16:28
 Analyst: MB

Date Collected: 01/13/17 17:00
 Date Received: 01/14/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name:
Project Number: CANISTER QC BAT

Lab Number: L1701407
Report Date: 01/26/17

Air Canister Certification Results

Lab ID: L1701407-02
 Client ID: CAN 203 SHELF 14
 Sample Location:

Date Collected: 01/13/17 17:00
 Date Received: 01/14/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

Project Name:
Project Number: CANISTER QC BAT

Lab Number: L1701407
Report Date: 01/26/17

Air Canister Certification Results

Lab ID: L1701407-02
 Client ID: CAN 203 SHELF 14
 Sample Location:

Date Collected: 01/13/17 17:00
 Date Received: 01/14/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1



Project Name:
Project Number: CANISTER QC BAT

Lab Number: L1701407
Report Date: 01/26/17

Air Canister Certification Results

Lab ID: L1701407-02
 Client ID: CAN 203 SHELF 14
 Sample Location:

Date Collected: 01/13/17 17:00
 Date Received: 01/14/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds



Project Name:

Lab Number: L1701407

Project Number: CANISTER QC BAT

Report Date: 01/26/17

Air Canister Certification Results

Lab ID: L1701407-02

Date Collected: 01/13/17 17:00

Client ID: CAN 203 SHELF 14

Date Received: 01/14/17

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	89		60-140

Project Name:
Project Number: CANISTER QC BAT

Lab Number: L1701407
Report Date: 01/26/17

Air Canister Certification Results

Lab ID: L1701407-02
 Client ID: CAN 203 SHELF 14
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/14/17 16:28
 Analyst: MB

Date Collected: 01/13/17 17:00
 Date Received: 01/14/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1



Project Name:
Project Number: CANISTER QC BAT

Lab Number: L1701407
Report Date: 01/26/17

Air Canister Certification Results

Lab ID: L1701407-02
 Client ID: CAN 203 SHELF 14
 Sample Location:

Date Collected: 01/13/17 17:00
 Date Received: 01/14/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1



Project Name:
Project Number: CANISTER QC BAT

Lab Number: L1701407
Report Date: 01/26/17

Air Canister Certification Results

Lab ID: L1701407-02
 Client ID: CAN 203 SHELF 14
 Sample Location:

Date Collected: 01/13/17 17:00
 Date Received: 01/14/17
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	97		60-140



Project Name: WE CARE

Lab Number: L1701897

Project Number: 26045

Report Date: 01/26/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal**Cooler**

N/A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1701897-01A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: Data Usability Report



Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

Data Qualifiers

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
 - D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
 - E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
 - G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
 - H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
 - I** - The lower value for the two columns has been reported due to obvious interference.
 - M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
 - NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
 - P** - The RPD between the results for the two columns exceeds the method-specified criteria.
 - Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
 - R** - Analytical results are from sample re-analysis.
 - RE** - Analytical results are from sample re-extraction.
 - S** - Analytical results are from modified screening analysis.
 - J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
 - ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: WE CARE
Project Number: 26045

Lab Number: L1701897
Report Date: 01/26/17

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide

EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS

EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Stone Hill Env.
Address: 600 State Street
Portsmouth, NH
Phone: 603.433.1935
Fax: —

Email: awyman@stonehillenvironmental.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments: None

Project-Specific Target Compound List:

Project Information

Project Name: We Care
Project Location: Kittery, ME
Project #: 26045
Project Manager: Al Wyman
ALPHA Quote #: —

Turn-Around Time

Standard RUSH (only confirmed if pre-approved!)

Date Due: _____ Time: _____

Date Rec'd in Lab: 1/19/17

Report Information - Data Deliverables

FAX
 ADEX
Criteria Checker: N/A
(Default based on Regulatory Criteria Indicated)
Other Formats: N/A
 EMAIL (standard pdf report)
 Additional Deliverables: N/A
Report to: (if different than Project Manager)
Same

ALPHA Job #: L1701897

Billing Information

Same as Client info PO #: _____
N/A

Regulatory Requirements/Report Limits

State/Fed	Program	Res/Comm
<u>ME</u>		<u>Res</u>

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION				Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS				Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum						Final Vacuum	TO-15	TO-15 SIM	APH	
<u>01897.01</u>	<u>Rice Library sub-slab near pipe in floor (3" iron) in boiler room</u>	<u>1/18/17</u>	<u>3:37 P.M.</u>	<u>4:24 P.M.</u>	<u>-29.75</u>	<u>AIR AW</u>	<u>27L2195</u>	<u>192</u>	<u>TO-15</u>	<u>CVOC only</u>					
					<u>-4.93</u>	<u>Soil Vapor</u>									

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By: [Signature]

Date/Time: 1/19/17 17:15

Received By: [Signature]

Date/Time: 1/19/17 17:45