ATLANTIC CHESTNUT – LOT 1

3264 FULTON STREET

BROOKLYN, NEW YORK

Remedial Design Investigation Report

AKRF Project Number: 12492
NYSDEC BCP Number: C224234

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TABLE OF CONTENTS

EXECUTIVE SUMMARY 1
REMEDIAL DESIGN INVESTIGATION REPORT 1
1.0 SITE BACKGROUND 1
1.1 Site Location and Current Usage 1
1.2 Description of Surrounding Property 1
1.3 Proposed Development Plan 1
2.0 SITE HISTORY 3
2.1 Past Uses and Ownership 3
2.2 State and Federal Database Listings 3
2.2.1 Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) 3
2.2.2 Petroleum Bulk Storage (PBS) 3
2.2.3 Chemical Bulk Storage (CBS) 4
2.2.4 Historic Petroleum Spills 4
2.2.5 Toxics Release Inventory System (TRIS) 5
2.2.6 Air Discharge Facilities Index (ADF) 5
2.3 Previous Environmental Reports 6
2.4 Area of Concern (AOC) 11
3.0 PROJECT MANAGEMENT 12
3.1 Project Organization 12
3.2 Health and Safety 12
4.0 REMEDIAL DESIGN INVESTIGATION ACTIVITIES 13
4.1 Soil Boring Advancement 13
4.2 Nested Groundwater Monitoring Well Installation 13
4.3 Groundwater Monitoring Well Development 14
4.4 Groundwater Monitoring Well Location and Elevation Survey 15
4.5 Sample Collection and Chemical Analysis 15
4.5.1 Soil Sampling 15
4.5.2 Soil Quality Assurance/Quality Control (QA/QC) Sampling 17
4.5.3 Groundwater Sampling 18
4.5.4 Groundwater Quality Assurance/Quality Control (QA/QC) Sampling 18
4.5.5 Air Monitoring 19
4.5.6 Chemical Analysis 19
4.5.7 Quality Assurance/Quality Control (QA/QC) Sampling 19
4.5.8 Results of Chemical Analyses 23
4.5.9 Management of Investigation-Derived Waste (IDW) 23
5.0 ENVIRONMENTAL EVALUATION 24
5.1 Geological and Hydrogeological Conditions 24
5.1.1 Stratigraphy 24
5.1.2 Hydrogeology 24
5.2 Soil Chemistry 24
5.2.1 Chlorinated Volatile Organic Compounds (CVOCs) in Soil 24
5.2.2 Polycyclic Aromatic Hydrocarbons (PAHs) in Soil 25
5.2.3 Resource Conservation and Recovery Act (RCRA) Metals in Soil 25
5.3 Groundwater Chemistry 26
5.3.1 Chlorinated Volatile Organic Compounds (CVOCs) in Groundwater 26
5.3.2 1,4-Dioxane (1,4-Dx) in Groundwater 26

5.3.3 Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) in Groundwater 27
6.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT (QHHEA) 28
6.1 Contaminants of Concern (COCs) in Respective Media 28
6.2 Potential Routes of Exposure 28
6.3 Exposure Route 29
6.4 Potential Receptors 29
6.5 Existence of Human Health Exposure Pathways 29
6.6 Overall Human Health Exposure Assessment 30
7.0 CONCLUSIONS 32

FIGURES

Figure 1 – Brownfield Cleanup Program Site Location Map
Figure 2 – Site and Sample Location Plan
Figure 3 – Shallow Groundwater Contour Map – August 28, 2017
Figure 4 – Intermediate Groundwater Contour Map – August 28, 2017
Figure 5 – Deep Groundwater Contour Map – August 28, 2017
Figure 6 – RDI Soil Sample Concentrations Above UUSCOs, RRSCOs, and/or PGWSCOs
Figure 7 – RDI Groundwater Sample Concentrations Above TOGS
Figures 8a and 8b – SI, RI, and RDI Soil Sample Concentrations Above UUSCOs, RRSCOs, and/or PGWSCOs
Figure 9 – SI, RI, and RDI Groundwater Sample Concentrations Above TOGS
Figure 10 – Soil Vapor Sample Detections

IN-TEXT TABLES

In-Text Table 1 – Soil Analytes Detected Above UUSCOs, RRSCOs, and/or PGWSCOs
In-Text Table 2 – Groundwater Analytes Detected Above TOGS Values
In-Text Table 3 – Petroleum Bulk Storage (PBS) Facility Data
In-Text Table 4 – Chemical Bulk Storage (CBS) Facility Data
In-Text Table 5 – Groundwater Monitoring Well Construction Details
In-Text Table 6 – Soil Sample Summary
In-Text Table 7 – Quality Assurance (QA)/Quality Control (QC) Program
In-Text Table 8 – CVOC Concentrations in Soil Above UUSCOs, RRSCOs, and/or PGWSCOs
In-Text Table 9 – CVOC Concentrations in Groundwater Concentrations TOGS Values

ATTACHED TABLES

Attached Table 1 – RDI Chlorinated Volatile Organic Compound (CVOC) Soil Analytical Results
Attached Table 2 – RDI Polycyclic Aromatic Hydrocarbons (PAHs) Soil Analytical Results
Attached Table 3 – RDI Resource Conservation and Recovery Act (RCRA) Soil Analytical Results
Attached Table 4 – RDI Chlorinated Volatile Organic Compound (CVOC) Groundwater Analytical Results
Attached Table 5 – RDI 1,4-Dioxane Groundwater Analytical Results
Attached Table 6 – RDI Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) Groundwater Analytical Results

APPENDICES

Appendix A – Soil Boring and Groundwater Monitoring Well Construction Logs
Appendix B – Groundwater Well Elevation Surveys
Appendix C – Groundwater Well Development Logs
Appendix D – Groundwater Sampling Logs
Appendix E – Air Monitoring Logs
Appendix F – Laboratory Data Deliverables and Data Usability Summary Reports (DUSRs) for Soil and Groundwater Analyses
Appendix G – Investigation-Derived Waste (IDW) Disposal Manifests

LIST OF ACRONYMS

Acronym	Definition
1,1-DCE	1,1-dichloroethylene
1,4-Dx	1,4-dioxane
ACM	Asbestos-Containing Material
ADF	Air Discharge Facility
AGV	Air Guidance Value
AOC	Area of Concern
AST	Aboveground Storage Tank
BCP	Brownfield Cleanup Program
CAMP	Community Air Monitoring Plan
Cis-1,2-DCE	Cis-1,2-dichloroethylene
CBS	Chemical Bulk Storage
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CVOC	Chlorinated Volatile Organic Compounds
DER-10	Division of Environmental Remediation Technical Guide 10
DOT	Department of Transportation
DUSR	Data Usability Summary Report
EC	Engineering Control
ELAP	Environmental Laboratory Accreditation Program
EM	Electromagnetic
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
eV	Electron Volt
GPR	Ground Penetrating Radar
GPS	Global Positioning System
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HPD	Housing Preservation and Development
HREC	Historic Recognized Environmental Condition
IC	Institutional Control
IDW	Investigation-Derived Waste
LIRR	Long Island Railroad
LBP	Lead-Based Paint
LUST	Leaking Underground Storage Tank
MDL	Method Detection Limit
MTA	Metropolitan Transit Authority
NELAP	National Laboratory Accreditation Program
NGVD	National Geodetic Vertical Datum
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation

Acronym	Definition
NYSDOH	New York State Department of Health
OEM	Office of Environmental Management
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PBS	Petroleum Bulk Storage
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethylene
P.E.	Professional Engineer
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonate
PGWSCO	Protection of Groundwater Soil Cleanup Objective
PID	Photoionization Detector
QA/QC	Quality Assurance/Quality Control
QHHEA	Qualitative Human Health Exposure Assessment
QEP	Qualified Environmental Professional
RA	Remedial Action
RAOs	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RDI	Remedial Design Investigation
RDIR	Remediation Design Investigation Report
REC	Recognized Environmental Condition
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RL	Reporting Limit
RPD	Relative Percent Difference
RRSCO	Restricted Residential Soil Cleanup Objective
RSCO	Recommended Soil Cleanup Objective
SCO	Soil Cleanup Objective
SIM	Selective Ion Monitoring
SSDS	Sub-Slab Depressurization System
SVOC	Semivolatile Organic Compound
TAGM	Technical and Administrative Guidance Memorandum
TAL	Target Analyte List
TCE	Trichloroethylene
TOGS	Technical and Operational Guidance Series
Trans-1,2-DCE	Trans-1,2-dichloroethylene
TRIS	Toxic Release Inventory System
UST	Underground Storage Tank

Acronym	Definition
UUSCO	Unrestricted Use Soil Cleanup Objective
VOC	Volatile Organic Compound

CERTIFICATION

I, Deborah Shapiro, QEP, certify that I am currently a Qualified Environmental Professional (QEP), as defined in 6 NYCRR Part 375 and that this Remedial Design Investigation Report (RDIR) was prepared in accordance with all applicable statutes and regulations, and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan, work plan addenda, and any DER-approved modifications.

Deborah Shapiro, QEP	02/24/2020	
Qualified Environmental Professional	Date	Signature

EXECUTIVE SUMMARY

This Remedial Design Investigation (RDI) Report (RDIR) provides information for the establishment of remedial action (RA) objectives (RAOs), evaluation of RA alternatives, and selection of a remedy pursuant to Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation. The RDI described in this RDIR is consistent with applicable guidance.

Site Location and Current Usage

The Atlantic Chestnut – Lot 1 site [New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C224234] is an approximately 65,945-square foot parcel located at 3264 Fulton Street in the East New York neighborhood of Brooklyn, hereafter referred to as the "Site". The Site is identified on the New York City Tax Map as Brooklyn Borough Tax Block 4143, Lot 1. Historically, Lot 1 encompassed the entirety of Block 4143, but was apportioned into three lots (Lots 1, 2, and 3) in 2016.

The Site consists of a vacant lot with a former partial cellar along the entire eastern portion, which was filled with construction and demolition debris to approximately eight feet below sidewalk grade. The Site was formerly developed with vacant, interconnected, factory buildings on the southern, eastern, and western portions of the Site, with an asphalt-paved truck loading bay on the north-central portion. The former buildings were vacated in 2012 after a fire caused severe structural damage to the buildings, which were demolished in 2016.

A Site Location map is provided as Figure 1, and a Site and Sample Location Plan is provided as Figure 2.

Description of Surrounding Property

The Site is abutted to the north by the elevated J and Z Metropolitan Transit Authority (MTA) subway tracks above Fulton Street, to the east by Euclid Avenue, to the west by Chestnut Street, and the south by vacant lots (BCP Site Nos. C224235 and C224236). The surrounding area is developed primarily with residential, commercial, manufacturing, transportation, and industrial uses. The Long Island Railroad (LIRR) tracks are located beneath Atlantic Avenue to the south.

Proposed Development Plan

The proposed development is still being finalized, but is currently anticipated to consist of a new 8- to 14-story mixed-use building comprising approximately 415,000 gross square feet. When completed, the building will contain two partial cellars on the eastern and western portions and two crawlspaces on the northern and southern portions. The ground floor space will include approximately 2,000-square feet of residential amenities, approximately 19,500-square feet of retail space, and 4 affordable residential units with an approximately 17,300-square foot centrally-located landscaped courtyard. The 2nd through 14th floors will contain 399 affordable residential units. Resident roof access and additional community space will be located on the 9th, 13th, and 14th floors.

Past Uses of Site and Area of Concern (AOC)

Historic records indicated that the Site was developed with residences and a road in 1887 and with industrial and manufacturing uses, including the Columbia Machine Works and Malleable Iron Company, the Columbia Cable and Electric Corporation, Blue Ridge Farms, Inc., and Chloe Foods

Corp. between 1908 and 2012. Blue Ridge Farms, Inc. and Chloe Foods Corp. are listed on multiple federal and state databases (further discussed in Section 2.2). Prior uses that appear to have led to Site contamination include blacksmithing and stamping, a brass foundry, woodworking, a machine shop, tank and engine rooms, an iron works, wire braiding, and cable manufacturing. The Site has been vacant since a July 2012 fire caused severe structural damage to the former Site buildings, which were demolished between July and December 2016.

The AOC for the RDI included the documented elevated concentrations of chlorinated volatile organic compounds (CVOCs) detected in soil and groundwater across the Site.

Summary of the Work Performed under the Remedial Design Investigation (RDI)

The RDI included the following scope of work:

1. The advancement of 23 soil borings with continuous sample collection and laboratory analysis of 92 soil samples to determine the horizontal and vertical extents of soil contamination.
2. The installation of 4 permanent, 2-inch diameter nested groundwater monitoring wells screened in shallow, intermediate, and deep groundwater with the collection and laboratory analysis of 13 groundwater samples. Five groundwater samples were also collected from the wells installed during the RI.
3. The performance of a groundwater monitoring well elevation survey to develop groundwater contour maps and determine shallow, intermediate, and deep groundwater flow direction beneath the Site.

Summary of Hydrogeological Findings

The following geologic and hydrogeologic conditions were noted:

1. Based on an August 2014 survey of the Site and the south-adjoining properties (BCP Site Nos. C224235 and C224236) by Roguski Land Surveying, P.C., the Site lies at an elevation of approximately 37 to 41 feet above National Geodetic Vertical Datum (NGVD), an approximate of mean sea level. The former cellar located on the eastern portion of the Site along Euclid Avenue lies at an elevation of approximately 31 feet above NGVD and the former truck loading bay on the north-central portion of the Site slopes down towards the south.
2. The stratigraphy of the Site, from the surface down, generally consisted of fill comprising sand, silt, and gravel with varying amounts of concrete, brick, clay, and asphalt up to approximately 12 feet below grade, underlain by apparent native sand, gravel, clay, and silt to boring termination depths (up to 80 feet below grade). Bedrock was not encountered.
3. Groundwater was measured at depths ranging from 9.5 to 9.3 feet above NAVD in groundwater monitoring wells on the northern and southern portions of the Site, respectively.
4. Based on the well elevation surveys, shallow, intermediate, and deep groundwater general flow in a southerly direction beneath the Site.

Summary of Environmental Findings

A total of 92 soil samples were analyzed for chlorinated volatile organic compounds (CVOCs) by Environmental Protection Agency (EPA) Method 8260; and 8 soil samples were analyzed for polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270 and the Resource Conservation and Recovery Act (RCRA) metals by EPA Method 6000/7000 series. Soil sample analytical results were compared to the 6 New York Codes, Rules, and Regulations (NYCRR) Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Restricted Residential Soil Cleanup Objectives (RRSCOs), the applicable Soil Cleanup Objectives (SCOs) for the proposed future use of the Site. Soil sample analytical results for CVOCs were additionally compared to the 6 NYCRR Part 375 Protection of Groundwater SCOs (PGWSCOs).

The CVOC tetrachloroethylene (PCE) was detected above its PGWSCO and its UUSCO in shallow soil samples L1-RDI-SB-18 (4-5) 20170814 and L1-RDI-SB-24 (4-5) 20170815 on the southwestern portion of the Site. The PCE breakdown compound cis-1,2-dichloroethylene (cis-1,2-DCE) was detected above its UUSCO and PGWSCO, but below its RRSCO in soil sample L1-RDI-SB-18 (4-5) 20170814. Trichloroethylene (TCE) was detected in 14 soil samples between 4 feet below grade and the saturated zone (32 feet below grade) across the southern portion of the Site at concentrations above its UUSCO, RRSCO, and/or PGWSCO. The highest concentration of TCE [1,220 milligrams per kilogram (mg/kg) from a diluted analysis] was detected between 4 and 5 feet below grade on the south-central portion of the Site in soil sample L1-RDI-SB-25 (4-5) 20170815. Methylene chloride was detected in one shallow soil sample on the southern portion of the Site at a concentration slightly above its UUSCO and PGWSCO, but below its RRSCO. Lead was detected at a concentration above its UUSCO but below its RRSCO in one shallow soil sample on the southern portion of the Site.

Soil analytes detected above UUSCOs, RRSCOs, and/or PGWSCOs are presented in In-Text Table 1.

In-Text Table 1
Soil Analytes Detected Above UUSCOs, RRSCOs, and/or PGWSCOs

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	PGWSCO (mg/kg)	Concentration (mg/kg)
Cis-1,2-dichloroethylene (Cis-1,2-DCE)	L1-RDI-SB-18 (4-5) 20170814	0.25	100	0.25	0.616
Lead, Total	L1-RDI-SB-16 (5) 20170814	63	400	N/A	312
Methylene Chloride	L1-RDI-SB-24 (4-5) 20170815	0.05	100	0.05	0.0572
Tetrachloroethylene (PCE)	L1-RDI-SB-18 (4-5) 20170814	1.3	19	1.3	19.4
	L1-RDI-SB-24 (4-5) 20170815				171 D
Trichloroethylene (TCE)	L1-RDI-SB-11 (7-9) 20171115	0.47	21	0.47	2.38 D
	L1-RDI-SB-11 (11-13) 20171115				6.75 D
	L1-RDI-SB-11 (21-23) 20171115				16.6 D
	L1-RDI-SB-18 (4-5) 20170814				11.1
	L1-RDI-SB-24 (4-5) 20170815				243 D
	L1-RDI-SB-25 (4-5) 20170815				1,220 D
	L1-RDI-SB-25 (5-7) 20170815				1.48 D
	L1-RDI-SB-25 (7-9) 20170815				25.1 D

In-Text Table 1
Soil Analytes Detected Above UUSCOs, RRSCOs, and/or PGWSCOs

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	PGWSCO (mg/kg)	Concentration (mg/kg)
	L1-RDI-SB-26 (4-5) 20170815				37.2 D
	L1-RDI-SB-26 (4-5) 2017115				18.7 D
	L1-RDI-SB-27 (4-5) 20170815				9.67 D
	L1-RDI-SB-28 (4-5) 20170815				6.33 D
	L1-RDI-SB-32 (4-5) 20170816				1.15 D
	L1-RDI-SB-32 (5-7) 20170816				9.01 D

Notes:
mg/kg - milligrams per kilograms = parts per million
D - The reported concentration is the result of a diluted sample analysis.
N/A - The standard is not applicable to the compound.

Thirteen groundwater samples were analyzed for CVOCs by EPA Method 8260 and 18 groundwater samples were analyzed for 1,4-Dioxane (1,4-Dx) by EPA Method 8260C Selective Ion Monitoring (SIM), and perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) by EPA Modified Method 537. Groundwater sample analytical results for CVOCs were compared to the NYSDEC Technical and Operations Guidance Series (TOGS) standards and guidance values. The EPA established a combined drinking water standard for a list of 21 perfluorinated compounds (PFCs), including PFOA and PFOS, of 70 parts per trillion (ppt). For comparison purposes, the results for PFOA and PFOS are compared to the EPA combined standard, although it is not directly applicable to the results included in this report. Groundwater standards have not been established for 1,4-Dx.

Two CVOCS were detected above their respective TOGS values in the groundwater samples, including PCE in one shallow groundwater sample and TCE in each of the four shallow groundwater samples. PFOA and PFAS was detected above the combined standard of 70 ppt in two groundwater samples, L1-RI-MW-1 20170828 and L1-RI-MW-3 20170828, at concentrations of 75.7 ppt and 88.4 ppt, respectively.

Groundwater analytes detected above TOGS values are presented in In-Text Table 2.

In-Text Table 2
Groundwater Analytes Detected Above TOGS Values

Analyte	Sample ID	TOGS Value (µg/L)	Concentration (µg/L)
Tetrachloroethene (PCE)	L1-RDI-MW-6S 20170829	5	5.7
Trichloroethene (TCE)	L1-RDI-MW-6S 20170829	5	22.3
	L1-RDI-MW-7S 20170829		30.7
	L1-RDI-MW-8S 20170829		53.8
	L1-RDI-MW-9S 20170830		63.6

Note:
µg/L = micrograms per Liter

Based on an evaluation of the data and information from the RDI and previous investigations conducted at the Site, the nature and extent of contaminated soil and groundwater present at the Site has been determined. The CVOCs detected in soil above UUSCOs, RRSCOs, and/or PGWSCOs were found primarily in the southern and southwestern portions of the Site. Elevated concentrations of TCE were detected primarily in shallow soil between 4 and 5 feet below grade, with deeper contamination on the south-central portion of the Site extending vertically down to the water table (32 feet below grade). The greatest concentrations of TCE were detected in soil borings L2-SRI-SB-24 and L2-RDI-SB-24 at concentrations of 1,220 mg/kg and 243 mg/kg, respectively.

The CVOCs PCE and TCE were detected at concentrations above their respective TOGS standard or guidance values in the shallow screened monitoring wells; PCE was detected in one groundwater sample on the south-central portion of the Site and TCE was detected in each of the four shallow groundwater samples collected. No exceedances of TOGs standards or guidance values were detected in the intermediate- or deep-screened wells.

PFOA and PFAS were detected above the EPA combined standard of 70 ppt in two groundwater samples, L1-RI-MW-1 20170828 and L1-RI-MW-3 20170828, at concentrations of 75.7 ppt and 88.4 ppt, respectively. It is noted that the standard is not directly applicable to the compounds analyzed.

REMEDIAL DESIGN INVESTIGATION REPORT

1.0 SITE BACKGROUND

This Remedial Design Investigation (RDI) Report (RDIR) summarizes the investigation work performed at the Site from August 7 to August 30, 2017; on November 15 and December 20, 2017; and on February 26, 2018. The goal of the RDI was to: further horizontally and vertically delineate known soil and groundwater contamination; investigate the potential presence of the emerging contaminants 1,4-Dioxane (1,4-Dx), and perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) in groundwater; and to aid in the design of the remedy. The RDI, described in this RDIR, was conducted in general accordance with AKRF's June 2017 NYSDEC-approved Remedial Design Investigation Work Plan (RDIWP) and Quality Assurance Project Plan (QAPP). The RDI was also conducted in general accordance with AKRF's September 2017 Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP), included as Appendix H of the Draft Remedial Action Work Plan (RAWP).

1.1 Site Location and Current Usage

The Atlantic Chestnut – Lot 1 site [New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C224234] is an approximately 65,945-square foot parcel located at 3264 Fulton Street in the East New York neighborhood of Brooklyn, hereafter referred to as the "Site". The Site is identified on the New York City Tax Map as Brooklyn Borough Tax Block 4143, Lot 1. Historically, Lot 1 encompassed the entirety of Block 4143, but was apportioned into three lots (Lots 1, 2, and 3) in 2016.

The Site consists of a vacant lot with a former partial cellar on the eastern portion along Euclid Avenue, which was filled with construction and demolition debris from the demolished building to approximately eight feet below sidewalk grade. Prior to demolition in 2016, the Site was developed with a series of vacant, interconnected, factory buildings on the southern, eastern, and western portions of the Site and an asphalt-paved truck loading bay on the north-central portion, which slopes down towards the south. The Site has been vacant since a July 2012 fire caused severe structural damage to the former Site buildings, which were demolished between July and December 2016.

A BCP Site Location Map is provided as Figure 1, and a Site and Sample Location Plan is provided as Figure 2.

1.2 Description of Surrounding Property

The Site is abutted to the north by the elevated J and Z Metropolitan Transit Authority (MTA) subway tracks above Fulton Street, to the east by Euclid Avenue, to the west by Chestnut Street, and the south by vacant lots (BCP Site Nos. C224235 and C224236). The surrounding area is developed primarily with residential, commercial, manufacturing, transportation, and industrial uses. The Long Island Railroad (LIRR) tracks are located beneath Atlantic Avenue to the south.

1.3 Proposed Development Plan

The proposed development is still being finalized, but is currently anticipated to consist of a new 8- to 14-story mixed-use building comprising approximately 415,000 gross square

feet. When completed, the building will contain two partial cellars on the eastern and western portions and two crawlspaces on the northern and southern portions. The ground floor space will include approximately 2,000-square feet of residential amenities, approximately 19,500-square feet of retail space, and 4 affordable residential units with an approximately 17,300-square foot centrally-located landscaped courtyard. The 2nd through 14th floors will contain 399 affordable residential units. Resident roof access and additional community space will be located on the 9th, 13th, and 14th floors.

2.0 SITE HISTORY

2.1 Past Uses and Ownership

Historic records indicate that the Site was developed with residences and a road in 1887 and with industrial and manufacturing uses, including the Columbia Machine Works and Malleable Iron Company, the Columbia Cable and Electric Corporation, Blue Ridge Farms, Inc., and Chloe Foods Corp. between 1908 and 2012. Blue Ridge Farms, Inc. and Chloe Foods Corp. are listed on multiple federal and state databases (as discussed in Section 2.2). Prior uses that appear to have led to Site contamination include blacksmithing and stamping, a brass foundry, woodworking, a machine shop, tank and engine rooms, an iron works, wire braiding, and cable manufacturing. The Site has remained vacant since a July 2012 fire caused severe structural damage to the former Site buildings. Demolition of the Site buildings was completed between July and December 2016.

Past owners of Block 4143, Lot 1 include: Columbia Electric Realty, Inc. in 1980; Avnal, Inc. from 1980 to 1984; Blue Ridge Farms, Inc. from 1984 to 2004; 3301 Atlantic Avenue, LLC from 2004 to 2013; Sapphire Luxury Estates, LLC from 2013 to 2014; Atlantic Chestnut, LLC from 2014 to 2015; and Atlantic Chestnut Affordable Housing, LLC from 2015 to the present. It is noted that Block 4143 formerly comprised Lot 1, but has subsequently been divided into three lots (Lots 1, 2, and 3).

2.2 State and Federal Database Listings

2.2.1 Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

3301 Atlantic Avenue, the address historically associated with the entirety of Block 4143 (former Lot 1), was listed in the CERCLIS database for the removal of a potential tank of anhydrous ammonia after a fire engulfed the eastern portion of the Site in July 2012. According to a July 2012 EPA Pollution Situation Report, approximately 18,800 pounds of anhydrous ammonia previously used for refrigeration at the Site had been removed prior to the fire in 2012. An inspection by the EPA in association with the NYC Office of Emergency Management (OEM), NYC Housing Preservation and Development (HPD), and NYSDEC concluded that little damage occurred in the portion of the building that potentially housed the ammonia refrigeration system. Additionally, perimeter air monitoring conducted during the July 2012 inspection reportedly did not indicate evidence of an ammonia release.

2.2.2 Petroleum Bulk Storage (PBS)

The Site, through its historic address 3301 Atlantic Avenue, is listed as PBS Facility 2-095923 on the NYSDEC PBS database. During demolition of the former Site buildings, the 10,000-gallon fuel oil aboveground storage tank (AST) was cleaned and transported off-site in accordance with applicable local, state, and federal regulations. The NYSDEC registration of the closed and removed 10,000-gallon AST has not yet been updated to reflect the current status of the tank. The 300-gallon AST listed as “In Service” in the PBS database was not encountered on-site or on the two south-adjoining properties formerly comprising former Lot 1 during building demolition; or identified during the geophysical survey. The AST may

exist in the Site subsurface or beneath one of the adjacent lots that were also formerly associated with the historic address 3301 Atlantic Avenue. Details of the facility data is summarized in In-Text Table 3.

In-Text Table 3
Petroleum Bulk Storage (PBS) Facility Data

Facility	Tank No.	Capacity/Tank Type (gallons)	Product Stored	Status
Blue Ridge Farms, Inc. 3301 Atlantic Avenue	001	10,000 UST	No. 2 Fuel Oil	Closed - Removed
	002	4,000 UST	Gasoline	Closed - Removed
	003	4,000 UST	Gasoline	Closed - Removed
	004	4,000 UST	Gasoline	Closed - Removed
	005	4,000 UST	Diesel	Closed - Removed
	FO #1	10,000 AST	No. 2 Fuel Oil	Closed - Removed
	LO #1	300 AST	Lubrication Oil	In Service

Note:
UST – underground storage tank
AST – aboveground storage tank

2.2.3 Chemical Bulk Storage (CBS)

The Site, through its historic address 3301 Atlantic Avenue, is listed as CBS Facility ID 2-000338 on the NYSDEC CBS database. The ammonia ASTs listed as "Converted/Non-Regulated" in the CBS database were not encountered during demolition or identified during the geophysical survey. The ammonia ASTs may have been removed, or may exist in the subsurface of the Site or one of the south-adjacent lots that were also formerly associated with the historic address 3301 Atlantic Avenue. Details of the facility data is summarized in In-Text Table 4.

In-Text Table 4
Chemical Bulk Storage (CBS) Facility Data

Facility	Tank No.	Capacity/Tank Type (gallons)	Product Stored	Status
Blue Ridge Farms 3301 Atlantic Avenue Brooklyn, New York	1	1,500 AST	Sodium Hypochlorite	Closed - Removed
	2	1,000 AST	Sodium Hydroxide	Closed - Removed
	3	1,000 AST	Potassium Hydroxide	Closed - Removed
	001	3,664 AST	Ammonia	Converted/Non-Regulated
	002	3,664 AST	Ammonia	Converted/Non-Regulated

2.2.4 Historic Petroleum Spills

Four closed-status NYSDEC petroleum spill numbers are associated with the historic Site address, 3301 Atlantic Avenue. The following is a summary of the spills as listed in the NYSDEC Spills database:

- Spill No. 8805745 was assigned to the historic address 3301 Atlantic Avenue when two 4,000-gallon tanks failed tank tightness tests. Spill No. 8805745 was combined with Spill No. 0101620 when field evidence of petroleum

contamination and volatile organic compounds (VOCs) above applicable standards were identified in soil and groundwater samples collected adjacent to a closed-in-place tank system on the southern portion of former Lot 1. According to Conestoga-Rovers & Associates February 2007 Status Report, approximately 600 pounds of permanganate mixed with approximately 3,300 gallons of water was injected into 19 chemical oxidation injection points located on the south-central portion of former Lot 1 (current BCP Site No. C224236; Atlantic Chestnut – Lot 3). Post-treatment groundwater laboratory results indicated that detections of petroleum-related VOCs and semivolatile organic compounds (SVOCs) were below applicable standards and/or laboratory detection limits. Spill No. 8805745 was closed in March 2003 and Spill No. 0101620 was closed in September 2007. Based on details in the database, this spill did not occur on-site.

- Spill No. 9412423 was reported in December 1994 when a tank gauge failed and approximately three gallons of No. 2 fuel oil were reportedly released onto the concrete at an exterior portion of the Site block. According to the listing, the product was cleaned up and the spill closed the same day.
- Spill No. 0205903 was reported in September 2002 when a traffic accident caused approximately 100 gallons of diesel fuel to be released into the subsurface, affecting soil. No further details were listed. The spill was closed on the same day it was reported. Based on details in the database, the spill most likely occurred on the street adjacent to the Site.

Based on listing details, Spill Nos. 0205903 8805745 and 0101620 likely occurred off-site. Spill No. 9412423 may have occurred on-site.

2.2.5 Toxics Release Inventory System (TRIS)

EPA Facility ID 11208BLRDG3301A was issued for Blue Ridge Foods, Inc., associated with the historic address 3301 Atlantic Avenue, for fugitive or non-point air emissions of 6,000 pounds per year of ammonia in 1990.

2.2.6 Air Discharge Facilities Index (ADF)

EPA Facility ID 36047N1202 was issued for Blue Ridge Farms, Inc., associated with the historic address 3301 Atlantic Avenue, which was listed as an Operational State Implementation Plan (SIP) source and Title V Permits for nitrogen dioxide. According to the listing, the facility was in compliance with procedural requirements and in violation with regard to procedural compliance.

2.3 Previous Environmental Reports

Subsurface (Phase II) Investigation Report – Blue Ridge Farms, 3301 Atlantic Avenue, 84 Dinsmore Place, and 111 Dinsmore Place, Brooklyn, New York, AKRF, Inc. (AKRF), May 2001

AKRF conducted a Subsurface (Phase II) Investigation of a larger area including the Site in May 2001. At the time of the investigation, the Site was developed with food processing and storage buildings. The Subsurface (Phase II) Investigation included the performance of a geophysical survey across exterior portions of the Site and the advancement of four soil borings with the collection and analysis of soil samples, and the installation of temporary groundwater monitoring wells with the collection and analysis of groundwater samples. The scope of the investigation was based on a December 2000 Phase I Environmental Site Assessment (ESA) of the Site by IVI Environmental, Inc.

Due to reported reinforced concrete across the Site, the geophysical survey was inconclusive. Soil consisted of fill material (brick, concrete, asphalt, clay, silt, sand, and gravel) up to 6 feet below grade, underlain by native soil (sand, gravel, silt, and clay) to 16 feet below grade. Groundwater was reported at approximately 32 feet below grade.

Petroleum-related VOCs and the SVOC naphthalene were detected in soil above NYSDEC Recommended Soil Cleanup Objectives (RSCOs) listed in the NYSDEC Technical and Administrative Guidance Memorandum (TAGM), the applicable soil cleanup objectives at the time of the investigation. Solvent and petroleum-related VOCs and metals were detected above their respective NYSDEC Technical and Operations Guidance Series (TOGS) standards and guidance values in the groundwater samples collected from the south-adjacent properties (BCP Site Nos. C224235 and C224236). VOCs were detected above TOGS in pre- and post- process water samples. Based on elevated photoionization detector (PID) detections and laboratory analytical data from the soil borings surrounding the tank system on the southern portion of the Site block (BCP Site No. C224236), Spill No. 0101620 was assigned to the historic address 3301 Atlantic Avenue.

AKRF recommended the preparation of a work plan to be submitted to the NYSDEC to further delineate, excavate, and dispose of petroleum-contaminated soil at BCP Site No. C224236 to close Spill No. 0101620.

Phase I Environmental Site Assessment – 3301 Atlantic Avenue, 3238 Fulton Street, 226-296 Euclid Avenue, and 215-279 Chestnut Street, Brooklyn, New York, Property Solutions, Inc. (PSI), June 2010

PSI conducted a Phase I ESA of a larger area including the Site in April 2014. The Phase I ESA identified historical uses at the Site including: a machine and iron works facility, an electrical cable manufacturer, and a food processing plant; records indicating that five underground storage tanks (USTs) were previously located on-site; and Historic Recognized Environmental Conditions (HRECs) at the Site, including the Site's listing in the Leaking Underground Storage Tank (LUST) and Spills databases. PSI recommended conducting a Subsurface Investigation, including a geophysical survey, to investigate the potential impacts associated with historic operations and fuel oil storage at the Site. It is noted by AKRF that some of these Recognized Environmental Conditions (RECs)/Historic

RECs (HRECs) are likely related to the south-adjacent property(ies) BCP Site Nos. C224235 and/or C224236.

Asbestos Investigation and Bulk Sample/Laboratory Analysis – 3301 Atlantic Avenue, Brooklyn, New York, Safety Environmental, Co. of NY, Inc. (Safety), July 2013

Safety conducted an asbestos survey of the former buildings located on the Site and south-adjacent properties (BCP Site Nos. C224235 and C224236) in July 2013. A total of 131 samples were collected for laboratory analysis from on- and off-site portions of the buildings. Asbestos-containing material (ACM) was identified within the following portions of the former buildings suspected to be located on-site: boiler No. 4 door insulation, boiler No. 3 caulking, first floor pipe insulation, roof transite shingles, roof membranes, roof flashing, and roof vent membranes. It could not be determined from the report how many of the samples were collected on-site and on the south-adjacent properties. Safety recommended removal of all ACM prior to demolition of the former on- and off-site buildings.

Phase I Environmental Site Assessment – 3301 Atlantic Avenue (Block 4143, Lot 1), Brooklyn, New York, Legette, Brashears, & Graham, Inc. (LBG), March 2014

LBG conducted a Phase I ESA of the Site and the south-adjoining lots (BCP Site Nos. C224235 and C224236) in April 2014. The Phase I ESA identified RECs associated with former uses at the Site, including: blacksmithing and stamping, a machine and iron works shop, an electric cable manufacturer, a gasoline filling station, and listings in the Spills database. The report noted the following de Minimis conditions: nearby hazardous materials/waste storage, use, and/or releases; and the potential presence of ACM, lead based paint (LBP), and fluorescent lighting. LBG recommended that any contaminated soil discovered during redevelopment of the Site be handled according to applicable federal, state, and local regulations.

Chain of Title Summary Report – 3301 Atlantic Avenue and 242 Chestnut Street, Brooklyn, New York, Phipps Houses, 2015

A Chain of Title Summary Report was compiled by Phipps Houses, which outlined ownership of the Site, and south-adjacent and nearby properties between 2004 and 2015. The report showed the transfer of ownership from Blue Ridge Farms, Inc. to 3301 Atlantic Avenue, LLC in May 2004; from 3301 Atlantic Avenue, LLC to Sapphire Luxury Estates, LLC in July 2013; a foreclosure and sale judgment for the Site and north-adjacent properties to be sold at public auction in September 2013; and an agreement for assignment of rights and claims from Blue Ridge Farms, Inc. to 3301 Atlantic Partners, LLC in March 2014.

Phase I Environmental Site Assessment – 3301 Atlantic Avenue and 242 Chestnut Street, Brooklyn, New York, AKRF, Inc. (AKRF), September 2015

AKRF conducted a Phase I ESA of a larger area including the Site in September 2015. The Phase I ESA identified the following RECs at the Site:

- Historic on-site industrial operations, including the Columbia Machine Works and Malleable Iron Company, and the Columbia Cable and Electric Corporation. It was concluded that undocumented releases from historic industrial uses may have affected subsurface conditions at the Site.

- The address 3301 Atlantic Avenue was formerly associated with the entirety of Block 4143. At the time of the Phase I ESA, 3301 Atlantic Avenue was listed in the following databases: PBS database for the storage of several USTs and ASTs, CERCLIS, CBS, Spill database for Spill No. 0101620, TRIS; and ADF databases. It was reported that these listings may have been related to the Site and/or south-adjoining property(ies).
- The former interconnected factory buildings were damaged by a fire in 2012. Abundant debris, including metal, wood, and ash were observed throughout the buildings during the Site inspection. Based on the documented storage of petroleum and chemicals, it was concluded that undocumented discharges due to the fire may have affected subsurface conditions at the Site, including high concentrations of metals and SVOCs in the ash.
- Two July 2013 Asbestos Reports identified ACM throughout the former buildings' interiors and on exterior built-up roofing materials. Interior and exterior building materials were observed to be in fair to poor condition, with the majority of the eastern portion of the former Site buildings damaged by fire. Observed painted surfaces were reported to be generally in fair to poor condition. Based on the age of the former Site buildings, it was concluded that LBP may have been present and the fluorescent lighting fixtures and remaining electrical equipment may have contained mercury and/or polychlorinated biphenyls (PCBs). No evidence of leaks or stains from these fixtures and equipment was reported; however, it was noted that releases may have occurred during the fire that were not able to be investigated due to inaccessibility and/or debris observed during the inspection.

  AKRF recommended a Subsurface Investigation to characterize subsurface conditions of soil, groundwater, and soil vapor across the Site prior to redevelopment.

  <u>Subsurface Investigation Report – 3264 Fulton Street, Brooklyn, New York, AKRF, Inc. (AKRF), January 2016</u>

  AKRF conducted a Subsurface Investigation at the Site in December 2015, which was based on the September 2015 Phase I ESA by AKRF. The Subsurface Investigation included the advancement of 3 soil borings with the collection and laboratory analysis of 6 soil samples; the installation of 1 temporary groundwater monitoring well at 1 of the boring locations with the collection and laboratory analysis of 1 groundwater sample; and the installation of 1 temporary soil vapor point with the collection and laboratory analysis of 1 soil vapor sample. An ambient air sample was collected for comparison and quality assurance/quality control (QA/QC) purposes.

  Soil beneath the Site consisted of fill material (sand, gravel, silt, concrete, brick, clay, and asphalt) to depths up to approximately 11 feet below grade, underlain by apparent native soil (sand and gravel) up to 40 feet below grade (the extent of the soil borings). Groundwater was encountered at approximately 30 feet below grade.

  The VOC TCE was detected in two soil samples at concentrations above its UUSCO. Arsenic, copper, lead, and zinc were detected in soil samples at concentrations above their respective UUSCOs and/or RRSCOs. The VOC chloroform was detected in the groundwater sample at a concentration slightly above its TOGS value. Sodium was detected in the unfiltered and filtered groundwater sample at concentrations above its TOGS value. VOCs associated with petroleum were detected in soil vapor samples at

individual concentrations up to 161 micrograms per cubic meter (µg/m^3) and solvent-related VOCs were detected at individual concentrations up to 903 µg/m^3. AKRF concluded that the soil, groundwater, and soil vapor contaminants appear to be associated with former industrial operations at the Site.

Remedial Investigation Report – Atlantic Chestnut – Lot 1, 3264 Fulton Street, Brooklyn, New York, AKRF, Inc. (AKRF), April 2017

AKRF conducted a Remedial Investigation (RI) at the Site in December 2016 in accordance with the NYSDEC-approved November 2015 RI Work Plan (RIWP). The RI included: the performance of a geophysical survey across accessible portions of the Site; the advancement of 14 soil borings and the collection of 26 soil samples for chemical analysis; the installation of 5 permanent, 2-inch diameter groundwater monitoring wells and the collection of 5 groundwater samples for chemical analysis; the installation of 6 temporary soil vapor probes across the Site and the collection of 6 soil vapor samples and 1 ambient air samples for chemical analysis; and the survey of groundwater monitoring well elevations on the Site and south-adjoining lots to develop groundwater contour maps to determine groundwater flow beneath the Site and surrounding area.

The stratigraphy of the Site, from the surface down, generally consisted of fill comprising sand, silt, gravel, concrete, brick, and metal up to a maximum depth of 6 feet below grade, underlain by apparent native sand with varying amounts of gravel and silt to boring termination depths (up to 35 feet below grade). Groundwater was encountered at depths ranging from approximately 30.5 feet to 32.7 feet below sidewalk grade or 8.6 to 8.7 feet above national geodetic vertical datum (NGVD), an approximate of mean sea level in groundwater monitoring wells on the northern and southern portions of the Site, respectively. Based on the well elevation survey, groundwater flows in a southerly direction beneath the Site and surrounding area.

The RI Report (RIR) concluded that contaminated soil, groundwater, and soil vapor present at the Site were likely attributable to historic Site usage, including the former industrial and manufacturing uses. The presence of copper, hexavalent chromium, lead, mercury, and zinc in shallow fill and the elevated detections of polycyclic aromatic hydrocarbons (PAHs) in soil were attributed to historic filling, undocumented discharges due to a fire in 2012, and/or historic operations at the Site. The presence of petroleum-related compounds in soil vapor were likely related to the former storage tanks and/or historic Site usage. The presence of the chlorinated solvent-related compounds TCE in soil, groundwater, and soil vapor; PCE in groundwater and soil vapor; chloroform in groundwater; and carbon tetrachloride in soil vapor were likely related to the historic manufacturing operations at the Site.

Remedial Design Investigation Work Plan – Atlantic Chestnut – Lot 1, 3264 Fulton Street, Brooklyn, New York, AKRF, Inc. August, June 2017

AKRF prepared an RDIWP June 2017. The RDIWP established a field protocol for the RDI and included: the advancement of 22 soil borings with the collection and laboratory analysis of soil samples from each boring; and the installation of 4 nested groundwater monitoring wells with the collection and laboratory analysis of 12 groundwater samples from the proposed nested groundwater monitoring wells, and five groundwater samples

from the five monitoring wells (L1-RI-MW-1 through L1-RI-MW-5) installed during the December 2016 RI. The RDIWP was approved in a July 3, 2017 NYSDEC-issued letter.

Interim Remedial Measure Work Plan – Atlantic Chestnut - Lot 1, 3264 Fulton Street, Brooklyn, New York, AKRF, Inc. (AKRF), July 2018

AKRF prepared an Interim Remedial Measure (IRM) Work Plan (IRMWP) to address the potential for off-site migration of soil vapor until a Site-wide remedy can be implemented under a NYSDEC-approved RAWP. The IRMWP included the preliminary design, installation, and startup for the proposed soil vapor extraction (SVE) system (SVES) to mitigate the potential for off-site migration of VOCs in soil vapor. The SVES targets the northern, eastern, and western Site boundaries; off-site soil vapor migration to the south are being addressed by SVES installed on the south-adjoining properties (NYSDEC BCP Site Nos. C224235 and C224236). The IRMWP was approved by NYSDEC in a letter dated July 2, 2018.

Soil/Fill Waste Classification Report – Atlantic Chestnut – Lot 1, 3264 Fulton Street, Brooklyn, New York, AKRF, Inc., March 2019

AKRF prepared a Soil/Fill Waste Classification Report in March 2019. The Soil/Fill Waste Classification Report documented the sampling and laboratory analytical data for in-situ soil waste classification sampling conducted by AKRF on August 11, 2017 and December 26 and 27, 2018. The sampling was performed to obtain representative analytical data from the subsurface soil/fill that will be excavated and disposed of during remediation. The report was intended to be used as a supplement to applications for disposal approval at facilities considering accepting Site soil/fill.

Draft Interim Remedial Measure Report (IRMR) – Atlantic Chestnut – Lots 1, 2, and 3, 3264 Fulton Street, 254 Euclid Avenue, and 275 Chestnut Street, Brooklyn, New York, AKRF, Inc., September 2019

AKRF prepared a Draft IRMR for the Site and two south-adjoining lots (BCP Site Nos. C224235 and C224236) in September 2019. The Draft IRMR was prepared to describe the installation, startup, and operation of the IRM SVES. The report summarized fieldwork, including a pilot study, and SVE well and vapor monitoring point installation, system startup, vapor sampling, and long-term system monitoring. The Draft IRMR included three Operation, Maintenance, and Monitoring (OM&M) Plans (one for each BCP site) as appendices, which provide directions for operation and maintenance of the SVES.

Remedial Action Work Plan – Atlantic Chestnut – Lot 1, 3264 Fulton Street, Brooklyn, New York, AKRF, Inc., October 2019

AKRF prepared a Remedial Action Work Plan (RAWP) in October 2019. The RAWP outlined the Remedial Action Objectives (RAOs), which established procedures and cleanup objectives for the protection of public health and the environment. The RAWP established Track 4 Restricted Residential Soil Cleanup Objectives (RRSCOs) and soil handling procedures, required the installation of a vapor barrier and an active sub-slab depressurization system (SSDS) to address potential vapor intrusion into the proposed building, installation of an SVES to remove source material that cannot be excavated, installation and implementation of a groundwater treatment program and installation of post-remedial groundwater monitoring wells, collection and analysis of documentation

samples, installation of a Site-wide composite cover system to prevent direct exposure to residual contamination in soil, a project schedule for construction, and institutional and engineering controls. The RAWP included a Site-specific HASP and CAMP for Site worker and community safety.

2.4 Area of Concern (AOC)

Based on the previous environmental investigations (discussed in Section 2.3), the AOC for the RDI included the documented elevated concentrations of CVOCs in soil and groundwater across the Site.

3.0 PROJECT MANAGEMENT

3.1 Project Organization

The Qualified Environmental Professionals (QEP) responsible for preparation of this RDIR is Deborah Shapiro, QEP.

3.2 Health and Safety

All work described in this report was performed in full compliance with applicable laws and regulations, including Site and Occupational Safety and Health Administration (OSHA) worker safety requirements and Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements. The work described in this report was also performed in accordance with a Site-specific HASP dated September 2017, provided as Appendix H of the Draft RAWP.

4.0 REMEDIAL DESIGN INVESTIGATION ACTIVITIES

The following activities were performed as part of the RDI:

1. The advancement of 23 soil borings with continuous sample collection and laboratory analysis of 92 soil samples to determine the horizontal and vertical extents of soil contamination.
2. The installation of 4 permanent, 2-inch diameter nested groundwater monitoring wells with the collection and laboratory analysis of 18 groundwater samples from nested wells installed during the RDI and 5 groundwater samples from the wells installed during the RI.
3. The performance of a groundwater monitoring well elevation survey to develop groundwater contour maps and determine groundwater flow direction beneath the Site.

The locations of the soil borings and groundwater monitoring wells are shown on Figure 2. A Site-specific shallow, intermediate, and deep groundwater elevation contour maps, including tabulations of the casing elevations and depth to water measurements, are provided as Figures 3, 4, and 5, respectively.

4.1 Soil Boring Advancement

Twenty-three soil borings (denoted as L1-RDI-SB-11 and L1-RDI-SB-15 through L1-RDI-SB-36) were advanced using a direct-push Geoprobe rig operated by AARCO Environmental Services (AARCO) of Lindenhurst, New York. The locations of the soil borings are shown on Figure 2.

Soil borings L1-RDI-SB-15 through L1-RDI-SB-25 and L1-RDI-SB-27 through L1-RDI-SB-36 were advanced to approximately 15 feet below grade (4 to 6 feet below cellar grade at soil borings L1-RDI-SB-34 through L1-RDI-SB-36), the approximate extent of excavation for the proposed new building partial cellars. Soil boring L1-RDI-SB-11 was advanced to the groundwater interface (approximately 32 feet below grade) at the location of RI soil boring L1-RI-SB-11 to delineate concentrations of TCE above UUSCOs, RRSCOs, and/or PGWSCOs between 5 and 31 feet below grade. Due to a laboratory error, soil samples between 5 and 15 feet below grade from soil boring L1-RDI-SB-26 submitted for laboratory analysis in August 2017 were analyzed outside of the method-specified holding time (further discussed in Section 4.5.7) and samples collected from the 2-foot intervals between 7 feet below grade and the groundwater interface were never activated for analysis during resampling in November 2017. Therefore, soil boring L1-RDI-SB-26 was re-advanced and re-sampled during a third mobilization in December 2017.

The soil boring locations were surveyed using the Global Positioning System (GPS) upon their completion and are shown on Figure 2. Soil boring logs are provided in Appendix A.

4.2 Nested Groundwater Monitoring Well Installation

Four permanent nested groundwater monitoring wells [denoted as L1-RDI-MW-6 (S, I, D) through L1-RDI-MW-9 (S, I, D)] were installed using a Rotosonic drill rig operated by AARCO at the locations shown on Figure 2.

Shallow well construction, denoted with an “S”, consisted of 10 feet of 0.020-inch slotted polyvinyl chloride (PVC) monitoring well screen installed 5 feet into the groundwater table. Intermediate well construction, denoted with an “I”, consisted of 10 feet of 0.020-

inch slotted PVC monitoring well screen installed from 50 to 60 feet below grade. Deep well construction, denoted with a "D", consisted of 10 feet of 0.020-inch slotted PVC monitoring well screen installed from 70 to 80 feet below grade.

Each well was finished with a solid PVC riser installed to grade and a No. 2 morie sandpack was installed to approximately two feet above the well screen. The annular space around the solid well riser was sealed with bentonite above each well screen and between all well screens, and the wells were completed with a non-shrinking cement mixture to approximately one foot below grade. The wells were finished with j-plugs and flush-mounted protective locking well covers, and concrete aprons to direct surface water away from the wells. Groundwater monitoring well locations and construction details for all of the wells sampled as part of the RDI are summarized in In-Text Table 5.

In-Text Table 5
Groundwater Monitoring Well Construction Details

Monitoring Well ID	On-Site Well Location	Screened Intervals
L1-RI-MW-1	West-central	28-38'
L1-RI-MW-2	Southwest	25-35'
L1-RI-MW-3	Southeast	25-35'
L1-RI-MW-4	Northeast	25-35'
L1-RI-MW-5	South-central	25-35'
L1-RDI-MW-6S	South-central	25-35'
L1-RDI-MW-6I		50-60'
L1-RDI-MW-6D		70-80'
L1-RDI-MW-7S	South-central	25-35'
L1-RDI-MW-7I		50-60'
L1-RDI-MW-7D		70-80'
L1-RDI-MW-8S	South-central	25-35'
L1-RDI-MW-8I		50-60'
L1-RDI-MW-8D		70-80'
L1-RDI-MW-9S	North-central Lot 2	25-35'
L1-RDI-MW-9I		50-60'
L1-RDI-MW-9D		70-80'

The groundwater monitoring well locations were surveyed by a NYS-licensed surveyor (discussed in Section 4.4) and are shown on Figure 2. The groundwater monitoring elevation surveys are provided as Appendix B. Groundwater monitoring well construction logs are provided in Appendix A. Groundwater sampling is discussed in Section 4.5.3 and groundwater sample analytical results are discussed in Section 5.3.

4.3 Groundwater Monitoring Well Development

Following installation of the nested groundwater wells, the wells were developed via pumping and surging with a Waterra pump affixed with dedicated tubing, a surge block, and foot valve to remove any accumulated fines and establish a hydraulic connection with the surrounding aquifer. Purge water was monitored with a Horiba U-52 water quality monitor during development. Development continued until turbidity within the well was less than 50 nephelometric turbidity units (NTUs) for three successive readings and until water quality indicators stabilized to within 10% for pH, temperature, oxidation reduction potential (ORP), dissolved oxygen, and specific conductivity for three successive readings.

Purge water was containerized in properly labeled Department of Transportation (DOT)-approved 55-gallon drums for off-site disposal at a permitted facility, as discussed in Section 4.5.9. Groundwater monitoring well development logs are provided as Appendix C.

4.4 Groundwater Monitoring Well Location and Elevation Survey

On December 13, 2016, as part of the 2016 RI, groundwater monitoring wells L1-RI-MW-1 through L1-RI-MW-5 and L2-SRI-MW-4 were surveyed by Roguski Land Surveying, P.C. (Roguski), a New York State-licensed surveyor. On August 28, 2017, monitoring wells L1-RDI-MW-6 through L1-RDI-MW-9 were surveyed by Roguski. Elevation measurements were taken at the manhole cover and at the top of each PVC casing on the north side at each of the groundwater monitoring wells. Horizontal and vertical datum was tied to NAVD 88. Based on the Site-specific groundwater depths and the elevation survey, the shallow groundwater flows beneath the Site in a generally southerly direction, and intermediate and deep groundwater flow in a generally south-southwesterly direction beneath the Site.

The locations of the groundwater monitoring wells are shown on Figure 2. Groundwater contour maps showing the well elevations and contours for shallow, intermediate, and deep groundwater collected at the Site on August 28, 2017 are shown on Figures 3, 4, and 5, respectively. The groundwater monitoring well elevation surveys completed during the RI and RDI are provided as Appendix B.

4.5 Sample Collection and Chemical Analysis

Soil and groundwater have been sampled as part of the RDI and are evaluated in this RDIR. The sampling performed and presented in this report provides a basis for the evaluation of subsurface Site conditions and potential remedial action with respect to the media sampled.

4.5.1 Soil Sampling

Soil samples were submitted to SGS Laboratories, Inc. (SGS) of Dayton, New Jersey, for chemical analysis. The sampling was conducted in August, November, and December 2017 in accordance with the NYSDEC-approved RDIWP. The 92 soil samples collected from soil borings L1-RDI-SB-11 and RDI-SB-15 through L1-RDI-SB-36 were analyzed for chlorinated volatile organic compounds (CVOCs) by Environmental Protection Agency (EPA) Method 8260. Eight soil samples collected from soil borings L1-RDI-SB-15, L1-RDI-SB-16, and L1-RDI-SB-34 through L1-RDI-SB-36 were analyzed for polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270 and the Resource Conservation and Recovery Act (RCRA) metals by EPA Method 6000/7000 series.

Thirteen soil samples were collected and analyzed from L1-RDI-SB-11; one from each two-foot interval between 5 feet below grade and the observed groundwater table, encountered at approximately 31 feet below grade. At soil borings L1-RDI-SB-15 and L1-RDI-SB-16, two soil samples were analyzed at 5 and 15 feet below grade and four soil samples (at 7, 9, 11, and 13 feet below grade) were placed on hold pending laboratory results of the 5- and 15-foot samples. Concentrations of CVOCs, PAHs, and metals were not detected above their respective RRSCOs in any of the analyzed samples collected from either of the aforementioned soil

borings; therefore, the samples collected and placed on hold from those soil borings were not analyzed and were discarded by the laboratory in accordance with applicable regulations.

One soil sample was analyzed from soil borings L1-RDI-SB-17 through L1-RDI-SB-33 from the 4 to 5 feet below grade interval and five samples were collected, from each two-foot interval between 5 and 15 feet below grade, and placed on hold pending laboratory analytical results of the 4- to 5-foot sample. Based on the initial analytical results (discussed in Section 5.2), the samples placed on hold from soil borings L1-RDI-SB-18, L1-RDI-SB-24 through L1-RDI-SB-28, and L1-RDI-SB-32 were released for analysis; the remaining samples placed on hold were not analyzed and were discarded by the laboratory in accordance with applicable regulations.

Due to a laboratory error, soil samples placed on hold from soil borings L2-SRI-SB-12, L2-SRI-SB-13, L2-SRI-SB-17, L2-SRI-SB-20, L2-SRI-SB-27, and L2-SRI-SB-28 in November 2017 were not activated within the hold time. The borings were re-advanced in December 2017 and samples were collected between 4 and 15 feet below grade and analyzed for CVOCs by EPA Method 8260.

Soil borings L2-SRI-SB-19 and L2-SRI-SB-21 were initially terminated at 15 feet below grade in November 2017. Based on the initial analytical results (discussed in Section 5.2), the soil borings were re-advanced in December 2017 and soil samples from 15 feet below grade to the groundwater interface (29 and 30 feet below grade, respectively), were submitted for laboratory analysis of CVOCs.

Soil boring L1-RDI-SB-26 was advanced during three separate drilling events (August, November, and December 2017). On August 15, 2017, soil samples were collected from 4 to 5 feet below grade and from each two-foot interval between 5 and 15 feet below grade. The 4- to 5-foot sample was analyzed for CVOCs and the other soil samples were placed on hold pending laboratory analytical results of the 4- to 5-foot sample. Based on the initial analytical results (discussed in Section 5.2), soil samples L1-RDI-SB-26 (5-7) 20170815, L1-RDI-SB-26 (7-9) 20170815, L1-RDI-SB-26 (9-11) 20170815, and L1-RDI-SB-26 (13-15) 20170815were additionally analyzed for CVOCs by EPA Method 8260. However, due to a laboratory error, the samples were analyzed outside of the laboratory method-specified holding time and the data was rejected (as discussed in Section 4.5.7). On November 15, 2017, soil boring L1-RDI-SB-26 was re-advanced directly adjacent to its initial location advanced on August 15, 2017. Soil samples were collected from the same intervals as the August 2017 event; however, due to another laboratory error, the samples collected from between 7 and 15 feet below grade were not analyzed with the method-specified limits and the samples were discarded at the laboratory. On December 20, 2017, soil boring L1-RDI-SB-26 was advanced for a third time directly adjacent to the November 2017 location. Soil samples were collected from 4 to 5 feet below grade and from the 2-foot intervals between 5 feet and the observed groundwater table, encountered at approximately 31 feet below grade and were analyzed for VOCs by EPA Method 8260.

One soil sample was collected from approximately 4 to 6 feet below cellar grade (approximately 13 to 15 feet below sidewalk grade) at soil borings L1-RDI-SB-34 and L1-RDI-SB-36, advanced on the eastern portion of the Site at the location of the former partial cellar, which currently lies approximately 8 feet below sidewalk grade.

Soil samples analyzed are summarized in In-Text Table 6.

In-Text Table 6
Soil Sample Summary

Soil Boring ID	Sample Intervals (feet below grade)
L1-RDI-SB-11	5-7', 7-9', 9-11', 11-13', 13-15', 15-17', 17-19', 19-21', 21-23', 23-25', 25-27', 27-29', 29-31'
L1-RDI-SB-15	5', 7', 15'
L1-RDI-SB-16	5', 15'
L1-RDI-SB-17, L1-RDI-SB-19 through L1-RDI-SB-23, L1-RDI-SB-29, L1-RDI-SB-30, and L1-RDI-SB-33	4-5'
L1-RDI-SB-18, L1-RDI-24, L1-RDI-SB-25, L1-RDI-SB-26 (advanced on August 15, 2017), L1-RDI-SB-27, L1-RDI-SB-28, and L1-RDI-SB-32	4-5', 5-7', 7-9', 9-11', 11-13', 13-15'
L1-RDI-SB-26 (advanced on November 15, 2017)	4-5', 5-7'
L1-RDI-SB-26 (advanced on December 20, 2017)	4-5', 5-7', 7-9', 9-11', 11-13', 13-15', 15-17', 17-19', 19-21', 21-23', 23-25', 25-27', 27-29', 29-31'
L1-RDI-SB-31	4-5', 9-11'
L1-RDI-SB-34 through L1-RDI-SB-36	13-15'

4.5.2 Soil Quality Assurance/Quality Control (QA/QC) Sampling

For QA/QC purposes, 5 trip blanks, 5 field blanks, 5 matrix spike/matrix spike duplicates (MS/MSD), and 5 blind duplicate samples were submitted for laboratory analysis during the RDI. The field blanks, blind duplicates, and MS/MSDs were analyzed for the same analyte list as the accompanying soil samples. The trip blanks were analyzed for CVOCs by EPA Method 8260 only.

Soil samples slated for laboratory analysis were placed in laboratory-supplied containers in accordance with EPA protocols. The soil samples were analyzed by SGS, a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory with Category B deliverables. Third-party data validation was performed by L.A.B. Validation Corp., of Northport, New York and a Data Usability Summary Report (DUSR) was prepared.

Soil analytical data is provided in Attached Tables 1 through 3. The soil boring locations are shown on Figure 2. Soil boring logs are provided in Appendix A. The soil DUSR is discussed in Section 4.5.7 and is provided in Appendix F.

4.5.3 Groundwater Sampling

Between August 28 and August 30, 2017, approximately two weeks after development, groundwater samples were collected from nested monitoring wells L1-RDI-MW-6 (S, I, D) through L1-RDI-MW-9 (S, I, D) installed during the RDI and from groundwater wells L1-RI-MW-1 through L1-RI-MW-6 installed during the RI.

Prior to collecting the groundwater samples, the depth to groundwater and the total well depth were measured at each of the groundwater monitoring wells using a water level meter attached to a measuring tape accurate to 0.01 foot. No free phase product was detected in any of the groundwater monitoring wells during installation, purging, or sampling. Purging of the wells continued until the turbidity of the water decreased below 50 NTUs and groundwater quality parameters stabilized. The purge water was containerized in labeled, DOT-approved 55-gallon drums for off-site disposal at a permitted facility. Disposal of investigation-derived waste (IDW) is discussed in Section 4.7.8.

Groundwater samples were collected using EPA low flow sampling methodology with dedicated and decontaminated sampling equipment. The sampling was also conducted in accordance with the NYSDEC emerging contaminant sampling guidance available at the time of sampling and the QAPP.

The groundwater samples were analyzed for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) by Modified EPA Method 537, and 1,4-Dioxane (1,4-Dx) by EPA Method 8260C Selective Ion Monitoring (SIM). Groundwater samples from monitoring wells L1-RDI-MW-6 (S, I, D) through L1-RDI-MW-9 (S, I, D) were also analyzed for CVOCs by EPA Method 8260.

Groundwater sampling logs are provided as Appendix D.

4.5.4 Groundwater Quality Assurance/Quality Control (QA/QC) Sampling

For QA/QC purposes, one field blank, one trip blank, one MS/MSD, and one blind duplicate sample were collected and submitted for laboratory analysis. The field blank, blind duplicate, and MS/MSD were analyzed for the same analyte list as the accompanying groundwater samples. The trip blank was analyzed for CVOCs by EPA Method 8260 only.

Sample containers were labeled, placed in an ice-filled cooler, and shipped to the laboratory via courier with appropriate chain of custody documentation. All samples were analyzed by SGS with Category B deliverables. Third-party data validation was performed by L.A.B. Validation Corp and a DUSR was prepared (discussed in Section 4.5.7).

Groundwater analytical data is provided in Attached Tables 4 through 6. Groundwater monitoring well construction logs are provided in Appendix A, development logs are provided in Appendix C, and sampling logs are provided in Appendix D. The locations of the groundwater monitoring wells are shown on Figure 2 and on the groundwater location and elevation surveys in Appendix B. The groundwater DUSR is discussed in Section 4.5.7 and is provided in Appendix F.

4.5.5 Air Monitoring

Air monitoring as outlined in the Site-specific HASP and CAMP, provided as Appendix H of the Remedial Action Work Plan (RAWP), was implemented during all subsurface disturbance activities. No exceedances were detected. The air monitoring logs are provided in Appendix E.

4.5.6 Chemical Analysis

Chemical analytical work has been performed under a QA/QC program, which is summarized in In-Text Table 7.

In-Text Table 7
Quality Assurance (QA)/Quality Control (QC) Program

Factor	Description
Quality Assurance Officer	The chemical analytical QA/QC was directed by Deborah Shapiro, QEP, of AKRF.
Third Party Data Validator	The third-party data validation was performed by Lori Beyer of L.A.B. Validation Corp.
Chemical Analytical Laboratory	The chemical analytical laboratory used in the investigation was SGS Accutest, Inc. of Dayton, New Jersey, and SGS Accutest, Inc. of Orlando, Florida, both New York State ELAP-certified laboratories.
Chemical Analytical Methods	Soil analytical methods: • CVOCs by EPA Method 8260 • PAHs by EPA Method 8270 • 8 RCRA metals by EPA Method 6000/7000 series Groundwater analytical methods: • PFOA/PFOS by Modified EPA Method 537 • 1,4-dioxane by EPA Method 8260C SIM • CVOCs by EPA Method 8260

4.5.7 Quality Assurance/Quality Control (QA/QC) Sampling

QA/QC procedures were used to provide performance information with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with the sampling and analyses for the RDI. Field QA/QC procedures were used (1) to document that samples are representative of actual conditions at the Site and (2) to identify possible cross-contamination from field activities or sample transit. Laboratory QA/QC procedures and analyses were used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix or by laboratory techniques that may have introduced systematic or random errors to the analytical process.

QA/QC samples were analyzed at SGS of Dayton, New Jersey and Orlando, Florida, ELAP-certified laboratories. The third-party data validation, performed by L.A.B. Validation Corp., is reported in the DUSRs for soil and groundwater, provided in Appendix F. Laboratory analytical data deliverables are also provided in Appendix F. QA/QC sampling consisted of the following:

Soil

- Five blind duplicates [L1-RDI-SB-X (13-15) 20170811, L1-RDI-SB-X (7) 20170814, L1-RDI-SB-X (9-11) 20170816, L1-RDI-SB-X (5-7) 20171115, and L1-RDI-SB-X (5-7) 20171220].
- Five MS/MSD samples [L1-RDI-SB-34 (13-15) MS/MSD 20170811, L1-RDI-SB-15 (7) MS/MSD 20170814, L1-RDI-SB-31 (9-11) MS/MSD 20170816, L1-RDI-SB11 (5-7) MS/MSD 20171115, and L1-RDI-SB-26 (5-7) MS/MSD 20171220].
- Five field blanks (L1-RDI-FB-1 20170811, L1-RDI-FB-2 20170816, L1-RDI-FB-4 20170814, L1-RDI-FB-1 20171115, and L1-RDI-FB-2 20170220).
- Five aqueous trip blank samples (L1-RDI-TB-1 20170811, L1-RDI-TB-2 20170816, L1-RDI-TB-4 20170814, L1-RDI-TB-1 20171115, and L1-RDI-TB-2 20170220).

Groundwater

- One blind duplicate (L1-RDI-MW-XD 20170829).
- One MS/MSD sample (L1-RDI-MW-6D MS/MSD 20170829).
- One field blank sample (L1-RDI-FB-3 20170829).
- One aqueous trip blank sample (L1-RDI-TB-3 20170829).

QA/QC samples were submitted with the collected soil and groundwater samples. The field blanks, blind duplicates, and MS/MSDs were analyzed for the same analyte list as the accompanying soil and groundwater samples. The trip blanks were submitted for laboratory analysis for CVOCs by EPA Method 8260 only.

Soil DUSR

- The soil DUSR identified additional qualifiers for specific compounds for specific samples. These qualifiers have been added to the soil analytical data tables, provided as Attached Tables 1 through 3.
- The data were determined to be acceptable for use with the additional data qualifiers. The changes included the addition of a "J" qualifier, indicating that the contaminant detections in the samples were considered estimated values. An "R" qualifier was added to unusable data, which is considered unreliable due to deficiencies in meeting QA/QC criteria. Reanalysis results have been qualified "D", indicated the concentration is from a diluted sample analysis.
- Samples were prepared and analyzed within the method-required and technical holding times, with the exception of the following samples: L1-RDI-SB-26 (4-5) 20170815, L1-RDI-SB-26 (5-7) 20170815, L1-RDI-SB-26 (9-11) 20170815, L1-RDI-SB-26 (11-13) 20170815, and L1-RDI-SB-26 (13-15) 20170815. Due to laboratory error, these samples, which were collected on August 15, 2017, were analyzed on September 6, 2017, outside of the method-specified holding time. Therefore, all non-detects have been rejected ("R" qualified) and detected for TCE have been qualified as estimated ("J"

qualified). Samples from soil boring L1-RDI-SB-26 from these intervals were resampled on December 20, 2017 and were analyzed within method- and technical-specified holding times.

- Continuing calibrations provided and the percent relative standard deviation (% RSD) were within acceptable limits (20 % and 40 % for poor responders) for all reported compounds, with the exception of:
  - Carbon tetrachloride at 25.3% in samples L1-RDI-SB-15 (7) 20180814, L1-RDI-SB-X (7) 20170814, and L1-RDI-SB-31 (9-11) 20170816, and L1-RDI-SB-16 (5) 20170814;
  - Carbon tetrachloride at 42.1% in samples L1-RDI-SB-32 (11-13) 20170816 and L1-RDI-SB-32 (13-15) 20170816;
  - Carbon tetrachloride at 24.4% in samples L1-RDI-SB-25 (4-5) 20170815, L1-RDI-SB-27 (4-5) 20180815, L1-RDI-SB-28 (4-5) 20170815, L1-RDI-SB-30 (4-5) 20170816, L1-RDI-SB-31 (4-5) 20170816, L1-RDI-SB-X (9-11) 20170816, L1-RDI-SB-33 (4-5) 20170816, and L1-RDI-SB-32 (4-5) 20170816;
  - 1,2-DCA at 20.3% in samples L1-RDI-SB-11 (5-7) 20171115, L1-RDI-SB-X (5-7) 20171115, L1-RDI-SB-11 (7-9) 20171115, L1-RDI-SB-11 (9-11) 20171115, L1-RDI-SB-11 (11-13) 20171115, L1-RDI-SB-11 (15-17) 20171115, L1-RDI-SB-11 (17-19) 2017115, L1-RDI-SB-11 (21-23) 20171115, L1-RDI-SB-11 (25-27) 20171115, L1-RDI-SB-11 (27-29) 2017115, L1-RDI-SB-11 (29-31) 20171115, and L1-RDI-SB-26 (4-5) 20171115; and
  - Carbon tetrachloride at 27.4% and 1,1,1-TCA at 30% in samples L1-RDI-SB-26 (5-7) 20171220, L1-RDI0-SB-26 (4-5) 20171220, L10RDI-SB-X (5-7) 20171220, L1-RDI-SB-26 (7-9) 20171220, L1-RDI-SB-26 (9-11) 20171220, L1-RDI-SB-26 (11-13) 20171220, L1-RDI-SB-26 (13-15) 20171220, L1-RDI-SB-26 (15-17) 20171220, L1-RDI-SB-26 (17-19) 20171220, L1-RDI-SB-26 (11-13) 20171220, L1-RDI-SB-26 (13-15) 20171220, L1-RDI-SB-26 (15-17) 20171220, L1-RDI-SB-26 (17-19) 20171220, L1-RDI-SB-26 (19-21) 20171220, L1-RDI-SB-26 (21-23) 20171220, L1-RDI-SB-26 (23-25) 20171220, L1-RDI-SB-26 (25-27) 20171220, L1-RDI-SB-26 (27-29) 20171220, and L1-RDI-SB-26 (29-31) 20171220.
- Surrogate recoveries (%R) for dibromofluoromethane, 1,2-dichloroethane-d4, toluene-d8, and 4-bromofluorobemnezene were within acceptable limits for surrogate compounds for all analyses pertaining, with the exception of dibromofluoromethane, which recovered low (71%) for initial analysis of sample L1-RDI-SB-23 (4-5) 20170815. As required, the sample was reanalyzed and a matrix effect was confirmed with a low surrogate recovery on reanalysis (65%). Non-detected target analytes (vinyl chloride, methylene chloride, chloroform, cis-1,2-DCE, trans-1,2-DCE, and 1,1-DCA) were qualified "UJ". The reported concentration of 1.2 ug/kg for 1,1-DCE was qualified "J".

- As required, the laboratory reported "J" values between the reporting limits (RLs) and method detection limits (MDLs), consistent with common laboratory practices and as a requirement of the National Environmental Laboratory Approval Program (NELAP). Samples were analyzed at low-level, with the exception of reanalysis of sample L1-RDI-SB-24 (4-5) 20170815, which required high-level rerun to obtain TCE and PCE within the instrument linear calibration range. The following samples also required high-level reanalysis for TCE: L1-RDI-SB-25 (4-5) 20170815, L1-RDI-SB-25 (5-7) 20170815, L1-RDI-SB-25 (7-9) 20170815, L1-RDI-SB-26 (4-5) 20180815, L1-RDI-SB-27 (4-5) 20170815, L1-RDI-SB-28 (4-5) 20170815, L1-RDI-SB-32 (4-5) 20170816, L1-RDI-SB-32 (5-7) 20170816, L1-RDI-SB-11 (5-7) 20171115, L1-RDI-SB-11 (7-9) 20171115, L1-RDI-SB-11 (11-13) 20171115, L1-RDI-SB-11 (21-23) 20171115, and L1-RDI-SB-26 (4-5) 20171115. Results of these analyses for these samples have been qualified "D", as required by NYSDEC.
- Laboratory duplicate analysis were performed on selected samples as an indication of overall precision; acceptable relative percent difference (RPD) is 25%.
  - High RPD for TCE in the parent sample L1-RDI-SB-32 (13-15) 20180816 and the duplicate sample [5.9 microgram per kilogram (µg/kg) vs. 1.8 µg/kg] was observed. The reported concentration is qualified "J".
  - High RPD for TCE in the sample L1-RDI-SB-26 (9-11) 20170815 and the duplicate sample (8.1 ug/kg vs. 4.2 ug/kg) was observed. The reported concentration is qualified "J".
- Field duplicates are collected and analyzed as an indication of overall precision. The results are expected to have more variability than laboratory duplicate samples; acceptable RPD is 25%.
  - Cis-1,2-DCE, methylene chloride, and TCE have been qualified "J" in parent sample L1-RDI-SB-11 (5-7) 20171115 and the field duplicate sample L1-RDI-SB-X (5-7) 2017115 due to high RPD.
  - Methylene chloride, PCE, and TCE have been qualified "J" in parent sample L1-RDI-SB-26 (5-7) 20171220 and field duplicate sample L1-RDI-SB-X (5-7) 20171220 due to high RPD.

Groundwater DUSR

- Chloroform demonstrated a percent difference of 51.4%, outside of acceptable range of 25% in sample L1-RDI-MW-XD 20170829, blind duplicate of parent sample L1-RDI-MW-6D 20170829. The result in the parent and duplicate samples have been "J" qualified.

The soil and groundwater DUSRs indicated that the data generated was of acceptable quality. Results for the analysis are usable with the revised qualifiers, incorporated on Attached Tables 1 through 3 and 4 through 6 for soil and groundwater, respectively. The soil and groundwater DUSRs are provided in Appendix F.

4.5.8 Results of Chemical Analyses

Laboratory data for soil and groundwater are summarized in Attached Tables 1 through 3 and Attached Tables 4 through 6, respectively. Soil sample concentrations above NYSDEC UUSCOs, RRSCOs, and PGWSCOs (for CVOCs only) are shown on Figure 6. Groundwater concentrations above NYSDEC TOGS values are shown on Figure 7. Laboratory data deliverables for all samples evaluated in this RDIR are provided in digital form in Appendix F.

4.5.9 Management of Investigation-Derived Waste (IDW)

All boreholes were filled with hydrated bentonite and patched at the surface with concrete or asphalt. Soil cuttings and development, decontamination, and purge water were containerized in DOT-approved 55-gallon drums. The drums were sealed at the end of each work day and labeled with the date, the well or boring number(s), the type of waste, and the name of an AKRF point of contact. Seven drums containing 335 gallons of development and purge water, and 6 drums containing 1,850 pounds of soil cuttings were disposed of by AARCO on October 2, 2017 and February 26, 2018, at Dale Transfer Corp. of West Babylon, New York in accordance with applicable local, state, and federal regulations.

IDW disposal manifests are included as Appendix G.

5.0 ENVIRONMENTAL EVALUATION

5.1 Geological and Hydrogeological Conditions

5.1.1 Stratigraphy

Soil observed in the borings primarily consisted of fill comprising sand, silt, clay, and gravel with varying amounts of asphalt, concrete, brick, and wood up to approximately 6 to 10 feet below grade, underlain by apparent native sand, silt, and gravel to the terminus of the borings at approximately 15 feet below grade. Consistent observations were made in the drill cuttings during nested well installation, which were installed to depths up to 80 feet below grade.

5.1.2 Hydrogeology

Based on Site-specific measurements, groundwater beneath the Site ranges from approximately 9.5 feet to 9.3 feet NGVD on the northern and southern portion of the Site, respectively and flows in a southerly direction. Groundwater contour maps showing the well elevations and contours for shallow, intermediate, and deep groundwater aquifers collected at the Site on August 28, 2017 are shown on Figures 3, 4, and 5, respectively.

5.2 Soil Chemistry

Nintey-two soil samples were collected for laboratory analysis from soil borings L1-RDI-SB-11 and L1-RDI-SB-15 through L1-RDI-SB-36. Soil samples were analyzed for CVOCs by EPA Method 8260. Soil samples collected from soil borings L1-RDI-SB-15, L1-RDI-SB-16, and L1-RDI-SB-34 through L1-RDI-SB-36 were also analyzed for PAHs by EPA Method 8270 and RCRA metals by EPA Method 6000/7000 series.

Soil sample analytical results were compared to the 6 NYCRR UUSCOs and RRSCOs, the applicable SCOs for the proposed future use of the Site. Soil sample analytical results for CVOCs were also compared to the 6 NYCRR Part 375 PGWSCOs. Soil sample analytical results are presented in Attached Tables 1 through 3. Soil concentrations exceeding RRSCOs, UUSCOs, and/or PGWSCOs are shown on Figure 6. The complete soil laboratory analytical data reports are included in Appendix F.

5.2.1 Chlorinated Volatile Organic Compounds (CVOCs) in Soil

PCE was detected in two soil samples above its UUSCO, PGWSCO and RRSCO. Cis-1,2-DCE, a breakdown compound of PCE, and methylene chloride were detected in one soil sample above their UUSCO and PGWSCO. Additionally, TCE was detected in 11 soil samples at concentrations between 1.15 mg/kg and 19.5 mg/kg, above its UUSCO and PGWSCO of 0.47 mg/kg and above its RRSCO in two soil samples at concentrations of 243 mg/kg and 1,220 mg/kg, respectively. CVOCs detected in soil above UUSCOs, RRSCOs, and/or PGWSCOs are presented in In-Text Table 8.

In-Text Table 8
CVOC Concentrations in Soil Above UUSCOs, RRSCOs, and/or PGWSCOs

Analyte	Sample Identification	UUSCO (mg/kg)	RRSCO (mg/kg)	PGWSCO (mg/kg)	Concentration (mg/kg)
Cis-1,2-dichloroethylene (Cis-1,2-DCE)	L1-RDI-SB-18 (4-5) 20170814	0.25	100	0.25	0.616
Methylene Chloride	L1-RDI-SB-24 (4-5) 20170815	0.05	100	0.05	0.0572
Tetrachloroethylene (PCE)	L1-RDI-SB-18 (4-5) 20170814	1.3	19	1.3	19.4
	L1-RDI-SB-24 (4-5) 20170815				171 D
Trichloroethylene (TCE)	L1-RDI-SB-11 (7-9) 20171115	0.47	21	0.47	2.38 D
	L1-RDI-SB-11 (11-13) 20171115				6.75 D
	L1-RDI-SB-11 (21-23) 20171115				16.6 D
	L1-RDI-SB-18 (4-5) 20170814				11.1
	L1-RDI-SB-24 (4-5) 20170815				243 D
	L1-RDI-SB-25 (4-5) 20170815				1,220 D
	L1-RDI-SB-25 (5-7) 20170815				1.48 D
	L1-RDI-SB-25 (7-9) 20170815				25.1 D
	L1-RDI-SB-26 (4-5) 2017115				18.7 D
	L1-RDI-SB-27 (4-5) 20170815				9.67 D
	L1-RDI-SB-28 (4-5) 20170815				6.33 D
	L1-RDI-SB-32 (4-5) 20170816				1.15 D
	L1-RDI-SB-32 (5-7) 20170816				9.01 D

Notes:
mg/kg - milligrams per kilogram = parts per million
D - The reported concentration is the result of a diluted sample analysis.

Soil analytical results for CVOCs are presented in Attached Table 1.

5.2.2 Polycyclic Aromatic Hydrocarbons (PAHs) in Soil

Eight soil samples collected from borings advanced at the locations of the proposed new building partial cellars [L1-RDI-SB-15 (5) 20170814, L1-RDI-SB-15 (15) 20170814, L1-RDI-SB-16 (5) 20170814, L1-RDI-SB-16 (15) 20170814, L1-RDI-SB-34 (13-15) 20170811, L1-RDI-SB-35 (13-15) 20170811, L1-RDI-SB-36 (13-15) 20170811, and L1-RDI-SB-X (13-15) 20170811] were analyzed for PAHs. PAHs were not detected above their respective UUSCOs or RRSCOs in any of the samples.

Soil analytical results for PAHs are presented in Attached Table 2.

5.2.3 Resource Conservation and Recovery Act (RCRA) Metals in Soil

Eight soil samples collected from borings advanced at the locations of the proposed new building partial cellars (see Section 5.2.2 for sample identifications) were analyzed for RCRA metals. Lead was detected in soil sample L1-RDI-SB-16 (5) 20170814 at a concentration of 312 mg/kg, above its UUSCO of 63 mg/kg, but below its RRSCO of 400 mg/kg. No other metals were detected at concentrations above their respective UUSCOs or RRSCOs.

Soil analytical results for RCRA metals are presented in Attached Table 3.

5.3 Groundwater Chemistry

Eighteen groundwater samples were collected for laboratory analysis from groundwater monitoring wells L1-RI-MW-1 through L1-RI-MW-5 and nested groundwater monitoring wells L1-RDI-MW-6 (S, I, D) through L1-RDI-MW-9 (S, I, D). The groundwater samples were analyzed for PFOA and PFOS by EPA Modified Method 537 and 1,4-Dioxane (1,4-Dx) by EPA Method 8260 SIM. The groundwater samples collected from monitoring wells L1-RDI-MW-6 (S, I, D) through L1-RDI-MW-9 (S, I, D) were also analyzed for CVOCs by EPA Method 8260. Groundwater laboratory analyses were performed by SGS, a NYSDOH ELAP-certified laboratory. CVOC analytical results were compared to the NYSDEC TOGS Class GA Groundwater Standards and/or Guidance Values, although groundwater in Brooklyn is not used as a source of potable water. There are currently no groundwater standards in New York for 1,4-Dx, PFOA, or PFOS; however, the PFOA and PFOS results were compared to the EPA combined standard of 70 parts per trillion (ppt), which includes PFOA/PFOS and other PFCs.

Groundwater sample analytical results are presented in Attached Tables 4 through 6 Groundwater sample concentrations exceeding TOGS values are shown on Figure 7. Groundwater laboratory analytical data reports are included in Appendix F.

5.3.1 Chlorinated Volatile Organic Compounds (CVOCs) in Groundwater

PCE was detected in one shallow groundwater sample above its TOGS value. TCE was detected in shallow groundwater samples collected above its TOGS value. No concentrations of VOCs were detected above TOGS values in the samples collected from the intermediate or deep groundwater aquifers.

In-Text Table 9 summarizes CVOC groundwater exceedances above respective TOGS values.

In-Text Table 9
CVOC Groundwater Analytes Detected Above TOGS Values

Analyte	Sample ID	TOGS Value (µg/L)	Concentration (µg/L)
Tetrachloroethylene (PCE)	L1-RDI-MW-6S 20170829	5	5.7
Trichloroethylene (TCE)	L1-RDI-MW-6S 20170829	5	22.3
	L1-RDI-MW-7S 20170829		30.7
	L1-RDI-MW-8S 20170829		53.8
	L1-RDI-MW-9S 20170830		63.6

Note:
µg/L = micrograms per Liter

Groundwater analytical results for CVOCs are presented in Attached Table 4.

5.3.2 1,4-Dioxane (1,4-Dx) in Groundwater

1,4-Dx was not detected in the groundwater samples above laboratory reporting limits.

Groundwater analytical results for 1,4-Dx are presented in Attached Table 5.

5.3.3 Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) in Groundwater

PFOS and/or PFOA were detected in 12 of the groundwater samples collected from shallow-, intermediate-, and deep-screened wells. There are currently no individual groundwater standards for PFOA or PFOS; however, the PFOA/PFOS results were compared to the EPA combined standard of 70 ppt, which includes PFOA/PFOS and 19 other PFCs. This combined standard was exceeded in two shallow groundwater samples, L1-RI-MW-1 20170828 and L1-RI-MW-3 20170828, where the total concentrations were 75.7 ppt and 88.4 ppt, respectively.

Groundwater analytical results for PFOS and PFOA are presented in Attached Table 6.

6.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT (QHHEA)

The objective of the QHHEA is to identify potential receptors and pathways for human exposure to the contaminants of concern (COC) that are present at, or migrating from, the Site. The identification of exposure pathways describes the route that the COC takes to travel from the source to the receptor. An identified pathway indicates that the potential for exposure exists; it does not imply that exposures actually occur.

The RDI, as described in this RDIR, is sufficient to complete a QHHEA. The QHHEA was performed to determine whether the Site poses an existing or future health hazard to the Site's exposed or potentially exposed population. The sampling data from the SI, RI, and RDI was evaluated to determine whether there is any health risk by characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. This QHHEA was prepared in accordance with Appendix 3B and Section 3.3 (b) 8 of the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation.

6.1 Contaminants of Concern (COCs) in Respective Media

Based on the results of the investigations conducted at the Site to date, the COCs are:

Soil:

The VOCs TCE, PCE, cis-1,2-DCE, methylene chloride and acetone at concentrations above their respective UUSCOs, RRSCOs, and/or PGWSCOs; the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene; and, the metals arsenic, copper, hexavalent chromium, lead, mercury, and zinc above their respective UUSCOs and/or RRSCOs.

The soil COCs with comparison to UUSCOs, RRSCOs, and/or PGWSCOs are shown on Figures 8a and 8b.

Groundwater:

The CVOCs TCE, PCE, and chloroform; and the total and/or dissolved metals manganese, iron, and sodium above their respective TOGS values.

The groundwater COCs with comparison to TOGS values are shown on Figure 9.

Soil Vapor:

CVOCs were detected in soil vapor at individual concentrations up to 3,610 $\mu g/m^3$, petroleum-related VOCs were detected at individual concentrations up to 161 $\mu g/m^3$, and refrigerant-related VOCs were detected at concentrations up to 3,560 $\mu g/m^3$.

The soil vapor COCs are shown on Figure 10.

6.2 Potential Routes of Exposure

The five elements of an exposure pathway are:

1. The source of contamination.
2. The environmental media and transport mechanisms.
3. The point of exposure.

4. The route of exposure.
5. The receptor population.

These elements of an exposure pathway may be based on past, present, or future events. An exposure pathway is considered complete when all five elements of an exposure pathway are documented. A potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway cannot be documented. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway has not existed in the past, does not exist in the present, and will never exist in the future.

6.3 Exposure Route

An exposure route is the mechanism by which a receptor comes into contact with a chemical. Three potential primary routes exist by which chemicals can enter the body:

- Ingestion of water, fill, and/or soil;
- Inhalation of vapors and/or particulates; and
- Dermal contact with water, fill, soil, and/or building materials.

6.4 Potential Receptors

The Site is currently vacant. The surrounding area is developed primarily with residential, commercial, manufacturing, transportation, and industrial uses. The anticipated future use of the Site is mixed-use residential and commercial.

On-site Receptors: As the Site is currently vacant, there are no potential on-site potential receptors other than any trespassers.

During redevelopment of the Site, the on-site potential sensitive receptors will include construction workers and inspectors. Once the Site is redeveloped, the on-site potential sensitive receptors will include: adult and child residents, maintenance staff, and commercial workers.

Off-site Receptors: Potential off-site receptors within a 0.25-mile radius of the Site include: adult and child residents, commercial and construction workers, students, pedestrians, trespassers, and cyclists, based on the following:

1. Commercial Businesses – existing and future
2. Residential Buildings – existing and future
3. Building Construction/Renovation – existing and future
4. Pedestrians, Trespassers, Cyclists – existing and future
5. Schools/Daycares – existing and future

6.5 Existence of Human Health Exposure Pathways

This evaluation consists of the following components: contaminant source, contaminant release and transport mechanism, point of exposure, route of exposure, and receptor population.

On-site Existing Conditions: The Site is vacant and capped with concrete, although there are portions of the slab under the cellar that are not competent. The non-competent areas are covered with several feet of demolition debris. As such, there are no potential on-site exposure pathways.

Off-site Existing Conditions: There is an existing potential exposure pathway from VOCs in soil vapor to enter into nearby buildings via any basement floor or lower wall openings/cracks. The indoor air quality at the adjoining properties may be susceptible to contamination from subsurface vapor intrusion attributable to VOCs emitted from the Site. The potential receptors from such a migration pathway into a building would be to off-site construction and commercial workers, and adult and child residents. The primary route of exposure would be inhalation. There is also a potential exposure pathway from any particulate emanating from the Site to off-site pedestrians, visitors, cyclists, and adult and child residents.

On-site Future Conditions: Once redevelopment activities begin, there will be a potential exposure pathway from on-site workers coming into direct contact with surface and subsurface soils as a result of construction and excavation activities. In addition, on-site construction workers could potentially ingest or inhale particulates from any exposed impacted soil and fill. Similarly, off-site receptors could be exposed to particulates and vapors from on-site activities. Although not anticipated, if the redevelopment plans include dewatering, there will be a potential exposure pathway from the groundwater to on-site workers. On-site workers could potentially inhale or have dermal contact with any soil/fill that is saturated with contaminated groundwater, vapors off-gassing from the groundwater, and/or the contaminated groundwater itself.

Once the redevelopment of the Site has been completed, there will be a potential exposure pathway to adult and child residents, maintenance staff, commercial workers, and/or schoolchildren from the inhalation of any potential off-gassing of VOC vapors from the subsurface. The VOC vapors could migrate from residual compounds in the soil and/or groundwater and enter the building through any cracks or openings in the foundation. There will also be a potential exposure pathway from dermal contact, inhalation, or ingestion of surface soil/fill in any landscaped or non-capped areas by adult and child residents, visitors, and trespassers.

Off-site Future Conditions: There is a potential exposure pathway from soil vapor emanating from the subsurface to enter into the adjoining buildings as a result of any ground floor or subsurface wall openings/cracks. The indoor air quality at the adjoining properties would be susceptible to contamination from subsurface vapor intrusion. Off-site commercial workers and adult or child residents could potentially inhale these vapors. There will also be a potential exposure pathway from any particulates emanating from the uncapped portions of the Site to off-site pedestrians, visitors, cyclists, and adult and child residents.

6.6 Overall Human Health Exposure Assessment

Since the Site is vacant and capped, there are currently no potential on-site exposure pathways. There is an existing potential off-site exposure pathway from VOCs in soil vapor to enter into the adjoining buildings as a result of any basement floor or lower wall openings/cracks. Once redevelopment activities begin with no protective measures, there

will be a potential exposure pathway from contaminated surface soil/fill to construction workers as these workers could potentially ingest, inhale, or have dermal contact with any exposed contaminated fill or soil. Although not anticipated, if dewatering is required during construction, there will be an additional potential exposure pathway as workers could potentially inhale off-gassing vapors or have dermal contact with contaminated groundwater. Once redevelopment of the Site has been completed, there will be a potential exposure pathway from the potential off-gassing of organic vapors in the soil and/or groundwater to adult and child residents, maintenance staff, students, visitors, and commercial workers through cracks or openings in the foundations of the new building and surrounding buildings. There will also be a potential on- and/or off-site exposure pathway from dermal contact, inhalation, or ingestion of surface soil in any landscaped or non-capped areas by adult and child residents, visitors, and trespassers.

7.0 CONCLUSIONS

This Remedial Design Investigation Report (RDIR) summarizes the investigation work performed from August 7 to August 30, 2017; on November 15 and December 20, 2017; and on February 26, 2018. The goal of the RDI was to: further horizontally and vertically delineate known soil and groundwater contamination; investigate the presence of the emerging contaminants in shallow, intermediate, and deep groundwater aquifers; and to aid in the design of the remedy.

Based on the results of this and all previous remedial investigations, the primary COCs include: the CVOCs PCE and TCE in soil, groundwater, and soil vapor. Additional soil COCs include: the VOCs cis-1,2-DCE, methylene chloride, and acetone; the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene; and the metals arsenic, copper, hexavalent chromium, lead, mercury, and zinc. Additional groundwater COCs include the VOC chloroform, and the total and/or dissolved metals manganese, iron, and sodium. Additional soil vapor COCs include petroleum- and refrigerant-related compounds.

The CVOCs detected in soil above UUSCOs, RRSCOs, and/or PGWSCOs were found across the southern portion of the Site. The greatest concentrations of TCE were detected between 3 to 5 feet below grade in soil borings L1-RDI-SB-24 (243 mg/kg), L1-RI-SB-11 (930 mg/kg), and L1-RDI-SB-25 (1,220 mg/kg) located on the south-central portion of the Site. The TCE contamination extends down to the shallow groundwater table (approximately 31-32 feet below grade) at soil borings L1-RI-SB-11/L1-RDI-SB-11 and down to 7 to 9 feet below grade in soil borings L1-RDI-SB-25 and L1-RDI-SB-32. PCE and its breakdown compounds cis-1,2-DCE in boring L1-RDI-SB-18 and PCE and methylene chloride in boring L1-RDI-SB-24 were detected above their respective UUSCOs and PGWSCOs. PCE was additionally detected above its RRSCO.

SVOCs and metals are present across the Site at concentrations above UUSCOs and/or RRSCOs from grade to approximately 30 feet below grade; however, the majority of the exceedances were detected in intervals above 6 feet below grade.

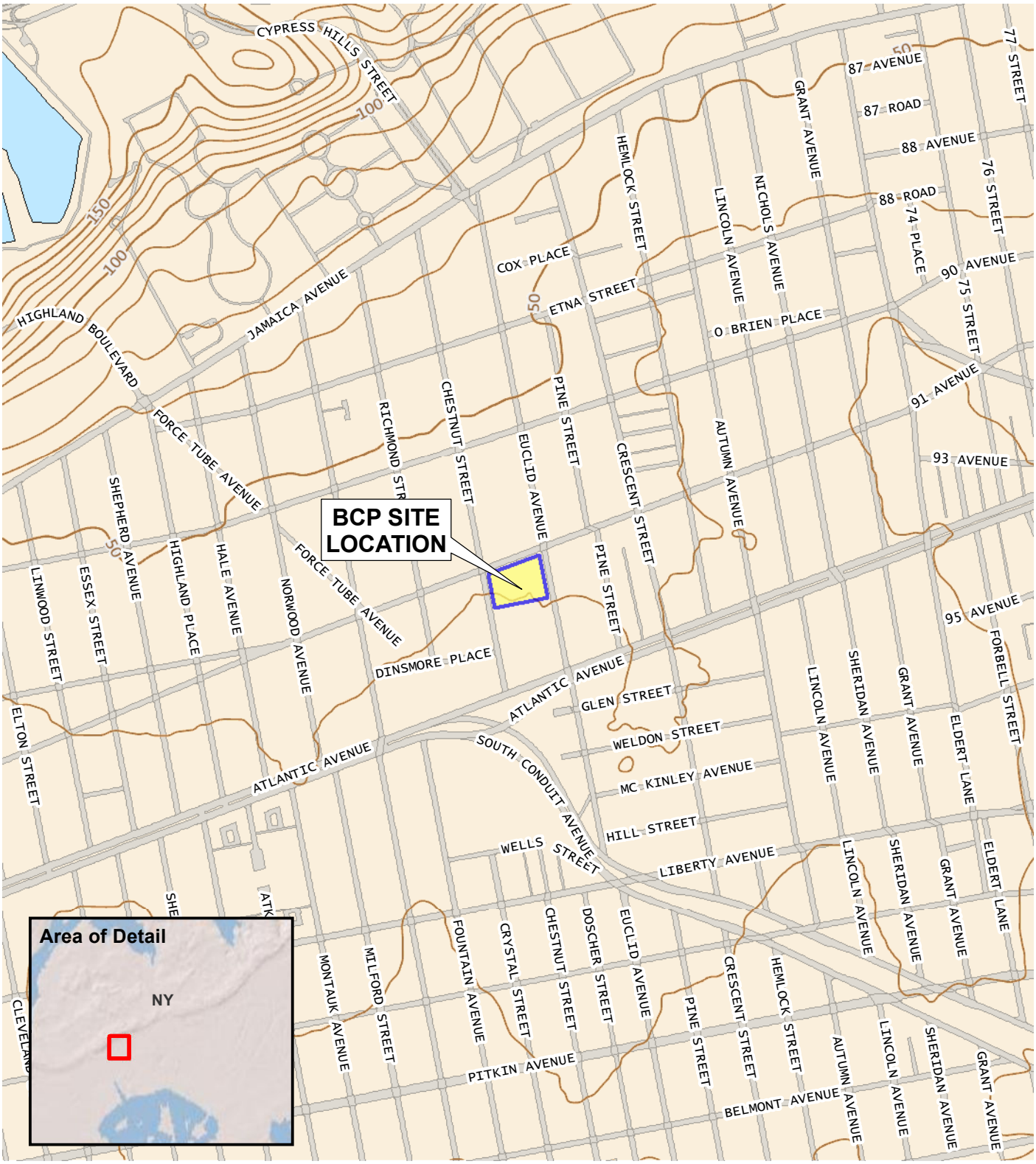
The horizontal extent of the TCE groundwater plume corresponds to the extent of the TCE contamination in soil. The greatest concentration of TCE in groundwater was detected in L1-RI-MW-5 (130 µg/L) on the south-central portion of the Site near soil borings L1-RDI-SB-15, L1-RDI-SB-26 and L1-RDI-SB-28. Concentrations of TCE decrease north, east, south, and west of L1-RI-MW-5 in adjacent shallow wells L1-RDI-MW-6S (22.3 µg/L), L1-RDI-MW-7S (30.7 µg/L), L1-RDI-MW-8S (53.8 µg/L), and L1-RDI-MW-9S (63.6 µg/L). TCE concentrations decrease significantly vertically, with no exceedances of TOGS standards in the intermediate- and deep-screened wells. PCE was detected above its TOGs standard in two wells on the southern portion of the Site, L1-RI-MW-5 (6.5 µg/L) and L1-RDI-MW-6S (5.7 µg/L). Chloroform was detected on the northeastern portion of the Site in shallow groundwater wells L1-SI-GW-3 (7.7 µg/L) and in L1-RI-MW-4 (13.3 µg/L).

CVOCs were detected in soil vapor at individual concentrations up to 3,610 µg/m^3, petroleum-related VOCs were detected at individual concentrations up to 161 µg/m^3, and refrigerant-related VOCs were detected at concentrations up to 3,560 µg/m^3.

Based on the results of the QHHEA and the significant threat determination made by NYSDEC and NYSDOH, an Interim Remedial Measure (IRM) will be implemented to ensure that the potential exposure pathways identified for soil vapor do not become complete. The IRM, as

described in the IRM Work Plan (see Section 2.3), will include the installation and operation of a Soil Vapor Extraction (SVE) system to prevent any off-site migration of soil vapor until implementation of a NYSDEC-approved RAWP.

FIGURES



SOURCE
USGS: Copyright:© 2014 Esri, USGS The National Map:

0 800 1,600 Feet

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Atlantic Chestnut - Lot 1
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BROWNFIELD CLEANUP PROGRAM
SITE LOCATION MAP

DATE
3/16/2018

PROJECT NO.
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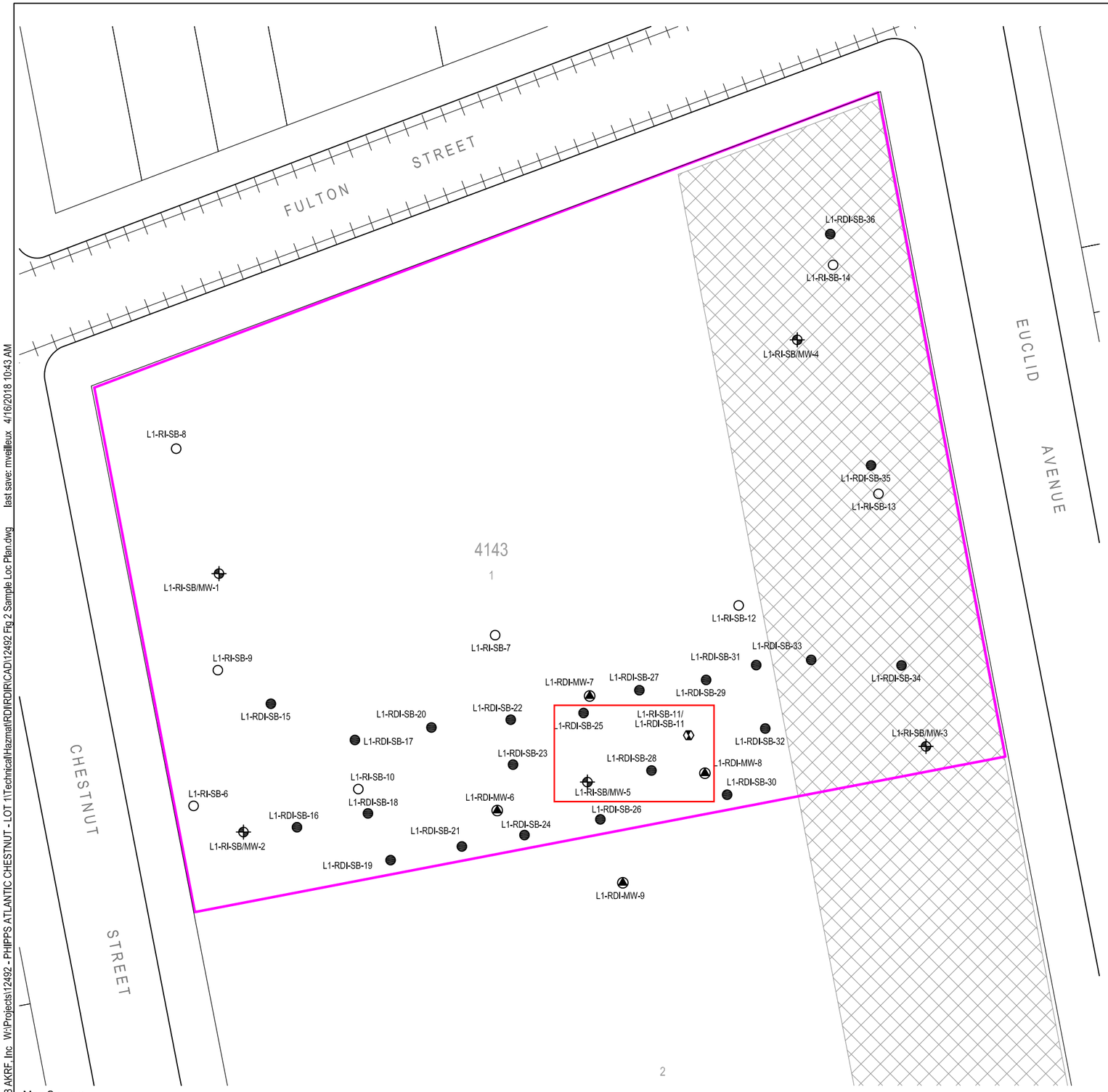
FIGURE
1

©2018 AKRF W:\Projects\12492 - PHIPPS ATLANTIC CHESTNUT - LOT 1\Technical\Hazmat\Phase II\3264 Fulton Street (North Lot)\GIS\12492 Fig 1 site loc map.mxd3/16/2018 10:17:59 AM mvelleux



LEGEND

- BCP SITE BOUNDARY
- 1 — LOT BOUNDARY
- 4143 — BLOCK NUMBER
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- REMEDIAL INVESTIGATION SOIL BORING LOCATION (2016)
- REMEDIAL INVESTIGATION SOIL BORING/GROUNDWATER MONITORING WELL LOCATION (2016)
- REMEDIAL DESIGN INVESTIGATION SOIL BORING LOCATION (2017)
- REMEDIAL DESIGN INVESTIGATION NESTED GROUNDWATER MONITORING WELL LOCATION (2017)
- REMEDIAL INVESTIGATION (2016) / REMEDIAL DESIGN INVESTIGATION (2017) SOIL BORING LOCATION

0 20 40 80
SCALE IN FEET

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

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SITE AND SAMPLE LOCATION PLAN

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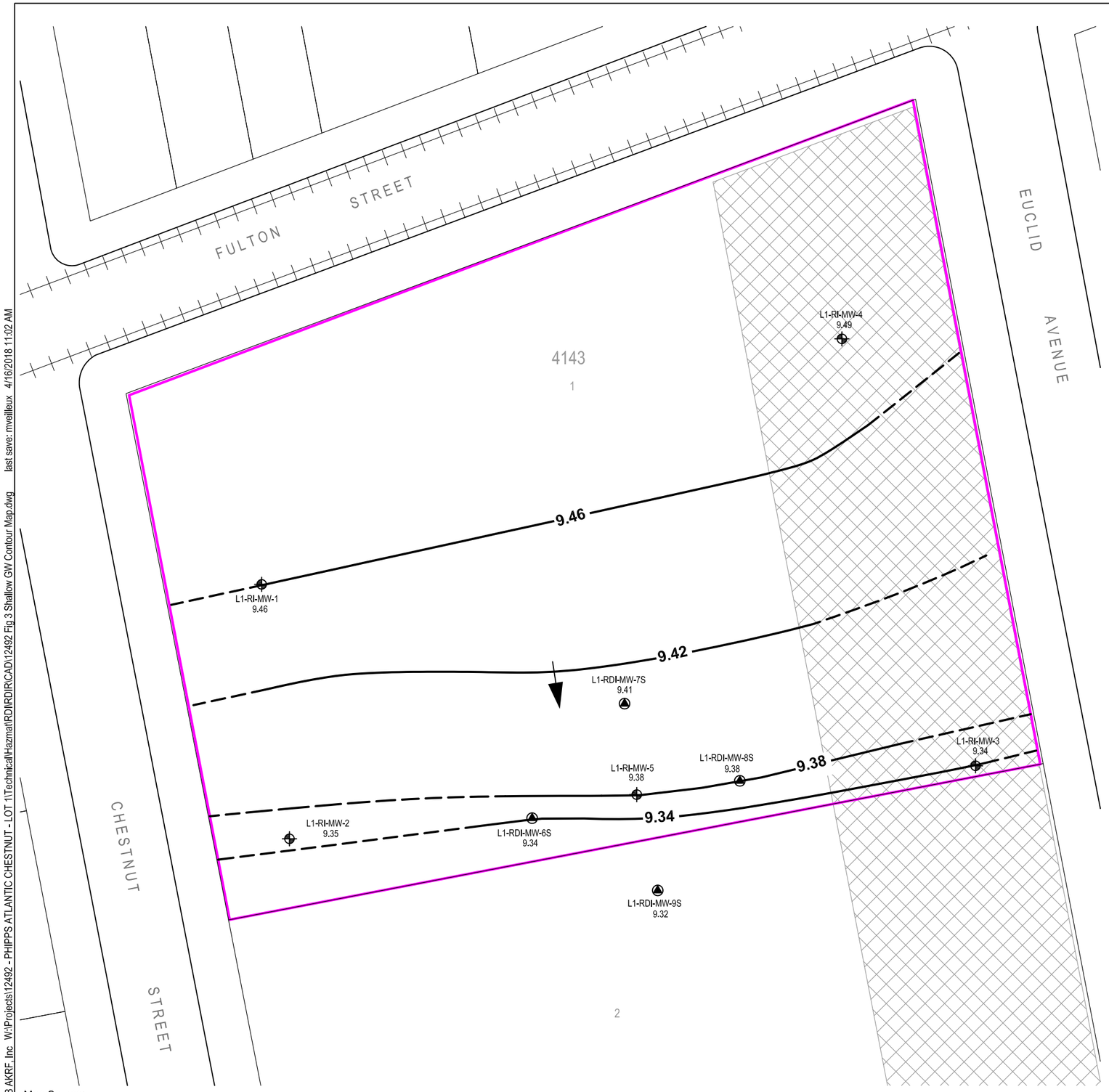
FIGURE
2

©2018 AKRF, Inc W:\Projects\12492 - PHIPPS ATLANTIC CHESTNUT - LOT 1\Technical\Hazmat\RDI\RDI\CAD\12492 Fig 2 Sample Loc Plan.dwg last save: mveilleux 4/16/2018 10:43 AM



LEGEND

- BCP SITE BOUNDARY
- LOT BOUNDARY
- 4143 BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL LOCATION (2016)
- REMEDIAL DESIGN INVESTIGATION NESTED GROUNDWATER MONITORING WELL LOCATION (2017)
- 9.49 WATER TABLE ELEVATION IN FEET
- 9.30 GROUNDWATER ELEVATION CONTOUR IN FEET (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

Groundwater Monitoring Well ID	Top of Casing	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet)
L1-RI-MW-1	39.05	29.59	9.46
L1-RI-MW-2	38.60	29.25	9.35
L1-RI-MW-3	34.88	25.54	9.34
L1-RI-MW-4	35.93	26.44	9.49
L1-RI-MW-5	41.00	31.62	9.38
L1-RDI-MW-6S	41.04	31.70	9.34
L1-RDI-MW-7S	40.43	31.02	9.41
L1-RDI-MW-8S	40.94	31.56	9.38
L1-RDI-MW-9S	40.79	31.47	9.32

Notes:

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88).

TOC - Top of Casing

0 20 40 80

SCALE IN FEET

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

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SHALLOW GROUNDWATER CONTOUR MAP - AUGUST 28, 2017

DATE
4/16/2018

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FIGURE
3

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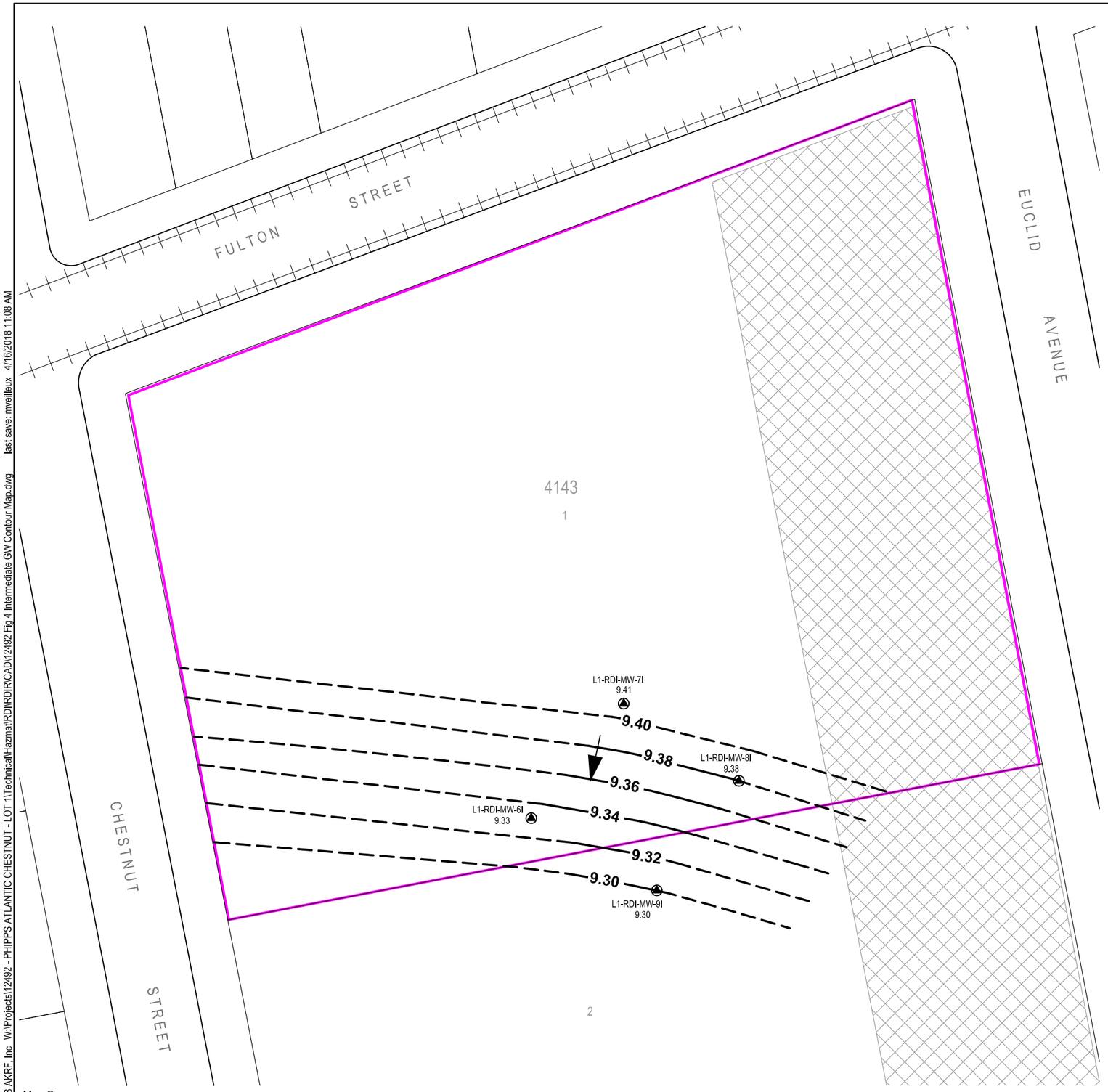

LEGEND

- BCP SITE BOUNDARY
- 1 — LOT BOUNDARY
- 4143 — BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- REMEDIAL DESIGN INVESTIGATION NESTED GROUNDWATER MONITORING WELL LOCATION (2017)
- 9.33 — WATER TABLE ELEVATION IN FEET
- 9.32 — GROUNDWATER ELEVATION CONTOUR IN FEET (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

Groundwater Monitoring Well ID	Top of Casing	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet)
L1-RDI-MW-6I	41.05	31.72	9.33
L1-RDI-MW-7I	40.46	31.05	9.41
L1-RDI-MW-8I	40.95	31.57	9.38
L1-RDI-MW-9I	40.82	31.52	9.30

Notes:

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88).

TOC - Top of Casing

0 20 40 80

SCALE IN FEET

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

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INTERMEDIATE GROUNDWATER CONTOUR MAP - AUGUST 28, 2017

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FIGURE
4

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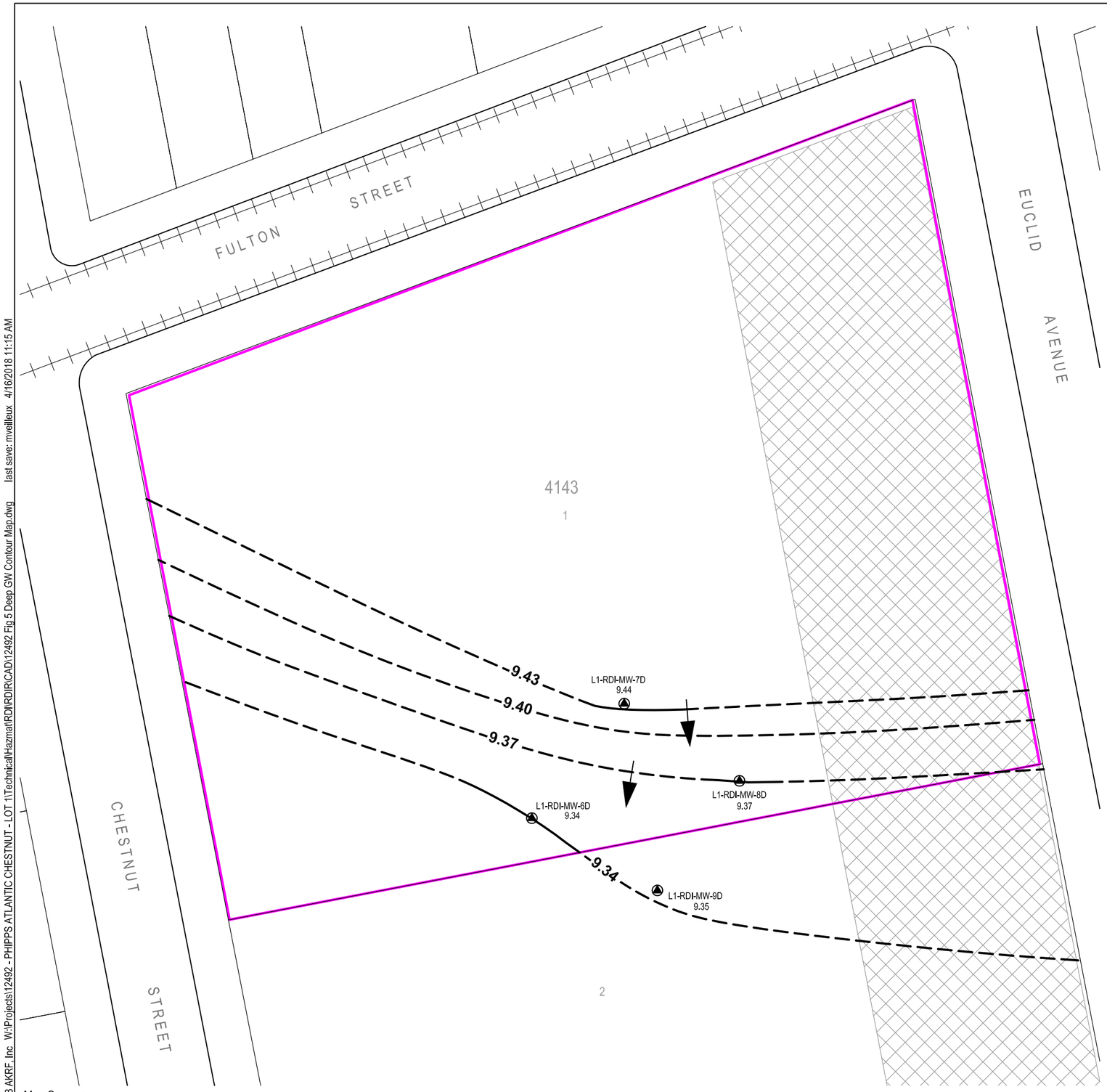

LEGEND

- BCP SITE BOUNDARY
- 1 — LOT BOUNDARY
- 4143 — BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- REMEDIAL DESIGN INVESTIGATION NESTED GROUNDWATER MONITORING WELL LOCATION (2017)
- 9.33 — WATER TABLE ELEVATION IN FEET
- 9.37 — GROUNDWATER ELEVATION CONTOUR IN FEET (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

Groundwater Monitoring Well ID	Top of Casing	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet)
L1-RDI-MW-6D	41.05	31.71	9.34
L1-RDI-MW-7D	40.47	31.03	9.44
L1-RDI-MW-8D	40.92	31.55	9.37
L1-RDI-MW-9D	40.87	31.52	9.35

Notes:

All elevations are referenced to the North American Vertical Datum of 1988 (NAVD88).

TOC - Top of Casing

0 20 40 80

SCALE IN FEET

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

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DEEP GROUNDWATER CONTOUR MAP - AUGUST 28, 2017

DATE
4/16/2018

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FIGURE
5

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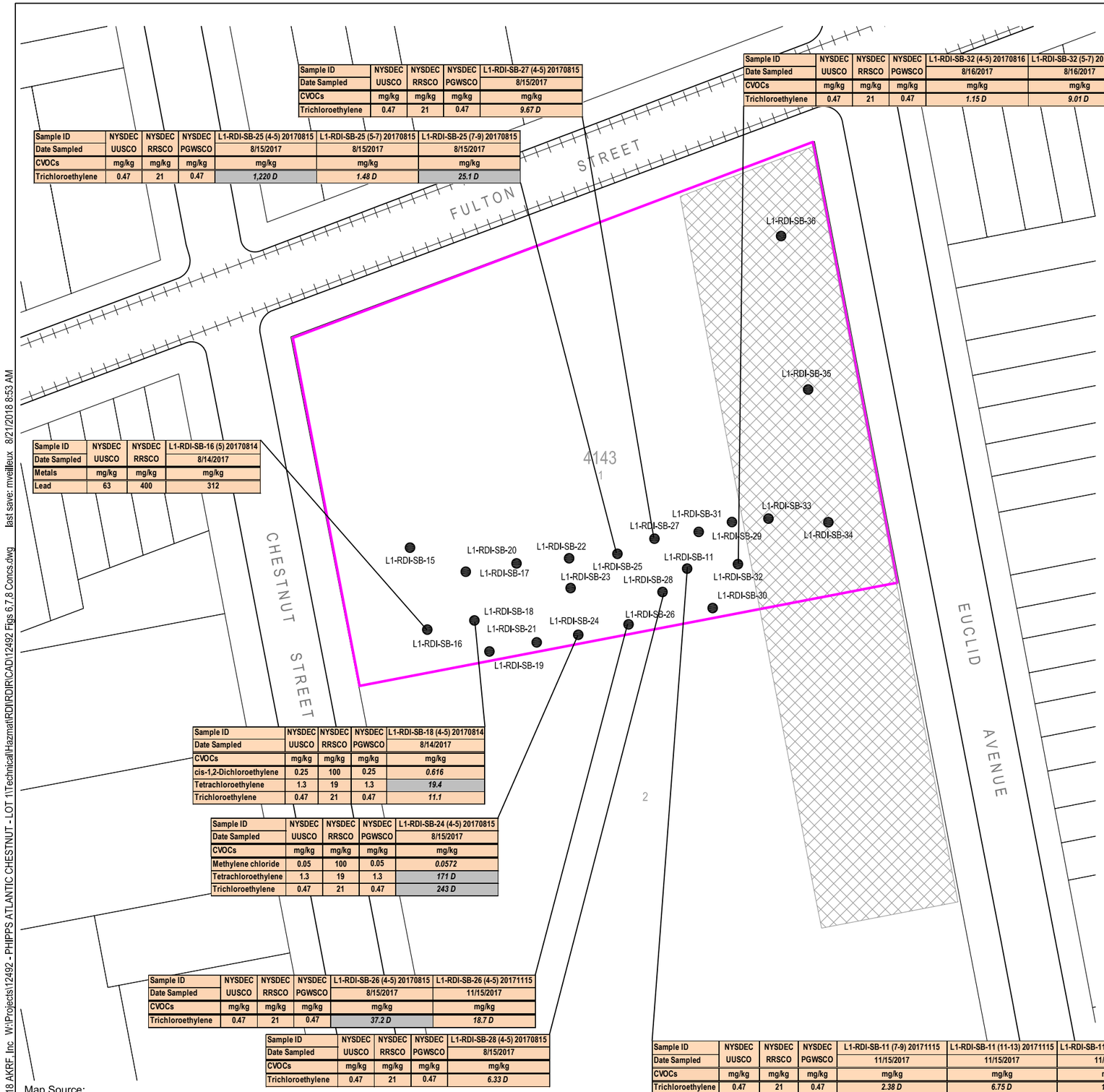

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-27 (4-5) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*9.67 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-32 (4-5) 20170816	L1-RDI-SB-32 (5-7) 20170816
Date Sampled	UUSCO	RRSCO	PGWSCO	8/16/2017	8/16/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*1.15 D*	*9.01 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-25 (4-5) 20170815	L1-RDI-SB-25 (5-7) 20170815	L1-RDI-SB-25 (7-9) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017	8/15/2017	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*1,220 D*	*1.48 D*	*25.1 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-16 (5) 20170814
Date Sampled	UUSCO	RRSCO		8/14/2017
Metals	mg/kg	mg/kg		mg/kg
Lead	63	400		312

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-18 (4-5) 20170814
Date Sampled	UUSCO	RRSCO	PGWSCO	8/14/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
cis-1,2-Dichloroethylene	0.25	100	0.25	*0.616*
Tetrachloroethylene	1.3	19	1.3	*19.4*
Trichloroethylene	0.47	21	0.47	*11.1*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-24 (4-5) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Methylene chloride	0.05	100	0.05	*0.0572*
Tetrachloroethylene	1.3	19	1.3	*171 D*
Trichloroethylene	0.47	21	0.47	*243 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-26 (4-5) 20170815	L1-RDI-SB-26 (4-5) 20171115
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017	11/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*37.2 D*	*18.7 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-28 (4-5) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*6.33 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-11 (7-9) 20171115	L1-RDI-SB-11 (11-13) 20171115	L1-RDI-SB-11 (21-23) 20171115
Date Sampled	UUSCO	RRSCO	PGWSCO	11/15/2017	11/15/2017	11/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*2.38 D*	*6.75 D*	*16.6 D*

LEGEND

- BCP SITE BOUNDARY
- 1 — LOT BOUNDARY
- 4143 — BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- REMEDIAL DESIGN INVESTIGATION SOIL BORING LOCATION (2017)

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-27 (4-5) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*9.67 D*

Sample ID
Sample Date
Concentration
Analyte/Compound

Part 375 Soil Cleanup Objectives (SCOs) : SCOs listed in New York State Department of Environmental Conservation (NYSDEC) Part 375 Regulations (6 NYCRR Part 375).

D : The reported concentration is the result of a diluted sample analysis.

mg/kg : milligrams per kilogram = parts per million (ppm)

Exceedances of Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) are highlighted in bold font.
Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are highlighted in gray.
Exceedances of Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) are highlighted in italic font.

0 30 60 120
SCALE IN FEET

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

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RDI SOIL SAMPLE CONCENTRATIONS ABOVE NYSDEC UUSCOs, RRSCOs, AND/OR PGWSCOs

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8/21/2018

PROJECT NO.
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FIGURE
6

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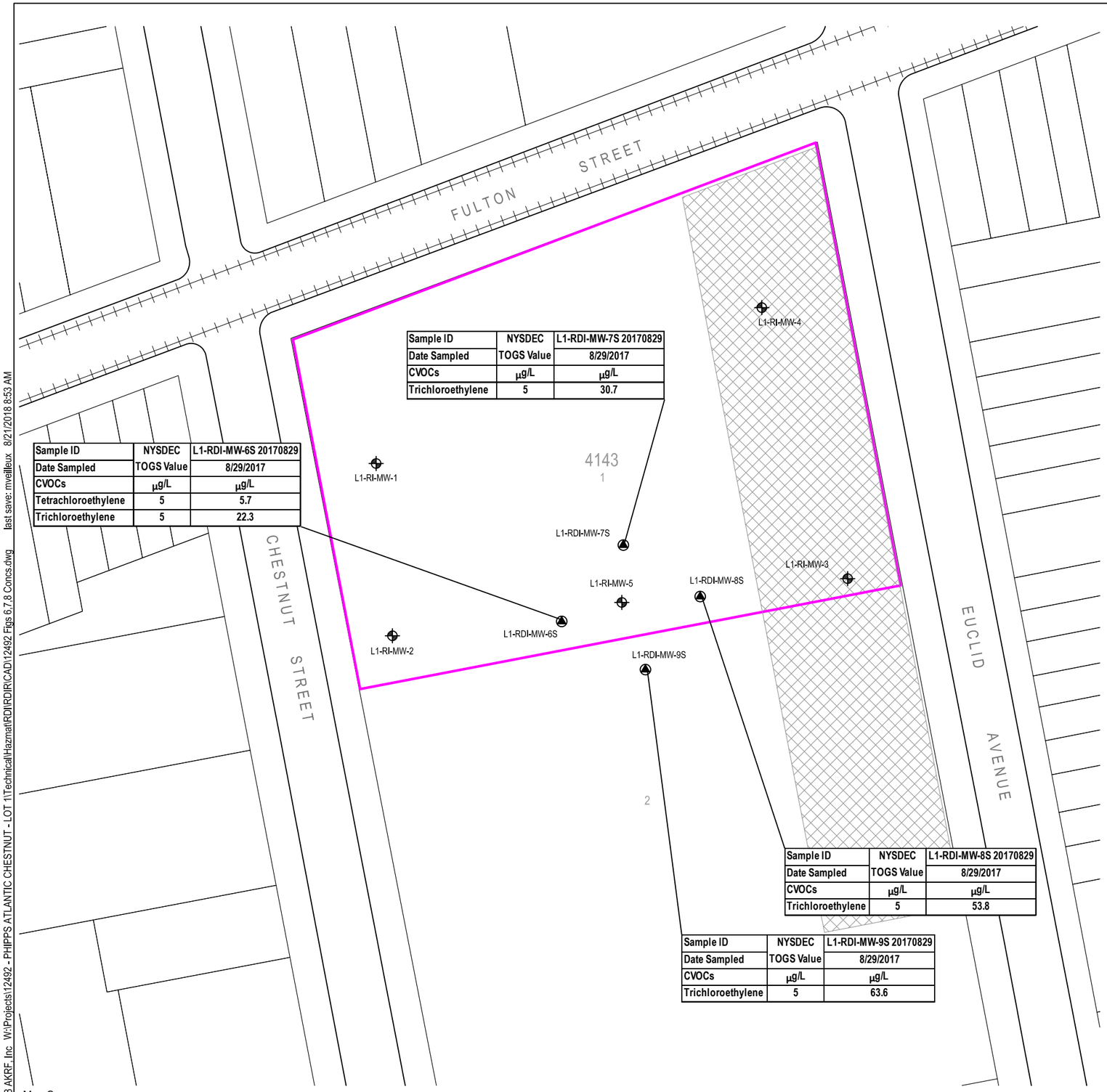

Sample ID	NYSDEC	L1-RDI-MW-7S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Trichloroethylene	5	30.7

Sample ID	NYSDEC	L1-RDI-MW-6S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Tetrachloroethylene	5	5.7
Trichloroethylene	5	22.3

Sample ID	NYSDEC	L1-RDI-MW-8S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Trichloroethylene	5	53.8

Sample ID	NYSDEC	L1-RDI-MW-9S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Trichloroethylene	5	63.6

LEGEND

- BCP SITE BOUNDARY
- 1 — LOT BOUNDARY
- 4143 — BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- REMEDIAL DESIGN INVESTIGATION NESTED GROUNDWATER MONITORING WELL LOCATION (2017)

Sample ID	NYSDEC	L1-RDI-MW-9S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Trichloroethylene	5	63.6

Sample ID
Sample Date
Concentration
Analyte/Compound

NYSDEC Technical & Operational Guidance Series (TOGS) Values : New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) (1.1.1): Class GA Ambient Water Quality Standards (AWQS) and Guidance Values.

µg/L : micrograms per Liter = parts per billion (ppb)

0 30 60 120
SCALE IN FEET

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

AKRF
440 Park Avenue South, New York, NY 10016

Atlantic Chestnut - Lot 1
3264 Fulton Street
Brooklyn, New York

RDI GROUNDWATER CONCENTRATIONS ABOVE TOGS

DATE
8/21/2018

PROJECT NO.
12492

FIGURE
7

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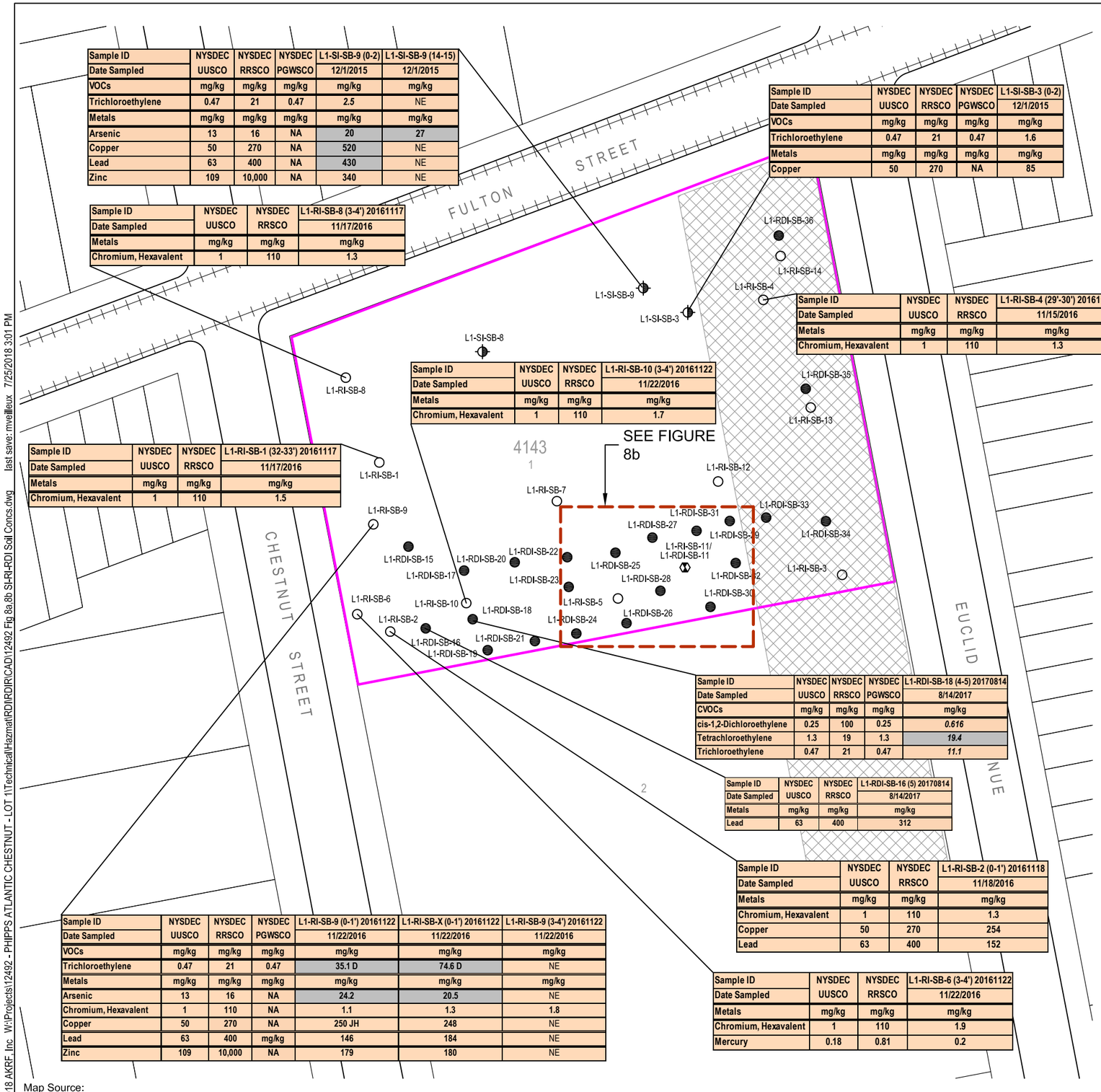


Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-SI-SB-9 (0-2)	L1-SI-SB-9 (14-15)
Date Sampled	UUSCO	RRSCO	PGWSCO	12/1/2015	12/1/2015
VOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	2.5	NE
Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	13	16	NA	20	27
Copper	50	270	NA	520	NE
Lead	63	400	NA	430	NE
Zinc	109	10,000	NA	340	NE

Sample ID	NYSDEC	NYSDEC	L1-RI-SB-8 (3-4') 20161117
Date Sampled	UUSCO	RRSCO	11/17/2016
Metals	mg/kg	mg/kg	mg/kg
Chromium, Hexavalent	1	110	1.3

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-SI-SB-3 (0-2)
Date Sampled	UUSCO	RRSCO	PGWSCO	12/1/2015
VOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	1.6
Metals	mg/kg	mg/kg	mg/kg	mg/kg
Copper	50	270	NA	85

Sample ID	NYSDEC	NYSDEC	L1-RI-SB-4 (29'-30') 20161115
Date Sampled	UUSCO	RRSCO	11/15/2016
Metals	mg/kg	mg/kg	mg/kg
Chromium, Hexavalent	1	110	1.3

Sample ID	NYSDEC	NYSDEC	L1-RI-SB-10 (3-4') 20161122
Date Sampled	UUSCO	RRSCO	11/22/2016
Metals	mg/kg	mg/kg	mg/kg
Chromium, Hexavalent	1	110	1.7

Sample ID	NYSDEC	NYSDEC	L1-RI-SB-1 (32-33') 20161117
Date Sampled	UUSCO	RRSCO	11/17/2016
Metals	mg/kg	mg/kg	mg/kg
Chromium, Hexavalent	1	110	1.5

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-18 (4-5) 20170814
Date Sampled	UUSCO	RRSCO	PGWSCO	8/14/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
cis-1,2-Dichloroethylene	0.25	100	0.25	*0.616*
Tetrachloroethylene	1.3	19	1.3	*19.4*
Trichloroethylene	0.47	21	0.47	*11.1*

Sample ID	NYSDEC	NYSDEC	L1-RDI-SB-16 (5) 20170814
Date Sampled	UUSCO	RRSCO	8/14/2017
Metals	mg/kg	mg/kg	mg/kg
Lead	63	400	312

Sample ID	NYSDEC	NYSDEC	L1-RI-SB-2 (0-1') 20161118
Date Sampled	UUSCO	RRSCO	11/18/2016
Metals	mg/kg	mg/kg	mg/kg
Chromium, Hexavalent	1	110	1.3
Copper	50	270	254
Lead	63	400	152

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RI-SB-9 (0-1') 20161122	L1-RI-SB-X (0-1') 20161122	L1-RI-SB-9 (3-4') 20161122
Date Sampled	UUSCO	RRSCO	PGWSCO	11/22/2016	11/22/2016	11/22/2016
VOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	35.1 D	74.6 D	NE
Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	13	16	NA	24.2	20.5	NE
Chromium, Hexavalent	1	110	NA	1.1	1.3	1.8
Copper	50	270	NA	250 JH	248	NE
Lead	63	400	mg/kg	146	184	NE
Zinc	109	10,000	NA	179	180	NE

Sample ID	NYSDEC	NYSDEC	L1-RI-SB-6 (3-4') 20161122
Date Sampled	UUSCO	RRSCO	11/22/2016
Metals	mg/kg	mg/kg	mg/kg
Chromium, Hexavalent	1	110	1.9
Mercury	0.18	0.81	0.2

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

LEGEND

- BCP SITE BOUNDARY
- 1 — LOT BOUNDARY
- 4143 — BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- SUBSURFACE INVESTIGATION SOIL BORING LOCATION (2015)
- REMEDIAL INVESTIGATION SOIL BORING LOCATION (2016)
- REMEDIAL INVESTIGATION (2016) / REMEDIAL DESIGN INVESTIGATION (2017) SOIL BORING LOCATION
- REMEDIAL DESIGN INVESTIGATION SOIL BORING LOCATION (2017)

Sample ID	NYSDEC	NYSDEC	L1-RI-SB-10 (3-4') 20161122
Date Sampled	UUSCO	RRSCO	11/22/2016
Metals	mg/kg	mg/kg	mg/kg
Chromium, Hexavalent	1	110	1.7

Sample ID
Sample Date
Concentration
Analyte/Compound

Part 375 Soil Cleanup Objectives (SCOs) : SCOs listed in New York State Department of Environmental Conservation (NYSDEC) Part 375 Regulations (6 NYCRR Part 375).

D : The reported concentration is the result of a diluted sample analysis.

NE : The analyte was not detected at a concentration exceeding UUSCOs or RRSCOs.

NA: The standard is not applicable

mg/kg : milligrams per kilogram = parts per million (ppm)

JH : The analyte was detected above laboratory reporting limit; the reported concentration is estimated and may be biased high.

Exceedances of Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) are highlighted in bold font.
Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are highlighted in gray.
Exceedances of Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) are highlighted in italic font.

Soil sample L1-RI-SB-X (0-1') 20161122 is a blind duplicate of soil sample L1-RI-SB-9 (0-1') 20161122.

0 30 60 120
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Atlantic Chestnut - Lot 1
3264 Fulton Street
Brooklyn, New York

SI, RI, AND RDI SOIL SAMPLE CONCENTRATIONS ABOVE NYSDEC UUSCOs, RRSCOs, AND/OR PGWSCOs

DATE
7/25/2018

PROJECT NO.
12492

FIGURE
8a

©2018 AKRF, Inc. W:\Projects\12492 - PHIPPS ATLANTIC CHESTNUT - LOT 1\Technical\Hazmat\RDI\RDIRI\CAD\12492 Fig 8a,8b SI-RI-RDI Soil Concs.dwg last save: mveilleux 7/25/2018 3:01 PM

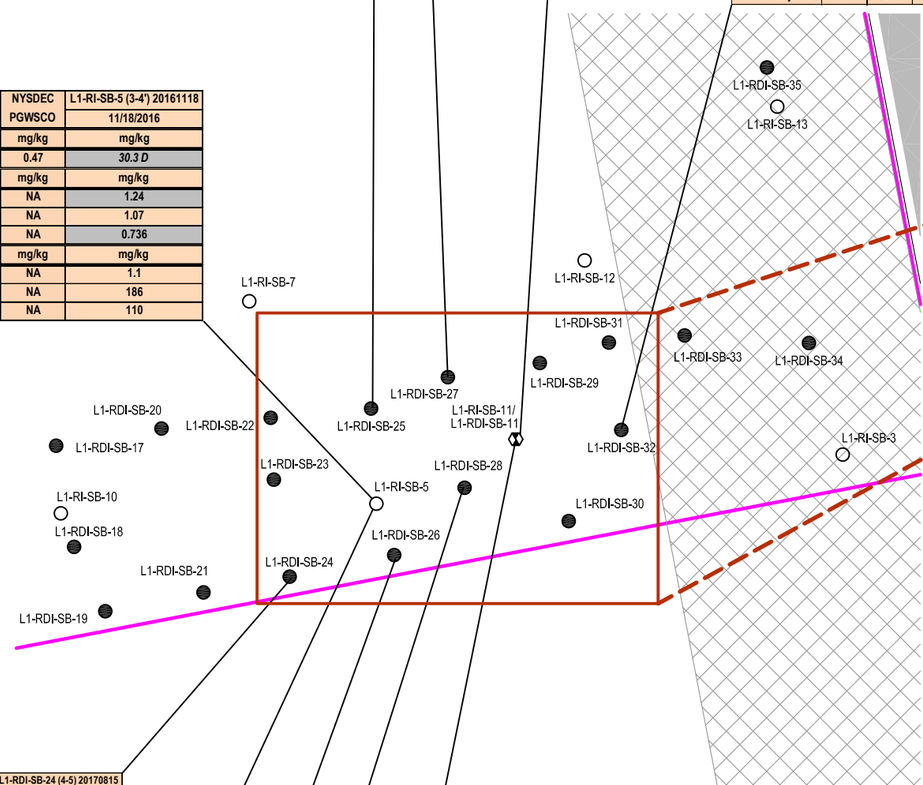
Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-27 (4-5) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*9.67 D*

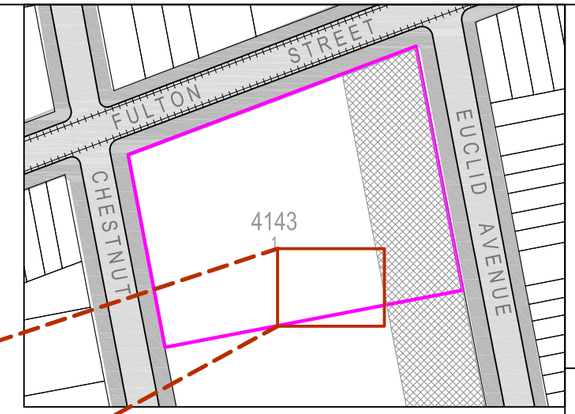
Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-11 (7-9) 20171115	L1-RDI-SB-11 (11-13) 20171115	L1-RDI-SB-11 (21-23) 20171115
Date Sampled	UUSCO	RRSCO	PGWSCO	11/15/2017	11/15/2017	11/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*2.38 D*	*6.75 D*	*16.6 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-25 (4-5) 20170815	L1-RDI-SB-25 (5-7) 20170815	L1-RDI-SB-25 (7-9) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017	8/15/2017	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*1,220 D*	*1.48 D*	*25.1 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-32 (4-5) 20170816	L1-RDI-SB-32 (5-7) 20170816
Date Sampled	UUSCO	RRSCO	PGWSCO	8/16/2017	8/16/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*1.15 D*	*9.01 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RI-SB-5 (3-4') 20161118
Date Sampled	UUSCO	RRSCO	PGWSCO	11/18/2016
VOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*30.3 D*
SVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Benzo(b)fluoranthene	1	1	NA	1.24
Chrysene	1	3.9	NA	1.07
Indeno(1,2,3-c,d)pyrene	0.5	0.5	NA	0.736
Metals	mg/kg	mg/kg	mg/kg	mg/kg
Chromium, Hexavalent	1	110	NA	1.1
Lead	63	400	NA	186
Zinc	109	10,000	NA	110





KEY MAP
SCALE: 1" = 150'

LEGEND

- BCP SITE BOUNDARY
- LOT BOUNDARY
- 4143 BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- REMEDIAL INVESTIGATION SOIL BORING LOCATION (2016)
- REMEDIAL INVESTIGATION (2016) / REMEDIAL DESIGN INVESTIGATION (2017) SOIL BORING LOCATION
- REMEDIAL DESIGN INVESTIGATION SOIL BORING LOCATION (2017)

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-27 (4-5) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*9.67 D*

Sample ID
Sample Date
Concentration
Analyte/Compound

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-24 (4-5) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Methylene chloride	0.05	100	0.05	*0.0572*
Tetrachloroethylene	1.3	19	1.3	*171 D*
Trichloroethylene	0.47	21	0.47	*243 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RI-SB-5 (3-4') 20161118
Date Sampled	UUSCO	RRSCO	PGWSCO	11/18/2016
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*30.3 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-26 (4-5) 20170815	L1-RDI-SB-26 (4-5) 20171115
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017	11/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*37.2 D*	*18.7 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RDI-SB-28 (4-5) 20170815
Date Sampled	UUSCO	RRSCO	PGWSCO	8/15/2017
CVOCs	mg/kg	mg/kg	mg/kg	mg/kg
Trichloroethylene	0.47	21	0.47	*6.33 D*

Sample ID	NYSDEC	NYSDEC	NYSDEC	L1-RI-SB-11 (3-4') 20161121	L1-RI-SB-11 (4-5') 20161121	L1-RI-SB-11 (31-32') 20161121
Date Sampled	UUSCO	RRSCO	PGWSCO	11/21/2016	11/21/2016	11/21/2016
VOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acetone	0.05	100	NA	0.0937	0.114 JH	NE
Trichloroethylene	0.47	21	0.47	*930 D*	*304 D*	*2.26 D*
SVOCs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzo(a)anthracene	1	1	NA	1.1	2.7	NE
Benzo(a)pyrene	1	1	NA	NE	2.46	NE
Benzo(b)fluoranthene	1	1	NA	2.41	4.11 D	NE
Benzo(k)fluoranthene	0.8	3.9	NA	NE	1.03 D	NE
Chrysene	1	3.9	NA	2.13	3.6 D	NE
Dibenz(a,h)anthracene	0.33	0.33	NA	NE	0.923	NE
Indeno(1,2,3-c,d)pyrene	0.5	0.5	NA	0.687	2.41	NE
Metals	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	13	16	NA	15.5	NE	NE
Copper	50	270	NA	373	677	NE
Lead	63	400	NA	304	295	NE
Mercury	0.18	0.81	NA	0.21	NE	NE
Zinc	109	10,000	NA	401	485	NE

Part 375 Soil Cleanup Objectives (SCOs) : SCOs listed in New York State Department of Environmental Conservation (NYSDEC) Part 375 Regulations (6 NYCRR Part 375).

D : The reported concentration is the result of a diluted sample analysis.

NE : The analyte was not detected at a concentration exceeding UUSCOs or RRSCOs.

NA: The standard is not applicable

mg/kg : milligrams per kilogram = parts per million (ppm)

JH : The analyte was detected above laboratory reporting limit; the reported concentration is estimated and may be biased high.

Exceedances of Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCOs) are highlighted in bold font.
Exceedances of Part 375 Restricted Residential Soil Cleanup Objectives (RRSCOs) are highlighted in gray.
Exceedances of Part 375 Protection of Groundwater Soil Cleanup Objectives (PGWSCOs) are highlighted in italic font.

Soil sample L1-RI-SB-X (0-1') 20161122 is a blind duplicate of soil sample L1-RI-SB-9 (0-1') 20161122.

0 20 40 80
SCALE IN FEET

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

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Atlantic Chestnut - Lot 1
3264 Fulton Street
Brooklyn, New York

SI, RI, AND RDI SOIL SAMPLE CONCENTRATIONS ABOVE NYSDEC UUSCOs, RRSCOs, AND/OR PGWSCOs

DATE
7/25/2018

PROJECT NO.
12492

FIGURE
8b

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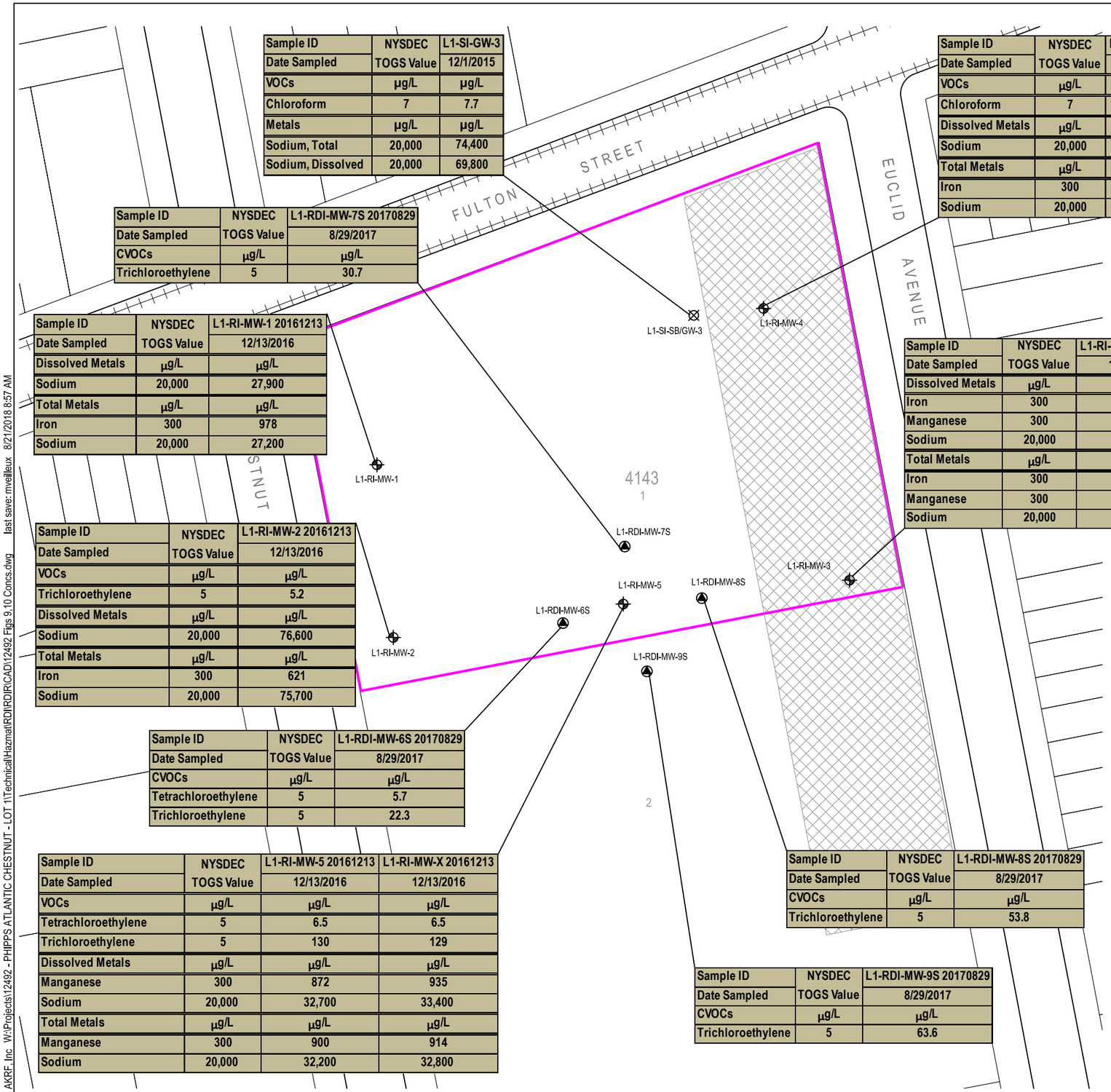

Sample ID	NYSDEC	L1-SI-GW-3
Date Sampled	TOGS Value	12/1/2015
VOCs	µg/L	µg/L
Chloroform	7	7.7
Metals	µg/L	µg/L
Sodium, Total	20,000	74,400
Sodium, Dissolved	20,000	69,800

Sample ID	NYSDEC	L1-RI-MW-4 20161213
Date Sampled	TOGS Value	12/13/2016
VOCs	µg/L	µg/L
Chloroform	7	13.3
Dissolved Metals	µg/L	µg/L
Sodium	20,000	56,300
Total Metals	µg/L	µg/L
Iron	300	501
Sodium	20,000	57,500

Sample ID	NYSDEC	L1-RDI-MW-7S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Trichloroethylene	5	30.7

Sample ID	NYSDEC	L1-RI-MW-1 20161213
Date Sampled	TOGS Value	12/13/2016
Dissolved Metals	µg/L	µg/L
Sodium	20,000	27,900
Total Metals	µg/L	µg/L
Iron	300	978
Sodium	20,000	27,200

Sample ID	NYSDEC	L1-RI-MW-3 20161213
Date Sampled	TOGS Value	12/13/2016
Dissolved Metals	µg/L	µg/L
Iron	300	407
Manganese	300	432
Sodium	20,000	69,000
Total Metals	µg/L	µg/L
Iron	300	691
Manganese	300	430
Sodium	20,000	67,900

Sample ID	NYSDEC	L1-RI-MW-2 20161213
Date Sampled	TOGS Value	12/13/2016
VOCs	µg/L	µg/L
Trichloroethylene	5	5.2
Dissolved Metals	µg/L	µg/L
Sodium	20,000	76,600
Total Metals	µg/L	µg/L
Iron	300	621
Sodium	20,000	75,700

Sample ID	NYSDEC	L1-RDI-MW-6S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Tetrachloroethylene	5	5.7
Trichloroethylene	5	22.3

Sample ID	NYSDEC	L1-RI-MW-5 20161213	L1-RI-MW-X 20161213
Date Sampled	TOGS Value	12/13/2016	12/13/2016
VOCs	µg/L	µg/L	µg/L
Tetrachloroethylene	5	6.5	6.5
Trichloroethylene	5	130	129
Dissolved Metals	µg/L	µg/L	µg/L
Manganese	300	872	935
Sodium	20,000	32,700	33,400
Total Metals	µg/L	µg/L	µg/L
Manganese	300	900	914
Sodium	20,000	32,200	32,800

Sample ID	NYSDEC	L1-RDI-MW-8S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Trichloroethylene	5	53.8

Sample ID	NYSDEC	L1-RDI-MW-9S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Trichloroethylene	5	63.6

LEGEND

- BCP SITE BOUNDARY
- 1 — LOT BOUNDARY
- 4143 — BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- SUBSURFACE INVESTIGATION GROUNDWATER MONITORING WELL LOCATION (2015)
- REMEDIAL INVESTIGATION GROUNDWATER MONITORING WELL LOCATION (2016)
- REMEDIAL DESIGN INVESTIGATION NESTED GROUNDWATER MONITORING WELL LOCATION (2017)

Sample ID	NYSDEC	L1-RDI-MW-9S 20170829
Date Sampled	TOGS Value	8/29/2017
CVOCs	µg/L	µg/L
Trichloroethylene	5	63.6

Sample ID
Sample Date
Concentration
Analyte/Compound

NYSDEC Technical & Operational Guidance Series (TOGS) : New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) (1.1.1): Class GA Ambient Water Quality Standards (AWQS) and Guidance Values.

µg/L : micrograms per Liter = parts per billion (ppb)

Sample L1-RI-MW-X 20161213 is a blind duplicate sample of sample L1-RI-MW-5 20161213.

0 30 60 120
SCALE IN FEET

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

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Atlantic Chestnut - Lot 1
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SI, RI, AND RDI GROUNDWATER CONCENTRATIONS ABOVE TOGS

DATE
8/21/2018

PROJECT NO.
12492

FIGURE
9

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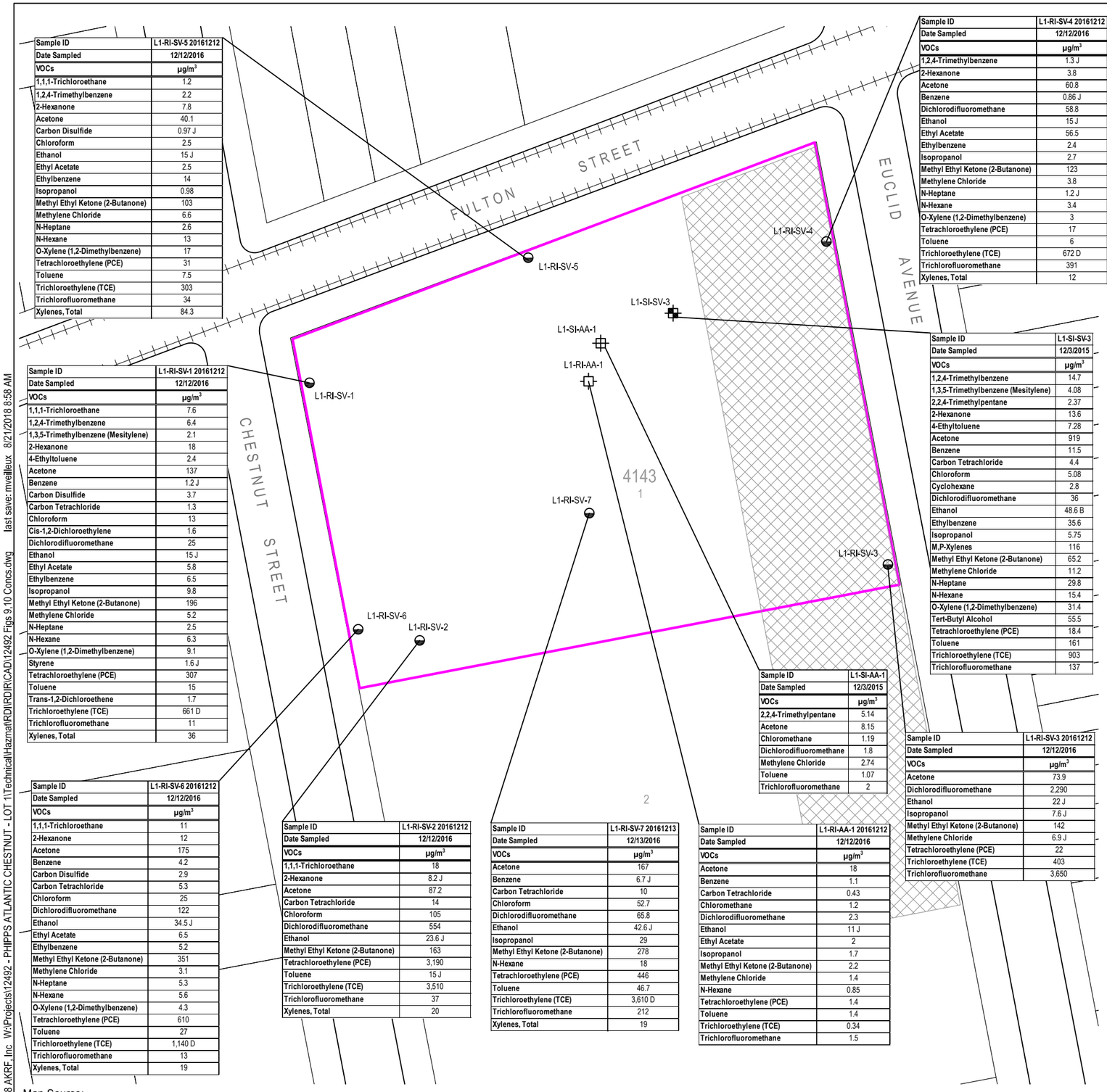

Sample ID	L1-RI-SV-5 20161212
Date Sampled	12/12/2016
VOCs	µg/m³
1,1,1-Trichloroethane	1.2
1,2,4-Trimethylbenzene	2.2
2-Hexanone	7.8
Acetone	40.1
Carbon Disulfide	0.97 J
Chloroform	2.5
Ethanol	15 J
Ethyl Acetate	2.5
Ethylbenzene	14
Isopropanol	0.98
Methyl Ethyl Ketone (2-Butanone)	103
Methylene Chloride	6.6
N-Heptane	2.6
N-Hexane	13
O-Xylene (1,2-Dimethylbenzene)	17
Tetrachloroethylene (PCE)	31
Toluene	7.5
Trichloroethylene (TCE)	303
Trichlorofluoromethane	34
Xylenes, Total	84.3

Sample ID	L1-RI-SV-4 20161212
Date Sampled	12/12/2016
VOCs	µg/m³
1,2,4-Trimethylbenzene	1.3 J
2-Hexanone	3.8
Acetone	60.8
Benzene	0.86 J
Dichlorodifluoromethane	58.8
Ethanol	15 J
Ethyl Acetate	56.5
Ethylbenzene	2.4
Isopropanol	2.7
Methyl Ethyl Ketone (2-Butanone)	123
Methylene Chloride	3.8
N-Heptane	1.2 J
N-Hexane	3.4
O-Xylene (1,2-Dimethylbenzene)	3
Tetrachloroethylene (PCE)	17
Toluene	6
Trichloroethylene (TCE)	672 D
Trichlorofluoromethane	391
Xylenes, Total	12

Sample ID	L1-SI-SV-3
Date Sampled	12/3/2015
VOCs	µg/m³
1,2,4-Trimethylbenzene	14.7
1,3,5-Trimethylbenzene (Mesitylene)	4.08
2,2,4-Trimethylpentane	2.37
2-Hexanone	13.6
4-Ethyltoluene	7.28
Acetone	919
Benzene	11.5
Carbon Tetrachloride	4.4
Chloroform	5.08
Cyclohexane	2.8
Dichlorodifluoromethane	36
Ethanol	48.6 B
Ethylbenzene	35.6
Isopropanol	5.75
M,P-Xylenes	116
Methyl Ethyl Ketone (2-Butanone)	65.2
Methylene Chloride	11.2
N-Heptane	29.8
N-Hexane	15.4
O-Xylene (1,2-Dimethylbenzene)	31.4
Tert-Butyl Alcohol	55.5
Tetrachloroethylene (PCE)	18.4
Toluene	161
Trichloroethylene (TCE)	903
Trichlorofluoromethane	137

Sample ID	L1-RI-SV-1 20161212
Date Sampled	12/12/2016
VOCs	µg/m³
1,1,1-Trichloroethane	7.6
1,2,4-Trimethylbenzene	6.4
1,3,5-Trimethylbenzene (Mesitylene)	2.1
2-Hexanone	18
4-Ethyltoluene	2.4
Acetone	137
Benzene	1.2 J
Carbon Disulfide	3.7
Carbon Tetrachloride	1.3
Chloroform	13
Cis-1,2-Dichloroethylene	1.6
Dichlorodifluoromethane	25
Ethanol	15 J
Ethyl Acetate	5.8
Ethylbenzene	6.5
Isopropanol	9.8
Methyl Ethyl Ketone (2-Butanone)	196
Methylene Chloride	5.2
N-Heptane	2.5
N-Hexane	6.3
O-Xylene (1,2-Dimethylbenzene)	9.1
Styrene	1.6 J
Tetrachloroethylene (PCE)	307
Toluene	15
Trans-1,2-Dichloroethene	1.7
Trichloroethylene (TCE)	661 D
Trichlorofluoromethane	11
Xylenes, Total	36

Sample ID	L1-SI-AA-1
Date Sampled	12/3/2015
VOCs	µg/m³
2,2,4-Trimethylpentane	5.14
Acetone	8.15
Chloromethane	1.19
Dichlorodifluoromethane	1.8
Methylene Chloride	2.74
Toluene	1.07
Trichlorofluoromethane	2

Sample ID	L1-RI-SV-3 20161212
Date Sampled	12/12/2016
VOCs	µg/m³
Acetone	73.9
Dichlorodifluoromethane	2,290
Ethanol	22 J
Isopropanol	7.6 J
Methyl Ethyl Ketone (2-Butanone)	142
Methylene Chloride	6.9 J
Tetrachloroethylene (PCE)	22
Trichloroethylene (TCE)	403
Trichlorofluoromethane	3,650

Sample ID	L1-RI-SV-6 20161212
Date Sampled	12/12/2016
VOCs	µg/m³
1,1,1-Trichloroethane	11
2-Hexanone	12
Acetone	175
Benzene	4.2
Carbon Disulfide	2.9
Carbon Tetrachloride	5.3
Chloroform	25
Dichlorodifluoromethane	122
Ethanol	34.5 J
Ethyl Acetate	6.5
Ethylbenzene	5.2
Methyl Ethyl Ketone (2-Butanone)	351
Methylene Chloride	3.1
N-Heptane	5.3
N-Hexane	5.6
O-Xylene (1,2-Dimethylbenzene)	4.3
Tetrachloroethylene (PCE)	610
Toluene	27
Trichloroethylene (TCE)	1,140 D
Trichlorofluoromethane	13
Xylenes, Total	19

Sample ID	L1-RI-SV-2 20161212
Date Sampled	12/12/2016
VOCs	µg/m³
1,1,1-Trichloroethane	18
2-Hexanone	8.2 J
Acetone	87.2
Carbon Tetrachloride	14
Chloroform	105
Dichlorodifluoromethane	554
Ethanol	23.6 J
Methyl Ethyl Ketone (2-Butanone)	163
Tetrachloroethylene (PCE)	3,190
Toluene	15 J
Trichloroethylene (TCE)	3,510
Trichlorofluoromethane	37
Xylenes, Total	20

Sample ID	L1-RI-SV-7 20161213
Date Sampled	12/13/2016
VOCs	µg/m³
Acetone	167
Benzene	6.7 J
Carbon Tetrachloride	10
Chloroform	52.7
Dichlorodifluoromethane	65.8
Ethanol	42.6 J
Isopropanol	29
Methyl Ethyl Ketone (2-Butanone)	278
N-Hexane	18
Tetrachloroethylene (PCE)	446
Toluene	46.7
Trichloroethylene (TCE)	3,610 D
Trichlorofluoromethane	212
Xylenes, Total	19

Sample ID	L1-RI-AA-1 20161212
Date Sampled	12/12/2016
VOCs	µg/m³
Acetone	18
Benzene	1.1
Carbon Tetrachloride	0.43
Chloromethane	1.2
Dichlorodifluoromethane	2.3
Ethanol	11 J
Ethyl Acetate	2
Isopropanol	1.7
Methyl Ethyl Ketone (2-Butanone)	2.2
Methylene Chloride	1.4
N-Hexane	0.85
Tetrachloroethylene (PCE)	1.4
Toluene	1.4
Trichloroethylene (TCE)	0.34
Trichlorofluoromethane	1.5

Map Source:
- NYCDCP (NYC Dept. of City Planning) GIS database.

LEGEND

- BCP SITE BOUNDARY
- 1 — LOT BOUNDARY
- 4143 — BLOCK NUMBER
- MTA RAILROAD ELEVATED TRACKS
- APPROXIMATE EXTENT OF FORMER PARTIAL CELLAR
- SUBSURFACE INVESTIGATION SOIL VAPOR POINT LOCATION (2015)
- SUBSURFACE INVESTIGATION AMBIENT AIR SAMPLE LOCATION (2015)
- REMEDIAL INVESTIGATION TEMPORARY SOIL VAPOR POINT LOCATION
- REMEDIAL INVESTIGATION AMBIENT AIR SAMPLE LOCATION

Sample ID	L1-RI-SV-3 20161212
Date Sampled	12/12/2016
VOCs	µg/m³
Acetone	73.9
Dichlorodifluoromethane	2,290
Ethanol	22 J
Isopropanol	7.6 J
Methyl Ethyl Ketone (2-Butanone)	142
Methylene Chloride	6.9 J
Tetrachloroethylene (PCE)	22
Trichloroethylene (TCE)	403
Trichlorofluoromethane	3,650

Sample ID
Sample Date
Analyte/Compound
Concentration

J : The analyte was detected above laboratory reporting limits; the reported concentration is an estimated concentration.

D : The reported concentration is the result of a diluted sample analysis.

B : The method blank has a concentration above the reporting limit for ethanol. The results of the original analysis are reported and are qualified with a "B" for any associated sample concentrations that are less than 10x the blank concentration for this analyte.

µg/m³ : micrograms per cubic meter

0 30 60 120
SCALE IN FEET

AKRF
440 Park Avenue South, New York, NY 10016

Atlantic Chestnut - Lot 1
3264 Fulton Street
Brooklyn, New York

SOIL VAPOR SAMPLE DETECTIONS

DATE
8/21/2018

PROJECT NO.
12492

FIGURE
10

©2018 AKRF, Inc W:\Projects\12492 - PHIPPS ATLANTIC CHESTNUT - LOT 1\Technical\Hazmat\RD\IRD\IR\CAD\12492 Figs 9,10 Concs.dwg last save: mveilleux 8/21/2018 8:58 AM

TABLES

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-11 (5-7) 20171115	L1-RDI-SB-X1 (5-7) 20171115	L1-RDI-SB-11 (7-9) 20171115	L1-RDI-SB-11 (9-11) 20171115	L1-RDI-SB-11 (11-13) 20171115
Laboratory Sample ID				JC55519-1	JC55519-2	JC55519-5	JC55519-6	JC55519-7
Date Sampled				11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.002 U	0.0024 U	0.0021 U	0.0022 U	0.0019 U
1,1-Dichloroethane	0.27	26	0.27	0.001 U	0.0012 U	0.0011 U	0.0011 U	0.00095 U
1,1-Dichloroethene	0.33	100	0.33	0.001 U	0.0012 U	0.0011 U	0.0011 U	0.00095 U
1,2-Dichlorobenzene	1.1	100	1.1	0.001 U	0.0012 U	0.0011 U	0.0011 U	0.00095 U
1,2-Dichloroethane	0.02	3.1	0.02	0.001 UJ	0.0012 UJ	0.0011 UJ	0.0011 UJ	0.00095 UJ
Carbon Tetrachloride	0.76	2.4	0.76	0.002 U	0.0024 U	0.0021 U	0.0022 U	0.0019 U
Chloroform	0.37	49	0.37	0.002 U	0.0024 U	0.0021 U	0.0022 U	0.00065 J
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0046 J	0.0024 J	0.0051	0.0011 U	0.0136
Methylene Chloride	0.05	100	0.05	0.0028 J	0.0044 J	0.0053 U	0.0034 J	0.0048 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0026	0.0024 U	0.0021 U	0.0022 U	0.0025
Trans-1,2-Dichloroethene	0.19	100	0.19	0.001 U	0.0012 U	0.0011 U	0.0011 U	0.0026
Trichloroethylene (TCE)	0.47	21	0.47	0.12 JD	0.0702 J	***2.38 D***	0.0053	***6.75 D***
Vinyl Chloride	0.02	0.9	0.02	0.002 U	0.0024 U	0.0021 U	0.0022 U	0.0019 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-11 (13-15) 20171115	L1-RDI-SB-11 (15-17) 20171115	L1-RDI-SB-11 (17-19) 20171115	L1-RDI-SB-11 (19-21) 20171115	L1-RDI-SB-11 (21-23) 20171115
Laboratory Sample ID				JC55519-8	JC55519-9	JC55519-10	JC55519-11	JC55519-12
Date Sampled				11/15/2017	11/15/2017	11/15/2017	11/15/2017	11/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0024 U	0.0024 U	0.0021 U	0.0026 U	0.002 U
1,1-Dichloroethane	0.27	26	0.27	0.0012 U	0.0012 U	0.0011 U	0.0013 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.0012 U	0.0012 U	0.0011 U	0.0013 U	0.0033
1,2-Dichlorobenzene	1.1	100	1.1	0.0012 U	0.0012 U	0.0011 U	0.0013 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0012 U	0.0012 UJ	0.0011 UJ	0.0013 UJ	0.001 UJ
Carbon Tetrachloride	0.76	2.4	0.76	0.0024 U	0.0024 U	0.0021 U	0.0026 U	0.002 U
Chloroform	0.37	49	0.37	0.0024 U	0.0024 U	0.0021 U	0.0026 U	0.0022
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0012 U	0.0012 U	0.0011 U	0.0013 U	0.0486
Methylene Chloride	0.05	100	0.05	0.0091	0.006 U	0.0057	0.0037 J	0.005 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0024 U	0.0024 U	0.0021 U	0.0026 U	0.0039
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U	0.0012 U	0.0011 U	0.0013 U	0.0106
Trichloroethylene (TCE)	0.47	21	0.47	0.0023	0.008	0.0067	0.0033	***16.6 D***
Vinyl Chloride	0.02	0.9	0.02	0.0024 U	0.0024 U	0.0021 U	0.0026 U	0.002 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-11 (23-25) 20171115	L1-RDI-SB-11 (25-27) 20171115	L1-RDI-SB-11 (27-29) 20171115	L1-RDI-SB-11 (29-31) 20171115	L1-RDI-SB-15 (5) 20170814
Laboratory Sample ID				JC55519-13	JC55519-14	JC55519-15	JC55519-16	JC48865-7
Date Sampled				11/15/2017	11/15/2017	11/15/2017	11/15/2017	8/14/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0024 U	0.0025 U	0.0023 U	0.0023 U	0.002 U
1,1-Dichloroethane	0.27	26	0.27	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.00099 U
1,1-Dichloroethene	0.33	100	0.33	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.00099 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.00099 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0012 U	0.0013 UJ	0.0011 UJ	0.0011 UJ	0.00099 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0024 U	0.0025 U	0.0023 U	0.0023 U	0.002 U
Chloroform	0.37	49	0.37	0.0024 U	0.0025 U	0.0023 U	0.0023 U	0.002 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0012 U	0.0012 J	0.0011 U	0.0011 U	0.00099 U
Methylene Chloride	0.05	100	0.05	0.0036 J	0.0074	0.0038 J	0.0042 J	0.0049 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0024 U	0.00086 J	0.0023 U	0.0023 U	0.0426
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.00099 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0012	0.214	0.0045	0.0057	0.0167
Vinyl Chloride	0.02	0.9	0.02	0.0024 U	0.0025 U	0.0023 U	0.0023 U	0.002 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-15 (7) 20170814	L1-RDI-SB-X (7) 20170814	L1-RDI-SB-15 (15) 20170814	L1-RDI-SB-16 (5) 20170814	L1-RDI-SB-16 (15) 20170814
Laboratory Sample ID				JC48865-8	JC48865-15	JC48865-12	JC48865-16	JC48865-21
Date Sampled				8/14/2017	8/14/2017	8/14/2017	8/14/2017	8/14/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0021 U	0.0021 U	0.0022 U	0.0021 U	0.0021 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.001 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0021 U	0.0021 U	0.0022 U	0.0021 U	0.0021 U
Chloroform	0.37	49	0.37	0.0021 U	0.0021 U	0.0022 U	0.0021 U	0.0021 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.001 U
Methylene Chloride	0.05	100	0.05	0.0053 U	0.0053 U	0.0056 U	0.0052 U	0.0052 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0012 J	0.0012 J	0.0022	0.0137	0.00092 J
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U	0.00061 J	0.0014	0.0054	0.001 U
Vinyl Chloride	0.02	0.9	0.02	0.0021 U	0.0021 U	0.0022 U	0.0021 U	0.0021 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-17 (4-5) 20170814	L1-RDI-SB-18 (4-5) 20170814	L1-RDI-SB-18 (5-7) 20170814	L1-RDI-SB-18 (7-9) 20170814	L1-RDI-SB-18 (9-11) 20170814
Laboratory Sample ID				JC48865-22	JC48865-28	JC48865-29	JC48865-30	JC48865-31
Date Sampled				8/14/2017	8/14/2017	8/14/2017	8/14/2017	8/14/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0021 U	0.25 U	0.0021 U	0.002 U	0.0022 U
1,1-Dichloroethane	0.27	26	0.27	0.001 U	0.13 U	0.001 U	0.001 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.33	0.001 U	0.13 U	0.001 U	0.001 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	1.1	0.001 U	0.13 U	0.001 U	0.001 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.001 U	0.13 U	0.001 U	0.001 U	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0021 U	0.25 U	0.0021 U	0.002 U	0.0022 U
Chloroform	0.37	49	0.37	0.0012 J	0.0949 J	0.0021 U	0.002 U	0.0022 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.001 U	***0.616***	0.001 U	0.001 U	0.0011 U
Methylene Chloride	0.05	100	0.05	0.0052 U	0.63 U	0.0052 U	0.0051 U	0.0056 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.088	***19.4***	0.0021 U	0.002 U	0.0022 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.001 U	0.13 U	0.001 U	0.001 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0312	***11.1***	0.001 U	0.001 U	0.0011 U
Vinyl Chloride	0.02	0.9	0.02	0.0021 U	0.25 U	0.0021 U	0.002 U	0.0022 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-18 (11-13) 20170814	L1-RDI-SB-18 (13-15) 20170814	L1-RDI-SB-19 (4-5) 20170814	L1-RDI-SB-20 (4-5) 20170814	L1-RDI-SB-21 (4-5) 20170815
Laboratory Sample ID				JC48865-32	JC48865-33	JC48865-34	JC48865-43	JC48865-49
Date Sampled				8/14/2017	8/14/2017	8/14/2017	8/14/2017	8/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0021 U	0.0021 U	0.0028 U	0.0026 U	0.002 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.001 U	0.0014 U	0.0013 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.001 U	0.0014 U	0.0013 U	0.001 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.001 U	0.0014 U	0.0013 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.001 U	0.0014 U	0.0013 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0021 U	0.0021 U	0.0028 U	0.0026 U	0.002 U
Chloroform	0.37	49	0.37	0.0021 U	0.0021 U	0.0043	0.0035	0.00062 J
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.001 U	0.0322	0.0013 U	0.001 U
Methylene Chloride	0.05	100	0.05	0.0053 U	0.0052 U	0.0069 U	0.0064 U	0.0051 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0021 U	0.0021 U	0.172	0.12	0.0107
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.001 U	0.0014	0.0013 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0011 U	0.001 U	0.176	0.0854	0.0125
Vinyl Chloride	0.02	0.9	0.02	0.0021 U	0.0021 U	0.0028 U	0.0026 U	0.002 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-22 (4-5) 20170815	L1-RDI-SB-23 (4-5) 20170815	L1-RDI-SB-24 (4-5) 20170815	L1-RDI-SB-24 (5-7) 20170815	L1-RDI-SB-24 (7-9) 20170815
Laboratory Sample ID				JC48865-55	JC48865-61	JC48865-70	JC48865-71	JC48865-72
Date Sampled				8/15/2017	8/15/2017	8/15/2017	8/15/2017	8/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0019 U	0.0026 U	0.0026 U	0.0019 U	0.0018 U
1,1-Dichloroethane	0.27	26	0.27	0.00095 U	0.0013 UJ	0.0013 U	0.00094 U	0.00089 U
1,1-Dichloroethene	0.33	100	0.33	0.00095 U	0.0012 J	0.0013 U	0.00094 U	0.00089 U
1,2-Dichlorobenzene	1.1	100	1.1	0.00095 U	0.0013 U	0.0013 U	0.00094 U	0.00089 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00095 U	0.0013 U	0.0013 U	0.00094 U	0.00089 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0019 U	0.0026 U	0.0019 J	0.0019 U	0.0018 U
Chloroform	0.37	49	0.37	0.00062 J	0.0026 UJ	0.01	0.00051 J	0.0018 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00095 U	0.0013 U	0.0054	0.00094 U	0.00089 U
Methylene Chloride	0.05	100	0.05	0.0047 U	0.0066 UJ	***0.0572***	0.0047 U	0.0044 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0139	0.003	***171 D***	0.0315	0.0044
Trans-1,2-Dichloroethene	0.19	100	0.19	0.00095 U	0.0013 U	0.0013 U	0.00094 U	0.00089 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0489	0.0048	***243 D***	0.0482	0.0094
Vinyl Chloride	0.02	0.9	0.02	0.0019 U	0.0026 UJ	0.0026 U	0.0019 U	0.0018 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-24 (9-11) 20170815	L1-RDI-SB-24 (11-13) 20170815	L1-RDI-SB-24 (13-15) 20170815	L1-RDI-SB-25 (4-5) 20170815	L1-RDI-SB-25 (5-7) 20170815
Laboratory Sample ID				JC48865-73	JC48865-74	JC48865-75	JC48865-76	JC48865-77
Date Sampled				8/15/2017	8/15/2017	8/15/2017	8/15/2017	8/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0022 U	0.0022 U	0.002 U	0.0021 U	0.002 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.0011 U	0.001 U	0.0011 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.0011 U	0.001 U	0.0011 U	0.001 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.0011 U	0.001 U	0.0011 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.0011 U	0.001 U	0.0011 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0022 U	0.0022 U	0.002 U	0.0024	0.002 U
Chloroform	0.37	49	0.37	0.0022 U	0.0022 U	0.002 U	0.0138	0.002 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.0011 U	0.001 U	0.0045	0.001 U
Methylene Chloride	0.05	100	0.05	0.0056 U	0.0055 U	0.005 U	0.0054 U	0.0051 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0022 U	0.0022 U	0.002 U	0.0321	0.00069 J
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.0011 U	0.001 U	0.0017	0.001 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0015	0.0017	0.0014	***1,220 D***	***1.48 D***
Vinyl Chloride	0.02	0.9	0.02	0.0022 U	0.0022 U	0.002 U	0.0021 U	0.002 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-25 (7-9) 20170815	L1-RDI-SB-25 (9-11) 20170815	L1-RDI-SB-25 (11-13) 20170815	L1-RDI-SB-25 (13-15) 20170815	L1-RDI-SB-26 (4-5) 20170815
Laboratory Sample ID				JC48865-78	JC48865-79	JC48865-80	JC48865-81	JC48865-82
Date Sampled				8/15/2017	8/15/2017	8/15/2017	8/15/2017	8/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0019 U	0.0019 U	0.002 U	0.0023 U	0.0019 U
1,1-Dichloroethane	0.27	26	0.27	0.00093 U	0.00097 U	0.001 U	0.0012 U	0.00096 U
1,1-Dichloroethene	0.33	100	0.33	0.00093 U	0.00097 U	0.001 U	0.0012 U	0.00096 U
1,2-Dichlorobenzene	1.1	100	1.1	0.00093 U	0.00097 U	0.001 U	0.0012 U	0.00096 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00093 U	0.00097 U	0.001 U	0.0012 U	0.00096 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0019 U	0.0019 U	0.002 U	0.0023 U	0.0019 U
Chloroform	0.37	49	0.37	0.00064 J	0.0019 U	0.002 U	0.0023 U	0.00077 J
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00093 U	0.00097 U	0.001 U	0.0012 U	0.00075 J
Methylene Chloride	0.05	100	0.05	0.0047 U	0.0048 U	0.005 U	0.0058 U	0.0048 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0015 J	0.0019 U	0.002 U	0.0023 U	0.0119
Trans-1,2-Dichloroethene	0.19	100	0.19	0.00093 U	0.00097 U	0.001 U	0.0012 U	0.00096 U
Trichloroethylene (TCE)	0.47	21	0.47	***25.1 D***	0.0136	0.0028	0.0031	***37.2 D***
Vinyl Chloride	0.02	0.9	0.02	0.0019 U	0.0019 U	0.002 U	0.0023 U	0.0019 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-26 (5-7) 20170815	L1-RDI-SB-26 (7-9) 20170815	L1-RDI-SB-26 (9-11) 20170815	L1-RDI-SB-26 (13-15) 20170815	L1-RDI-SB-26 (4-5) 20171115
Laboratory Sample ID				JC48865-83	JC48865-84	JC48865-85	JC48865-87	JC55519-17
Date Sampled				8/15/2017	8/15/2017	8/15/2017	8/15/2017	11/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0019 R	0.0018 R	0.0018 R	0.0022 R	0.002 U
1,1-Dichloroethane	0.27	26	0.27	0.00096 R	0.0009 R	0.00092 R	0.0011 R	0.00098 U
1,1-Dichloroethene	0.33	100	0.33	0.00096 R	0.0009 R	0.00092 R	0.0011 R	0.00098 U
1,2-Dichlorobenzene	1.1	100	1.1	0.00096 R	0.0009 R	0.00092 R	0.0011 R	0.00098 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00096 R	0.0009 R	0.00092 R	0.0011 R	0.00098 UJ
Carbon Tetrachloride	0.76	2.4	0.76	0.0019 R	0.0018 R	0.0018 R	0.0022 R	0.002 U
Chloroform	0.37	49	0.37	0.0019 R	0.0018 R	0.0018 R	0.0022 R	0.00089 J
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00096 R	0.0009 R	0.00092 R	0.0011 R	0.00061 J
Methylene Chloride	0.05	100	0.05	0.0048 R	0.0045 R	0.0046 R	0.0054 R	0.0049 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0019 R	0.0018 R	0.0018 R	0.0022 R	0.0207
Trans-1,2-Dichloroethene	0.19	100	0.19	0.00096 R	0.0009 R	0.00092 R	0.0011 R	0.00098 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0047 JL	0.0054 JL	0.0081 JL	0.0012 JL	***18.7 D***
Vinyl Chloride	0.02	0.9	0.02	0.0019 R	0.0018 R	0.0018 R	0.0022 R	0.002 U

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Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-26 (5-7) 20171115	L1-RDI-SB-26 (4-5) 20171220	L1-RDI-SB-26 (5-7) 20171220	L1-RDI-SB-X (5-7) 20171220	L1-RDI-SB-26 (7-9) 20171220
Laboratory Sample ID				JC55519-18	JC57756-1	JC57756-2	JC57756-3	JC57756-6
Date Sampled				11/15/2017	12/20/2017	12/20/2017	12/20/2017	12/20/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.002 U	0.002 UJ	0.0027 UJ	0.0022 UJ	0.0022 UJ
1,1-Dichloroethane	0.27	26	0.27	0.001 U	0.001 U	0.0014 U	0.0011 U	0.0011 U
1,1-Dichloroethene	0.33	100	0.33	0.001 U	0.001 U	0.0014 U	0.0011 U	0.0011 U
1,2-Dichlorobenzene	1.1	100	1.1	0.001 U	0.001 U	0.0014 U	0.0011 U	0.0011 U
1,2-Dichloroethane	0.02	3.1	0.02	0.001 U	0.001 U	0.0014 U	0.0011 U	0.0011 U
Carbon Tetrachloride	0.76	2.4	0.76	0.002 U	0.002 UJ	0.0027 UJ	0.0022 UJ	0.0022 UJ
Chloroform	0.37	49	0.37	0.002 U	0.002 U	0.0027 U	0.00039 J	0.0022 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.001 U	0.001 U	0.0014 U	0.00058 J	0.0011 U
Methylene Chloride	0.05	100	0.05	0.0031 J	0.0025 J	0.0055 J	0.0031 J	0.0061
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0072	0.0067	0.0081 J	0.0146 J	0.0022 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.001 U	0.001 U	0.0014 U	0.0011 U	0.0011 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0906	0.0773	0.0813 J	0.132 J	0.001 J
Vinyl Chloride	0.02	0.9	0.02	0.002 U	0.002 U	0.0027 U	0.0022 U	0.0022 U

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Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-26 (9-11) 20171220	L1-RDI-SB-26 (11-13) 20171220	L1-RDI-SB-26 (13-15) 20171220	L1-RDI-SB-26 (15-17) 20171220	L1-RDI-SB-26 (17-19) 20171220
Laboratory Sample ID				JC57756-7	JC57756-8	JC57756-9	JC57756-10	JC57756-11
Date Sampled				12/20/2017	12/20/2017	12/20/2017	12/20/2017	12/20/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0028 UJ	0.0027 UJ	0.0036 UJ	0.0026 UJ	0.0024 UJ
1,1-Dichloroethane	0.27	26	0.27	0.0014 U	0.0014 U	0.0018 U	0.0013 U	0.0012 U
1,1-Dichloroethene	0.33	100	0.33	0.0014 U	0.0014 U	0.0018 U	0.0013 U	0.0012 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0014 U	0.0014 U	0.0018 U	0.0013 U	0.0012 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0014 U	0.0014 U	0.0018 U	0.0013 U	0.0012 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0028 UJ	0.0027 UJ	0.0036 UJ	0.0026 UJ	0.0024 UJ
Chloroform	0.37	49	0.37	0.0028 U	0.0027 U	0.0036 U	0.0026 U	0.0024 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0014 U	0.0014 U	0.0018 U	0.0013 U	0.0012 U
Methylene Chloride	0.05	100	0.05	0.0048 J	0.0088	0.0051 J	0.0038 J	0.0037 J
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0028 U	0.0027 U	0.0036 U	0.0026 U	0.0024 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0014 U	0.0014 U	0.0018 U	0.0013 U	0.0012 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0014 U	0.0014 U	0.0024	0.0045	0.002
Vinyl Chloride	0.02	0.9	0.02	0.0028 U	0.0027 U	0.0036 U	0.0026 U	0.0024 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-26 (19-21) 20171220	L1-RDI-SB-26 (21-23) 20171220	L1-RDI-SB-26 (23-25) 20171220	L1-RDI-SB-26 (25-27) 20171220	L1-RDI-SB-26 (27-29) 20171220
Laboratory Sample ID				JC57756-12	JC57756-13	JC57756-14	JC57756-15	JC57756-16
Date Sampled				12/20/2017	12/20/2017	12/20/2017	12/20/2017	12/20/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0024 UJ	0.0025 UJ	0.0025 UJ	0.0025 UJ	0.0025 UJ
1,1-Dichloroethane	0.27	26	0.27	0.0012 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U
1,1-Dichloroethene	0.33	100	0.33	0.0012 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0012 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0012 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0024 UJ	0.0025 UJ	0.0025 UJ	0.0025 UJ	0.0025 UJ
Chloroform	0.37	49	0.37	0.0024 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0012 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U
Methylene Chloride	0.05	100	0.05	0.0048 J	0.0043 J	0.007	0.0091	0.0037 J
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0024 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0012 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0015	0.0022	0.0019	0.0024	0.0026
Vinyl Chloride	0.02	0.9	0.02	0.0024 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U

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Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-26 (29-31) 20171220	L1-RDI-SB-27 (4-5) 20170815	L1-RDI-SB-27 (5-7) 20170815	L1-RDI-SB-27 (7-9) 20170815	L1-RDI-SB-27 (9-11) 20170815
Laboratory Sample ID				JC57756-17	JC48865-88	JC48865-89	JC48865-90	JC48865-91
Date Sampled				12/20/2017	8/15/2017	8/15/2017	8/15/2017	8/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0028 UJ	0.0016 U	0.0016 U	0.0017 U	0.002 U
1,1-Dichloroethane	0.27	26	0.27	0.0014 U	0.0008 U	0.00082 U	0.00086 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.0014 U	0.0008 U	0.00082 U	0.00086 U	0.001 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0014 U	0.0008 U	0.00082 U	0.00086 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0014 U	0.0008 U	0.00082 U	0.00086 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0028 UJ	0.0016 U	0.0016 U	0.0017 U	0.002 U
Chloroform	0.37	49	0.37	0.0028 U	0.0011 J	0.001 J	0.00096 J	0.002 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0014 U	0.0011	0.0013	0.0009	0.001 U
Methylene Chloride	0.05	100	0.05	0.005 J	0.004 U	0.0041 U	0.0043 U	0.0051 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0028 U	0.0029	0.0022	0.0012 J	0.002 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0014 U	0.0008 U	0.00074 J	0.00086 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.47	0.002	***9.67 D***	0.139	0.0751	0.0049
Vinyl Chloride	0.02	0.9	0.02	0.0028 U	0.0016 U	0.0016 U	0.0017 U	0.002 U

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Atlantic Chestnut - Lot 1
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RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-27 (11-13) 20170815	L1-RDI-SB-27 (13-15) 20170815	L1-RDI-SB-28 (4-5) 20170815	L1-RDI-SB-28 (5-7) 20170815	L1-RDI-SB-28 (7-9) 20170815
Laboratory Sample ID				JC48865-92	JC48865-93	JC48865-97	JC48865-98	JC48865-99
Date Sampled				8/15/2017	8/15/2017	8/15/2017	8/15/2017	8/15/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0021 U	0.002 U	0.0018 U	0.0018 U	0.0019 U
1,1-Dichloroethane	0.27	26	0.27	0.0011 U	0.001 U	0.00092 U	0.00088 U	0.00094 U
1,1-Dichloroethene	0.33	100	0.33	0.0011 U	0.001 U	0.00092 U	0.00088 U	0.00094 U
1,2-Dichlorobenzene	1.1	100	1.1	0.0011 U	0.001 U	0.00092 U	0.00088 U	0.00094 U
1,2-Dichloroethane	0.02	3.1	0.02	0.0011 U	0.001 U	0.00092 U	0.00088 U	0.00094 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0021 U	0.002 U	0.0018 U	0.0018 U	0.0019 U
Chloroform	0.37	49	0.37	0.0021 U	0.002 U	0.0017 J	0.00049 J	0.0019 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.0011 U	0.001 U	0.0022	0.00088 U	0.00094 U
Methylene Chloride	0.05	100	0.05	0.0053 U	0.0051 U	0.0046 U	0.0044 U	0.0047 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0021 U	0.002 U	0.0031	0.0016 J	0.0019 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.0011 U	0.001 U	0.0033	0.00088 U	0.00094 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0019	0.0031	***6.33 D***	0.16	0.007
Vinyl Chloride	0.02	0.9	0.02	0.0021 U	0.002 U	0.0018 U	0.0018 U	0.0019 U

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Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-28 (9-11) 20170815	L1-RDI-SB-28 (11-13) 20170815	L1-RDI-SB-28 (13-15) 20170815	L1-RDI-SB-29 (4-5) 20170816	L1-RDI-SB-30 (4-5) 20170816
Laboratory Sample ID				JC48865-100	JC48865-101	JC48865-102	JC48865-103	JC48865-110
Date Sampled				8/15/2017	8/15/2017	8/15/2017	8/16/2017	8/16/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.002 U	0.0018 U	0.0021 U	0.0019 U	0.0018 U
1,1-Dichloroethane	0.27	26	0.27	0.001 U	0.00092 U	0.0011 U	0.00095 U	0.0009 U
1,1-Dichloroethene	0.33	100	0.33	0.001 U	0.00092 U	0.0011 U	0.00095 U	0.0009 U
1,2-Dichlorobenzene	1.1	100	1.1	0.001 U	0.00092 U	0.0011 U	0.00095 U	0.0009 U
1,2-Dichloroethane	0.02	3.1	0.02	0.001 U	0.00092 U	0.0011 U	0.00095 U	0.0009 U
Carbon Tetrachloride	0.76	2.4	0.76	0.002 U	0.0018 U	0.0021 U	0.0019 U	0.0018 U
Chloroform	0.37	49	0.37	0.002 U	0.0018 U	0.0021 U	0.0019 U	0.0018 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.001 U	0.00092 U	0.0011 U	0.00095 U	0.0009 U
Methylene Chloride	0.05	100	0.05	0.005 U	0.0046 U	0.0054 U	0.0048 U	0.0045 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.002 U	0.0018 U	0.0021 U	0.0053	0.0059
Trans-1,2-Dichloroethene	0.19	100	0.19	0.001 U	0.00092 U	0.0011 U	0.00095 U	0.0009 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0083	0.004	0.0081	0.133	0.105
Vinyl Chloride	0.02	0.9	0.02	0.002 U	0.0018 U	0.0021 U	0.0019 U	0.0018 U

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3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-31 (4-5) 20170816	L1-RDI-SB-31 (9-11) 20170816	L1-RDI-SB-X (9-11) 20170816	L1-RDI-SB-32 (4-5) 20170816	L1-RDI-SB-32 (5-7) 20170816
Laboratory Sample ID				JC48865-116	JC48865-119	JC48865-123	JC48865-124	JC48865-125
Date Sampled				8/16/2017	8/16/2017	8/16/2017	8/16/2017	8/16/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0019 U	0.0019 U	0.002 U	0.0026 U	0.002 U
1,1-Dichloroethane	0.27	26	0.27	0.00097 U	0.00096 U	0.001 U	0.0013 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.00097 U	0.00096 U	0.001 U	0.0013 U	0.001
1,2-Dichlorobenzene	1.1	100	1.1	0.00097 U	0.00096 U	0.001 U	0.0013 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00097 U	0.00096 U	0.001 U	0.0013 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0019 U	0.0019 U	0.002 U	0.0026 U	0.002 U
Chloroform	0.37	49	0.37	0.0019 U	0.0019 U	0.002 U	0.0026 U	0.00048 J
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00097 U	0.00096 U	0.001 U	0.0013 U	0.0064
Methylene Chloride	0.05	100	0.05	0.0049 U	0.0048 U	0.0051 U	0.0066 U	0.005 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0015 J	0.0019 U	0.002 U	0.0055	0.002 U
Trans-1,2-Dichloroethene	0.19	100	0.19	0.00097 U	0.00096 U	0.001 U	0.0013 U	0.0019
Trichloroethylene (TCE)	0.47	21	0.47	0.0707	0.0063	0.0062	***1.15 D***	***9.01 D***
Vinyl Chloride	0.02	0.9	0.02	0.0019 U	0.0019 U	0.002 U	0.0026 U	0.002 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-32 (7-9) 20170816	L1-RDI-SB-32 (9-11) 20170816	L1-RDI-SB-32 (11-13) 20170816	L1-RDI-SB-32 (13-15) 20170816	L1-RDI-SB-33 (4-5) 20170816
Laboratory Sample ID				JC48865-126	JC48865-127	JC48865-128	JC48865-129	JC48865-130
Date Sampled				8/16/2017	8/16/2017	8/16/2017	8/16/2017	8/16/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.0019 U	0.002 U	0.0022 U	0.0026 U	0.0019 U
1,1-Dichloroethane	0.27	26	0.27	0.00097 U	0.001 U	0.0011 U	0.0013 U	0.00097 U
1,1-Dichloroethene	0.33	100	0.33	0.00097 U	0.001 U	0.0011 U	0.0013 U	0.00097 U
1,2-Dichlorobenzene	1.1	100	1.1	0.00097 U	0.001 U	0.0011 U	0.0013 U	0.00097 U
1,2-Dichloroethane	0.02	3.1	0.02	0.00097 U	0.001 U	0.0011 U	0.0013 U	0.00097 U
Carbon Tetrachloride	0.76	2.4	0.76	0.0019 U	0.002 U	0.0022 U	0.0026 U	0.0019 U
Chloroform	0.37	49	0.37	0.0019 U	0.002 U	0.0022 U	0.0026 U	0.0019 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.00097 U	0.001 U	0.0011 U	0.0013 U	0.00097 U
Methylene Chloride	0.05	100	0.05	0.0049 U	0.0051 U	0.0054 U	0.0065 U	0.0049 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0012 J	0.002 U	0.0022 U	0.0026 U	0.00096 J
Trans-1,2-Dichloroethene	0.19	100	0.19	0.00097 U	0.001 U	0.0011 U	0.0013 U	0.00097 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0779	0.0037	0.0022	0.0059	0.0371
Vinyl Chloride	0.02	0.9	0.02	0.0019 U	0.002 U	0.0022 U	0.0026 U	0.0019 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-SB-34 (13-15) 20170811	L1-RDI-SB-35 (13-15) 20170811	L1-RDI-SB-36 (13-15) 20170811	L1-RDI-SB-X (13-15) 20170811
Laboratory Sample ID				JC48865-1	JC48865-2	JC48865-3	JC48865-6
Date Sampled				8/11/2017	8/11/2017	8/11/2017	8/11/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	0.68	100	0.68	0.002 U	0.0021 U	0.002 U	0.0021 U
1,1-Dichloroethane	0.27	26	0.27	0.001 U	0.0011 U	0.001 U	0.001 U
1,1-Dichloroethene	0.33	100	0.33	0.001 U	0.0011 U	0.001 U	0.001 U
1,2-Dichlorobenzene	1.1	100	1.1	0.001 U	0.0011 U	0.001 U	0.001 U
1,2-Dichloroethane	0.02	3.1	0.02	0.001 U	0.0011 U	0.001 U	0.001 U
Carbon Tetrachloride	0.76	2.4	0.76	0.002 U	0.0021 U	0.002 U	0.0021 U
Chloroform	0.37	49	0.37	0.002 U	0.0021 U	0.002 U	0.0021 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	0.001 U	0.0011 U	0.001 U	0.001 U
Methylene Chloride	0.05	100	0.05	0.005 U	0.0054 U	0.005 U	0.0052 U
Tetrachloroethylene (PCE)	1.3	19	1.3	0.0026	0.0021 U	0.002 U	0.0018 J
Trans-1,2-Dichloroethene	0.19	100	0.19	0.001 U	0.0011 U	0.001 U	0.001 U
Trichloroethylene (TCE)	0.47	21	0.47	0.0358	0.0008 J	0.00056 J	0.0274
Vinyl Chloride	0.02	0.9	0.02	0.002 U	0.0021 U	0.002 U	0.0021 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-FB-1 20170811	L1-RDI-FB-1 20171115	L1-RDI-FB-2 20170816	L1-RDI-TB-1 20170811	L1-RDI-TB-1 20171115
Laboratory Sample ID				JC48865-5	JC55519-4	JC48865-105	JC48865-4	JC55519-3
Date Sampled				8/11/2017	11/15/2017	8/16/2017	8/11/2017	11/15/2017
Unit	mg/kg	mg/kg	mg/kg	µg/L	µg/L	µg/L	µg/L	µg/L
1,1,1-Trichloroethane	0.68	100	0.68	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.27	26	0.27	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.33	100	0.33	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1.1	100	1.1	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.02	3.1	0.02	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	0.76	2.4	0.76	1 U	1 U	1 U	1 U	1 U
Chloroform	0.37	49	0.37	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	0.05	100	0.05	2 U	2 U	2 U	2 U	2 U
Tetrachloroethylene (PCE)	1.3	19	1.3	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	0.19	100	0.19	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	0.47	21	0.47	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	0.02	0.9	0.02	1 U	1 U	1 U	1 U	1 U

Attached Table 1
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Chlorinated Volatile Organic Compounds (CVOCs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	NYSDEC PGWSCO	L1-RDI-TB-2 20170816	L1-RDI-TB-2 20171220	L1-RDI-FB-2 20171220	L1-RDI-TB-4 20170814	L1-RDI-FB-4 20170814
Laboratory Sample ID				JC48865-122	JC57756-4	JC57756-5	JC48865-13	JC48865-14
Date Sampled				8/16/2017	12/20/2017	12/20/2017	8/14/2017	8/14/2017
Unit	mg/kg	mg/kg	mg/kg	µg/L	µg/L	µg/L	µg/L	µg/L
1,1,1-Trichloroethane	0.68	100	0.68	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.27	26	0.27	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.33	100	0.33	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1.1	100	1.1	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.02	3.1	0.02	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	0.76	2.4	0.76	1 U	1 U	1 U	1 U	1 U
Chloroform	0.37	49	0.37	1 U	1 U	1 U	1 U	1 U
Cis-1,2-Dichloroethylene	0.25	100	0.25	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	0.05	100	0.05	2 U	2 U	2 U	2 U	2 U
Tetrachloroethylene (PCE)	1.3	19	1.3	1 U	1 U	1 U	1 U	1 U
Trans-1,2-Dichloroethene	0.19	100	0.19	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	0.47	21	0.47	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	0.02	0.9	0.02	1 U	1 U	1 U	1 U	1 U

Attached Table 2
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Polycyclic Aromatic Hydrocarbons (PAHs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	L1-RDI-SB-15 (5) 20170814	L1-RDI-SB-15 (15) 20170814	L1-RDI-SB-16 (5) 20170814	L1-RDI-SB-16 (15) 20170814	L1-RDI-SB-34 (13-15) 20170811
Laboratory Sample ID			JC48865-7A	JC48865-12A	JC48865-16A	JC48865-21A	JC48865-1
Date Sampled			8/14/2017	8/14/2017	8/14/2017	8/14/2017	8/11/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	20	100	0.039 U	0.034 U	0.036 U	0.033 U	0.033 U
Acenaphthylene	100	100	0.039 U	0.034 U	0.036 U	0.033 U	0.033 U
Anthracene	100	100	0.039 U	0.034 U	0.036 U	0.033 U	0.033 U
Benzo(a)Anthracene	1	1	0.039 U	0.034 U	0.117	0.033 U	0.027 J
Benzo(a)Pyrene	1	1	0.039 U	0.034 U	0.0888	0.033 U	0.0197 J
Benzo(b)Fluoranthene	1	1	0.039 U	0.034 U	0.145	0.033 U	0.0466
Benzo(g,h,i)Perylene	100	100	0.039 U	0.034 U	0.067	0.033 U	0.0175 J
Benzo(k)Fluoranthene	0.8	3.9	0.039 U	0.034 U	0.0404	0.033 U	0.033 U
Chrysene	1	3.9	0.039 U	0.034 U	0.16	0.033 U	0.0299 J
Dibenz(a,h)Anthracene	0.33	0.33	0.039 U	0.034 U	0.0248 J	0.033 U	0.033 U
Fluoranthene	100	100	0.039 U	0.034 U	0.185	0.033 U	0.0332
Fluorene	30	100	0.039 U	0.034 U	0.036 U	0.033 U	0.033 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	0.039 U	0.034 U	0.0596	0.033 U	0.0162 J
Naphthalene	12	100	0.039 U	0.034 U	0.0203 J	0.033 U	0.033 U
Phenanthrene	100	100	0.039 U	0.034 U	0.165	0.033 U	0.0206 J
Pyrene	100	100	0.039 U	0.034 U	0.184	0.033 U	0.0334

Attached Table 2
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Polycyclic Aromatic Hydrocarbons (PAHs)

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	L1-RDI-SB-35 (13-15) 20170811	L1-RDI-SB-36 (13-15) 20170811	L1-RDI-SB-X (13-15) 20170811	L1-RDI-FB-1 20170811
Laboratory Sample ID			JC48865-2	JC48865-3	JC48865-6	JC48865-5
Date Sampled			8/11/2017	8/11/2017	8/11/2017	8/11/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L
Acenaphthene	20	100	0.033 U	0.033 U	0.034 U	1 U
Acenaphthylene	100	100	0.033 U	0.033 U	0.034 U	1 U
Anthracene	100	100	0.033 U	0.033 U	0.034 U	1 U
Benzo(a)Anthracene	1	1	0.033 U	0.033 U	0.0256 J	1 U
Benzo(a)Pyrene	1	1	0.033 U	0.033 U	0.0216 J	1 U
Benzo(b)Fluoranthene	1	1	0.033 U	0.033 U	0.0395	1 U
Benzo(g,h,i)Perylene	100	100	0.033 U	0.033 U	0.0215 J	1 U
Benzo(k)Fluoranthene	0.8	3.9	0.033 U	0.033 U	0.034 U	1 U
Chrysene	1	3.9	0.033 U	0.033 U	0.0289 J	1 U
Dibenz(a,h)Anthracene	0.33	0.33	0.033 U	0.033 U	0.034 U	1 U
Fluoranthene	100	100	0.033 U	0.033 U	0.0356	1 U
Fluorene	30	100	0.033 U	0.033 U	0.034 U	1 U
Indeno(1,2,3-c,d)Pyrene	0.5	0.5	0.033 U	0.033 U	0.0167 J	1 U
Naphthalene	12	100	0.033 U	0.033 U	0.034 U	1 U
Phenanthrene	100	100	0.033 U	0.033 U	0.0213 J	1 U
Pyrene	100	100	0.033 U	0.033 U	0.0304 J	1 U

Attached Table 3
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Metals

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	L1-RDI-SB-15 (5) 20170814	L1-RDI-SB-15 (15) 20170814	L1-RDI-SB-16 (5) 20170814	L1-RDI-SB-16 (15) 20170814	L1-RDI-SB-34 (13-15) 20170811
Laboratory Sample ID			JC48865-7A	JC48865-12A	JC48865-16A	JC48865-21A	JC48865-1
Date Sampled			8/14/2017	8/14/2017	8/14/2017	8/14/2017	8/11/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	13	16	5.6	2.1 U	10.4	2.1 U	2.2 U
Barium	350	400	62.5	21 U	257	26.5	27.7
Cadmium	2.5	4.3	0.63 U	0.53 U	0.58	0.54 U	0.55 U
Chromium, Total	30	180	27.6	9.2	21.2	7.6	11
Lead	63	400	10.8	3.5	**312**	2.5	26.9
Mercury	0.18	0.81	0.036 U	0.034 U	0.036 U	0.033 U	0.033 U
Selenium	3.9	180	2.5 U	2.1 U	2.3 U	2.1 U	2.2 U
Silver	2	180	0.63 U	0.53 U	0.58 U	0.54 U	0.55 U

Attached Table 3
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Soil Analytical Results
Metals

AKRF Sample ID	NYSDEC UUSCO	NYSDEC RRSCO	L1-RDI-SB-X (13-15) 20170811	L1-RDI-SB-35 (13-15) 20170811	L1-RDI-SB-36 (13-15) 20170811	L1-RDI-FB-1 20170811	L1-RDI-FB-2 20170816
Laboratory Sample ID			JC48865-6	JC48865-2	JC48865-3	JC48865-5	JC48865-105A
Date Sampled			8/11/2017	8/11/2017	8/11/2017	8/11/2017	8/16/2017
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L	µg/L
Arsenic	13	16	2.1 U	2.1 U	2.1 U	3 U	3.7
Barium	350	400	26.9	21.9	21 U	200 U	200 U
Cadmium	2.5	4.3	0.54 U	0.52 U	0.52 U	3 U	3 U
Chromium, Total	30	180	10.6	11.4	13.9	10 U	10 U
Lead	63	400	25.3	2.1	2.7	3 U	3 U
Mercury	0.18	0.81	0.033 U	0.033 U	0.032 U	0.2 U	0.2 U
Selenium	3.9	180	2.1 U	2.1 U	2.1 U	10 U	10 U
Silver	2	180	0.54 U	0.52 U	0.52 U	10 U	10 U

Attached Table 4
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
CVOCs

AKRF Sample ID	NYSDEC TOGS Value	L1-RDI-MW-6S 20170829	L1-RDI-MW-6I 20170829	L1-RDI-MW-6D 20170829	L1-RDI-MW-XD 20170829	L1-RDI-MW-7S 20170829
Lab Sample ID		JC49698-10	JC49698-9	JC49698-7	JC49698-8	JC49698-12
Date Sampled		8/29/2017	8/29/2017	8/29/2017	8/29/2017	8/29/2017
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U
Chloroform	7	0.7 J	0.48 J	0.88 J	0.52 J	0.98 J
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	2 U	2 U	2 U	2 U	2 U
Tetrachloroethylene (PCE)	5	**5.7**	1 U	1.5	1.4	2.3
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	**22.3**	0.4 J	0.67 J	0.69 J	**30.7**
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U

Attached Table 4
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
CVOCs

AKRF Sample ID	NYSDEC TOGS Value	L1-RDI-MW-7I 20170829	L1-RDI-MW-7D-20170828	L1-RDI-MW-8S-20170829	L1-RDI-MW-8I 20170830	L1-RDI-MW-8D 20170830
Lab Sample ID		JC49698-11	JC49698-6	JC49698-15	JC49698-16	JC49698-17
Date Sampled		8/29/2017	8/28/2017	8/29/2017	8/30/2017	8/30/2017
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	0.39 J	2.3	4.5	3.2
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	2 U	2 U	2 U	2 U	2 U
Tetrachloroethylene (PCE)	5	1.1	1.2	2.2	3.5	2.4
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	0.6 J	0.51 J	**53.8**	1	1.5
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U

Attached Table 4
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
CVOCs

AKRF Sample ID	NYSDEC TOGS Value	L1-RDI-MW-9S 20170830	L1-RDI-MW-9I 20170830	L1-RDI-MW-9D 20170830	L1-RDI-FB-3 20170829	L1-RDI-TB-3 20170829
Lab Sample ID		JC49698-18	JC49698-19	JC49698-20	JC49698-13	JC49698-14
Date Sampled		8/30/2017	8/30/2017	8/30/2017	8/29/2017	8/29/2017
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U
Chloroform	7	2.3	1 U	0.62 J	1 U	1 U
Cis-1,2-Dichloroethylene	5	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	2 U	2 U	2 U	2 U	2 U
Tetrachloroethylene (PCE)	5	3.5	1.3	1.6	1 U	1 U
Trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
Trichloroethylene (TCE)	5	**63.6**	0.81 J	0.62 J	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U

Attached Table 5
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
1,4-Dioxane (1,4-Dx)

AKRF Sample ID	L1-RI-MW-1 20170828	L1-RI-MW-2 20170828	L1-RI-MW-3 20170828	L1-RI-MW-4 20170828	L1-RI-MW-5 20170828	L1-RDI-MW-6S 20170829	L1-RDI-MW-6I 20170829
Lab Sample ID	JC49698-1	JC49698-2	JC49698-3	JC49698-4	JC49698-5	JC49698-10	JC49698-9
Date Sampled	8/28/2017	8/28/2017	8/28/2017	8/28/2017	8/28/2017	8/29/2017	8/29/2017
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,4-Dioxane (P-Dioxane)	0.4 U	0.4 U	0.24 J	0.4 U	0.4 U	0.27 J	0.4 U

Attached Table 5
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
1,4-Dioxane (1,4-Dx)

AKRF Sample ID	L1-RDI-MW-6D 20170829	L1-RDI-MW-XD 20170829	L1-RDI-MW-7S 20170829	L1-RDI-MW-7I 20170829	L1-RDI-MW-7D-20170828	L1-RDI-MW-8S-20170829	L1-RDI-MW-8I 20170830
Lab Sample ID	JC49698-7	JC49698-8	JC49698-12	JC49698-11	JC49698-6	JC49698-15	JC49698-16
Date Sampled	8/29/2017	8/29/2017	8/29/2017	8/29/2017	8/28/2017	8/29/2017	8/30/2017
Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,4-Dioxane (P-Dioxane)	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

Attached Table 5
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
1,4-Dioxane (1,4-Dx)

AKRF Sample ID	**L1-RDI-MW-8D 20170830**	**L1-RDI-MW-9S 20170830**	**L1-RDI-MW-9I 20170830**	**L1-RDI-MW-9D 20170830**	**L1-RDI-FB-3 20170829**
Lab Sample ID	**JC49698-17**	**JC49698-18**	**JC49698-19**	**JC49698-20**	**JC49698-13**
Date Sampled	**8/30/2017**	**8/30/2017**	**8/30/2017**	**8/30/2017**	**8/29/2017**
Unit	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
1,4-Dioxane (P-Dioxane)	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

Attached Table 6
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
Perfluoroctanesulfonic Acid and Perfluorooctanoic Acid

AKRF Sample ID	USEPA Combined Drinking Water Standard	L1-RI-MW-1 20170828	L1-RI-MW-2 20170828	L1-RI-MW-3 20170828	L1-RI-MW-4 20170828	L1-RI-MW-5 20170828	L1-RDI-MW-6S 20170829
Lab Sample ID		JC49698-1	JC49698-2	JC49698-3	JC49698-4	JC49698-5	JC49698-10
Date Sampled		8/28/2017	8/28/2017	8/28/2017	8/28/2017	8/28/2017	8/29/2017
Unit	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Perfluorooctanesulfonic Acid (PFOS)	NS	24.3	14.7 J	38	11.4 J	6.82 J	17 U
Perfluorooctanoic Acid (PFOA)	NS	51.4	34.9	50.4	38.1	19	13.7 J
Total PFCs	70	**75.7**	49.6 J	**88.4**	49.5 J	25.82 J	13.7 J

Attached Table 6
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
Perfluoroctanesulfonic Acid and Perfluorooctanoic Acid

AKRF Sample ID	USEPA Combined Drinking Water Standard	L1-RDI-MW-6I 20170829	L1-RDI-MW-6D 20170829	L1-RDI-MW-XD 20170829	L1-RDI-MW-7S 20170829	L1-RDI-MW-7I 20170829	L1-RDI-MW-7D-20170828
Lab Sample ID		JC49698-9	JC49698-7	JC49698-8	JC49698-12	JC49698-11	JC49698-6
Date Sampled		8/29/2017	8/29/2017	8/29/2017	8/29/2017	8/29/2017	8/28/2017
Unit	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Perfluorooctanesulfonic Acid (PFOS)	NS	10.7 J	17 U	17 U	5.72 J	17 U	17 U
Perfluorooctanoic Acid (PFOA)	NS	30.6	17 U	17 U	18.9	17 U	17 U
Total PFCs	70	41.3 J	34 U	34 U	24.62 J	34 U	34 U

Attached Table 6
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
Perfluoroctanesulfonic Acid and Perfluorooctanoic Acid

AKRF Sample ID	USEPA Combined Drinking Water Standard	L1-RDI-MW-8S-20170829	L1-RDI-MW-8I 20170830
Lab Sample ID		JC49698-15	JC49698-16
Date Sampled		8/29/2017	8/30/2017
Unit	ng/L	ng/L	ng/L
Perfluorooctanesulfonic Acid (PFOS)	NS	7.31 J	5.59 J
Perfluorooctanoic Acid (PFOA)	NS	20.3	14.1 J
Total PFCs	70	27.61 J	19.69 J

Attached Table 6
Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, New York
RDI Groundwater Analytical Results
Perfluoroctanesulfonic Acid and Perfluorooctanoic Acid

AKRF Sample ID	USEPA Combined Drinking Water Standard	L1-RDI-MW-8D 20170830	L1-RDI-MW-9S 20170830	L1-RDI-MW-9I 20170830	L1-RDI-MW-9D 20170830	L1-RDI-FB-3 20170829
Lab Sample ID		JC49698-17	JC49698-18	JC49698-19	JC49698-20	JC49698-13
Date Sampled		8/30/2017	8/30/2017	8/30/2017	8/30/2017	8/29/2017
Unit	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
Perfluorooctanesulfonic Acid (PFOS)	NS	4.7 J	14.3 J	15 U	16 U	17 U
Perfluorooctanoic Acid (PFOA)	NS	13.2 J	37.8	15 U	16 U	17 U
Total PFCs	70	17.9 J	52.1 J	30 U	32 U	34 U

DATA QUALIFIERS

U : The analyte was analyzed for, but was not detected above the laboratory reporting limit.

J : The analyte was detected at a concentration above the laboratory reporting limit; the reported concentration is approximate and may be inaccurate or imprecise.

UJ : The analyte was not detected above the laboratory reporting limit. The reported concentration is approximate and may be inaccurate or imprecise.

JL : The reported concentrations is approximate and may be inaccurate or imprecise and biased low.

D : The reported concentration is the result of a diluted analysis.

R : The reported data is unusable and is rejected due to serious definiciences meeting quality assurance/quality control (QA/QC) criteria. The analyte may or may not be present in the sample.

SOIL

Part 375 Soil Cleanup Objectives : Soil Cleanup Objectives listed in NYSDEC (New York State Department of Environmental Conservation) "Part 375" Regulations (6 NYCRR Part 375).

mg/kg : milligrams per kilogram = parts per million (ppm)

Exceedances of NYSDEC Unrestricted Use Soil Cleanup Objectives (RRSCOs) are presented in bold font.
Exceedances of NYSDEC Restricted Residential Soil Cleanup Objectives (RRSCOs) are presented in gray shading.
Exceedances of NYSDEC Protection of Groundwater Soil Cleanup Objectives (RRSCOs) are presented in italic font.

Sample L1-RDI-SB-X1 (5-7) 20171115 is a blind duplicate of sample L1-RDI-SB-11 (5-7) 20171115.
Sample L1-RDI-SB-X (7) 20170814 is a blind duplicate of sample L1-RDI-SB-15 (7) 20170814.
Sample L1-RDI-SB-X (5-7) 20171220 is a blind duplicate of sample L1-RDI-SB-26 (5-7) 20171220.
Sample L1-RDI-SB-X (9-11) 20170816 is a blind duplicate of sample L1-RDI-SB-31 (9-11) 20170816.
Sample L1-RDI-SB-X (13-15) 20170811 is a blind duplicate of sample L1-RDI-SB-36 (13-15) 20170811.

GROUNDWATER

Technical & Operational Guidance Series (TOGS) : New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) (1.1.1): Class GA Ambient Water Quality Standards (AWQS) and Guidance Values.

µg/L : micrograms per Liter = parts per billion (ppb)

ng/L : nanograms per Liter = parts per trillion (ppt)

Exceedances of NYSDEC TOGS values are presented in bold font.

Sample L1-RDI-MW-XD 20170829 is a blind duplicate of sample L1-RDI-MW-6D 20170829.

APPENDIX A

SOIL BORING AND GROUNDWATER MONITORING WELL CONSTRUCTION LOGS

440 Park Avenue South, 7th Floor, New York, NY 10016

AKRF

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY

AKRF Project Number: 12492

Sampling Method:	Plastic Liner	**Driller:**	Aarco Environmental
Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140 LC
Weather:	70°F, Cloudy & Rain	**Start Time and Date:**	8/7/2017 at 8:20
Sheet No.:	1 of 4	**Finish Time and Date:**	8/7/2017 at 14:50

NESTED GROUNDWATER WELL INSTALLATION LOG

GROUNDWATER MONITORING WELL IDS:

Shallow Well:	L1-RDI-MW-6 S
Intermediate Well:	L1-RDI-MW-6 I
Deep Well:	L1-RDI-MW-6 D

SOIL BORING INSTALLATION LOG — **SOIL BORING ID:** **L1-RDI-MW-6**

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction
1	**Flush-mounted well cover and locking j-plug**	**Flush-mounted well cover and locking j-plug**	**Flush-mounted well cover and locking j-plug**
2	**Non-shrinking cement grout: grade to 21' below grade.**	**Non-shrinking cement grout: grade to 21' below grade.**	**Non-shrinking cement grout: grade to 21' below grade.**
3	**2-inch Ø PVC well casing: grade to 25' below grade.**	**2-inch Ø PVC well casing: grade to 50' below grade.**	**2-inch Ø PVC well casing: grade to 66' below grade.**
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
	No recovery.	NA	NA	NA	NA
45	Top 15": Brown-gray silty SAND, little Gravel.	ND	Dry	0.1	ND
	Middle 15": Orange-brown SAND, some Silt, little Gravel.	ND	Dry	0.2	ND
	Bottom 15": Brown SAND, some Gravel, trace Cobbles.	ND	Dry	0.1	ND
50	Top 32": Light Brown SAND, trace Silt, Gravel.	ND	Dry	ND	ND
	Bottom 18": Light brown SAND, some gravel, trace Silt.	ND	Dry	ND	ND
47	Brown SAND, trace Silt, Gravel.	ND	Dry	ND	ND

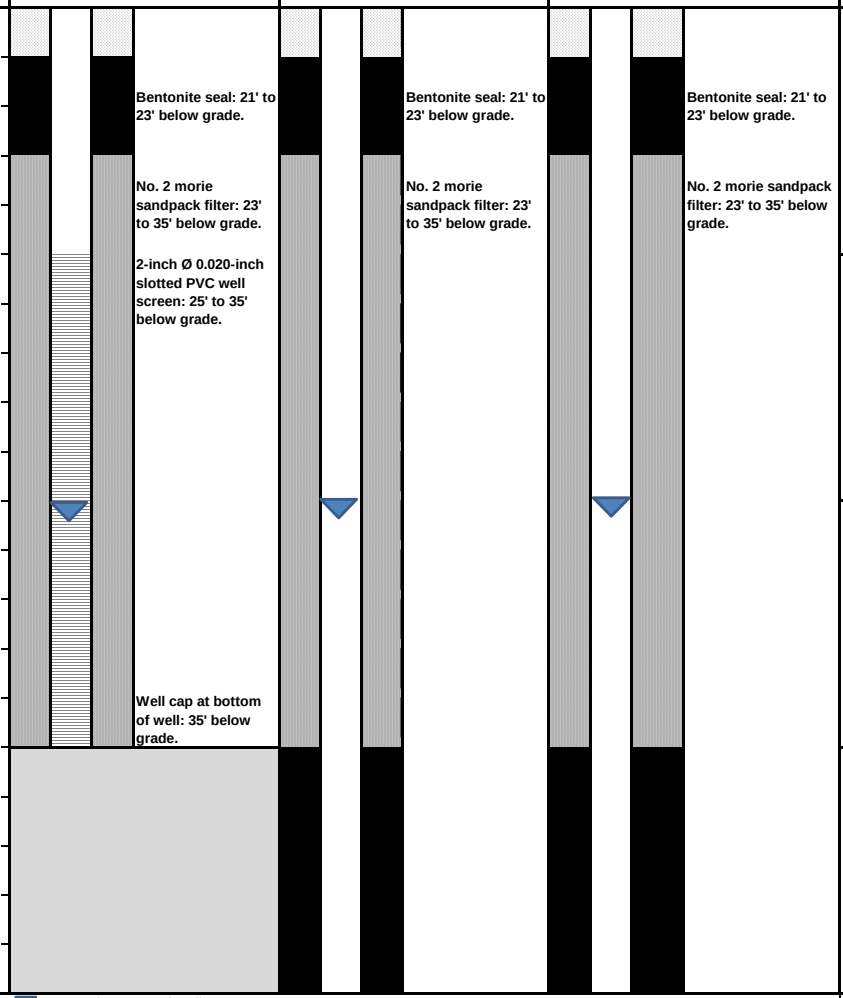
Notes: Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW6S installed to 35.16 feet below grade. Groundwater measured at 31.41 feet below grade during sampling on 08/7/2017.
Groundwater monitoring well L1-RDI-MW6I installed to 59.93 feet below grade. Groundwater measured at 31.03 feet below grade during sampling on 08/7/2017.
Groundwater monitoring well L1-RDI-MW6D installed to 80.83 feet below grade. Groundwater measured at 31.8 feet below grade during sampling on 08/7/2017.

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140 LC
	AKRF Project Number: 12492	**Weather:**	70°F, Cloudy & Rain	**Start Time and Date:**	8/7/2017 at 8:20
		Sheet No.:	2 of 4	**Finish Time and Date:**	8/7/2017 at 14:50
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-6 S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-6**
		Intermediate Well:	L1-RDI-MW-6 I		
		Deep Well:	L1-RDI-MW-6 D		

Depth (feet): 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40



Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
40	Light brown SAND, trace Silt.	ND	Dry	ND	ND
38	Light brown SAND, trace Silt.	ND	Dry	ND	ND
23	Brown SAND, trace Silt.	ND	Wet @ 30' Wet	ND	ND
41	Top 23": Brown SAND, trace Silt.	ND	Wet	ND	ND
	Bottom 18": Brown SAND, little gravel, trace Silt.	ND	Wet	ND	ND

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW6S installed to 35.16 feet below grade. Groundwater measured at 31.41 feet below grade during
Groundwater monitoring well L1-RDI-MW6I installed to 59.93 feet below grade. Groundwater measured at 31.03 feet below grade during
Groundwater monitoring well L1-RDI-MW6D installed to 80.83 feet below grade. Groundwater measured at 31.8 feet below grade during

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140 LC
	AKRF Project Number: 12492	**Weather:**	70°F, Cloudy & Rain	**Start Time and Date:**	8/7/2017 at 8:20
		Sheet No.:	3 of 4	**Finish Time and Date:**	8/7/2017 at 14:50
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-6 S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-6**
		Intermediate Well:	L1-RDI-MW-6 I		
		Deep Well:	L1-RDI-MW-6 D		

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction	Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
41, 42, 43, 44, 45				50	Brown Sand, trace Silt, Gravel.	ND	Wet	ND	ND
46, 47, 48		**Bentonite seal: 35' to 48' below grade.**	**Bentonite seal: 35' to 48' below grade.**	10	Brown Sand, trace Silt, some Gravel.	ND	Wet	ND	ND
49, 50		**No. 2 morie sandpack filter: 48' to 60' below grade.**	**No. 2 morie sandpack filter: 48' to 60' below grade.**						
51, 52, 53, 54, 55		**2-inch Ø 0.020-inch slotted PVC well screen: 50' to 60' below grade.**			No recovery.	NA	NA	NA	NA
56, 57, 58, 59, 60		**Well cap at bottom of well: 60' below grade.**			No recovery.	NA	NA	NA	NA

Notes: Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW6S installed to 35.16 feet below grade. Groundwater measured at 31.41 feet below grade during
Groundwater monitoring well L1-RDI-MW6I installed to 59.93 feet below grade. Groundwater measured at 31.03 feet below grade during
Groundwater monitoring well L1-RDI-MW6D installed to 80.83 feet below grade. Groundwater measured at 31.8 feet below grade during

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140 LC
	AKRF Project Number: 12492	**Weather:**	70°F, Cloudy & Rain	**Start Time and Date:**	8/7/2017 at 8:20
		Sheet No.:	4 of 4	**Finish Time and Date:**	8/7/2017 at 14:50
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-6 S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-6**
		Intermediate Well:	L1-RDI-MW-6 I		
		Deep Well:	L1-RDI-MW-6 D		

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction	Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
61				16	Gray-brown SAND, trace Silt.	ND	Wet	ND	ND
62									
63									
64									
65									
66				47	Gray-brown SAND, trace Silt.	ND	Wet	ND	ND
67			**Bentonite seal: 60' to 68' below grade.**						
68									
69			**No. 2 morie sandpack filter: 68' to 80' below grade.**						
70									
71			**2-inch Ø 0.020-inch slotted PVC well screen: 70' to 80' below grade.**		No recovery.	NA	NA	NA	NA
72									
73									
74									
75									
76				50	Gray-brown SAND, trace Silt.	ND	Wet	ND	ND
77									
78									
79									
80			**Well cap at bottom of well: 80' below grade**						

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW6S installed to 35.16 feet below grade. Groundwater measured at 31.41 feet below grade during
Groundwater monitoring well L1-RDI-MW6I installed to 59.93 feet below grade. Groundwater measured at 31.03 feet below grade during
Groundwater monitoring well L1-RDI-MW6D installed to 80.83 feet below grade. Groundwater measured at 31.8 feet below grade during

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016

AKRF

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY

AKRF Project Number: 12492

Sampling Method:	Plastic Liner	**Driller:**	Aarco Environmental
Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
Weather:	70-80°F, Cloudy	**Start Time and Date:**	8/8/2017 at 10:12
Sheet No.:	1 of 4	**Finish Time and Date:**	8/8/2017 at 15:00

NESTED GROUNDWATER WELL INSTALLATION LOG

GROUNDWATER MONITORING WELL IDS:

Shallow Well:	L1-RDI-MW-7 S
Intermediate Well:	L1-RDI-MW-7 I
Deep Well:	L1-RDI-MW-7 D

SOIL BORING INSTALLATION LOG | **SOIL BORING ID:** | **L1-RDI-MW-7**

Depth (feet): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Shallow-Screened Well Construction

Flush-mounted well cover and locking j-plug

Non-shrinking cement grout: grade to 21' below grade.

2-inch Ø PVC well casing: grade to 25' below grade.

Intermediate-Screened Well Construction

Flush-mounted well cover and locking j-plug

Non-shrinking cement grout: grade to 21' below grade.

2-inch Ø PVC well casing: grade to 50' below grade.

Deep-Screened Well Construction

Flush-mounted well cover and locking j-plug

Non-shrinking cement grout: grade to 21' below grade.

2-inch Ø PVC well casing: grade to 70' below grade.

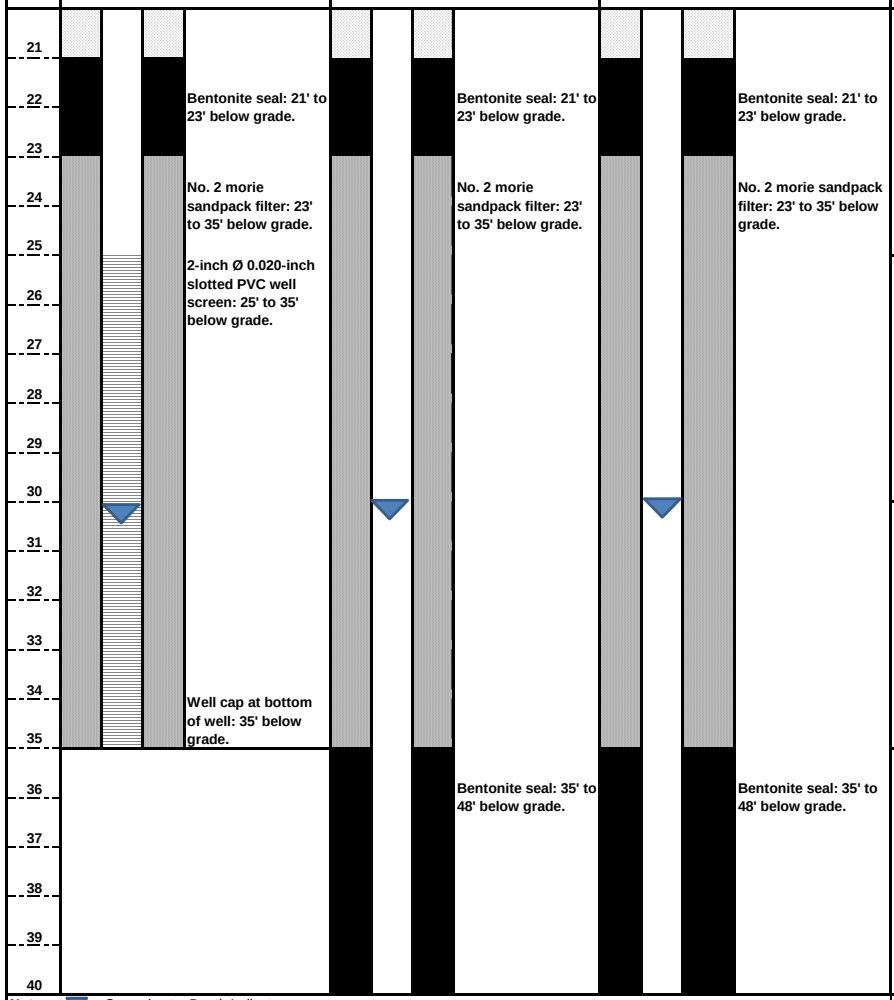
Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
14	Top 4": Concrete	ND	Dry	ND	ND
	Bottom 10": Brown-black Silty SAND, trace Gravel.	ND	Dry	ND	ND
47	Top:16": Brown Silty SAND.	ND	Dry	ND	ND
	Middle 15": Brown Silt, trace Clay.	ND	Dry	ND	ND
	Bottom 16": Brown SAND, trace Silt.	ND	Dry	ND	ND
52	Brown SAND, little gravel, trace Cobbles, Silt.	None	ND	ND	ND
46	Brown SAND, trace Silt.	None	ND	ND	ND

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW7S installed to 35.17 feet below grade. Groundwater measured at 31.19 feet below grade during sampling on 8/8/2017
Groundwater monitoring well L1-RDI-MW7I installed to 60.82 feet below grade. Groundwater measured at 31.14 feet below grade during sampling on 8/8/2017
Groundwater monitoring well L1-RDI-MW7D installed to 81.68 feet below grade. Groundwater measured at 31.79 feet below grade during sampling on 8/8/2017

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
	AKRF Project Number: 12492	**Weather:**	70-80°F, Cloudy	**Start Time and Date:**	8/8/2017 at 10:12
		Sheet No.:	2 of 4	**Finish Time and Date:**	8/8/2017 at 15:00
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-7 S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-7**
		Intermediate Well:	L1-RDI-MW-7 I		
		Deep Well:	L1-RDI-MW-7 D		



Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
36	Brown SAND, trace Silt.	None	Dry	ND	ND
35	Brown SAND, trace Silt.	None	Dry	ND	ND
55	Brown SAND, trace Silt.	None	Wet at 30ft.	Nd	ND
39	Top 27": Brown SAND.	ND	ND	ND	ND
	Bottom 12": Redish-brown SAND, trace Silt.	None	ND	ND	ND

Notes: Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW7S installed to 35.17 feet below grade. Groundwater measured at 31.19 feet below grade during
Groundwater monitoring well L1-RDI-MW7I installed to 60.82 feet below grade. Groundwater measured at 31.14 feet below grade during
Groundwater monitoring well L1-RDI-MW7D installed to 81.68 feet below grade. Groundwater measured at 31.79 feet below grade during

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
	AKRF Project Number: 12492	**Weather:**	70-80°F, Cloudy	**Start Time and Date:**	8/8/2017 at 10:12
		Sheet No.:	3 of 4	**Finish Time and Date:**	8/8/2017 at 15:00
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-7 S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-7**
		Intermediate Well:	L1-RDI-MW-7 I		
		Deep Well:	L1-RDI-MW-7 D		

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction
41			
42			
43			
44			
45			
46			
47			
48			
49		**No. 2 morie sandpack filter: 48' to 60' below grade.**	**No. 2 morie sandpack filter: 48' to 60' below grade.**
50		**2-inch Ø 0.020-inch slotted PVC well screen: 50' to 60' below grade.**	
51			
52			
53			
54			
55			
56			
57			
58			
59		**Well cap at bottom of well: 60' below grade.**	
60			

Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
	No recovery.	NA	NA	NA	---
43	Top 10": Brown Silty SAND. Bottom 33": Brown SAND, trace Silt.	None	Wet SAT	ND	ND
60	Brown SAND, trace Silt.	None	Wet	ND	ND
60	Brown SAND, trace Silt.	None	Wet	ND	ND

Notes: Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW7S installed to 35.17 feet below grade. Groundwater measured at 31.19 feet below grade during
Groundwater monitoring well L1-RDI-MW7I installed to 60.82 feet below grade. Groundwater measured at 31.14 feet below grade during
Groundwater monitoring well L1-RDI-MW7D installed to 81.68 feet below grade. Groundwater measured at 31.79 feet below grade during

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	Atlantic Chestnut - Lot 1 3264 Fulton Street, Brooklyn, NY AKRF Project Number: 12492	Sampling Method:	Plastic Liner	Driller:	Aarco Environmental
		Logged by:	A. Bosco, AKRF	Drilling Method:	Geoprobe 8140LC
		Weather:	70-80°F, Cloudy	Start Time and Date:	8/8/2017 at 10:12
		Sheet No.:	4 of 4	Finish Time and Date:	8/8/2017 at 15:00
NESTED GROUNDWATER WELL INSTALLATION LOG	GROUNDWATER MONITORING WELL IDS:	Shallow Well:	L1-RDI-MW-7 S	SOIL BORING INSTALLATION LOG	SOIL BORING ID: L1-RDI-MW-7
		Intermediate Well:	L1-RDI-MW-7 I		
		Deep Well:	L1-RDI-MW-7 D		

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction	Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
61					No recovery.	N/A	N/A	N/A	N/A
62									
63									
64									
65									
66					No recovery.	N/A	N/A	N/A	N/A
67			**Bentonite seal: 60' to 68' below grade.**						
68									
69			**No. 2 morie sandpack filter: 68' to 80' below grade.**						
70									
71			**2-inch Ø 0.020-inch slotted PVC well screen: 70' to 80' below grade.**	53	Brown SAND, little Silt.	ND	Wet	ND	ND
72									
73									
74									
75									
76				60	Brown SAND, little Silt.	ND	Wet	ND	ND
77									
78									
79									
80			**Well cap at bottom of well: 80' below grade**						

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW7S installed to 35.17 feet below grade. Groundwater measured at 31.19 feet below grade during
Groundwater monitoring well L1-RDI-MW7I installed to 60.82 feet below grade. Groundwater measured at 31.14 feet below grade during
Groundwater monitoring well L1-RDI-MW7D installed to 81.68 feet below grade. Groundwater measured at 31.79 feet below grade during

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 — AKRF

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY

AKRF Project Number: 12492

Sampling Method:	Plastic Liner	**Driller:**	Aarco Environmental
Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
Weather:	80 °F, Sunny	**Start Time and Date:**	8/9/2017 at 7:30
Sheet No.:	1 of 4	**Finish Time and Date:**	8/9/2017 at 14:30

NESTED GROUNDWATER WELL INSTALLATION LOG

GROUNDWATER MONITORING WELL IDS:

Shallow Well:	L1-RDI-MW-8S
Intermediate Well:	L1-RDI-MW-8 I
Deep Well:	L1-RDI-MW-8 D

SOIL BORING INSTALLATION LOG — **SOIL BORING ID:** **L1-RDI-MW-8**

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction
1	**Flush-mounted well cover and locking j-plug**	**Flush-mounted well cover and locking j-plug**	**Flush-mounted well cover and locking j-plug**
2	**Non-shrinking cement grout: grade to 21' below grade.**	**Non-shrinking cement grout: grade to 21' below grade.**	**Non-shrinking cement grout: grade to 21' below grade.**
3	**2-inch Ø PVC well casing: grade to 25' below grade.**	**2-inch Ø PVC well casing: grade to 50' below grade.**	**2-inch Ø PVC well casing: grade to 70' below grade.**
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

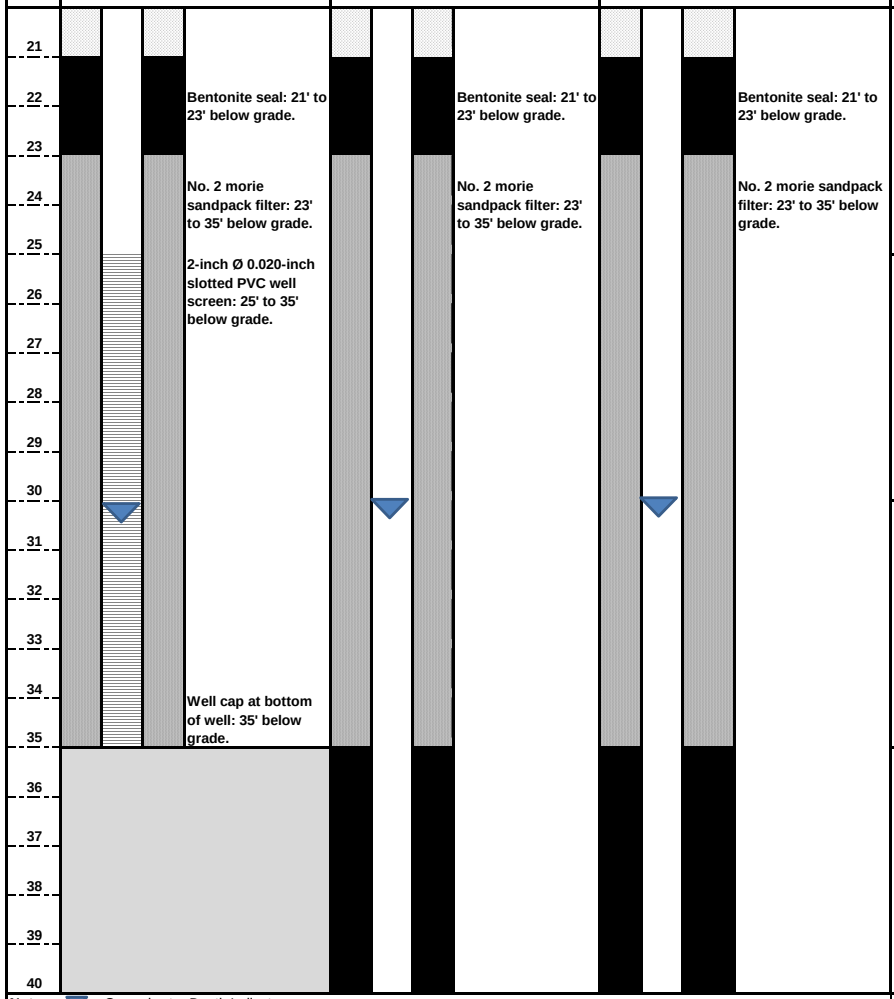
Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
25	Top 9": CONCRETE SLAB.	ND	Dry	ND	ND
	Bottom 16": Brown Silty SAND, trace Gravel.	ND	Dry	6.8	ND
35	Brown SAND, some Gravel.	ND	Dry	ND	ND
48	Brown SAND, trace Gravel.	ND	Dry	ND	ND
38	Brown fine SAND.	ND	Dry	ND	ND

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW8S installed to 35 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/9/2017
Groundwater monitoring well L1-RDI-MW8I installed to 60 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/9/2017
Groundwater monitoring well L1-RDI-MW8D installed to 80 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/9/2017

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
	AKRF Project Number: 12492	**Weather:**	80 °F, Sunny	**Start Time and Date:**	8/9/2017 at 7:30
		Sheet No.:	2 of 4	**Finish Time and Date:**	8/9/2017 at 14:30
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-8S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-8**
		Intermediate Well:	L1-RDI-MW-8 I		
		Deep Well:	L1-RDI-MW-8 D		



Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
32	Brown fine SAND, trace fine Gravel.	ND	Dry	ND	ND
25	Brown fine SAND, little Silt, trace fine Gravel.	ND	Dry	ND	ND
41	Brown fine SAND, some Silt.	ND	Wet @ 30'	ND	ND
37	Brown fine SAND, some Silt and fine Gravel.	ND	Wet	ND	ND

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW8S installed to 35 feet below grade. Groundwater measured at 30 feet below grade during sampling
Groundwater monitoring well L1-RDI-MW8I installed to 60 feet below grade. Groundwater measured at 30 feet below grade during sampling
Groundwater monitoring well L1-RDI-MW8D installed to 80 feet below grade. Groundwater measured at 30 feet below grade during

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
	AKRF Project Number: 12492	**Weather:**	80 °F, Sunny	**Start Time and Date:**	8/9/2017 at 7:30
		Sheet No.:	3 of 4	**Finish Time and Date:**	8/9/2017 at 14:30
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-8S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-8**
		Intermediate Well:	L1-RDI-MW-8 I		
		Deep Well:	L1-RDI-MW-8 D		

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction
41			
42			
43			
44			
45			
46			
47		**Bentonite seal: 35' to 48' below grade.**	**Bentonite seal: 35' to 48' below grade.**
48			
49		**No. 2 morie sandpack filter: 48' to 60' below grade.**	**No. 2 morie sandpack filter: 48' to 60' below grade.**
50			
51		**2-inch Ø 0.020-inch slotted PVC well screen: 50' to 60' below grade.**	
52			
53			
54			
55			
56			
57			
58			
59		**Well cap at bottom of well: 60' below grade.**	
60			

Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
29	Brown SAND, some Silt, trace fine Gravel.	ND	Wet	ND	ND
47	Brown SAND, some Silt and fine Gravel.	ND	Wet	ND	ND
54	Brown SAND, trace fine Gravel.	ND	Wet	ND	ND
43	Brown SAND, trace fine Gravel.	ND	Wet	ND	ND

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW8S installed to 35 feet below grade. Groundwater measured at 30 feet below grade during sampling
Groundwater monitoring well L1-RDI-MW8I installed to 60 feet below grade. Groundwater measured at 30 feet below grade during sampling
Groundwater monitoring well L1-RDI-MW8D installed to 80 feet below grade. Groundwater measured at 30 feet below grade during

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
	AKRF Project Number: 12492	**Weather:**	80 °F, Sunny	**Start Time and Date:**	8/9/2017 at 7:30
		Sheet No.:	4 of 4	**Finish Time and Date:**	8/9/2017 at 14:30
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-8S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-8**
		Intermediate Well:	L1-RDI-MW-8 I		
		Deep Well:	L1-RDI-MW-8 D		

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction	Recovery (inches)	Soil Boring Log	Odor	Moisture	PID (ppm)	NAPL
61				52	Brown SAND and some Silt.	ND	Wet	ND	ND
62									
63									
64									
65									
66				53	Brown SAND and some Silt.	ND	Wet	ND	ND
67			**Bentonite seal: 60' to 68' below grade.**						
68									
69			**No. 2 morie sandpack filter: 68' to 80' below grade.**						
70			**2-inch Ø 0.020-inch slotted PVC well screen: 70' to 80' below grade.**	38	Brown SAND and some Silt.	ND	Wet	ND	ND
71									
72									
73									
74									
75									
76					Brown Silty SAND.	ND	Wet	ND	ND
77									
78									
79									
80			**Well cap at bottom of well: 80' below grade**						

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW8S installed to 35 feet below grade. Groundwater measured at 30 feet below grade during sampling on
Groundwater monitoring well L1-RDI-MW8I installed to 60 feet below grade. Groundwater measured at 30 feet below grade during sampling on
Groundwater monitoring well L1-RDI-MW8D installed to 80 feet below grade. Groundwater measured at 30 feet below grade during sampling on

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016

AKRF

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY

AKRF Project Number: 12492

Sampling Method:	Plastic Liner	**Driller:**	Aarco Environmental
Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
Weather:	85 °F, Sunny	**Start Time and Date:**	8/10/2017 at 7:45
Sheet No.:	1 of 4	**Finish Time and Date:**	8/10/2017 at 15:40

NESTED GROUNDWATER WELL INSTALLATION LOG

GROUNDWATER MONITORING WELL IDS:

Shallow Well:	L1-RDI-MW-9 S
Intermediate Well:	L1-RDI-MW-9 I
Deep Well:	L1-RDI-MW-9 D

SOIL BORING INSTALLATION LOG — **SOIL BORING ID:** **L1-RDI-MW-9**

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction
1	**Flush-mounted well cover and locking j-plug**	**Flush-mounted well cover and locking j-plug**	**Flush-mounted well cover and locking j-plug**
2	**Non-shrinking cement grout: grade to 21' below grade.**	**Non-shrinking cement grout: grade to 21' below grade.**	**Non-shrinking cement grout: grade to 21' below grade.**
3	**2-inch Ø PVC well casing: grade to 25' below grade.**	**2-inch Ø PVC well casing: grade to 50' below grade.**	**2-inch Ø PVC well casing: grade to 70' below grade.**
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

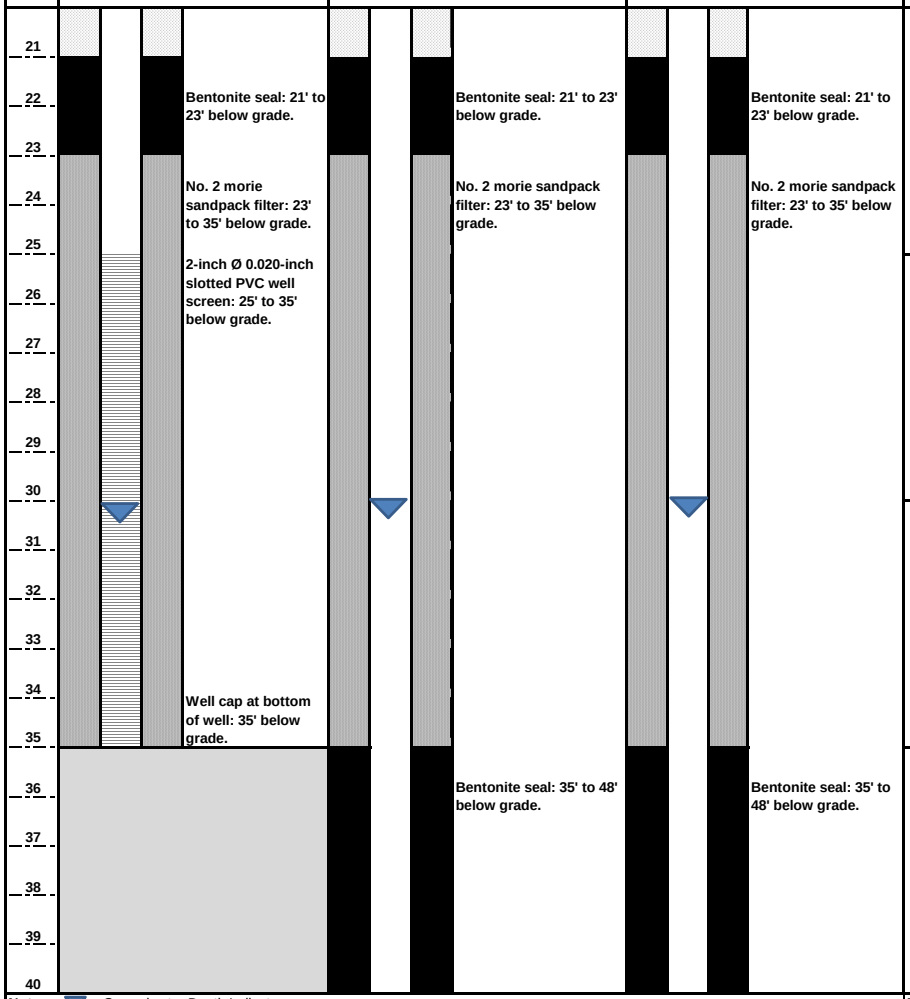
Recovery (inches)	Soil Boring Log	Odor	Moisture	PID	NAPL
	No Recovery.	N/A	N/A	N/A	N/A
50	Top 20": Brown SAND, some Silt, little fine Gravel.	ND	Dry	ND	ND
	Middle13": Gray-brown Silt, trace Clay and fine Gravel.	ND	Dry	ND	ND
	Bottom 17": Brown SAND, trace Silt and fine Gravel.	ND	Dry	ND	ND
46	Brown SAND, some fine Gravel.	ND	Dry	ND	ND
43	Brown SAND, some fine Gravel.	ND	Dry	ND	ND

Notes: Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW9S installed to 35 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017
Groundwater monitoring well L1-RDI-MW9I installed to 60 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017.
Groundwater monitoring well L1-RDI-MW9D installed to 80 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017.

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
	AKRF Project Number: 12492	**Weather:**	85 °F, Sunny	**Start Time and Date:**	8/10/2017 at 7:45
		Sheet No.:	2 of 4	**Finish Time and Date:**	8/10/2017 at 15:40
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-9 S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-9**
		Intermediate Well	L1-RDI-MW-9 I		
		Deep Well:	L1-RDI-MW-9 D		



Recovery (inches)	Soil Boring Log	Odor	Moisture	PID	NAPL
35	Brown SAND, little fine Gravel.	ND	Dry	ND	ND
35	Brown SAND, trace fine Gravel.	ND	Dry	ND	ND
42	Brown SAND, little Silt, trace fine Gravel.	ND	Wet	ND	ND
40	Top 14": Brown SAND, some fine Gravel.	ND	Wet	ND	ND
	Bottom 26": Brown Sandy SILT.	ND	Wet	ND	ND

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW9S installed to 35 feet below grade. Groundwater measured at 30 feet below grade during sampling
Groundwater monitoring well L1-RDI-MW9I installed to 60 feet below grade. Groundwater measured at 30 feet below grade during sampling on
Groundwater monitoring well L1-RDI-MW9D installed to 80 feet below grade. Groundwater measured at 30 feet below grade during sampling

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY

AKRF Project Number: 12492

Sampling Method:	Plastic Liner	**Driller:**	Aarco Environmental
Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
Weather:	85 °F, Sunny	**Start Time and Date:**	8/10/2017 at 7:45
Sheet No.:	3 of 4	**Finish Time and Date:**	8/10/2017 at 15:40

NESTED GROUNDWATER WELL INSTALLATION LOG

GROUNDWATER MONITORING WELL IDS:

Shallow Well:	L1-RDI-MW-9 S
Intermediate Well:	L1-RDI-MW-9 I
Deep Well:	L1-RDI-MW-9 D

SOIL BORING INSTALLATION LOG | **SOIL BORING ID:** **L1-RDI-MW-9**

Depth (feet): 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

Shallow-Screened Well Construction

Intermediate-Screened Well Construction

No. 2 morie sandpack filter: 48' to 60' below grade.

2-inch Ø 0.020-inch slotted PVC well screen: 50' to 60' below grade.

Well cap at bottom of well: 60' below grade.

Deep-Screened Well Construction

No. 2 morie sandpack filter: 48' to 60' below grade.

Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL
39	Top 16": Brown Sandy SILT Next 12": Sand and gravel Bottom 11": Brown SAND, little gravel and Silt	ND	Wet	ND	ND
	No recovery				
42	Brown SAND, some gravel	ND	Wet	ND	ND
48	Brown SAND, little Silt and gravel	ND	Wet	ND	ND

Notes: Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW9S installed to 35 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017
Groundwater monitoring well L1-RDI-MW9I installed to 60 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017.
Groundwater monitoring well L1-RDI-MW9D installed to 80 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017.

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

440 Park Avenue South, 7th Floor, New York, NY 10016 AKRF	**Atlantic Chestnut - Lot 1** **3264 Fulton Street, Brooklyn, NY**	**Sampling Method:**	Plastic Liner	**Driller:**	Aarco Environmental
		Logged by:	A. Bosco, AKRF	**Drilling Method:**	Geoprobe 8140LC
	AKRF Project Number: 12492	**Weather:**	85 °F, Sunny	**Start Time and Date:**	8/10/2017 at 7:45
		Sheet No.:	4 of 4	**Finish Time and Date:**	8/10/2017 at 15:40
NESTED GROUNDWATER WELL INSTALLATION LOG	**GROUNDWATER MONITORING WELL IDS:**	**Shallow Well:**	L1-RDI-MW-9 S	**SOIL BORING INSTALLATION LOG**	**SOIL BORING ID:** **L1-RDI-MW-9**
		Intermediate Well:	L1-RDI-MW-9 I		
		Deep Well:	L1-RDI-MW-9 D		

Depth (feet)	Shallow-Screened Well Construction	Intermediate-Screened Well Construction	Deep-Screened Well Construction
61			
62			
63			
64			
65			
66			
67			**Bentonite seal: 60' to 68' below grade.**
68			
69			**No. 2 morie sandpack filter: 68' to 80' below grade.**
70			**2-inch Ø 0.020-inch slotted PVC well screen: 70' to 80' below grade.**
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			**Well cap at bottom of well: 80' below grade**

Recovery (Inches)	Soil Boring Log	Odor	Moisture	PID	NAPL
41	Brown SAND, trace fine Gravel.	ND	Wet	ND	ND
51	Brwon SAND, little Silt, trace fine Gravel.	ND	Wet	ND	ND
38	Brown SAND, trace fine Gravel.	ND	Wet	ND	ND
42	Brown SAND, some Silt, trace fine Gravel.	ND	Wet	ND	ND

Notes: ▼ Groundwater Depth Indicator
Groundwater monitoring well L1-RDI-MW9S installed to 35 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017
Groundwater monitoring well L1-RDI-MW9I installed to 60 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017.
Groundwater monitoring well L1-RDI-MW9D installed to 80 feet below grade. Groundwater measured at 30 feet below grade during sampling on 8/10/2017.

End of soil boring at 80 feet below grade.
Groundwater encountered at approximately 30 feet below grade during soil boring advancement.
PID = photoionization detector NAPL = non-aqueous phase liquid
ppm = parts per million ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-11**
Sheet 1 of 2

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	4' Macrocore
Driller:	Aarco Environmental
Weather:	45 °F, Partly Cloudy
Logged By:	D. Lewis, AKRF

Drilling
Start Time: 10:30 **Finish Time:** 12:30
Date: 11/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	29	Top 19": Dark brown SAND, some Asphalt, little fine Gravel, Silt (FILL).	ND	Dry	34.7	ND	
2							
3		Bottom 10": Light brown SAND, some fine Gravel, little Silt, trace Concrete (FILL).	ND	Dry	5.4	ND	
4							
5	35	Top 20": Light brown SAND, trace Clay and Silt (FILL).	ND	Dry	0.3	ND	
6							L1-RDI-SB-11 (5-7) 20171115
7		Bottom 15": Light brown SAND, some Gravel, little Silt, trace Concrete (FILL).	ND	Dry	0.2	ND	
8							L1-RDI-SB-11 (7-9) 20171115
9	45	Top 7": Light brown SAND, some Silt, trace Clay (FILL).	ND	Dry	0.9	ND	
10		Middle 5": CONCRETE (FILL).	ND	Dry	1.2	ND	L1-RDI-SB-11 (9-11) 20171115
11		Bottom 33": Light brown SAND, trace Silt, fine Gravel.	ND	Dry	ND	ND	L1-RDI-SB-11 (11-
12							13) 20171121
13	45	Top 14": Dark brown SAND, some fine Gravel, little Clay, Silt.	ND	Dry	1.4	ND	
14							L1-RDI-SB-11 (13- 15) 20171115
15		Bottom 31": Light brown SAND, trace Silt, fine Gravel.	ND	Dry	1.0	ND	
16							L1-RDI-SB-11 (15- 17) 20171115
17	45	Light brown SAND, little Silt, trace fine Gravel.	ND	Dry	0.9	ND	
18							L1-RDI-SB-11 (17- 19) 20171115
19							L1-RDI-SB-11 (19-
20							21) 20171115

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater encountered during soil boring installation at 31 feet below grade.
Soil boring advanced to 32 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	Atlantic Chestnut - Lot 1 3264 Fulton Street, Brooklyn, NY AKRF Project Number: 12492	Soil Boring ID:	L1-RDI-SB-11
		Sheet 2 of 2	

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT	**Drilling**	
Sampling Method:	4' Macrocore	**Start Time:** 10:30	**Finish Time:** 12:30
Driller:	Aarco Environmental		
Weather:	45 °F, Partly Cloudy	**Date:** 11/15/2017	
Logged By:	D. Lewis, AKRF		

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21 22 23 24	44	Light brown SAND, little fine Gravel, trace Silt.	ND	Dry	2.0	ND	L1-RDI-SB-11 (21-23) 20171115 L1-RDI-SB-11 (23-25)20171115
25 26 27 28	26	Light brown SAND, trace fine Gravel, Silt.	ND	Dry	1.0	ND	L1-RDI-SB-11 (25-27) 20171115 L1-RDI-SB-11 (27-29) 20171115
29 30 31 32	28	Light brown SAND, trace Silt.	ND	Moist Wet @ 31'	ND	ND	L1-RDI-SB-11 (29-31) 20171115

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater encountered during soil boring installation at 31 feet below grade.
Soil boring advanced to 32 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-15**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	84 °F, Mostly Cloudy
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 07:45 **Finish Time: 08:00**
Date: 08/14/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	35	Top 3": CONCRETE.	ND	Dry	0.2	ND	
2		Next 7": Brown SAND, little Silt, Concrete (FILL).	ND	Dry	0.8	ND	
3		Next 5": Brown SAND, some Asphalt, little Gravel (FILL).	ND	Dry	0.7	ND	
4 5		Bottom 20": Brown SAND, little Clay.	ND	Dry	0.1	ND	L1-RDI-SB-15 (5) 20170814
6 7 8 9 10	37	Brown SAND, little Silt.	ND	Dry	ND	ND	L1-RDI-SB-15 (7) 20170814
11 12 13 14 15	45	Brown SAND, little Silt.	ND	Dry	ND	ND	L1-RDI-SB-15 (15) 20170814

Notes: Soil samples analyzed for CVOCs by EPA Method 8260, PAHs by EPA Method 8270, and RCRA 8 Metals by EPA Methods 6000/7000.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-16**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	84 °F, Mostly Cloudy
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 08:15 **Finish Time: 08:35**
Date: 08/14/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	20	Top 2": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3		Middle 3": ASPHALT (FILL).	ND	Dry	ND	ND	
4							
5		Bottom 15": Brown SAND, little Silt, trace Concrete (FILL).	ND	Dry	ND	ND	L1-RDI-SB-16 (5) 20170814
6	38	Top 10": Brown SAND, little Silt, trace Concrete (FILL).	ND	Dry	ND	ND	
7							
8							
9		Bottom 28": Brown SAND, little Silt.	ND	Dry	ND	ND	
10							
11	50	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							
13							
14							
15							L1-RDI-SB-16 (15) 20170814

Notes: Soil samples analyzed for CVOCs by EPA Method 8260, PAHs by EPA Method 8270, and RCRA 8 Metals by EPA Methods 6000/7000.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-17**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	84 °F, Mostly Cloudy
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 09:00 **Finish Time: 09:20**
Date: 08/14/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Construction and Demolition Debris	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	33	Top 6": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3		Middle 8": Dark Brown SAND, trace Brick, Asphalt (FILL).	ND	Dry	ND	ND	
4							
5		Bottom 19": Brown Clayey SAND.	ND	Dry	ND	ND	L1-RDI-SB-17 (4-5) 20170814
6	35						
7		Top 7": Brown SAND, little Gravel (FILL).	ND	Dry	ND	ND	
8		Bottom 28": Brown SAND, little Silt.	ND	Dry	ND	ND	
9							
10							
11	45						
12							
13		Brown SAND, little Silt.	ND	Dry	ND	ND	
14							
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-18**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	84 °F, Mostly Cloudy
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 10:00 **Finish Time: 10:25**
Date: 08/14/2017

Surface Condition: Concrete Slab

Depth (feet)	Recovery (Inches)		Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	23	Top 5": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3		Bottom 18": Brown Clayey SAND, little Concrete, trace Wood (FILL).	ND	Dry	ND	ND	
4							
5							L1-RDI-SB-18 (4-5) 20170814
6	28	Top 7": SLOUGH.	ND	Dry	ND	ND	L1-RDI-SB-18 (5-7) 20170814
7							
8							L1-RDI-SB-18 (7-9) 20170814
9		Bottom 21": Brown SAND, little Silt, trace fine Gravel.	ND	Dry	ND	ND	
10							L1-RDI-SB-18 (9-11) 20170814
11	46	Brown SAND, trace Silt.	ND	Dry	ND	ND	
12							L1-RDI-SB-18 (11-13) 20170814
13							
14							L1-RDI-SB-18 (13-15) 20170814
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **ppm = parts per million** **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-19**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	84 °F, Mostly Cloudy
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 10:45 **Finish Time: 11:10**
Date: 08/14/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Construction and Demolition Debris	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	21	Top 11": CONCRETE SLAB.	ND	Dry	ND	ND	
2							
3		Middle 3": Dark Brown SAND, some Asphalt (FILL).	ND	Dry	1.3	ND	
4							
5		Bottom 7": Brown Clayey SILT, trace Gravel (FILL).	ND	Dry	0.1	ND	L1-RDI-SB-19 (4-5) 20170814
6	38						
7		Top 4": CONCRETE (FILL).	ND	Dry	ND	ND	
8		Bottom 34": Brown SAND, little Gravel, Brick (FILL).	ND	Dry	ND	ND	
9							
10							
11	53	Top 4": Brown SAND, some Gravel, trace Brick (FILL).	ND	Dry	ND	ND	
12							
13		Middle 2": CONCRETE (FILL).	ND	Dry	ND	ND	
14							
15		Bottom 47": Brown SAND, some Gravel.	ND	Dry	ND	ND	

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **ppm = parts per million** **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-20**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	84 °F, Mostly Cloudy
Logged By:	A. Bosco, AKRF

Drilling

Start Time: 11:45 **Finish Time: 12:10**

Date: 08/14/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Construction and Demolition Debris	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	20	Top 10": Brown SAND, some Concrete, little Brick, Gravel (FILL).	ND	Dry	ND	ND	
2							
3							
4		Bottom 10": Silty SAND, trace fine Gravel (FILL).	ND	Dry	ND	ND	
5							L1-RDI-SB-20 (4-5) 20170814
6	41	Top 7": SLOUGH (FILL).	ND	Dry	ND	ND	
7							
8							
9		Bottom 34": Brown SAND, little Silt, trace fine Gravel (FILL).	ND	Dry	ND	ND	
10							
11	37	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							
13							
14							
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-21**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	75 °F, Partly Cloudy/Rain
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 07:50 **Finish Time: 08:15**
Date: 08/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Construction and Demolition Debris	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	17	Top 12": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3							
4		Bottom 5": Brown clayey SAND.	ND	Dry	ND	ND	
5							L1-RDI-SB-21 (4-5) 20170815
6	46	Top 13": Brown Clayey SAND, trace Brick, Concrete (FILL).	ND	Dry	ND	ND	
7		Middle 13": Brown SAND, little Silt, trace Concrete, Gravel (FILL).	ND	Dry	ND	ND	
8							
9		Bottom 20": Brown SAND, little Silt.	ND	Dry	ND	ND	
10							
11	55	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							
13							
14							
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-22**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	75 °F, Partly Cloudy/Rain
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 08:30 **Finish Time: 08:45**
Date: 08/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Construction and Demolition Debris	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	30	Top 6": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3		Bottom 24": Brown SAND, some Asphalt, Concrete, little Gravel (FILL).	ND	Dry	ND	ND	
4							
5							L1-RDI-SB-22 (4-5) 20170815
6	31	Top 6": Brown SAND, little Concrete (FILL).	ND	Dry	ND	ND	
7		Middle 10": Brown Silty SAND.	ND	Dry	ND	ND	
8							
9		Bottom 15": Brown Silt, trace Sand, Clay.	ND	Dry	ND	ND	
10							
11	45	Brown SAND, little Silt, trace Gravel.	ND	Dry	ND	ND	
12							
13							
14							
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-23**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	75 °F, Partly Cloudy/Rain
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 09:10 **Finish Time: 09:25**
Date: 08/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Construction and Demolition Debris	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	36	Top 6": Brown SAND, some Brick (FILL).	ND	Dry	ND	ND	
2							
3		Bottom 30": Brown SAND, little Concrete, trace Asphalt, Brick (FILL).	ND	Dry	ND	ND	
4							
5							L1-RDI-SB-23 (4-5) 20170815
6	35	Brown Clayey SAND.	ND	Dry	ND	ND	
7							
8							
9							
10							
11	42	Top 14": Brown Clayey SAND.	ND	Dry	ND	ND	
12							
13							
14		Bottom 28": Brown SAND, little Silt.	ND	Dry	ND	ND	
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-24**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	75 °F, Partly Cloudy/Rain
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 09:40 **Finish Time: 10:00**
Date: 08/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Construction and Demolition Debris	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1 2 3 4 5	37	Brown SAND, some Concrete, little Asphalt, Gravel (FILL).	ND	Dry	ND	ND	L1-RDI-SB-24 (4-5) 20170815
6 7 8 9 10	44	Top 32": Brown Clayey SAND. Bottom 12": Brown SAND, some Silt.	ND ND	Dry Dry	ND ND	ND ND	L1-RDI-SB-24 (5-7) 20170815 L1-RDI-SB-24 (7-9) 20170815 L1-RDI-SB-24 (9-11) 20170815
11 12 13 14 15	41	Brown SAND, little Silt.	ND	Dry	ND	ND	L1-RDI-SB-24 (11-13) 20170815 L1-RDI-SB-24 (13-15) 20170815

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-25**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	75 °F, Partly Cloudy/Rain
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 10:20 **Finish Time: 10:35**
Date: 08/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Construction and Demolition Debris	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	29	Top 5": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3							
4		Bottom 24": Brown SAND, some Asphalt, little Gravel (FILL).	ND	Dry	ND	ND	
5							L1-RDI-SB-25 (4-5) 20170815
6	35	Top 17": Brown Silty SAND.	ND	Dry	ND	ND	L1-RDI-SB-25 (5-7) 20170815
7							
8							L1-RDI-SB-25 (7-9) 20170815
9		Bottom 18": Brown SAND, little Silt.	ND	Dry	0.4	ND	
10							L1-RDI-SB-25 (9-11) 20170815
11	40	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							L1-RDI-SB-25 (11-13) 20170815
13							
14							
15							L1-RDI-SB-25 (13-15) 20170815

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **ppm = parts per million** **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-26**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	75 °F, Partly Cloudy/Rain
Logged By:	A. Bosco, AKRF

Drilling

Start Time: 11:00 **Finish Time: 11:20**

Date: 08/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	28	Top 5": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3							
4		Bottom 23": Brown SAND, little Brick, Concrete, trace Asphalt (FILL).	ND	Dry	ND	ND	
5							L1-RDI-SB-26 (4-5) 20170815
6	26	Top 21": Brown Silty SAND.	ND	Dry	ND	ND	L1-RDI-SB-26 (5-7) 20170815
7							
8							L1-RDI-SB-26 (7-9) 20170815
9		Bottom 5": Brown SAND, little Silt.	ND	Dry	ND	ND	
10							L1-RDI-SB-26 (9-11) 20170815
11	45	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							L1-RDI-SB-26 (11-13) 20170815
13							
14							
15							L1-RDI-SB-26 (13-15) 20170815

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-26**
Sheet 1 of 2

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	4' Macrocore
Driller:	Aarco Environmental
Weather:	45 °F, Partly Cloudy
Logged By:	D. Lewis, AKRF

Drilling
Start Time: 7:30 **Finish Time:** 10:00
Date: 11/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1 2 3 4	17	Dark brown SAND, little fine Gravel, little Silt, Concrete (FILL).	ND	Dry	4.0	ND	L1-RDI-SB-26 (7-9) 20171115
5 6 7 8	31	Top 12": Dark brown SAND, little fine Gravel, little Silt (FILL). Bottom 19": Brown SAND, little Clay, trace Silt (FILL).	ND ND	Dry Dry	91.9 ND	ND ND	L1-RDI-SB-26 (7-9) 20171115
9 10 11 12	44	Top 8": CONCRETE (FILL). Middle 6": Light brown SAND, little Silt, little fine Gravel. Bottom 30": Light brown SAND.	ND ND ND	Dry Dry Dry	0.3 0.8 0.4	ND ND ND	
13 14 15 16	40	Light brown SAND, trace Silt, fine Gravel.	ND	Dry	0.4	ND	
17 18 19 20	39	Top 9": Light brown SAND, little Silt, trace fine Gravel. Middle 4": Dark brown SAND, little fine Gravel, little Silt. Bottom 26": Light brown SAND, little Silt.	ND ND ND	Dry Dry Dry	ND 0.6 0.9	ND ND ND	

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater encountered during soil boring installation at 28 feet below grade.
Soil boring advanced to 32 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for

SOIL BORING LOG	Atlantic Chestnut - Lot 1 3264 Fulton Street, Brooklyn, NY AKRF Project Number: 12492	Soil Boring ID: Sheet 2 of 2	L1-RDI-SB-26

AKRF 440 Park Avenue South, 7th Floor New York, NY 10016	**Drilling Method:** Geoprobe/7822DT **Sampling Method:** 4' Macrocore **Driller:** Aarco Environmental **Weather:** 45 °F, Partly Cloudy **Logged By:** D. Lewis, AKRF	**Drilling** **Start Time:** 7:30	**Finish Time:** 10:00
		Date: 11/15/2017	

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21	38	Top 28": Light brown SAND, little Silt.	ND	Dry	ND	ND	
22							
23		Bottom 10": Brown SAND, little Silt, fine Gravel.	ND	Dry	0.9	ND	
24							
25	42	Light brown SAND, trace Silt.	ND	Moist	ND	ND	
26							
27							
28							
29	42	Light brown SAND, trace Silt, trace Gravel.	ND	Wet @ 28'	ND	ND	
30							
31							
32							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater encountered during soil boring installation at 28 feet below grade.
Soil boring advanced to 32 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-26**
Sheet 1 of 2

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	4' Macrocore
Driller:	Aarco Environmental
Weather:	45 °F, Partly Cloudy
Logged By:	E. Matamoros, AKRF

Drilling
Start Time: 11:40 **Finish Time:** 13:00
Date: 12/20/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1 2 3 4	33	Top 6": CONCRETE. Bottom 27": Dark brown SAND, some Brick, Concrete (FILL).	ND ND	Dry Dry	ND ND	ND ND	
5 6 7 8	25	Brown SAND, little fine Gravel, Silt.	ND	Dry	ND	ND	L1-RDI-SB-26 (4-5) 20171220 L1-RDI-SB-26 (7-9) 20171220
9 10 11 12	40	Brown SAND.	ND	Dry	ND	ND	L1-RDI-SB-26 (9-11) 20171220 L1-RDI-SB-26 (11-13) 20171220
13 14 15 16	45	Brown SAND.	ND	Dry	ND	ND	L1-RDI-SB-26 (13-15) 20171220 L1-RDI-SB-26 (15-17) 20171220
17 18 19 20	34	Brown SAND.	ND	Dry	ND	ND	L1-RDI-SB-26 (17-19) 20171220 L1-RDI-SB-26 (19-21) 20171220

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater encountered during soil boring installation at 28 feet below grade.
Soil boring advanced to 32 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for

SOIL BORING LOG	Atlantic Chestnut - Lot 1 3264 Fulton Street, Brooklyn, NY AKRF Project Number: 12492	Soil Boring ID: Sheet 2 of 2	L1-RDI-SB-26

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT	Drilling	
Sampling Method:	4' Macrocore	Start Time: 11:40	Finish Time: 13:00
Driller:	Aarco Environmental		
Weather:	45 °F, Partly Cloudy	Date: 12/20/2017	
Logged By:	E. Matamoros, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
21 22 23 24	45	Brown SAND, little Silt.	ND	Dry	ND	ND	L1-RDI-SB-26 (21-23) 20171220 L1-RDI-SB-26 (23-25) 20171220
25 26 27 28	38	Brown SAND, little Silt.	ND	Dry	ND	ND	L1-RDI-SB-26 (25-27) 20171220
29 30 31 32	39	Brown SAND, little Silt.	ND	Moist Wet @ 31'	ND	ND	L1-RDI-SB-26 (27-29) 20171220 L1-RDI-SB-26 (29-31) 20171220

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater encountered during soil boring installation at 28 feet below grade.
Soil boring advanced to 32 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-27**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	75 °F, Partly Cloudy/Rain
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 12:00 **Finish Time: 12:20**
Date: 08/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	26	Top 4": CONCRETE (FILL).	ND	Dry	ND	ND	
2		Middle 8": Brown SAND, little Asphalt (FILL).	ND	Dry	ND	ND	
3							
4		Bottom 14": Brown SAND, some Asphalt, little Gravel (FILL).	ND	Dry	ND	ND	
5							L1-RDI-SB-27 (4-5) 20170815
6	34	Top 18": Brown Silty SAND.	ND	Dry	ND	ND	L1-RDI-SB-27 (5-7) 20170815
7							
8							L1-RDI-SB-27 (7-9) 20170815
9		Bottom 16": Brown SAND, little Silt.	ND	Dry	ND	ND	
10							L1-RDI-SB-27 (9-11) 20170815
11	55	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							L1-RDI-SB-27 (11-13) 20170815
13							
14							
15							L1-RDI-SB-27 (13-15) 20170815

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-28**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	75 °F, Partly Cloudy/Rain
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 12:30 **Finish Time: 12:45**
Date: 08/15/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	29	Top 3": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3		Bottom 26": Brown Silty SAND, little Concrete, Asphalt (FILL).	ND	Dry	ND	ND	
4							
5							L1-RDI-SB-28 (4-5) 20170815
6	47	Brown SAND, some fine Gravel, little Silt.	ND	Dry	ND	ND	L1-RDI-SB-28 (5-7) 20170815
7							
8							L1-RDI-SB-28 (7-9) 20170815
9							
10							L1-RDI-SB-28 (9-11) 20170815
11	42	Brown SAND, little Silt, trace fine Gravel.	ND	Dry	ND	ND	
12							L1-RDI-SB-28 (11-13) 20170815
13							
14							
15							L1-RDI-SB-28 (13-15) 20170815

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-29**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	89 °F, Sunny
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 07:25 **Finish Time: 07:37**
Date: 08/16/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	41	Top 3": CONCRETE (FILL).	ND	Dry	ND	ND	
2		Middle 20": ASPHALT (FILL).	ND	Dry	ND	ND	
3							
4		Bottom 18": Brown Clayey SAND, trace Silt.	ND	Dry	ND	ND	L1-RDI-SB-29 (4-5) 20170816
5							
6	43	Top 9": Brown Clayey SAND, trace Silt.	ND	Dry	ND	ND	
7							
8							
9		Bottom 34": Brown SAND, some Silt.	ND	Dry	ND	ND	
10							
11	60	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							
13							
14							
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-30**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	89 °F, Sunny
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 07:45 **Finish Time: 08:00**
Date: 08/16/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	39	Top 7": CONCRETE (FILL).	ND	Dry	ND	ND	
2							
3		Middle 12": ASPHALT (FILL).	ND	Dry	ND	ND	
4		Bottom 20": Brown Clayey SAND, trace Silt.	ND	Dry	0.3	ND	
5							L1-RDI-SB-30 (4-5) 20170816
6	29	Top 9": Brown Clayey SAND, trace Silt.	ND	Dry	ND	ND	
7							
8							
9		Bottom 20" Brown SAND, little Silt.	ND	Dry	ND	ND	
10							
11	48	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							
13							
14							
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-31**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	89 °F, Sunny
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 8:10 **Finish Time: 08:20**
Date: 08/16/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	35	Top 4": CONCRETE (FILL).	ND	Dry	ND	ND	
2		Middle 9": ASPHALT (FILL).	ND	Dry	ND	ND	
3							
4		Bottom 22": Brown SAND, little Silt, trace Gravel.	ND	Dry	ND	ND	L1-RDI-SB-31 (4-5) 20170816
5							
6	40	Top 12": Brown SAND, little Silt, trace Gravel.	ND	Dry	ND	ND	
7		Middle 7": SILT, little Sand.	ND	Dry	ND	ND	
8							
9		Bottom 21" Brown SAND, some Silt.	ND	Dry	ND	ND	
10							
11	47	Brown SAND, little Silt.	ND	Dry	ND	ND	
12							
13							
14							
15							

Notes: Soil samples analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG

Atlantic Chestnut - Lot 1
3264 Fulton Street, Brooklyn, NY
AKRF Project Number: 12492

Soil Boring ID: **L1-RDI-SB-32**

Sheet 1 of 1

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT
Sampling Method:	5' Macrocore
Driller:	Aarco Environmental
Weather:	89 °F, Sunny
Logged By:	A. Bosco, AKRF

Drilling
Start Time: 09:20 **Finish Time: 09:40**
Date: 08/16/2017

Depth (feet)	Recovery (Inches)	**Surface Condition:** Concrete Slab	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1	35	Top 13": ASPHALT (FILL).	ND	Dry	0.3	ND	
2		Middle 11": Brown SAND, little Asphalt (FILL).	ND	Dry	8.7	ND	
3							
4		Bottom 11": Brown Silty SAND, trace Gravel.	Solvent-like	Dry	1.3	ND	
5							L1-RDI-SB-32 (4-5) 20170816
6	44	Top 14": Brown SAND, some Silt, trace Gravel.	ND	Dry	0.8	ND	L1-RDI-SB-32 (5-7) 20170816
7							
8							L1-RDI-SB-32 (7-9) 20170816
9		Bottom 30": Brown SAND, little Silt.	ND	Dry	0.9	ND	
10							
11	46	Brown SAND, little Silt.	ND	Dry	ND	ND	L1-RDI-SB-32 (9-11) 20170816
12							
13							L1-RDI-SB-32 (11-13) 20170816
14							
15							L1-RDI-SB-32 (13-15) 20170816

Notes: Soil sample analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	Atlantic Chestnut - Lot 1 3264 Fulton Street, Brooklyn, NY AKRF Project Number: 12492	Soil Boring ID: Sheet 1 of 1	L1-RDI-SB-33

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT	Drilling	
Sampling Method:	5' Macrocore	Start Time: 10:10	Finish Time: 10:30
Driller:	Aarco Environmental		
Weather:	89 °F, Sunny	Date: 08/16/2017	
Logged By:	A. Bosco, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Concrete Slab	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1	28	Top 4": CONCRETE (FILL).	ND	Dry	ND	ND	
2		Middle 14": Brown SAND, some Asphalt, little Concrete (FILL).	ND	Dry	ND	ND	
3							
4		Bottom 10": Brown Silty SAND.	ND	Dry	ND	ND	
5							L1-RDI-SB-33 (4-5) 20170816
6	28	Top 7": Brown SAND, little Concrete, trace Silt.	ND	Dry	ND	ND	
7							
8							
9		Bottom 21": Brown SAND, little Silt.	ND	Dry	ND	ND	
10							
11	47	Top 13": Brown SAND, little Silt.	ND	Dry	ND	ND	
12							
13							
14		Bottom 34": Brown SAND, trace Silt.	ND	Dry	ND	ND	
15							

Notes: Soil sample analyzed for CVOCs by EPA Method 8260.
Groundwater not encountered.
End of soil boring at 15 feet below grade.

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	Atlantic Chestnut - Lot 1 3264 Fulton Street, Brooklyn, NY AKRF Project Number: 12492	Soil Boring ID: Sheet 1 of 1	L1-RDI-SB-34

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT	Drilling	
Sampling Method:	Dedicated Plastic Liner	Start Time: 09:55	Finish Time: 10:15
Driller:	Aarco Environmental		
Weather:	80 °F, Sunny	Date: 08/11/2017	
Logged By:	A. Bosco, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Construction and Demoltion Debris	Odor	Moisture	PID (ppm)	NAPL	Soil Samples Collected for Laboratory Analysis
1							
2							
3							
4							
5							
6							
7							
8							
9							
10	46	Top 13": Brown SAND, some Silt, trace Gravel, Brick, Concrete (FILL).	ND	Dry	ND	ND	
11							
12		Middle 8": Dark brown SAND, some Silt.	ND	Dry	15.9	ND	
13							
14		Bottom 25": Dark brown SAND, some Silt.	ND	Dry	0.1	ND	L1-RDI-SB-34 (13-15) 20170811
15	12	Brown SAND, trace Silt.	ND	Dry	0.1	ND	

Notes: Soil sample analyzed for CVOCs by EPA Method 8260, PAHs by EPA Method 8270, and RCRA 8 Metals by EPA Methods 6000/7000.
Groundwater not encountered.
End of soil boring at 6 feet below grade (approximately 15 feet below sidewalk grade).

PID = photoionization detector ppm = parts per million NAPL = non-aqueous phase liquid ND = not detected

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	Atlantic Chestnut - Lot 1 3264 Fulton Street, Brooklyn, NY AKRF Project Number: 12492	Soil Boring ID: Sheet 1 of 1	L1-RDI-SB-35

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT	Drilling	
Sampling Method:	Dedicated Plastic Liner	Start Time: 09:30	Finish Time: 09:40
Driller:	Aarco Environmental		
Weather:	80 °F, Sunny	Date: 08/11/2017	
Logged By:	A. Bosco, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Construction and Demoltion Debris	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1 2 3 4 5 6 7 8 9							
10 11 12	35	Top 15": Brown SAND, some fine Gravel, Brick, Concrete, trace Silt (FILL).	ND	Dry	ND	ND	
13 14		Bottom 20": Brown SAND, trace Silt.	ND	Dry	ND	ND	L1-RDI-SB-35 (13-15) 20170811
15	12	Brown SAND, trace Silt.	ND	Dry	ND	ND	

Notes: Soil samples analyzed for CVOCs by EPA Method 8260, PAHs by EPA Method 8270, and RCRA 8 Metals by EPA Methods 6000/7000.
Groundwater not encountered.
End of soil boring at 6 feet below grade (approximately 15 feet below sidewalk grade).

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

SOIL BORING LOG	Atlantic Chestnut - Lot 1 3264 Fulton Street, Brooklyn, NY AKRF Project Number: 12492	Soil Boring ID: Sheet 1 of 1	L1-RDI-SB-36

AKRF
440 Park Avenue South, 7th Floor
New York, NY 10016

Drilling Method:	Geoprobe/7822DT	Drilling	
Sampling Method:	Dedicated Plastic Liner	Start Time: 09:00	Finish Time: 09:20
Driller:	Aarco Environmental		
Weather:	80 °F, Sunny	Date: 08/11/2017	
Logged By:	A. Bosco, AKRF		

Depth (feet)	Recovery (Inches)	Surface Condition: Construction and Demoltion Debris	Odor	Moisture	PID	NAPL	Soil Samples Collected for Laboratory Analysis
1 2 3 4 5 6 7 8 9							
10 11 12	28	Top 10": SAND, some Silt, Brick, Concrete, fine Gravel (FILL).	ND	Dry	ND	ND	
13 14		Bottom 18": Brown SAND, trace Silt.	ND	Dry	ND	ND	L1-RDI-SB-36 (13-15) 20170811
15	10	Brown SAND, trace Silt.	ND	Dry	ND	ND	

Notes: Soil sample analyzed for CVOCs by EPA Method 8260, PAHs by EPA Method 8270, and RCRA 8 Metals by EPA Methods 6000/7000.
Groundwater not encountered.
End of soil boring at 6 feet below grade (approximately 15 feet below sidewalk grade).

PID = photoionization detector **NAPL = non-aqueous phase liquid** **ND = not detected**

Soil classifications and descriptions presented are based on the Modified Burmister Classification System. Descriptions were developed for environmental purposes only.

APPENDIX B

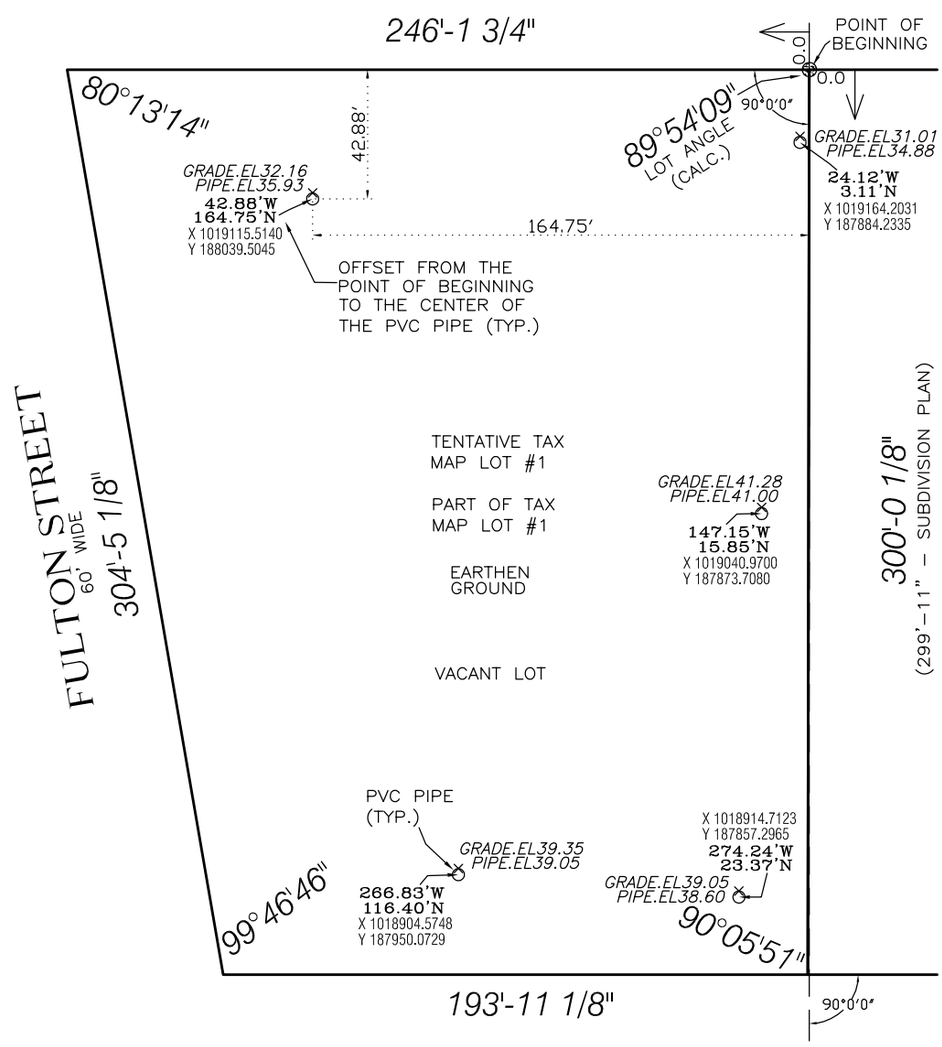
GROUNDWATER WELL ELEVATION SURVEYS

Job No. RLS163638

THE EXISTENCE OF RIGHT OF WAYS AND/OR EASEMENTS OF RECORD, IF ANY, NOT SHOWN ARE NOT CERTIFIED.

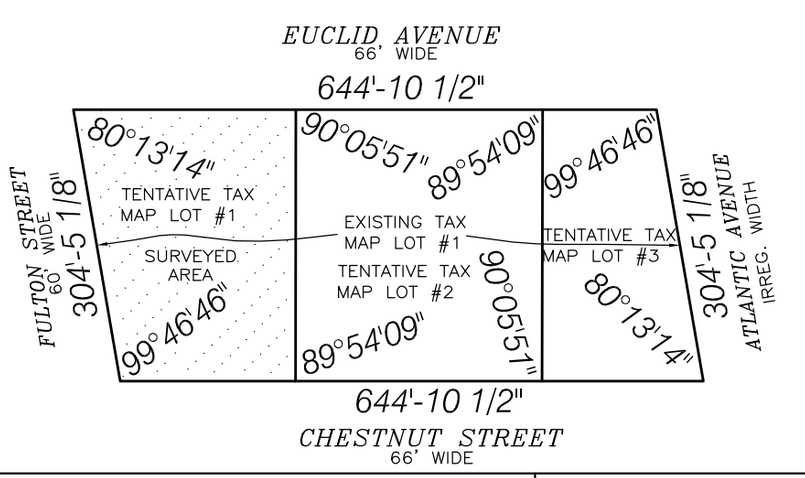
LEGEND:
ELEVATION AT GROUND LEVEL NEXT TO PIPE —— GRADE.EL40.92
ELEVATION AT THE TOP OF THE PVC PIPE —— PIPE.EL40.92
CHAIN LINK FENCE —— C.L.F.
PLATFORM —— PLT.
PAVEMENT —— PVMT.
EARTHEN GROUND —— E.G.
CONCRETE —— CONC.
OVER HEAD SERVICE WIRE —— O.H.S.W.
METAL DOOR —— M.D.
METAL COVER —— M.C.
FIRE ESCAPE —— F.E.
UTILITY POLE ——
WOOD FENCE —— W.F.
VINYL FENCE —— V.F.
METAL FENCE —— M.F.
BAY WINDOW —— B.W.
AREA WAY —— A.W.
ON LINE —— O/L
AIR CONDITIONER —— A.C.
CELLAR ENTRANCE —— C.E.

NOTES:
1) SUBDIVISION (APPORTIONMENT) HEREIN IS BASED UPON NYC FINANCE FORM RP-602, PREPARED AND CERTIFIED BY WILLIAM STEIN, REGISTERED ARCHITECT, DATED 1/18/2016 FOR BROOKLYN BLOCK 4143, PRESENT LOT 1, NEW LOTS 1, 2 & 3.
2) TENTATIVE TAX MAP LOT #1 ADDRESS IS 3264 FULTON STREET, BROOKLYN, NY PER AKRF EMAIL DATED 12/22/16.



TENTATIVE LOT #1 AREA IS 66013.4 sq. ft. (ACTUAL), 65994.2 sq. ft. AS PER SUBDIVISION PLAN

PROPERTY LINE DETAIL NOT TO SCALE



NOTES:
1) UNLESS OTHERWISE NOTED, ELEVATIONS AND LEGAL GRADES SHOWN ON THIS SURVEY ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AS ESTABLISHED AND MAINTAINED BY THE NATIONAL GEODETIC SURVEY OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, OR SUCCESSOR AGENCY, WHICH IS ESTABLISHED AS THE CITY DATUM BY LOCAL LAW 96 OF 2013.
2) GEOSPATIAL COORDINATES (X,Y) SHOWN ARE PROVIDED BASED UPON NYS PLANE COORDINATES LONG ISLAND ZONE.

PARTIAL SURVEY
FOR MONITORING WELLS PIPES LOCATION AND SPOT ELEVATIONS PURPOSES USE ONLY, AS REQUESTED BY THE CLIENT

FOR BUILDING DEPARTMENT USE ONLY

SURVEY OF: *Described Property*
LOCATED AT:
3301 Atlantic Avenue, Brooklyn
County of Kings
City and State of New York
TAX DESIG:
Block 4143 Existing Lot 1, Tentative Lot 1
CERTIFIED TO:
AKRF, INC.

ROGUSKI
LAND SURVEYING. P.C.
TITLE • ARCHITECTURAL • BOUNDARY • CONSTRUCTION
60-17 56th DRIVE, MASPETH, N.Y. 11378
Tel. • (718)480-3761 • Fax. • (718)480-3762 •
Email • info@roguskils.net •
SZCZEPAN H. ROGUSKI
PROFESSIONAL LAND SURVEYOR

DATE: *December 14, 2016*
SCALE: *NOT TO SCALE*
DRAWN BY MP

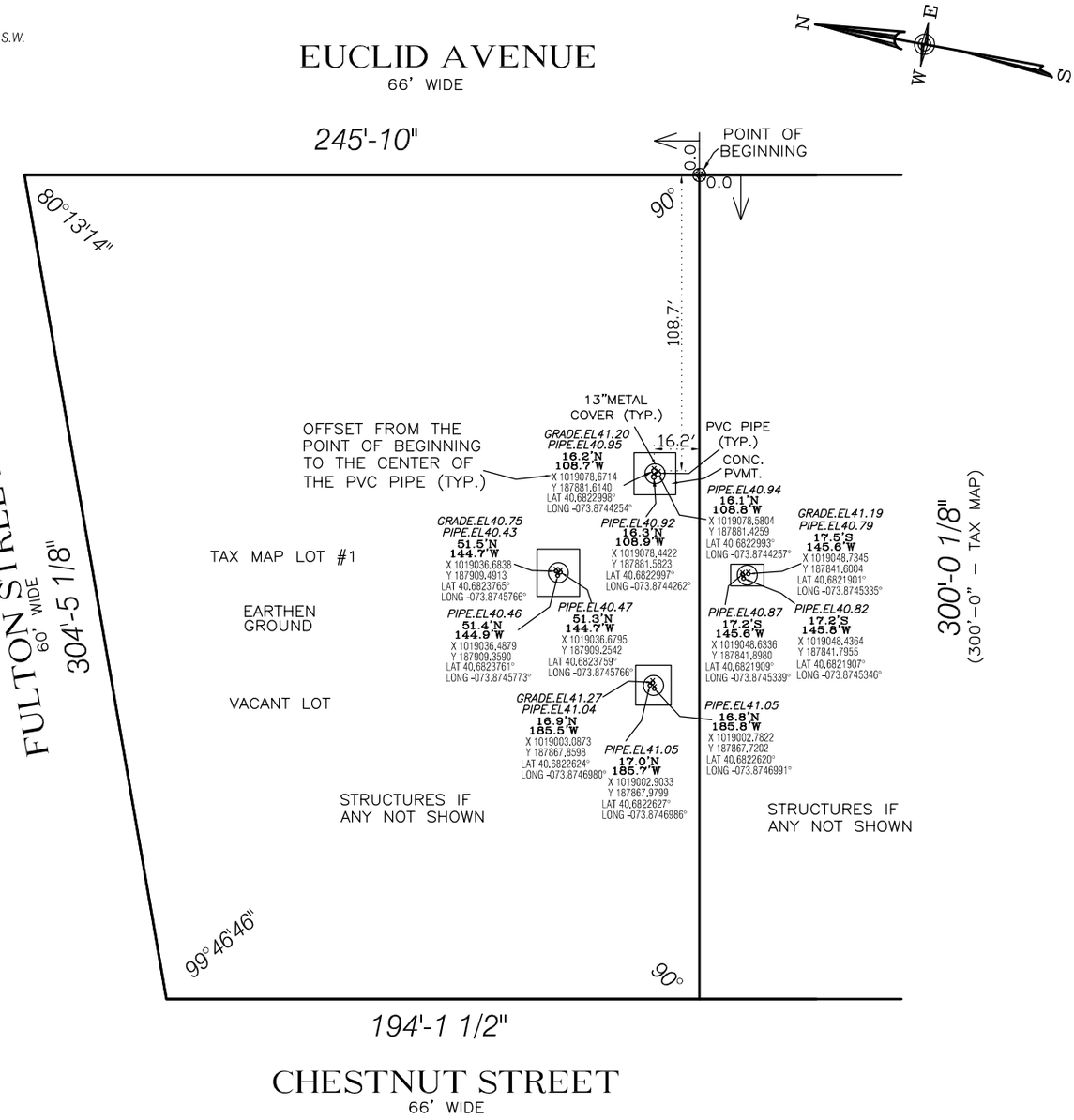
UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

CERTIFICATION INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

LEGEND:
ELEVATION AT GROUND LEVEL NEXT TO PIPE —— GRADE.EL40.92
ELEVATION AT THE TOP OF THE PVC PIPE —— PIPE.EL40.92
CHAIN LINK FENCE —— C.L.F.
PLATFORM —— PLT.
PAVEMENT —— PVMT.
EARTHEN GROUND —— E.G.
CONCRETE —— CONC.
OVER HEAD SERVICE WIRE —— O.H.S.W.
METAL DOOR —— M.D.
METAL COVER —— M.C.
FIRE ESCAPE —— F.E.
UTILITY POLE ——
WOOD FENCE —— W.F.
VINYL FENCE —— V.F.
METAL FENCE —— M.F.
BAY WINDOW —— B.W.
AREA WAY —— A.W.
ON LINE —— O/L
AIR CONDITIONER —— A.C.
CELLAR ENTRANCE —— C.E.

Job No. RLS172090

THE EXISTENCE OF RIGHT OF WAYS AND/OR EASEMENTS OF RECORD, IF ANY, NOT SHOWN ARE NOT CERTIFIED.



NOTES:

1) UNLESS OTHERWISE NOTED, ELEVATIONS SHOWN ON THIS SURVEY ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AS ESTABLISHED AND MAINTAINED BY THE NATIONAL GEODETIC SURVEY OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, OR SUCCESSOR AGENCY, WHICH IS ESTABLISHED AS THE CITY DATUM BY LOCAL LAW 96 OF 2013.
2) GEOSPATIAL COORDINATES (X,Y) SHOWN ARE PROVIDED BASED UPON NYS PLANE COORDINATES LONG ISLAND ZONE.
3) PLEASE NOTE THAT SOUTH PROPERTY LINE IS CHANGED (AFTER 8/17/2017) AND ALL OFFSETS ARE IN RELATION TO NEW PROPERTY LINE

FOR MONITORING WELLS PIPES LOCATION AND SPOT ELEVATIONS PURPOSES USE ONLY, AS REQUESTED BY THE CLIENT

FOR BUILDING DEPARTMENT USE ONLY

REVISIONS

REVISION 1 (12/8/2017): ADD DECIMAL LAT/LONG FORMAT

SURVEY OF: *Described Property*

LOCATED AT:
3248 Atlantic Avenue, Brooklyn
County of Kings
City and State of New York

TAX DESIG:
Block 4143 Lot 1

CERTIFIED TO:
AKRF, INC.

ROGUSKI
LAND SURVEYING. P.C.
TITLE • ARCHITECTURAL • BOUNDARY • CONSTRUCTION
60-17 56th DRIVE, MASPETH, N.Y. 11378
Tel. • (718)480-3761 • Fax. • (718)480-3762 •
Email • info@roguskils.net •
SZCZEPAN H. ROGUSKI
PROFESSIONAL LAND SURVEYOR

DATE: *August 28, 2017*
REV.1: *December 8, 2017*
SCALE: *NOT TO SCALE*
DRAWN BY AM1

UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

CERTIFICATION INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

APPENDIX C

GROUNDWATER WELL DEVELOPMENT LOGS

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/14/2017	

Development Setup

Start Time:	9:55	**Stop Time:**	10:20
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	35.36 feet below top of casing	**1 Well Volume*:**	0.605 gallons
Depth to Water:	31.05 feet below top of casing	**Volume Purged:**	3 gallons
Water Column:	3.71 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-6S	**Groundwater Monitoring Well Installation Date:**	8/14/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
9:55	300	22.01	7.52	-243	0.210	701	17.95
10:00	300	19.44	7.12	-239	0.345	873	18.15
10:05	300	18.64	6.68	-199	0.474	95.5	18.34
10:10	300	18.8	6.65	-183	0.533	32.3	18.09
10:15	300	18.56	6.54	-174	0.573	19.8	18.33
10:20	300	18.55	6.56	-188	0.542	17.1	18.43

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/14/2017	

Development Setup

Start Time:	7.45	**Stop Time:**	8:15
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	59.93 feet below top of casing	**1 Well Volume*:**	4.59 gallons
Depth to Water:	31.74 feet below top of casing	**Volume Purged:**	5 gallons
Water Column:	28.19 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-6I	**Groundwater Monitoring Well Installation Date:**	8/14/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
7:45	540	22.34	7.70	71	0.755	732	13.38
7:50	540	19.59	7.31	-86	0.782	846	15.84
7:55	540	18.6	7.19	-58	0.771	228	17.40
8:00	540	18.06	6.99	-83	0.780	71.4	19.15
8:05	540	17.78	6.85	-73	0.804	38.6	20.59
8:10	540	17.66	6.77	-60	0.810	25	21.85
8:15	540	17.35	6.72	-61	0.818	20.1	21.22

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/14/2017	

Development Setup

Start Time:	8:45	**Stop Time:**	9:10
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	80.83 feet below top of casing	**1 Well Volume*:**	8.01 gallons
Depth to Water:	31.68 feet below top of casing	**Volume Purged:**	2.5 gallons
Water Column:	49.15 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-6D	**Groundwater Monitoring Well Installation Date:**	8/14/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
8:45	315	18.32	7.44	-40	0.696	>1,000	21.42
8:50	315	18.43	7.39	-38	0.835	308	20.55
8:55	315	18.01	7.29	-15	0.825	80.1	20.87
9:00	315	17.92	7.28	-33	0.815	34.8	21.77
9:05	315	18.03	7.31	-34	0.804	19.6	22.06
9:10	315	18.36	7.36	-37	0.810	19.7	22.11

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/15/2017	

Development Setup

Start Time:	12:30	**Stop Time:**	13:30
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	36.11 feet below top of casing	**1 Well Volume*:**	0.808 gallons
Depth to Water:	31.15 feet below top of casing	**Volume Purged:**	10 gallons
Water Column:	4.96 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-7S	**Groundwater Monitoring Well Installation Date:**	8/15/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
12:30	580	14.36	7.83	-314	0.218	586	14.29
12:35	580	20.92	7.23	-220	0.261	>1,000	13.40
12:40	580	19.51	6.79	-191	0.347	740	14.30
12:45	580	18.04	6.51	-143	0.364	635	16.04
12:50	580	18.40	6.49	-183	0.380	336	16.39
12:55	580	18.18	6.35	-184	0.424	295	16.40
13:00	580	17.79	6.36	-196	0.456	107	16.41
13:05	580	18.04	6.33	-213	0.461	99.7	16.53
13:10	580	18.06	6.26	-185	0.469	62.3	16.67
13:15	580	18.06	6.31	-205	0.473	21	16.64
13:20	580	18.09	6.31	-201	0.475	39.7	16.68
13:25	580	18.10	6.29	-207	0.481	40.5	16.68
13:30	580	18.10	6.33	-214	0.488	36.8	16.70

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/15/2017	

Development Setup

Start Time:	7:20	**Stop Time:**	7:45
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	60.81 feet below top of casing	**1 Well Volume*:**	4.83 gallons
Depth to Water:	31.15 feet below top of casing	**Volume Purged:**	4 gallons
Water Column:	29.66 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-7I	**Groundwater Monitoring Well Installation Date:**	8/15/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
7:20	430	19.80	8.65	-147	0.481	586	15.15
7:25	430	17.60	7.50	-142	0.724	292	16.98
7:30	430	17.26	7.26	-128	0.742	40.5	18.74
7:35	430	17.22	7.21	-127	0.742	38.2	19.08
7:40	430	17.46	7.31	-95	0.747	33.3	18.43
7:45	430	17.52	7.27	-91	0.737	29.1	18.17

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/15/2017	

Development Setup

Start Time:	11:15	**Stop Time:**	11:50
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	81.05 feet below top of casing	**1 Well Volume*:**	8.03 gallons
Depth to Water:	31.79 feet below top of casing	**Volume Purged:**	3 gallons
Water Column:	49.26 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-7D	**Groundwater Monitoring Well Installation Date:**	8/15/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
11:15	200	23.78	6.51	68	0.705	897	13.09
11:20	200	19.83	7.93	-108	0.754	465	14.15
11:25	200	19.50	7.87	-91	0.8	239	14.25
11:30	200	19.27	7.80	-82	0.805	107	14.23
11:35	200	19.24	7.8	-79	0.805	81.4	14.16
11:40	200	18.91	7.53	-81	0.804	37.6	14.81
11:45	200	18.99	7.56	-86	0.822	25.4	14.98
11:50	200	19.00	7.53	-72	0.826	19.6	14.85

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/10/2017	
Development Setup			
Start Time:	9:35	**Stop Time:**	11:05
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	35.11 feet below top of casing	**1 Well Volume*:**	0.522 gallons
Depth to Water:	31.91 feet below top of casing	**Volume Purged:**	4 gallons
Water Column:	3.20 feet below top of casing	**Pump Type:**	Waterra Hydrolift
Groundwater Monitoring Well Information			
Groundwater Monitoring Well ID:	L1-RDI-MW-8S	**Groundwater Monitoring Well Installation Date:**	8/10/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
9:35	150	19.36	7.40	-201	0.293	>1,000	14.18
9:40	150	19.40	7.39	-211	0.383	992	12.24
9:45	150	18.82	6.93	-165	0.404	987	12.79
9:50	150	18.91	6.63	-158	0.424	613	12.84
9:55	150	18.50	6.38	-141	0.439	303	13.08
10:00	150	18.43	6.28	-138	0.454	212	14.12
10:05	150	18.92	6.19	-133	0.462	134	12.60
10:10	150	18.31	6.20	-129	0.474	119	11.72
10:15	150	18.22	6.27	-145	0.484	104	11.45
10:20	150	18.35	6.08	-139	0.489	103	11.19
10:25	150	18.73	6.01	-140	0.490	115	11.40
10:30	150	18.31	6.25	-125	0.492	92.9	11.23
10:35	150	18.41	6.39	-132	0.493	78.5	11.13
10:40	150	19.39	6.44	-134	0.489	64.1	10.64
10:45	150	19.37	6.31	-146	0.498	60.5	10.56
10:50	150	19.42	6.33	-122	0.491	55.7	10.92
10:55	150	18.20	6.33	-133	0.499	48.5	10.66
11:00	150	18.43	6.29	-124	0.497	48.1	10.65
11:05	150	18.40	6.30	-126	0.495	45.8	10.61

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/16/2017	

Development Setup

Start Time:	8:15	**Stop Time:**	9:15
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	60.15 feet below top of casing	**1 Well Volume*:**	4.73 gallons
Depth to Water:	31.12 feet below top of casing	**Volume Purged:**	15 gallons
Water Column:	29.03 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-8I	**Groundwater Monitoring Well Installation Date:**	8/16/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
8:15	870	19.85	7.42	58	1.05	335	14.15
8:20	870	21.66	7.44	45	1.04	308	12.16
8:25	870	20.33	7.47	49	1.07	265	12.66
8:30	870	21.42	7.39	65	1.02	204	11.70
8:35	870	21.29	7.40	58	1.02	157	11.81
8:40	870	20.53	7.45	66	1.03	109	12.34
8:45	870	22.53	7.51	49	1.01	96.8	10.80
8:50	870	20.75	7.61	55	1.04	78.2	11.94
8:55	870	20.90	7.48	43	1.04	68.8	11.70
9:00	870	20.17	7.48	65	1.04	51.5	11.47
9:05	870	20.00	7.45	69	0.405	46.5	11.57
9:10	870	21.06	7.52	66	0.403	40.6	11.25
9:15	870	22.55	6.90	71	0.405	40.3	11.42

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/16/2017	

Development Setup

Start Time:	11:35	**Stop Time:**	12:15
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	80.09 feet below top of casing	**1 Well Volume*:**	7.98 gallons
Depth to Water:	31.15 feet below top of casing	**Volume Purged:**	6 gallons
Water Column:	48.94 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-8D	**Groundwater Monitoring Well Installation Date:**	8/16/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
11:35	500	20.47	7.77	-45	0.689	98.3	10.17
11:40	500	23.6	5.58	146	0.485	285	8.70
11:45	500	18.12	7.71	-1	1.09	166	11.16
11:50	500	17.9	7.56	23	1.1	125	10.49
11:55	500	18.89	7.54	7	1.1	98.6	10.39
12:00	500	17.53	7.33	28	1.1	68.1	10.97
12:05	500	17.29	7.33	37	1.12	46.6	10.77
12:10	500	16.81	7.34	29	1.14	46.3	10.96
12:15	500	16.93	7.32	35	1.12	42.2	10.83

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/16/2017	

Development Setup

Start Time:	12:15	**Stop Time:**	13:15
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	35.44 feet below top of casing	**1 Well Volume*:**	0.654 gallons
Depth to Water:	31.43 feet below top of casing	**Volume Purged:**	10 gallons
Water Column:	4.01 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-9S	**Groundwater Monitoring Well Installation Date:**	8/16/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
12:15	630	26.95	7.26	-64	0.000	154	12.08
12:20	630	20.23	7.33	-247	0.248	350	12.58
12:30	630	19.97	5.40	-216	0.335	397	14.03
12:35	630	19.65	5.50	-182	0.391	230	14.83
12:40	630	19.56	6.84	-173	0.414	179	15.27
12:45	630	19.92	6.81	-165	0.425	144	15.47
12:50	630	19.88	6.54	-154	0.43	87.5	19.43
12:55	630	19.95	6.56	-132	0.439	67.4	17.95
13:00	630	20.01	6.74	-143	0.446	54.3	17.60
13:05	630	18.98	6.65	-135	0.451	49.8	18.27
13:10	630	18.78	6.47	-136	0.454	45.7	19.53
13:15	630	19.59	6.56	-117	0.460	45.2	18.57

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/16/2017	

Development Setup

Start Time:	8:35	**Stop Time:**	9:45
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	60.71 feet below top of casing	**1 Well Volume*:**	4.77 gallons
Depth to Water:	31.42 feet below top of casing	**Volume Purged:**	7.5 gallons
Water Column:	29.29 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-9I	**Groundwater Monitoring Well Installation Date:**	8/16/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
8:35	400	24.19	7.26	49	0.67	473	9.85
8:40	400	18.95	7.27	5	0.735	149	12.33
8:45	400	18.24	7.35	-33	0.749	100	12.24
8:50	400	22.15	7.25	-29	0.765	82.5	16.66
8:55	400	18.64	7.16	-24	0.737	65.2	11.51
9:00	400	17.95	7.11	86	0.745	51.1	11.98
9:05	400	18.39	7.15	63	0.741	32.2	12.38
9:10	400	18.49	7.23	44	0.746	24.7	12.21
9:15	400	18.69	7.40	34	0.746	18.4	11.76
9:20	400	18.58	7.43	30	0.755	13.2	11.93
9:25	400	18.63	7.26	31	0.744	10.3	12.94
9:30	400	22.1	6.10	179	0.368	10.4	11.35
9:35	400	19.09	7.37	30	0.735	12.3	12.75
9:40	400	18.15	7.32	30	0.742	13.9	12.52
9:45	400	18.05	7.22	32	0.745	14.3	12.63

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

Groundwater Monitoring Well Development Log

AKRF Project No:	12492	**Installed By:**	Aarco Environmental Services
Project Location:	254 Euclid Avenue, Brooklyn, New York	**Developed By:**	S. Clement, AKRF
Client:	Atlantic Chestnut Affordable Housing LLC	**Logged By:**	S. Clement, AKRF
Date:		8/16/2017	

Development Setup

Start Time:	10:15	**Stop Time:**	10:40
Headspace PID:	ND	**Well Diameter:**	2 inches
Total Depth:	79.12 feet below top of casing	**1 Well Volume*:**	7.76 gallons
Depth to Water:	31.49 feet below top of casing	**Volume Purged:**	2 gallons
Water Column:	47.63 feet below top of casing	**Pump Type:**	Waterra Hydrolift

Groundwater Monitoring Well Information

Groundwater Monitoring Well ID:	L1-RDI-MW-9D	**Groundwater Monitoring Well Installation Date:**	8/16/2017

Groundwater Monitoring Well Development Parameters

Time	Pump Rate (mL/min)	Temperature (ºC)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
10:15	250	21.82	7.70	-74	0.714	483	14.20
10:20	250	19.17	7.81	-105	0.682	210	14.05
10:25	250	18.72	7.66	-101	0.720	50.4	14.28
10:30	250	18.48	7.57	-90	0.731	25.5	15.15
10:35	250	18.05	7.57	-90	0.743	20.2	14.60
10:40	250	18.30	7.55	-70	0.743	18.4	14.98

Notes:	PID = Photoionization Detector	ND = Not Detected	WC = Water Column	ORP = Oxidation Reduction Potential
Volume Calculations:	*= 0.041 x WC for 1" wells	*= 0.163 x WC for 2" wells	*= 0.653 x WC for 4" wells	*= 1.469 x WC for 6" wells
Comments:	None			

Record readings in 5-minute intervals. Purge until turbidity is less than 50 NTU for three successive readings or until water quality indicators are within 10% for three successive readings. Purge a minimum of three well volumes.

APPENDIX D

GROUNDWATER SAMPLING LOGS

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/28/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	38.98 feet below top of casing	**Sampling Time:**	10:30
Depth to Water:	29.59 feet below top of casing	**Water Column (WC):**	9.39 feet
Depth to Product:	ND	**Well Volume*:**	1.50 gallons
Depth to Top of Screen:	28.98 feet below top of casing	**Volume Purged:**	1 gallons
Depth to Bottom of Screen:	38.98 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	34 feet below top of casing	**Purging Device (pump type):**	QED MP-50

Groundwater Monitoring Well ID:

L1-R1-MW-1

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
9:55	29.59	100	16.63	0.608	15.21	6.59	112	52.2	
10:00	29.59	100	16.61	0.585	13.30	6.45	128	84.1	
10:05	29.59	100	16.33	0.554	12.91	6.42	158	23.2	
10:10	29.59	100	16.33	0.557	12.19	6.42	159	25.3	
10:15	29.59	100	16.74	0.550	10.27	6.43	163	18.5	
10:20	29.59	100	16.89	0.554	11.19	6.43	166	16.2	
10:25	29.59	100	16.90	0.561	11.48	6.43	170	12	
10:30	29.59	100	16.92	0.559	11.55	6.44	172	9.8	
SAMPLING									
10:37	29.60	100	16.93	0.564	12.60	6.47	170	21	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC	**Groundwater Monitoring Well ID:**
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1	
Date:	8/28/2017	**BCP Project Number:**	C224234	**L1-R1-MW-2**
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF	
Total Depth:	35.02 feet below top of casing	**Sampling Time:**	9:25	
Depth to Water:	29.31 feet below top of casing	**Water Column (WC):**	5.71 feet	*= 0.163 x WC for 2" wells
Depth to Product:	ND	**Well Volume*:**	0.9 gallons	
Depth to Top of Screen:	25.02 feet below top of casing	**Volume Purged:**	2.5 gallons	Target maximum flow rate is 100 mL/min
Depth to Bottom of Screen:	35.02 feet below top of casing	**Well Diameter:**	2 inches	
Approximate Pump Intake:	32 feet below top of casing	**Purging Device (pump type):**	QED MP-50	

Time	**Depth to Water** (feet)	**Purge Rate** (mL/min)	**Temp** (^{o}C)	**Conductivity** (mS/cm)	**DO** (mg/L)	**pH**	**ORP** (mV)	**Turbidity** (NTU)	**Comments** (problems, odor, sheen)
8:45	29.31	100	17.80	0.842	21.57	6.85	120	70.4	
8:50	29.31	100	18.05	0.865	17.31	6.44	165	39.9	
8:55	29.31	100	18.16	0.864	17.11	6.46	167	54	
9:00	29.31	100	17.05	0.861	17.65	6.49	166	55.9	
9:05	29.31	100	15.81	0.864	15.81	6.52	165	48	
9:10	29.31	100	15.60	0.862	16.61	6.50	169	34.1	
9:15	29.30	100	15.57	0.863	15.36	6.50	171	22.5	
9:20	29.29	100	15.55	0.863	15.53	6.51	172	17.5	
9:25	29.29	100	15.58	0.860	15.59	6.52	173	14.1	
SAMPLING									
9:34	29.29	100	16.16	0.856	11.41	6.55	156	27.4	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC	**Groundwater Monitoring Well ID:**
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1	
Date:	8/28/2017	**BCP Project Number:**	C224234	**L1-RI-MW-3**
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF	
Total Depth:	31.07 feet below top of casing	**Sampling Time:**	13:50	
Depth to Water:	25.59 feet below top of casing	**Water Column (WC):**	5.48 feet	*= 0.163 x WC for 2" wells
Depth to Product:	ND	**Well Volume*:**	0.89 feet	
Depth to Top of Screen:	21.07 feet below top of casing	**Volume Purged:**	2 gallons	Target maximum flow rate is 100 mL/min
Depth to Bottom of Screen:	31.07 feet below top of casing	**Well Diameter:**	2 inches	
Approximate Pump Intake:	28 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro	

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
13:15	25.59	100	20.41	0.703	5.83	7.86	34	214	
13:20	25.59	100	16.76	0.568	3.83	6.78	20	113	
13:25	25.59	100	16.36	0.559	3.36	6.59	33	81.6	
13:30	25.59	100	16.38	0.559	2.96	6.49	48	61.5	
13:35	25.59	100	18.73	0.568	3.35	6.47	64	55.2	
13:40	25.59	100	20.09	0.565	3.56	6.49	67	48.8	
13:45	25.60	100	20.99	0.566	3.84	6.53	66	45.9	
13:50	25.60	100	21.37	0.565	3.99	6.55	66	44.1	
SAMPLING									
13:55	25.60	100	21.12	0.553	4.92	6.62	44	40.8	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by EPA Modified Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/28/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	31.97 feet below top of casing	**Sampling Time:**	12:50
Depth to Water:	26.48 feet below top of casing	**Water Column (WC):**	5.49 feet
Depth to Product:	ND	**Well Volume*:**	0.89 gallons
Depth to Top of Screen:	21.97 feet below top of casing	**Volume Purged:**	2.5 gallons
Depth to Bottom of Screen:	31.97 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	29 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro

Groundwater Monitoring Well ID:

L1-R1-MW-4

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
11:50	26.48	100	18.98	0.745	11.14	6.86	109	172	
11:55	26.48	100	18.71	0.737	11.15	6.61	133	152	
12:00	26.48	100	19.33	0.738	12.84	6.59	146	138	
12:05	26.49	100	18.32	0.737	13.78	6.65	161	132	
12:10	26.49	100	18.32	0.736	13.86	6.66	161	128	
12:15	26.49	100	18.13	0.736	13.90	6.66	163	124	
12:20	26.49	100	18.31	0.728	12.87	6.66	171	84	
12:25	26.49	100	19.65	0.736	12.52	6.65	172	70.2	
12:30	26.49	100	20.19	0.731	12.76	6.67	174	62.5	
12:35	26.49	100	20.36	0.725	12.76	6.66	175	50.8	
12:40	26.49	100	21.02	0.731	12.56	6.64	174	42.8	
12:45	26.49	100	21.78	0.730	12.39	6.65	175	39.2	
12:50	26.49	100	21.86	0.729	12.36	6.66	175	37.9	
12:50	SAMPLING								
12:55	26.50	100	22.06	0.742	13.51	6.69	176	27.4	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC	**Groundwater Monitoring Well ID:**
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1	
Date:	8/28/2017	**BCP Project Number:**	C224234	**L1-RI-MW-5**
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF	
Total Depth:	34.47 feet below top of casing	**Sampling Time:**	11:25	
Depth to Water:	31.63 feet below top of casing	**Water Column (WC):**	2.84 feet	*= 0.163 x WC for 2" wells
Depth to Product:	ND	**Well Volume*:**	0.46 gallons	
Depth to Top of Screen:	24.47 feet below top of casing	**Volume Purged:**	1.5 gallons	Target maximum flow rate is 100 mL/min
Depth to Bottom of Screen:	34.47 feet below top of casing	**Well Diameter:**	2 inches	
Approximate Pump Intake:	33 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro	

Time	**Depth to Water** (feet)	**Purge Rate** (mL/min)	**Temp** (^{o}C)	**Conductivity** (mS/cm)	**DO** (mg/L)	**pH**	**ORP** (mV)	**Turbidity** (NTU)	**Comments** (problems, odor, sheen)
11:00	31.63	100	19.68	0.580	9.96	6.37	157	71.5	
11:05	31.63	100	18.12	0.572	8.79	6.25	151	22	
11:10	31.63	100	18.04	0.568	8.32	6.23	170	6.6	
11:15	31.63	100	18.04	0.568	8.53	6.23	171	5.9	
11:20	31.63	100	17.82	0.569	8.28	6.23	176	2	
11:25	SAMPLING								
11:28	31.64	100	18.00	0.587	8.22	6.24	182	43	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC	**Groundwater Monitoring Well ID:**	
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1		
Date:	8/29/2017	**BCP Project Number:**	C224234	**L1-RI-MW-6**	
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF		
Total Depth:	35.09 feet below top of casing	**Sampling Time:**			
Depth to Water:	31.73 feet below top of casing	**Water Column (WC):**	8:38 feet	*= 0.163 x WC for 2" wells	
Depth to Product:	ND	**Well Volume*:**	0.55 gallons		
Depth to Top of Screen:	25.09 feet below top of casing	**Volume Purged:**	1 gallon	Target maximum flow rate is 100 mL/min	
Depth to Bottom of Screen:	35.09 feet below top of casing	**Well Diameter:**	2 inches		
Approximate Pump Intake:	33 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro		

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
14:05	31.73	100	17.14	0.546	25.93	6.97	-28	212	
14:10	31.73	100	14.69	0.581	7.76	6.89	-56	63.9	
14:15	31.73	100	14.63	0.592	7.30	6.88	-44	46.2	
14:20	31.73	100	14.57	0.605	6.39	6.85	-43	29.3	
14:25	31.73	100	14.57	0.609	6.12	6.84	-42	26.1	
14:30	31.73	100	14.57	0.625	6.09	6.87	-36	14.9	
	SAMPLING								
14:40	31.73	100	14.75	0.634	6.84	6.77	-30	14.7	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC	**Groundwater Monitoring Well ID:**
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1	
Date:	8/29/2017	**BCP Project Number:**	C224234	**L1-RI-MW-6I**
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF	
Total Depth:	59.44 feet below top of casing	**Sampling Time:**	12:32	
Depth to Water:	31.71 feet below top of casing	**Water Column (WC):**	27.73 feet	*= 0.163 x WC for 2" wells
Depth to Product:	ND	**Well Volume*:**	4.52 gallons	
Depth to Top of Screen:	49.44 feet below top of casing	**Volume Purged:**	2 gallons	Target maximum flow rate is 100 mL/min
Depth to Bottom of Screen:	59.44 feet below top of casing	**Well Diameter:**	2 inches	
Approximate Pump Intake:	55 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro	

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
11:15	31.71	100	16.07	0.694	17.93	7.53	51	595	
11:20	31.71	100	15.46	0.685	7.17	7.51	18	403	
11:25	31.71	100	16.06	0.678	4.65	7.52	30	343	
11:30	31.71	100	16.25	0.688	5.45	7.53	20	315	
11:35	31.71	100	17.03	0.689	4.50	7.55	9	252	
11:40	31.71	100	16.99	0.692	5.90	7.57	-4	193	
11:45	31.71	100	16.97	0.692	6.11	7.57	-5	176	
11:50	31.71	100	16.43	0.691	4.09	7.66	-12	101	
11:55	31.71	100	16.26	0.684	3.34	7.65	-29	98.6	
12:00	31.72	100	16.10	0.673	5.02	7.65	-23	85.7	
12:05	31.72	100	16.01	0.672	4.53	7.67	-22	64.7	
12:10	31.72	100	16.03	0.671	4.46	7.67	-22	63	
12:15	31.72	100	15.97	0.665	4.49	7.67	-18	59.8	
12:20	31.72	100	15.85	0.659	4.49	7.67	-17	41.3	
12:25	31.72	100	15.77	0.659	4.47	7.66	-7	36.2	
12:30	31.72	100	15.78	0.662	4.47	7.67	-10	32.5	
12:32	SAMPLING								
12:40	31.72	100	15.48	0.664	5.37	7.67	-2	29.7	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC	**Groundwater Monitoring Well ID:**
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1	
Date:	8/29/2017	**BCP Project Number:**	C224234	**L1-RI-MW-6D**
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF	
Total Depth:	80.52 feet below top of casing	**Sampling Time:**	10:05	
Depth to Water:	31.73 feet below top of casing	**Water Column (WC):**	48.79 gallons	*= 0.163 x WC for 2" wells
Depth to Product:	ND	**Well Volume*:**	7.95277 gallons	
Depth to Top of Screen:	70.52 feet below top of casing	**Volume Purged:**	2 gallons	Target maximum flow rate is 100 mL/min
Depth to Bottom of Screen:	80.52 feet below top of casing	**Well Diameter:**	2 inches	
Approximate Pump Intake:	75 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro	

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (^{o}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
8:45	31.73	100	20.36	0	50.00	7.51	152	76.5	
8:50	31.73	100	16.62	0.584	11.38	7.58	-99	95.1	
8:55	31.73	100	16.57	0.658	4.59	7.57	-101	88.5	
9:00	31.73	100	16.63	0.684	2.78	7.56	-96	86.0	
9:05	31.73	100	16.56	0.689	2.45	7.55	-92	81.3	
9:10	31.73	100	16.56	0.697	2.51	7.55	-90	80.1	
9:15	31.73	100	16.45	0.699	4.58	7.54	-87	79.6	
9:20	31.73	100	16.45	0.698	7.93	7.54	-85	78.9	
9:25	31.73	100	16.47	0.697	7.13	7.54	-85	79.7	
9:30	31.74	100	16.31	0.702	2.20	7.54	-83	76.6	
9:35	31.74	100	16.27	0.704	1.84	7.54	-83	75.1	
9:40	31.74	100	16.27	0.705	1.63	7.54	-82	66.4	
9:45	31.74	100	16.19	0.709	1.16	7.54	-83	54.2	
9:50	31.74	100	16.19	0.708	1.23	7.54	-83	47.6	
9:55	31.74	100	16.19	0.707	1.18	7.54	-83	40.3	
10:00	31.74	100	16.20	0.709	1.19	7.54	-83	38.7	
10:05	SAMPLING								
10:25	31.74	100	16.23	0.711	1.31	7.55	-80	32.1	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC	**Groundwater Monitoring Well ID:**	
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1		
Date:	8/29/2017	**BCP Project Number:**	C224234	**L1-RI-MW-7S**	
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF		
Total Depth:	35.55 feet below top of casing	**Sampling Time:**	13:10		
Depth to Water:	31.11 feet below top of casing	**Water Column (WC):**	4.44 gallons	*= 0.163 x WC for 2" wells	
Depth to Product:	ND	**Well Volume*:**	0.72372 gallons		
Depth to Top of Screen:	25.55 feet below top of casing	**Volume Purged:**	2 inches	Target maximum flow rate is 100 mL/min	
Depth to Bottom of Screen:	35.55 feet below top of casing	**Well Diameter:**	2 inches		
Approximate Pump Intake:	33 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro		

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
12:30	31.11	100	16.20	0.438	3.94	6.69	-303	99.8	
12:35	31.11	100	15.25	0.443	3.50	6.78	-318	104	
12:40	31.11	100	15.28	0.449	3.11	6.84	-326	115	
12:45	31.11	100	15.36	0.453	2.78	6.94	-334	116	
12:50	31.11	100	15.24	0.463	2.19	6.83	-318	48.6	
12:55	31.11	100	15.22	0.465	1.84	6.82	-318	37.0	
13:00	31.12	100	15.21	0.466	1.74	6.82	-319	31.0	
13:05	31.12	100	15.13	0.466	1.58	6.81	-316	25.9	
13:10	SAMPLING								
13:15	31.12	100	15.14	0.469	1.53	6.78	-301	22.0	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/29/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	60.94 feet below top of casing	**Sampling Time:**	11:45
Depth to Water:	31.06 feet below top of casing	**Water Column (WC):**	29.88 gallons
Depth to Product:	ND	**Well Volume*:**	4.87044 gallons
Depth to Top of Screen:	50.94 feet below top of casing	**Volume Purged:**	2 inches
Depth to Bottom of Screen:	60.94 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	55 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro

Groundwater Monitoring Well ID:

L1-RDI-MW-7I

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
9:35	31.09	100	17.50	0.527	2.00	7.01	112	745	
9:40	31.09	100	16.00	0.541	1.43	7.37	113	512	
9:45	31.09	100	15.68	0.553	1.23	7.40	113	383	
9:50	31.09	100	15.78	0.554	1.11	7.43	110	280	
9:55	31.09	100	15.67	0.554	1.06	7.46	94	225	
10:00	31.09	100	15.48	0.552	0.84	7.49	77	191.0	
10:05	31.09	100	15.41	0.552	0.83	7.49	68	151.0	
10:10	31.09	100	15.35	0.553	0.91	7.51	61	187	
10:15	31.09	100	15.27	0.554	0.89	7.53	52	94.1	
10:20	31.09	100	15.26	0.553	4.43	7.55	48	81.0	
10:25	31.09	100	15.78	0.552	4.24	7.54	62	70	
10:30	31.09	100	16.32	0.556	4.04	7.56	63	58.7	
10:35	31.09	100	17.18	0.559	3.86	7.56	53	67	
10:40	31.09	100	17.33	0.552	3.65	7.64	46	73.3	
10:45	31.09	100	17.65	0.555	3.50	7.65	43	77.9	
10:50	31.09	100	17.93	0.553	3.37	7.68	43	70.1	
10:55	31.09	100	18.00	0.549	3.17	7.72	41	75.2	
11:00	31.09	100	18.94	0.548	3.00	7.75	38	73.2	
11:05	31.09	100	18.50	0.546	2.87	7.79	34	69.8	
11:10	31.09	100	17.84	0.545	2.79	7.80	26	67.2	
11:15	31.09	100	17.74	0.546	2.65	7.83	18	61.4	
11:20	31.09	100	17.49	0.544	2.48	7.83	13	59.8	
11:25	31.09	100	17.45	0.543	2.38	7.83	11	57.1	
11:30	31.09	100	17.33	0.541	2.25	7.84	8	54.2	
11:35	31.09	100	17.22	0.541	2.21	7.84	6	49.9	
11:43	31.09	100	17.39	0.558	0.85	7.84	2	75.4	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/28/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	81.04 feet below top of casing	**Sampling Time:**	15:05
Depth to Water:	31.07 feet below top of casing	**Water Column (WC):**	49.97 feet
Depth to Product:	ND	**Well Volume*:**	8.14511 gallons
Depth to Top of Screen:	71.04 feet below top of casing	**Volume Purged:**	2 gallons
Depth to Bottom of Screen:	81.04 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	75 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro

Groundwater Monitoring Well ID:

L1-RDI-MW-7D

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
14:10	31.07	100	16.16	0.684	1.89	7.66	35	186	
14:15	31.07	100	15.59	0.696	2.77	7.56	29	109	
14:20	31.07	100	15.34	0.701	2.59	7.55	28	59.5	
14:25	31.07	100	15.73	0.709	1.72	7.55	32	41.7	
14:30	31.07	100	15.71	0.71	2.04	7.55	32	40.1	
14:35	31.07	100	15.82	0.708	1.62	7.56	36	36.1	
14:40	31.07	100	15.99	0.709	1.52	7.56	41	33.5	
14:45	31.07	100	16.13	0.713	1.43	7.56	43	32.7	
15:00	31.07	100	16.09	0.708	1.98	7.58	37	26.0	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC	**Groundwater Monitoring Well ID:**
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1	**L1-RDI-MW-8S**
Date:	8/29/2017	**BCP Project Number:**	C224234	
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF	
Total Depth:	35.61 feet below top of casing	**Sampling Time:**	15:40	
Depth to Water:	31.64 feet below top of casing	**Water Column (WC):**	3.97 gallons	*= 0.163 x WC for 2" wells
Depth to Product:	ND	**Well Volume*:**	0.64711 gallons	
Depth to Top of Screen:	25.61 feet below top of casing	**Volume Purged:**	2 inches	Target maximum flow rate is 100 mL/min
Depth to Bottom of Screen:	35.61 feet below top of casing	**Well Diameter:**	2 inches	
Approximate Pump Intake:	33 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro	

Time	**Depth to Water** (feet)	**Purge Rate** (mL/min)	**Temp** (^{o}C)	**Conductivity** (mS/cm)	**DO** (mg/L)	**pH**	**ORP** (mV)	**Turbidity** (NTU)	**Comments** (problems, odor, sheen)
14:40	31.64	100	15.36	0.424	1.75	6.73	-48	138	
14:45	31.64	100	15.80	0.421	0.60	6.63	-63	94.3	
14:50	31.64	100	15.37	0.421	0.44	6.60	-80	71.4	
14:55	31.64	100	15.11	0.423	0.00	6.59	-91	51.2	
15:00	31.64	100	15.04	0.423	0.00	6.57	-104	39.1	
15:05	31.64	100	15.02	0.424	0.00	6.56	-141	32.7	
15:10	31.64	100	15.02	0.425	0.00	6.56	-191	29.0	
15:15	31.64	100	15.01	0.425	0.00	6.57	-224	28.2	
15:20	31.64	100	15.04	0.425	0.00	6.57	-237	26.7	
15:25	31.64	100	15.01	0.426	0.00	6.58	-244	25.5	
15:30	31.64	100	15.02	0.427	0.00	6.58	-246	22	
15:35	31.64	100	15.18	0.429	0.00	6.59	-195	45.1	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/30/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	59.86 feet below top of casing	**Sampling Time:**	6:28 feet
Depth to Water:	31.59 feet below top of casing	**Water Column (WC):**	28.27 gallons
Depth to Product:	ND	**Well Volume*:**	4.60801 gallons
Depth to Top of Screen:	49.86 feet below top of casing	**Volume Purged:**	2 inches
Depth to Bottom of Screen:	59.86 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	54 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro

Groundwater Monitoring Well ID:

L1-RD1-MW-8I

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
10:35	31.59	100	16.11	0.83	5.68	8.08	213	118	
10:40	31.59	100	17.49	0.836	4.48	7.93	203	42.5	
10:45	31.59	100	17.58	0.837	4.37	7.93	204	40	
10:50	31.59	100	18.27	0.842	4.36	7.92	209	31	
10:55	31.59	100	18.35	0.847	4.47	7.92	217	12.9	
11:00	31.59	100	17.36	0.841	4.27	7.92	227	8.1	
11:05	31.59	100	17.07	0.84	3.83	7.92	235	2.7	
11:10	31.59	100	17.18	0.838	3.75	7.92	242	2.4	
11:15	31.59	100	17.21	0.837	3.78	7.92	245	1.2	
11:22	31.59	100	18.25	0.837	4.07	7.89	253	0.8	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/30/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	79.66 feet below top of casing	**Sampling Time:**	9:40
Depth to Water:	31.61 feet below top of casing	**Water Column (WC):**	48.05 gallons
Depth to Product:	ND	**Well Volume*:**	7.83215 gallons
Depth to Top of Screen:	69.66 feet below top of casing	**Volume Purged:**	2 inches
Depth to Bottom of Screen:	79.66 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	74 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro

Groundwater Monitoring Well ID:

L1-RD1-MW-8D

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
8:45	31.61	100	15.84	0.798	7.65	9.76	190	140	
8:50	31.61	100	15.85	0.964	5.82	8.06	233	104	
8:55	31.61	100	15.85	0.973	5.34	7.89	223	34.3	
9:00	31.61	100	15.87	0.976	5.34	7.86	212	26.4	
9:05	31.61	100	15.43	0.975	5.79	7.85	202	34.4	
9:10	31.61	100	15.20	0.974	6.09	7.85	201	28.6	
9:15	31.61	100	15.21	0.971	6.02	7.85	195	18.0	
9:20	31.61	100	15.21	0.976	5.87	7.84	188	6.5	
9:25	31.61	100	15.09	0.974	6.14	7.84	182	5.1	
9:30	31.61	100	15.31	0.97	6.26	7.84	188	4.2	
9:35	31.61	100	15.41	0.97	6.12	7.84	190	2.8	
9:48	31.61	100	15.72	0.974	5.71	7.82	189	2.9	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/30/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	35.29 feet below top of casing	**Sampling Time:**	11:50
Depth to Water:	31.49 feet below top of casing	**Water Column (WC):**	3.80 gallons
Depth to Product:	ND	**Well Volume*:**	0.6194 gallons
Depth to Top of Screen:	25.29 feet below top of casing	**Volume Purged:**	2 inches
Depth to Bottom of Screen:	35.29 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	33 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro

Groundwater Monitoring Well ID:

L1-RD1-MW-9S

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
11:00	31.49	100	21.13	0.296	18.24	8.33	14	324	
11:05	31.49	100	17.60	0.501	3.88	6.48	-37	231	
11:10	31.49	100	17.23	0.483	2.14	6.41	-25	193	
11:15	31.49	100	16.93	0.469	1.11	6.37	-10	144	
11:20	31.49	100	16.64	0.462	2.40	6.36	5	95.8	
11:25	31.49	100	16.66	0.462	2.26	6.37	10	82.6	
11:30	31.49	100	16.62	0.462	2.09	6.37	16	61.1	
11:35	31.49	100	16.61	0.462	2.76	6.38	22	46.9	
11:40	31.49	100	16.58	0.463	2.86	6.38	24	39.3	
11:45	31.49	100	16.61	0.463	2.64	6.38	27	31.3	
11:50	SAMPLING								
11:55	31.50	100	17.64	0.463	2.39	6.41	4	25.7	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/30/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	60.44 feet below top of casing	**Sampling Time:**	13:47
Depth to Water:	31.54 feet below top of casing	**Water Column (WC):**	28.90 gallons
Depth to Product:	ND	**Well Volume*:**	4.7107 gallons
Depth to Top of Screen:	50.44 feet below top of casing	**Volume Purged:**	2 inches
Depth to Bottom of Screen:	60.44 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	55 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro

Groundwater Monitoring Well ID:

L1-RD1-MW-9I

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (^{0}C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
12:50	31.54	100	16.11	0.573	4.67	8.21	166	140	
12:55	31.54	100	15.49	0.575	3.98	8.06	166	83.1	
13:00	31.54	100	16.03	0.574	3.35	7.92	166	44.6	
13:05	31.54	100	16.02	0.569	2.66	7.86	177	17	
13:10	31.54	100	16.74	0.572	2.64	7.85	184	15.5	
13:15	31.54	100	17.17	0.573	2.48	7.84	189	13.7	
13:20	31.54	100	16.86	0.5767	2.41	7.83	194	12.4	
13:25	31.54	100	16.58	0.572	2.56	7.82	201	8.8	
13:30	31.54	100	16.59	0.57	2.53	7.81	207	4.4	
13:35	31.54	100	16.65	0.57	2.56	7.82	212	5.8	
13:40	31.54	100	16.59	0.57	2.55	7.82	215	5.9	
13:47	SAMPLING								
13:47	31.54	100	19.07	0.567	2.60	7.75	221	6	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

Groundwater Monitoring Well Sampling Log

Job Number:	12492	**Client:**	Atlantic Chestnut Affordable Housing LLC
Project Location:	3264 Fulton Street, Brooklyn, New York	**BCP Project Name:**	Atlantic Chestnut - Lot 1
Date:	8/30/2017	**BCP Project Number:**	C224234
PID at Surface:	ND	**Sampled By:**	A. Bosco, AKRF
Total Depth:	79.97 feet below top of casing	**Sampling Time:**	10:05
Depth to Water:	31.54 feet below top of casing	**Water Column (WC):**	48.43 gallons
Depth to Product:	ND feet below top of casing	**Well Volume*:**	7.89409 gallons
Depth to Top of Screen:	69.97 feet below top of casing	**Volume Purged:**	3 gallons
Depth to Bottom of Screen:	79.97 feet below top of casing	**Well Diameter:**	2 inches
Approximate Pump Intake:	74 feet below top of casing	**Purging Device (pump type):**	QED Sample Pro

Groundwater Monitoring Well ID:

L1-RD1-MW-9D

*= 0.163 x WC for 2" wells

Target maximum flow rate is 100 mL/min

Time	Depth to Water (feet)	Purge Rate (mL/min)	Temp (°C)	Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Comments (problems, odor, sheen)
8:20	31.54	100	16.03	0.58	12.88	7.70	111	768	
8:25	31.54	100	15.94	0.649	7.09	7.66	111	740	
8:30	31.54	100	15.98	0.656	6.11	7.67	111	708	
8:35	31.54	100	16.09	0.656	6.01	6.67	109	682	
8:40	31.54	100	16.31	0.656	5.43	7.67	104	637	
8:45	31.54	100	16.37	0.656	4.72	7.66	101	610.0	
8:50	31.54	100	16.37	0.656	4.54	7.66	101	519.0	
8:55	31.54	100	16.54	0.655	4.16	7.66	99	449	
9:00	31.54	100	16.71	0.654	3.87	7.66	100	392.0	
9:05	31.54	100	16.86	0.653	3.67	7.66	101	359.0	
9:10	31.54	100	16.97	0.653	3.64	7.66	101	345	
9:15	31.54	100	17.24	0.656	4.54	7.67	105	234	
9:20	31.55	100	15.60	0.649	3.42	7.67	98	214	
9:20	31.55	100	15.13	0.65	3.31	7.66	88	92.3	
9:30	31.55	100	15.10	0.652	3.40	7.66	85	85.2	
9:35	31.55	100	15.09	0.653	3.47	7.66	85	83.1	
9:40	31.55	100	15.18	0.657	3.40	7.66	87	77.1	
9:45	31.55	100	15.25	0.657	3.44	7.66	89	63.2	
9:50	31.55	100	15.42	0.654	4.02	7.67	92	56.2	
9:55	31.55	100	15.44	0.654	3.80	7.67	90	42.7	
10:00	31.55	100	15.53	0.651	3.63	7.67	89	33.4	
10:05	SAMPLING								
10:15	31.55	100	16.32	0.651	3.65	7.67	98	18.5	
Stabilization Criteria:				**+/- 3 mS/cm**	**+/- 0.3 mg/L**	**+/- 0.1 pH units**	**+/- 10 mV**	**<50 NTU**	If water quality parameters do not stabilize and/or turbidity is greater than 50 NTU within two hours, discontinue purging and collect sample.

Groundwater samples analyzed for PFOAs/PFOS by Modified EPA Method 537 and 1,4-Dioxane by EPA Method 8260C SIM.

ND = not detected PID = photoionization detector ppm = parts per million ORP = oxidation reduction potential

APPENDIX E

AIR MONITORING LOGS

AKRF, Inc.
Environmental Consultants

Air Monitoring Log

Project: Atlantic Chestnut - Lot 1		**Client:**	**Date:** 8/8/17
Work Activity: Groundwater monitoring well installation in Lot 1			**Logged By:** A. BOSCO
			Job No: 12492
Weather: Cloudy, 70-80°F (Sunny PM)		**Wind Direction:** W	**Wind Speed:** 5-10 mph

TIME	LOCATION	PID (ppm)	DUST (mg/m³)	ODORS	COMMENTS (activity; work zone, upwind or downwind)
0710	LOT1 - LRD-MW-6	ND	0.048	NONE	BACKGROUND
0730		ND	0.062	NONE	well installation
0800		ND	0.033	NONE	well installation
0830		ND	0.029	none	
0900		ND	0.018	none	
0930		ND	0.027	none	
1000		ND	0.009	none	
1030	L1-RDI-MW-7	ND	0.008	none	Drilling.
1100	L1-RDI-MW-7	ND	0.005	none	Drilling
1130		ND	0.011	none	
1200		ND	0.014	none	
1230		ND	0.019	none	
1300		ND	0.023	none	
1330		ND	0.018	none	
1400		ND	0.064	none	
1430		ND	0.030	none	
1500		ND	0.027	none	
1530				none	
1600				none	

Work Zone Action Levels	
OVM	DUST
<10 ppm: level D	<1.25 ug/m³ above background: level D
>10 ppm: level C	>1.25 ug/m³ above background: STOP
>50 ppm: STOP	

ND = NOT DETECTED

AKRF, Inc.
Environmental Consultants

Air Monitoring Log

Project: Atlantic Chestnut - Lot 1		**Client:**	**Date:** 8/9/17
Work Activity: Drilling bore holes and ~~well~~ monitoring well installation.		**Logged By:** A. Bosco	
		Job No: 12492	
Weather: Sunny, 70-84°F		**Wind Direction:** E/SE	**Wind Speed:** 0-5mph

TIME	LOCATION	PID (ppm)	DUST (mg/m³)	ODORS	COMMENTS (activity; work zone, upwind or downwind)
0655	LI-RDI-MW-7	ND	0.034	none	BACKGROUND
0730		ND	0.039	none	well installation
0800		ND	0.083	none	well installation
0830		ND	0.090	none	well installation.
0900		ND	0.136	none	well installation
0930		ND	0.142	none	well installation
1000	LI-RDI-MW-8	ND	0.135	none	drilling borehole for well installation
1030		ND	0.010	none	
1100		ND	0.018	none	
1130		ND	0.029	none	
1200		ND	0.021	none	
1230		ND	0.031	none	
1300		ND	0.037	none	
1330		ND	0.041	none	
1400		ND	0.032	none	
1430		ND	0.044	none	
~~1500~~					

Work Zone Action Levels	
OVM	**DUST**
<10 ppm: level D	<1.25 ug/m³ above background: level D
>10 ppm: level C	**>1.25 ug/m³ above background: STOP**
>50 ppm: STOP	

ND= NOT DETECTED

AKRF, Inc.
Environmental Consultants

Air Monitoring Log

Project: Atlantic Chestnut - Lot 1		**Client:**	**Date:** 8/10/17
Work Activity:		**Logged By:** A. Bosco	
		Job No: 12492	
Weather: Sunny, 85°F		**Wind Direction:**	**Wind Speed:**

TIME	LOCATION	PID (ppm)	DUST (mg/m^3)	ODORS	COMMENTS (activity; work zone, upwind or downwind)
0710	LI-RDI-MW-8	0.0	0.082	none	BACKGROUND
0730	↓	ND	0.088	none	well installation
0800		ND	0.071	none	well installation
0830		ND	0.076	none	well installation
0900		ND	0.083	none	well installation
1000	LI-RDI-MW-9	ND	0.087	none	drilling borehole
1030		ND	0.092	none	
1100		ND	0.055	none	
1130		ND	0.067	none	
1200		ND	0.073	none	
1230		ND	0.082	none	
1300					
1330					
1400					

Work Zone Action Levels	
OVM	**DUST**
<10 ppm: level D	<1.25 ug/m^3 above background: level D
>10 ppm: level C	**>1.25 ug/m^3 above background: STOP**
>50 ppm: STOP	

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Air Monitoring Log

Project: Atlantic Chestnut - Lot 1		**Client:**	**Date:** 8/11/17
Work Activity: Monitoring well installation / soil boring drilling		**Logged By:** ABOSLO	
		Job No: 12492	
Weather: Sunny 80°F		**Wind Direction:**	**Wind Speed:**

TIME	LOCATION	PID (ppm)	DUST (mg/m^3)	ODORS	COMMENTS (activity; work zone, upwind or downwind)
0700	LI-201-MW-9	ND	0.043	none	BACKGROUND
0730	↓	ND	0.037	none	Monitoring well
0800	↓	ND	0.049	none	installation
0830	↓	ND	0.051	none	↓
0900	eastern cellar	ND	0.040	none	soil boring
0930	↓	ND	0.056	none	drilling
1000	↓	ND	0.050	none	↓
1030	↓	ND	0.043	none	↓
1100	↓	ND	0.041	none	↓
End of intrusive activities					

Work Zone Action Levels	
OVM	**DUST**
<10 ppm: level D	<1.25 ug/m^3 above background: level D
>10 ppm: level C	**>1.25 ug/m^3 above background: STOP**
>50 ppm: STOP	

AKRF, Inc.
Environmental Consultants

Air Monitoring Log

Project: Atlantic Chestnut - Lot 1		**Client:**	**Date:** 8/14/17
Work Activity: Soil boring drilling + sampling		**Logged By:** ADUSCO	
		Job No: 12492	
Weather: Mostly cloudy 84°F		**Wind Direction:** SSW	**Wind Speed** 0-5MPH

TIME	LOCATION	PID (ppm)	DUST (mg/m^3)	ODORS	COMMENTS (activity; work zone, upwind or downwind)
0645	gate on Atlantic Ave	ND	0.033	none	BACKGROUND
0730	southern portion of Lot 1	ND	0.036	none	Soil boring
0800		ND	0.032	none	drilling
0830		ND	0.046	none	
0900		ND	0.049	none	
0930		ND	0.051	none	
1000		ND	0.030	none	
1030		ND	0.030	none	
1100		ND	0.035	none	
1130		ND	0.037	none	
1300		ND	0.031	none	
1345		ND	0.032	none	
1415		ND	0.032	none	

Work Zone Action Levels	
OVM	**DUST**
<10 ppm: level D	<1.25 ug/m^3 above background: level D
>10 ppm: level C	**>1.25 ug/m^3 above background: STOP**
>50 ppm: STOP	

AKRF, Inc.
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Air Monitoring Log

Project: Atlantic Chestnut - Lot 1		**Client:**	**Date:** 8/15/17
Work Activity: Soil boring drilling + soil sampling		**Logged By:** A. Bosco	
		Job No: 12492	
Weather: 75°F P. Cloudy, Rain PM		**Wind Direction:** SW	**Wind Speed:** 0-5 mph

TIME	LOCATION	PID (ppm)	DUST (mg/m^3)	ODORS	COMMENTS (activity; work zone, upwind or downwind)
0700	gate on Atlantic Ave	ND	0.051	none	BACKGROUND
0730	southern portion of lot 1	ND	0.043	none	soil boring drilling
0800		ND	0.045	none	
0835		ND	0.049	none	
0900		ND	0.055	none	
0930		ND	0.057	none	
1000		ND	0.061	none	
1030		ND	0.054	none	
1100		ND	0.051	none	
1130		ND	0.060	none	
Rain in PM - stop air monitoring					

Work Zone Action Levels	
OVM	**DUST**
<10 ppm: level D	<1.25 ug/m^3 above background: level D
>10 ppm: level C	**>1.25 ug/m^3 above background: STOP**
>50 ppm: STOP	

AKRF, Inc.
Environmental Consultants

Air Monitoring Log

Project: Atlantic Chestnut - Lot 1		**Client:**	**Date:** 8/16/17
Work Activity: Soil boring drilling		**Logged By:** A. Bosco	
		Job No: 12492	
Weather: Sunny, 89°F		**Wind Direction:** WSW	**Wind Speed:** 0-5MPH

TIME	LOCATION	PID (ppm)	DUST (mg/m^3)	ODORS	COMMENTS (activity; work zone, upwind or downwind)
0700	Atlantic Ave Gate	ND	0.039	none	BACKGROUND
0730	southern	ND	0.036	none	Soil boring drilling
0800	portion of lot 1	ND	0.037	none	
0830		ND	0.045	none	
0900		ND	0.048	none	
0930		ND	0.039	none	
1000		ND	0.035	none	
1030		ND	0.035	none	
1100		ND	0.029	none	
1130		ND	0.036	none	
1200		ND	0.040	none	
1230		ND	0.032	none	
End of intrusive activities / drilling					

Work Zone Action Levels	
OVM	**DUST**
<10 ppm: level D	<1.25 ug/m^3 above background: level D
>10 ppm: level C	**>1.25 ug/m^3 above background: STOP**
>50 ppm: STOP	

APPENDIX F

LABORATORY DATA DELIVERABLES AND DATA USABILITY SUMMARY REPORTS (DUSRS) FOR SOIL AND GROUNDWATER ANALYSES

DATA USABILITY SUMMARY REPORT – DUSR
DATA VALIDATION SUMMARY

ORGANIC/INORGANIC ANALYSES

CHLORINATED VOLATILES BY GC/MS
PAH SEMIVOLATILES BY GC/MS
RCRA (8) METALS BY ICP/CV

For Soil Samples Collected
August 11, 2017 through August 16, 2017
November 15, 2017 and December 20, 2017
From Atlantic Chestnut – Lot 1
3264 Fulton Street
Brooklyn, New York
Collected by AKRF, Inc.
Project # 12492-0009

SAMPLE DELIVERY GROUP NUMBERs:
JC48865, JC55519, JC57756
BY SGS ACCUTEST – DAYTON, NJ (ELAP#10983)

SUBMITTED TO:

Amy Jordan
AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016

March 06, 2018

PREPARED BY:

Lori A. Beyer/President
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East Northport, NY 11731

Lori A. Beyer

(516) 523-7891; email LABValidation@aol.com

Atlantic Chestnut – Lot 1; 3264 Fulton Street, Brooklyn, New York – Data Usability Summary Report (Data Validation):
August/November/December 2017 Soil Sampling Events; - Chlorinated Volatiles, PAH Semivolatiles and RCRA (8) Metals.

Table of Contents:

Introduction
Data Qualifier Definitions
Sample Receipt

1.0 Chlorinated Part 375 List Volatile Organics by GC/MS SW846 Method 8260C
- 1.1 Holding Time
- 1.2 System Monitoring Compound (Surrogate) Recovery
- 1.3 Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
- 1.4 Laboratory Control Sample/Blank Spikes
- 1.5 Blank Contamination
- 1.6 GC/MS Instrument Performance Check (Tuning)
- 1.7 Initial and Continuing Calibrations
- 1.8 Internal Standards
- 1.9 Field Duplicates
- 1.10 Target Compound List Identification
- 1.11 Compound Quantification and Reported Detection Limits
- 1.12 Overall System Performance

2.0 Polyaromatic Hydrocarbon (PAH) Semivolatile Organics by GC/MS SW846 Method 8270D
- 2.1 Holding Time
- 2.2 Surrogate Recovery
- 2.3 Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
- 2.4 Laboratory Control Sample
- 2.5 Method Blanks
- 2.6 GC/MS Instrument Performance Check (Tuning)
- 2.7 Initial and Continuing Calibrations
- 2.8 Internal Standards
- 2.9 Field Duplicates
- 2.10 Target Compound List Identification
- 2.11 Compound Quantification and Reported Detection Limits
- 2.12 Overall System Performance

3.0 RCRA (8) Metals by ICP/Cold Vapor SW846 Methods 6010C/7471B
- 3.1 Holding Times
- 3.2 Calibration (Initial and Continuing Calibration Verifications)
- 3.3 Blanks
- 3.4 Spiked Sample Recovery
- 3.5 Laboratory/Field Duplicates
- 3.6 Laboratory Control Sample
- 3.7 Interference Check Sample
- 3.8 ICP Serial Dilution
- 3.9 Sample Results Verification
- 3.10 Overall Assessment of Data

APPENDICES:

A. Chain of Custody Documents
B. Case Narratives
C. Data Summary Form I's with Qualifications

Introduction:

A validation was performed on soil samples and the associated quality control samples (MS/MSD/Field Duplicates/Field Blanks/Trip Blanks) for organic/inorganic analysis for samples collected under chain of custody documentation by AKRF, Inc. and submitted to SGS Accutest, NJ for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized on the following pages. Analysis was performed in accordance with requested tests per the chain of custody documents and subsequent additions/cancellations are documented by the laboratory.

The samples were analyzed by SGS Accutest, utilizing SW846 Methods and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing for soil samples consisted of Chlorinated Part 375 analyte list for Volatile Organics, select samples for PAH Semivolatile Organics and select samples for RCRA (8) Metals.

The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic and Inorganic Data Review and EPA Region II SOPs for 8260, 8270 and Metals and in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

Sample ID	Lab ID	Analysis	Date Collected/Received
L1-RDI-SB-34 (13-15) 20170811 (plus, MS/MSD)	JC48865-1	Chlorinated VOA, PAH, RCRA Metals	08/11/2017
L1-RDI-SB-35 (13-15) 20170811	JC48865-2	Chlorinated VOA, PAH, RCRA Metals	08/11/2017
L1-RDI-SB-36 (13-15) 20170811	JC48865-3	Chlorinated VOA, PAH, RCRA Metals	08/11/2017
L1-RDI-TB-1 20170811	JC48865-4	Chlorinated VOA	08/11/2017
L1-RDI-FB-1 201870811	JC48865-5	Chlorinated VOA, PAH, RCRA Metals	08/11/2017
L1-RDI-SB-X (13-15) 20170811 (Field Duplicate of L1-RDI-SB-34 (13-15) 20180811	JC48865-6	Chlorinated VOA, PAH, RCRA Metals	08/11/2017
L1-RDI-SB-15 (5) 20180814	JC48865-7	Chlorinated VOA, PAH, RCRA Metals	08/14/2017
L1-RDI-SB-15 (7) 20170814 (plus, MS/MSD)	JC48865-8	Chlorinated VOA	08/14/2017
L1-RDI-SB-15 (15) 20180814	JC48865-12	Chlorinated VOA, PAH, RCRA Metals	08/14/2017
L1-RDI-TB-4 20170814	JC48865-13	Chlorinated VOA	08/14/2017
L1-RDI-FB-4 20170814	JC48865-14	Chlorinated VOA	08/14/2017
L1-RDI-SB-X (7) 20170814 (Field Duplicate of L1-RDI-SB-15 (7) 20170814)	JC48865-15	Chlorinated VOA	08/14/2017
L1-RDI-SB-16 (5) 20170814	JC48865-16	Chlorinated VOA, PAH, RCRA Metals	08/14/2017
L1-RDI-SB-16 (15) 20170814	JC48865-21	Chlorinated VOA, PAH, RCRA Metals	08/14/2017
L1-RDI-SB-17 (4-5) 20170814	JC48865-22	Chlorinated VOA	08/14/2017
L1-RID-SB-18 (4-5) 20170814	JC48865-28	Chlorinated VOA	08/14/2017
L1-RDI-SB-18 (5-7) 20170814	JC48865-29	Chlorinated VOA	08/14/2017

L1-RDI-SB-18 (7-9) 20170814	JC48865-30	Chlorinated VOA	08/14/2017
L1-RDI-SB-18 (9-11) 20170814	JC48865-31	Chlorinated VOA	08/14/2017
L1-RDI-SB-18 (11-13) 20170814	JC48865-32	Chlorinated VOA	08/14/2017
L1-RDI-SB-18 (13-15) 20170814	JC48865-33	Chlorinated VOA	08/14/2017
L1-RDI-SB-19 (4-5) 20170814	JC48865-34	Chlorinated VOA	08/14/2017
L1-RDI-SB-20 (4-5) 20170814	JC48865-43	Chlorinated VOA	08/14/2017
L1-RDI-SB-21 (4-5) 20170815	JC48865-49	Chlorinated VOA	08/15/2017
L1-RDI-SB-22 (4-5) 20170815	JC48865-55	Chlorinated VOA	08/15/2017
L1-RDI-SB-23 (4-5) 20170815	JC48865-61	Chlorinated VOA	08/15/2017
L1-RDI-SB-24 (4-5) 20170815	JC48865-70	Chlorinated VOA	08/15/2017
L1-RDI-SB-24 (5-7) 20170815	JC48855-71	Chlorinated VOA	08/15/2017
L1-RDI-SB-24 (7-9) 20170815	JC48865-72	Chlorinated VOA	08/15/2017
L1-RDI-SB-24 (9-11) 20170815	JC48865-73	Chlorinated VOA	08/15/2017
L1-RDI-SB-24 (11-13) 20170815	JC48865-74	Chlorinated VOA	08/15/2017
L1-RDI-SB-24 (13-15) 20170815	JC48865-75	Chlorinated VOA	08/15/2017
L1-RDI-SB-25 (4-5) 20170815	JC48865-76	Chlorinated VOA	08/15/2017
L1-RDI-SB-25 (5-7) 20170815	JC48865-77	Chlorinated VOA	08/15/2017
L1-RDI-SB-25 (7-9) 20170815	JC48865-78	Chlorinated VOA	08/15/2017
L1-RDI-SB-25 (9-11) 20170815	JC48865-79	Chlorinated VOA	08/15/2017
L1-RDI-SB-25 (11-13) 20170815	JC48865-80	Chlorinated VOA	08/15/2017
L1-RDI-SB-25 (13-15) 20170815	JC48865-81	Chlorinated VOA	08/15/2017
L1-RDI-SB-26 (4-5) 20170815	JC48865-82	Chlorinated VOA	08/15/2017
L1-RDI-SB-26 (5-7) 20170815	JC48865-83	Chlorinated VOA	08/15/2017
L1-RDI-SB-26 (7-9) 20170815	JC48865-84	Chlorinated VOA	08/15/2017
L1-RDI-SB-26 (9-11) 20170815	JC48865-85	Chlorinated VOA	08/15/2017
L1-RDI-SB-26 (11-13) 20170815	JC48865-86	Chlorinated VOA	08/15/2017
L1-RDI-SB-26 (13-15) 20170815	JC48865-87	Chlorinated VOA	08/15/2017
L1-RDI-SB-27 (4-5) 20170815	JC48865-88	Chlorinated VOA	08/15/2017
L1-RDI-SB-27 (5-7) 20170815	JC48865-89	Chlorinated VOA	08/15/2017
L1-RDI-SB-27 (7-9) 20170815	JC48865-90	Chlorinated VOA	08/15/2017
L1-RDI-SB-27 (9-11) 20170815 (plus, MS/MSD)	JC48865-91	Chlorinated VOA	08/15/2017
L1-RDI-SB-27 (11-13) 20170815	JC48865-92	Chlorinated VOA	08/15/2017
L1-RDI-SB-27 (13-15) 20170815	JC48865-93	Chlorinated VOA	08/15/2017
L1-RDI-SB-28 (4-5) 20170815	JC48865-97	Chlorinated VOA	08/15/2017
L1-RDI-SB-28 (5-7) 20170815	JC48865-98	Chlorinated VOA	08/15/2017
L1-RDI-SB-28 (7-9) 20170815	JC48865-99	Chlorinated VOA	08/15/2017
L1-RDI-SB-28 (9-11) 20170815	JC48865-100	Chlorinated VOA	08/15/2017
L1-RDI-SB-28 (11-13) 20170815	JC48865-101	Chlorinated VOA	08/15/2017
L1-RDI-SB-28 (13-15) 20170815	JC48865-102	Chlorinated VOA	08/15/2017
L1-RDI-SB-29 (4-5) 2070816	JC48865-103	Chlorinated VOA	08/16/2017
L1-RDI-FB-2 20170816	JC48865-105	Chlorinated VOA, PAH, RCRA Metals	08/16/2017
L1-RDI-SB-30 (4-5) 20170816	JC48865-110	Chlorinated VOA	08/16/2017
L1-RDI-SB-31 (4-5) 20170816	JC48865-116	Chlorinated VOA	08/16/2017
L1-RDI-SB-31 (9-11) 20170816	JC48865-119	Chlorinated VOA	08/16/2017
L1-RDI-TB-2 20170816	JC48865-122	Chlorinated VOA	08/16/2017
L1-RDI-SB-X (9-11) 20170816 [Field Duplicate of L1-RDI-SB-31 (9-11) 20170816]	JC48865-123	Chlorinated VOA	08/16/2017
L1-RDI-SB-32 (4-5) 20170816	JC48865-124	Chlorinated VOA	08/16/2017
L1-RDI-SB-32 (5-7) 20170816	JC48865-125	Chlorinated VOA	08/16/2017
L1-RDI-SB-32 (7-9) 20170816	JC48865-126	Chlorinated VOA	08/16/2017
L1-RDI-SB-32 (9-11) 20170816	JC48865-127	Chlorinated VOA	08/16/2017
L1-RDI-SB-21 (11-13) 20170816	JC48865-128	Chlorinated VOA	08/16/2017
L1-RDI-SB-32 (13-15) 20170816	JC48865-129	Chlorinated VOA	08/16/2017
L1-RDI-SB-33 (4-5) 20170816	JC48865-130	Chlorinated VOA	08/16/2017
L1-RDI-SB-11 (5-7) 20171115 (plus, MS/MSD)	JC55519-1	Chlorinated VOA	11/15/2017
L1-RDI-SB-X1 (5-7) 20171115 (Field Duplicate of L1-RDI-SB-11 (5-7) 20171115	JC55519-2	Chlorinated VOA	11/15/2017
L1-RDI-TB-1 20171115	JC55519-3	Chlorinated VOA	11/15/2017

L1-RDI-FB-1 20171115	JC55519-4	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (7-9) 20171115	JC55519-5	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (9-11) 20171115	JC55519-6	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (11-13) 20171115	JC55519-7	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (13-15) 20171115	JC55519-8	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (15-17)20171115	JC55519-9	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (17-19) 20171115	JC55519-10	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (9-11) 20171115	JC55519-11	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (21-23) 20171115	JC55519-12	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (23-25) 20171115	JC55519-13	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (25-27) 20171115	JC55519-14	Chlorinated VOA	11/15/2017
L1-RID-SB-11 (27-29) 20171115	JC55519-15	Chlorinated VOA	11/15/2017
L1-RDI-SB-11 (29-31) 20171115	JC55519-16	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (4-5) 20171115	JC55519-17	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (5-7) 20171115 (plus, MS/MSD)	JC55519-18	Chlorinated VOA	11/15/2017
L1-RDI-SB-X (5-7) 20171115 (Field Duplicate of L1-RDI-SB-26 (5-7) 20171116	JC55519-19	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (7-9) 20171115	JC55519-22	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (9-11) 20171115	JC55519-23	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (11-13) 20171115	JC55519-24	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (13-15) 20171115	JC55519-25	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (15-17) 20171115	JC55519-26	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (17-19) 20171115	JC55519-27	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (19-21) 20171115	JC55519-28	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (21-23) 20171115	JC55519-29	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (23-25) 20171115	JC55519-30	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (25-27) 20171115	JC55519-31	Chlorinated VOA	11/15/2017
L1-RDI-SB-26 (4-5) 20171220	JC57756-1	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (5-7) 20171220 (plus, MS/MSD)	JC57756-2	Chlorinated VOA	12/20/2017
L1-RDI-SB-X (5-7) 20171220 (Field Duplicate of L1-RDI-SB-26 (5-7) 20171220	JC57756-3	Chlorinated VOA	12/20/2017
L1-RDI-TB-2 20171220	JC57756-4	Chlorinated VOA	12/20/2017
L1-RDI-FB-2 20171220	JC57756-5	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (7-9) 20171220	JC57756-6	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (9-11) 20171220	JC57756-7	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (11-13) 20171220	JC57756-8	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (13-15) 20171220	JC57756-9	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (15-17) 20171220	JC57756-10	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (17-19) 20171220	JC57756-11	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (19-21) 20171220	JC57756-12	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (21-23) 20171220	JC57756-13	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (23-25) 20171220	JC57756-14	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (25-27) 20171220	JC57756-15	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (27-29) 20171220	JC57756-16	Chlorinated VOA	12/20/2017
L1-RDI-SB-26 (29-31) 20171220	JC57756-17	Chlorinated VOA	12/20/2017

Data Qualifier Definitions:

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U - The analyte was analyzed for but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

R - The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

J+ - The result is an estimated quantity, but the result may be biased high.

J- - The result is an estimated quantity, but the result may be biased low.

D - Analyte concentration is from diluted analysis.

Sample Receipt:
The Chain of Custody documents indicates that the samples were received at SGS Accutest via laboratory courier upon completion of the sampling events. Sample login notes were generated. The cooler temperature for sample receipts were recorded upon receipt at SGS Accutest and determined to be <6.0 degrees C for all coolers. The actual temperatures are recorded on the chain of custody documents, sample receipt checklists in addition to the case narratives provided in Appendix B of this report.

No unresolved problems and/or discrepancies were noted, consequently, the integrity of the soil samples has been assumed to be good. As indicated on the chain of custody documents, many samples were initially put "on hold" and where analysis subsequently was authorized, the laboratory has documented the requested analysis.

The initial lab report listed the incorrect metals list required for the project (RCRA Metals). Updated reporting sheets were resubmitted by the laboratory. Samples collected on 8/15/17 were inadvertently listed by the laboratory with an extra "0" for sample identifications. The sample identifications were corrected with the resubmitted lab report.

The Form I's and EQUIS excel file includes all usable (qualified) and unusable (rejected) results for the samples identified on the following pages. The Form I's and EQUIS file summarizes the detailed narrative section of the report.

NOTE:
L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

1.0 Chlorinated Part 375 Analyte List Volatile Organics by GC/MS SW846 Method 8260C

The following method criteria were reviewed: holding times, SMCs, MS, MSD, LCS, Laboratory Spiked Blanks, Method Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results are valid and useable except for non-detects in L1-RDI-SB-26 (5-7) 20170815, L1-RDI-SB-26 (7-9) 201670815, L1-RDI-SB-26 (9-11) 20170815, L1-RDI-SB-26 (11-13) 20170815 and L1-RDI-SB-26 (13-15) 20170815 due to holding time exceedances. These sample locations were resampled on 12/20/17 and results are usable as noted within the following text:

1.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Samples pertaining to these SDGs were prepared and analyzed within the Method required holding times as well as the technical holding times for data validation of 14 days from collection to analysis for 5035A field preserved (DI and Methanol) containers and 14 days from collection for HCL preserved Field and Trip Blanks except for L1-RDI-SB-26 (5-7) 20170815, L1-RDI-SB-26 (7-9) 201670815, L1-RDI-SB-26 (9-11) 20170815, L1-RDI-SB-26 (11-13) 20170815 and L1-RDI-SB-26 (13-15) 20170815. These samples were collected on 8/15/17 and initially put on hold. Authorization to perform analysis was requested on 9/6/17. Analysis was performed as soon as possible on 9/6/17. In accordance with EPA Region 2 Validation SOP HW-24, all non-detects have been rejected, "R." Detections for Trichloroethene have been qualified, "J."

******Samples from these locations were recollected on 12/20/17 and analyzed within holding time.***

No additional data validation qualifiers were required based upon holding time requirements.

1.2 System Monitoring Compound (Surrogate) Recovery

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specification, qualifications are required to be applied to associated samples and analytes.

Surrogate recoveries (%R) for Dibromofluoromethane, 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene were found to be within acceptable limits for surrogate compounds for all analyses pertaining to this SDG except for Dibromofluoromethane which recovered low at 71% for initial analysis of L1-RDI-SB-23 (4-5) 20170815. In house established acceptance limits are 72%-120%).

This sample was reanalyzed as required and a matrix effect has been confirmed with surrogate recovery at 65%. Non-detected target analytes associated with this surrogate compound have been qualified, "UJ." Specifically, Vinyl Chloride, Methylene Chloride, Chloroform, Cis-1, 2-Dichloroethene, Trans-1, 2-Dichloroethene and 1, 1-Dichloroethane. The laboratory reported concentration of 1.2 ug/kg for 1, 1-Dichloroethene has been qualified, "J."

1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

MS/MSD analyses were conducted for each analytical sequence as batch QC and were spiked with all components as required by the analytical procedure.

Site specific MS/MSD was performed on L1-RSI-SB-18 (5-7) 20170814, L1-RDI-SB-32 (11-13) 20170816, L1-RDI-SB-26 (7-9) 20170815, L1-RDI-SB-26 (11-13) 20170815 and L1-RDI-SB-34 (13-15) 20170811. Acceptable recovery and RPD were met for these QC pairs.

Additionally, MS/MSD analysis was performed on L1-RDI-SB-27 (9-11) 20170815. Acceptable MS and MSD recoveries were obtained for all spiked analytes, however, RPD fell outside range for all compounds except for Vinyl Chloride. Based on professional judgment, no qualifications to the data were made based on these RPD outliers.

MS/MSD analysis of L1-RDI-SB-15 (7) 20170814 also yielded acceptable MS/MSD recovery values with all compounds yielding RPD outliers. Again, no qualifications to the data were made based on these outliers.

MS/MSD analysis of L1-RDI-SB-31 (9-11) 20170816 resulted in acceptable recovery values for all analytes except for Trichloroethene which recovered outside acceptance range due to high parent sample concentration relative to spike amount. Acceptable RPD was observed. No qualifications to the data were required.

L1-RDI-SB-11 (5-7) 20171115 MS/MSD resulted in low MS recovery (37%) for Trichloroethene due to high sample concentration relative to spike amount. Acceptable MSD recovery value was observed, however, the RPD fell outside range at 26%. Based on professional judgment, no data validation qualifiers were applied based on this deviation.

L1-RDI-SB-26 (5-7) 20171115 MS/MSD resulted in non-recoverable MS and MSD values for Trichloroethene due to high sample concentration relative to spike amount. Again, no qualifiers were applied.

L1-RDI-SB-26 (5-7) 20171220 resulted in high MS recovery (149%). RPD for 1,2-Dichlorobenzene (18%) also fell outside acceptance limits. Trichloroethene recovered low (36%) in the MS due to high sample concentration relative to spike amount and therefore RPD fell outside range since acceptable recovery values were obtained for MSD analysis. No qualifications to the data were applied.

The National Functional Guidelines and EPA Region 2 SOPs state that "No qualifications to the data is necessary based on MS data alone."

No qualifications to the data were required based on professional judgment for batch (non-site specific) MS/MSD analysis or RPD outliers.

1.4 Laboratory Control Sample/Blank Spikes

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

LCS/Blank Spikes or LCS/LCS Duplicates were analyzed for each sequence. Recovery values were acceptable for all spiked analytes except for Blank Spike associated with L1-RDI-SB-16 (5) 20170814 which yielded high cis-1, 2-Dichloroethene recovery (117%). This analyte was not detected in the associated field sample and no qualifications to the data are required since high recovery does not support any potential loss of detection.

1.5 Blank Contamination

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

Blank Type	Blank Result	Sample Result	Action for Samples
Method, Storage, field, Trip, Instrument	Detects	Not Detected	No qualification required
	<CRQL*	<CRQL*	Report CRQL value with a U
		>/= CRQL* and <2x the CRQL**	No qualification required
	>CRQL*	</= CRQL*	Report CRQL value with a U
		>/=CRQL* and </= blank concentration	Report blank value for sample concentration with a U
		>/= CRQL* and > blank concentration	No qualification required
	=CRQL*	</= CRQL*	Report CRQL value with a U
		>CRQL*	No qualification required
	Gross Contamination**	Detects	Report blank value for sample concentration with a U

*2x the CRQL for methylene chloride, 2-butanone and acetone.
**Qualifications based on instrument blank results affect only the sample analyzed immediately after the sample that has target compounds that exceed the calibration range or non-target compounds that exceed 100 ug/L.

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

A) **Method Blank Contamination:**

Target analytes were not detected in any of the method blanks associated with sample analysis.

B) **Field Blank Contamination:**

Target analytes were not detected in any of the Field Blanks.

C) **Trip Blank Contamination:**

Target analytes were not detected in the Trip Blanks.

*****The end user should proceed with caution when making decisions based on Methylene Chloride detections. Low concentrations were detected in many samples, however, could not be negated due to lack of presence in the corresponding method/field/trip blanks.***

1.6 GC/MS Instrument Performance Check

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses conducted for these SDGs.

1.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can produce acceptable performance at the beginning of an experimental sequence.

The continuing calibration checks document that the instrument is giving satisfactory daily performance. Initial calibration verifications were acceptable.

A) Response Factor GC/MS:
The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R". Method 8260C allows for a minimum response factor of 0.1 for Acetone and 2-Butanone. Validation criteria allows response factor to be /=>0.01 for poor responders (Acetone, MEK, Carbon Disulfide, Chloroethane, Chloromethane, Cyclohexane, 1,2-Dibromoethane, Dichlorodifluoromethane, cis-1,2-Dichloroethene, 1,2-Dichloropropane,

1,2-Dibromo-3-chloropropane, Isopropylbenzene, Methyl Acetate, Methylene Chloride, Methylcyclohexane, MTBE, trans-1,2-Dichloroethene, 4-Methyl-2-Pentanone, 2-Hexanone, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane.

All the response factors for the target analytes reported were found to be within acceptable limits (>/=0.05) and (>/= 0.01 for poor responders) and minimum response criteria in Table 4 of Method 8260C, for the initial and continuing calibrations for all reported analytes.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <20% and %D must be <20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >20% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Closing CCV must meet 30% criteria. Poor responders must be </= 40%.

*Method 8260C allows for several analytes to be outside requirements due to the large number of compounds.

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (20%) and (40% for poor responders) for all reported compounds.

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (20%) and (40% for poor responders) for all reported compounds except for:

CCAL GCMS3C 08/24/17 – Carbon Tetrachloride – 25.3%; "UJ" non-detects in L1-RDI-SB-15 (7), 20170814, L1-RDI-SB-X (7) 20170814, L1-RDI-SB-31 (9-11) 20170816.

CCAL GCMS3V 08/18/17 – Carbon Tetrachloride – 25.3%; "UJ" non-detects in L1-RDI-SB-16 (5) 20170814.

CCAL GCMS3V 08/23/17 – Carbon Tetrachloride – 42.1%; "UJ" non-detects in L1-RDI-SB-32 (11-13) 20170816 and L1-RDI-SB-32 (13-15) 20170816.

CCAL GCMS3V 08/17/17 – Carbon Tetrachloride – 24.4%; "UJ" non-detects in L1-RDI-SB-25 (4-5) 20170815, L1-RDI-SB-27 (4-5) 20170815, L1-RDI=SB-28 (4-5) 20170815, L1-RDI-SB-30 (4-5) 20170816, L1-RDI-SB-31 (4-5) 20170816, L1-RDI-SB-X (9-11) 20170816, L1-RDI-SB-33 (4-5) 20170816 and L1-RDI-SB-32 (4-5) 20170816.

CCAL GCMS3C 11/21/17 – 1,2-Dichloroethane – 20.3%; "UJ" non-detects in L1-RDI-SB-11 (5-7) 20171115, L1-RDIU-SB-X1 (5-7) 20171115, L1-RDI-SB-11 (7-9) 20171115, L1-RDI-SB-11 (9-11) 20171115, L1-RDI-SB-11 (11-13) 20171115, L1-RDI-SB-11 (15-17) 20171115, L1-RDI-SB-11 (17-19) 20171115, L1-RDI-SB-11 (19-121) 20171115, L10-RDI-SB-11 (19-21) 20171115, L1-RDI-SB-11 (21-23) 20171115, L1-RDI-SB-11 (25-27) 20171115, L1-RDI-SB-11 (27-29) 20171115, L1-RDI-SB-11 (29-21) 20171115 and L1-RDI-SB-26 (4-5) 20171115.

CCAL GCMS1 12/22/17 – Carbon Tetrachloride – 27.4% and 1,1,1-Trichloroethane – 30.0%; "UJ" non-detects in samples L1-RDI-SB-26 (5-7) 20171220, L1-RDI-SB-26 (4-5) 20171220, L1-RDI-SB-X (5-7) 20171220, L1-RDI-SB-26 (7-9) 20171220, L1-RDI-SB-26 (9-11) 20171220, L1-RDI-SB-26 (11-13) 20171220, L1-RDI-SB-26 (13-15) 201711220, L1-RDI-SB-26 (15-17), L1-RDI-SB-26 (17-19) 20171220, L1-RDI-SB-26 (19-21) 20171220, L1-RDI-SB-26 (21-23) 20171220, L1-RDI-SB-26 (23-25) 20171220, L1-RDI-SB-26 (25-27) 20171220, L1-RDI-SB-26 (27-29) 20171220 and L1-RDI-SB-26 (29-31) 20171220.

1.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

All samples were spiked with the internal standards Pentafluorobenzene, Chlorobenzene-d5, 1, 4-Dichlorobenzene-d4, TBA-d9, Chlorobenzene-d5 and 1, 4-Difluorobenzene prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with this SDG.

1.9 Field Duplicates

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Acceptable RPD is 25%.

Field Duplicates:

L1-RDI-SB-34 (13-15) 20180811 = L1-RDI-SB-X (13-15) 20170811 – Acceptable precision was obtained for detected analytes Trichloroethene and Tetrachloroethene.

L1-RDI-SB-15 (7) 20170814 = L1-RDI-SB-X (7) 20170814 – Acceptable precision was obtained for detected analyte Tetrachloroethene. Low Trichloroethene (0.61 ug/kg) was detected in the field duplicate but not in the parent sample No qualifications to the data is required.

L1-RDI-SB-31 (9-11) 20170816 = L1-RDI-SB-X (9-11) 20170816 – Acceptable precision was observed for detected analyte Trichloroethene.

L1-RDI-SB-11 (5-7) 20171115 = L1-RDI-SB-X1 (5-7) 20171115 – cis-1,2-Dichloroethene, Methylene Chloride and Trichloroethene have been qualified, "J" estimated in both the parent and field duplicate due to high percent difference. Tetrachloroethene was detected in the parent sample at 2.6 ug/kg and not in the field duplicate. No qualifiers were applied based on this detection.

L1-RDI-SB-26 (5-7) 20171220 = L1-RDI-SB-X (5-7) 20171220 – Methylene Chloride, Tetrachloroethene and Tri chloroethene have been qualified, "J" in the parent and field duplicate due to high %D. Chloroform (0.39 ug/kg) and cis-1,2-Dichloroethene (0.58 ug/kg) was detected in the field duplicate and not in the parent sample No qualifications were applied based on this observance for "J" qualified analytes (greater than the LOD but less than the LOQ).

Laboratory Duplicates:

Laboratory Duplicate analysis was performed on L1-RDI-SB-18 (7-9) 20170814 and L1-RDI-SB-26 (13-15) 20170815. Acceptable RPD was observed for all compounds.

Duplicate analysis of L1-RDI-SB-32 (13-15) 20170816 resulted in high RPD for analytes Trichloroethene (5.9 ug/kg vs. 1.8 ug/kg). The laboratory reported results in this sample must be considered estimated, "J."

Laboratory Duplicate analysis was performed on L1-RDI-SB-26 (9-11) 20170815. High RPD for Trichloroethene (8.1 ug/kg vs. 4.2 ug/kg). The laboratory reported results in this sample must be considered estimated, "J."

1.10 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.

1.11 Compound Quantification and Reported Detection Limits

GC/MS quantitative analysis is acceptable. Correct internal standards per SW846, response factors and percent moisture were used to calculate final concentrations.

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).

Samples were analyzed at low level except for reanalysis of L1-RDI-SB-24 (4-5) 20170815 which required high level rerun to obtain Tetrachloroethene and Trichloroethene within the instruments linear calibration range. L1-RDI-SB-25 (4-5) 20170815, L1-RDI-SB-25 (5-7) 20170815, L1-RDI-SB-25 (7-9) 20170815, L1-RDI-SB-26 (4-5) 20170815, L1-RDI-SB-27 (4-5) 20170815, L1-RDI-SB-28 (4-5) 20170815, L1-RDI-SB-32 (4-5) 20170816, L1-RDI-SB-32 (5-7) 20170816, L1-RDI-SB-11 (5-7) 20171115, L1-RDI-SB-11 (7-9) 20171115, L1-RDI-SB-11 (11-13) 20171115, L1-RDI-SB-11 (21-23) 20171115 and L1-RDI-SB-26 (4-5) 20171115 also required high level reanalysis for Trichloroethene.

Results for these analytes have been qualified, "D" as required by NYSDEC.

1.12 Overall System Performance

Good resolution and chromatographic performance were observed.

2.0 Polyaromatic Hydrocarbon (PAH) Semivolatile Organics by GC/MS SW846 Method 8270D

The following method criteria were reviewed: holding times, Surrogates, MS, MSD, LCS, Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and overall system performance. The Semivolatile results are valid and usable as noted within the following text:

2.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as

estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

All samples were extracted and analyzed within the method required holding times and the technical holding times (14 days from collection to extraction for soil samples and 7 days from collection to extraction for field blanks) for analysis required for data validation.

2.2 Surrogate Recovery

All samples are spiked with surrogate compounds prior to sample preparation/extraction to evaluate overall laboratory performance and efficiency of the analytical technique. Additionally, the sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Since the effects of the sample matrix are frequently outside the control of the laboratory and may present relatively unique problems, the evaluation of the data is dependent upon reextraction and/or reanalysis to confirm/negate laboratory error or matrix related problems. Discussion of surrogate recoveries that fell outside (above/below) QC guidelines is itemized below:

Samples were spiked with six (6) surrogate standards at the sample extraction portion of analysis. Method allows for one (1) base neutral and one (1) acid recovery to be outside acceptance limits without requiring reextraction/reanalysis. For validation, recovery values <10% require analytes from that fraction be rejected, "R."

Base neutral surrogates met acceptance criteria for all analysis.

2.3 Matrix Spikes (MS)/Matrix Spike Duplicates (MSD)

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices.

MS/MSD analysis was performed on L1-RDI-SB-34 (13-15) 20170811. Acceptable recovery and RPD was observed for all spiked PAH analytes.

Where batch (non-site specific) MS/MSD data was supplied in the data package, no qualifications to the data were made.

The National Functional Guidelines provide and allow for flexibility when qualifying the parent sample based on MS/MSD data.

2.4 Laboratory Control Sample

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

LCS/Blank Spikes were analyzed for each analytical extraction batch. Recovery values were acceptable for all spiked analytes.

2.5 Method Blanks

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

For:	Flag Sample Result with a "U" when:	Report CRQL & Qualify "U" when:	No Qualification is Needed when:
Phthalates (common laboratory contaminants)	Sample Conc. is >CRQL, but </=5x blank value	Sample Conc. Is <CRQL and </=5x blank value	Sample Conc. is >CRQL and >5x blank value
Other Contaminants	Sample Conc. is >CRQL, but </=1x blank value	Sample Conc. Is <CRQL and </=1x blank value	Sample Conc. is >CRQL and >1x blank value

Below is a summary of the compounds in the sample and the associated qualification that have been applied:

A) **Method Blank Contamination:**

Target analytes were not detected in the method blanks.

B) **Field Blank Contamination:**

PAH compounds were not detected in any of the Field Blanks.

2.6 GC/MS Instrument Performance Check

Tuning and performance criteria are established to ensure adequate mass resolution proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for semivolatile organics is decafluorotriphenylphosphine (DFTPP).

Instrument performance was generated within acceptable limits and frequency (12 hours) for decafluorotriphenylphosphine (DFTPP) for all analyses.

2.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can give acceptable performance at the beginning of an experimental sequence.
The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:
The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

All the response factors for the target analytes reported were found to be within acceptable limits (>/=0.05), for the initial (average RRF) and continuing calibrations.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):
Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the

instrument's daily performance. Percent RSD must be <20% and %D must be <20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >30% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Due to the large number of analytes in this method, it is expected for some analytes to fall outside acceptance criteria and the calibration is still considered valid.

Acceptable Initial Calibration Verifications were performed.

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (20%) for all reported compounds.

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (20%) for all reported PAH compounds.

2.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

All area responses and retention times fell within established QC ranges for sample analysis.

2.9 Field Duplicates

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. An acceptable RPD is 25%. Field duplicate analysis was collected on samples listed below:

Field Duplicates:

L1-RDI-SB-34 (13-15) 20180811 = L1-RDI-SB-X (13-15) 20170811 – Acceptable precision was obtained for detected analytes.

L1-RDI-SB-X (9-11) 20170816 – No target analytes were detected. The parent sample L1-RDI-SB-31 (9-11) 20170816 was not designation for PAH analysis. Precision could not be evaluated.

2.10 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

Mass spectra meet criteria for all detected analytes.

2.11 Compound Quantification and Reported Detection Limits

GC/MS quantitative analysis is acceptable. Correct internal standards, response factors and percent moisture were used to calculate final concentrations.

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP). Soil samples were extracted by Method 3546 (microwave extraction).

All samples were analyzed undiluted.

2.12 Overall System Performance

Acceptable system performance was maintained throughout the analysis.

3.0 RCRA (8) Metals by ICP/Cold Vapor SW846 Methods 6010C/7471B

The following method criteria were reviewed: holding times, CRDL standards, calibration, blanks, MS, laboratory duplicates, LCS, interference check sample, ICP serial dilutions and sample results verification. Metals results are valid and usable with the appropriate qualifiers as notated in the following text:

3.1 Holding Times

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Soil samples and Field Blanks were digested and analyzed for Metals within the method required holding times and the technical holding times for data validation. No qualifications were applied based upon holding time criteria.

3.2 Calibration (ICV/CCV)

Satisfactory instrument calibration is established to ensure that the instruments can produce acceptable quantitative data. An initial calibration demonstrates that the instruments can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instruments are giving satisfactory sequential performance and that the initial calibration is still valid.

The ICP and Mercury instruments were calibrated utilizing a minimum of a four-point curve in addition to blanks at the beginning of each analytical run. The calibrations have been determined to be acceptable, yielding correlation coefficients of 0.995 or greater.

For ICP analysis, satisfactory instrument performance near the Contract Required Detection Limit (CRDL) was demonstrated by analyzing a CRDL standard at the beginning and end of the analytical run. The instruments were calibrated properly by analyzing the CRDL solution at the correct levels and analyzed at the required frequency at the beginning and end of each analytical run.

All recoveries were within acceptable limits of 90-110 % for initial calibration pertaining to field samples.

Continuing calibrations were within acceptable limits of 90-110% recovery of the true values for ICP and Mercury (80-120%) for all field samples.

No qualifications were applied based upon ICV/CCV analysis.

3.3 Blanks

Quality assurance (QA) blanks, i.e. method, field or preparation blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Preparation blanks measure laboratory contamination. Field blanks measure cross-contamination of samples during field operations.

All digestion/prep/ICB/CCB blanks were generated within acceptable limits yielding final concentrations less than the CRDL. L1-RDI-FB-1 20170811 was determined to contain Zinc at 30.3 ug/L and L1-RDI-FB-2 20170816 had Arsenic at 3.7 ug/L. Sample results are not impacted by these detections in the field blanks.

No qualifications to the data were made based upon blank contamination.

3.4 Spiked Sample Recovery

The spike data are generated to determine the long terms precision and accuracy of the analytical method in various matrices.

Soil spike recoveries are qualified based on the criteria below:

<30% - "R" all detects and non-detects
Between 30%-74% - results >/=MDL "J" and non-detects "UJ"
Between 126-150% - results >/=MDL "J"

MS/MSD was performed on L1-RDI-SB-34 (13-15) 20170811 for RCRA (8) Metals. Acceptable recovery values were obtained for all elements.

Additionally, L1-RDI-SB-15 (15) 20170814 was selected by the laboratory for Mercury MS/MSD. Acceptable recovery values were obtained.

No qualifications to the data were made based on batch (non-site-specific MS/MSD data)

3.5 Laboratory/Field Duplicates

The laboratory uses duplicate sample determinations to demonstrate acceptable method precision at the time of analysis. Duplicate analyses are also performed to generate data to determine the long-term precision of the analytical method on various matrices.

Laboratory Duplicates:
RPD >20% but <100% - J detected concentrations
RPD >/=100% - R all detected and non-detected concentrations

Matrix Spike Duplicate was performed in lieu of laboratory duplicate analysis. No qualifications were applied to the data.

Field Duplicates:
RPD >/=35% but <120% - qualify sample and duplicate results >/= CRQL "J"
RPD >/= 120% - rejected sample and duplicate results >/= CRQL "R"

Field Duplicate analysis was submitted as follows:

L1-RDI-SB-34 (13-15) 20180811 = L1-RDI-SB-X (13-15) 20170811 – Acceptable precision was obtained for detected analytes.

L1-RDI-SB-X (9-11) 20170816 – The parent sample L1-RDI-SB-31 (9-11) 20170816 was not designated for RCRA (8) analysis. Precision could not be evaluated.

3.6 Laboratory Control Sample

The laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous and solid Laboratory Control samples shall be analyzed for each analyte utilizing the same sample preparation, analytical methods and QA/QC procedures as employed for the samples.

The LCS was analyzed and reported for all ICP and Mercury analysis. Associated LCS recoveries were within the acceptable limits for Metals analyses (80-120%).

3.7 Interference Check Sample

The interference check sample (ICS) verifies the laboratory's interelement and background correction factors. The ICS consists of two solutions A and AB. Solution A consists of interference, and solution AB consists of the analytes mixed with interferents.

SW846 Method 6010 requires solution A and solution AB to be analyzed separately. The recoveries for the ICP interference check sample were all within the acceptable limits of 80-120%. No data qualifications were made based upon ICS analysis.

3.8 ICP Serial Dilution

The serial dilution of samples quantitated by ICP determines whether significant physical or chemical interferences exist due to sample matrix. An ICP serial dilution analysis must be performed on a sample for each group of samples with a similar matrix type and concentration, or for each Sample Delivery Group (SDG), whichever is more frequent.

Acceptable ICP serial dilutions were performed at a 5-fold dilution as required by the method where the initial concentration is equal or greater than 50x MDL. All serial dilution analyses agree within a 10% difference of the original determination after correction for dilution for all reported elements where sample concentration is <50x the MDL.

3.9 Sample Results Verification

Analyte quantitation was generated in accordance with protocols. The raw data was verified and found within the linear range of each instrument used for quantitation. Raw data supplied corresponds with reported values. Verification of the calculations yielded reported results.

Metals analysis resulted in acceptable results.

3.10 Overall Assessment of Data

The data generated were of acceptable quality. For the Metals analysis results are usable at the concentrations presented in the validated spreadsheet.

The data was of acceptable quality.

Reviewer's Signature Lori A. Blyn **Date** 03/06/2018

Appendix A
Chain of Custody
Documents

SGS ACCUTEST

SCL
FB
STB

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #: JC48865
SGS Accutest Quote #:
SGS Accutest Job #:

Client / Reporting Information

Company Name: AKRF, INC.
Street Address: 440 PARK AVE S. 7TH FLR
City, State, Zip: NY, NY 10016
Project Contact: AMY JORDAN
E-mail: AJORDAN@AKRF.COM
Phone #: 646-388-9864
Fax #: 9576
Sampler(s) Name(s): ADRIANNA BOSSO
Phone #: 646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 32-64 Fulton Street
City, State: Brooklyn, NY
Project #: 12422 12492
Client Purchase Order #:
Project Manager: AMY JORDAN / DEBORAH SHAPIRO
Billing Information (if different from Report to):
Company Name:
Street Address:
City, State, Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EQ - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preserved Bottles: Unpres	MeOH	HNO3	H2SO4	NaOH	DI Water	MeOH	ENCORE	VOCs - 8260	PAHs - 8270	RCRA Metals - 6020/7000	LAB USE ONLY
1	L1-RD1-SB-34(13-15)20170811	446/278/338	8/11/17	955	AB	SO	4					1	2	1		A	A	A	C36
2	L1-RD-SB-35(13-15)20170811	447/276/337	8/11/17	935	AB	SO	4					1	2	1		A	A	A	14V3
3	L1-RD1-SB-36(13-15)20170811	448/274/335	8/11/17	910	AB	SO	4					1	2	1		A	A	A	4952
4	L1-RD1-~~TB~~ 1 20170811	—	8/7/17	1300	/	TB	2	2								A	~~A~~	~~A~~ (AB)	
5	L1-RD1-FB-1 20170811	—	8/11/17	735	AB	FB	5	2		1		2				A	A	A	E12
6	L1-RD1-SB-34(13-15)MS/MSD 20170811	449, 272, 273, 454, 336 (AB)	8/11/17	955	AB	SO	8					2	4	2		A	A	A	V538 A3
	L1-RD1-SB-X(13-15)20170811	449/272 283	8/11/17	—	AB	SO	4					1	2	1		A	A	A	

D.I. slurry voc vials frozen storage
Date: 8/11/17 Time: 8:33 Initials: JS

INITIAL ASSESSMENT: 2/1/2
LABEL VERIFICATION: JS

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format AKRF
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

A= analyze
keep SDG open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1 [signature]	8/11/17 1500	1 [signature]	2 [signature]	8/11/17 18:35	2 [signature]
3		3	4		4
5		5			

Custody Seal #: 665 [ ] Intact [ ] Not intact
657
Preserved where applicable: [ ]
On Ice: [x]
Cooler Temp: 2.2C
2 coolers 1.8-2

Form SM008-01CRev.Date:9/13/16

5.1 5

JC48865: Chain of Custody
Page 1 of 36

SLL
FB
STB

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 4

FED-EX Tracking #

Bottle Order Control #

SGS Accutest Quote #

SGS Accutest Job # JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9664
Sampler(s) Name(s) Phone #: 588-9576 Shire Clement & Adrianna Bosco ~~646-600-5016~~

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI	MEOH	ENCORE	CVOCs - EPA 8260	PAHs - EPA 8270	RCRA Metals - EPA 6000/7000	LAB USE ONLY
7	L1-RDI-SB-15 (5) 201708 /4	254, 253, 2	8/14/17	840	AB	SO	4					2	1			A	A	A	D31
8	L1-RDI-SB-15 (7) 201708 /4	257, 256, 457		850		SO	4				1	2	1			H	H	H	P59
9	L1-RDI-SB-15 (9) 201708 /4	268, 269, 457, 268		855		SO	4				1	2	1			H	H	H	1445
10	L1-RDI-SB-15 (11) 201708 /4	258, 259, 456		900		SO	4				1	2	1			H	H	H	4955
11	L1-RDI-SB-15 (13) 201708 /4	220, 221, 457D		905		SO	4				1	2	1			H	H	H	4956
12	L1-RDI-SB-15 (15) 201708 /4	242, 242, 2410		910		SO	4					2	1			A	A	A	V550
13	L1-RDI-TB-4 201708 /4	—		—		TB	2	2								H			E12
14	L1-RDI-FB-4 201708 /4	—		1350	AB	FB	5	2		1		2				H	H	H	A40
8	L1-RDI-SB-15 (7) MS/MSD 201708 /4	251, 460, 250, 455, 260	261	850		SO	8					2	4	2		H	H	H	
15	L1-RDI-SB-X (7) 201708 /4	265, 458, 264		—		SO	4				1	2	1			H	H	H	
16	L1-RDI-SB-16 (5) 201708 /4	1790, 1780, 1473		925		SO	4					2	1			H	H	H	
17	L1-RDI-SB-16 (7) 201708 /4	1805, 1797		930		SO	4					2	1			A	A	A	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

Turnaround Time (Business days)

Approved by (SGS Accutest PM) / Date:

1 _X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other
Emergency & Rush T/A data available VIA Labtrack

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X_NYASP Category B
__State Forms
_X_EDD Format AKRF
Other

Comments / Special Instructions

H = extract and hold analysis
A = analyze
Keep SDG open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/14/17 15:15	1 Chris Lad	2 Chris Lad	8/14/17 1740	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___ Intact ___ Not Intact	Preserved where applicable ___	On Ice X Cooler Temp. 2.9°, 2.5°, 2.3°, 3.3°, 3.6° CDP

D.I. slurry voc vials frozen storage
Date: 8/14/17 Time: 20:32 Initials: DK

INITIAL ASESSMENT 2B/DB

LABEL VERIFICATION DK

5.1 5

JC48865: Chain of Custody
Page 2 of 36

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 2 OF 4

FED-EX Tracking #

Bottle Order Control #

SGS Accutest Quote #

SGS Accutest Job # JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9664
Sampler(s) Name(s) Phone #: Shira Clement & Adrianna Bosco 646-588-5576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI	MEOH	EnCore	CVOCs - EPA 8260	PAHs - EPA 8270	RCRA Metals - EPA 6000/7000
18	L1-RDI-SB-16 (9) 201708 14	1810, 1812, 1800	8/14/17	935	AB	SO	5				2	1	2	1		H	H	H
19	L1-RDI-SB-16 (11) 201708 14	1804, 1827, 1817		940		SO	5				2	1	2	1		H	H	H
20	L1-RDI-SB-16 (13) 201708 14	1811, 1820, 1771		945		SO	5				2	1	2	1		H	H	H
21	L1-RDI-SB-16 (15) 201708 14	1805, 1787, 1777		950		SO	5				2	1	2	1		A	A	A
22	L1-RDI-SB-17 (4-5) 201708 14	1802, 1808, 1801		1000		SO	5				2	1	2	1		A		
23	L1-RDI-SB-17 (5-7) 201708 14	1569, 1897, 1581		1010		SO	5				2	1	2	1		H		
24	L1-RDI-SB-17 (7-9) 201708 14	1814, 1824, 1802		1015		SO	5				2	1	2	1		H		
25	L1-RDI-SB-17 (9-11) 201708 14	1572, 1571, 1467		1020		SO	5				2	1	2	1		H		
26	L1-RDI-SB-17 (11-13) 201708 14	1801, 1815, 1825		1025		SO	5				2	1	2	1		H		
27	L1-RDI-SB-17 (13-15) 201708 14	1817, 1845, 1805		1030		SO	5				2	1	2	1		H		
28	L1-RDI-SB-18 (4-5) 201708 14	1781, 1830, 1755		1045		SO	5				2	1	2	1		A		
29	L1-RDI-SB-18 (5-7) 201708 14	1541, 1560, 1490		1050		SO	5				2	1	2	1		H		

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB-Rinse Blank
TB-Trip Blank

LAB USE ONLY

Turnaround Time (Business days)

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other _____
Emergency & Rush T/A data available VIA Labtrk

Approved by (SGS Accutest PM) / Date:

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data

__NYASP Category A
_X_NYASP Category B
__State Forms
_X_EDD Format AKRF
Other _____

Comments / Special Instructions

H = extract and hold analysis
A = analyze
Keep SDG open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Shira	8/14/17 1515	1 Chris Land	2 Chris Land	8/14/17 1740	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___Intact ___Not Intact	Preserved where applicable ___ On Ice ___	Cooler Temp.

5.1 5

JC48865: Chain of Custody
Page 3 of 36

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
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www.accutest.com

PAGE 3 OF 4

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9664
Sampler(s) Name(s) Phone #: Shira Clement & Adrianna Bosco 646-688-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro
Billing Information (if different from Report to):
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis: CVOCs - EPA 8260

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI	MEOH	EnCore	CVOCs - EPA 8260	Matrix Codes
30	L1-RDI-SB-18 (7-9) 201708 /4	1523, 1524, 1525	8/14/17	1055	RAS	SO	25				2	2	2	1		H	
31	L1-RDI-SB-18 (9-11) 201708 /4	1523 1524, 1525		1100		SO	25				2	2	2	1		H	
32	L1-RDI-SB-18 (11-13) 201708 /4	1510, 1601, 1602		1105		SO	25				2	2	2	1		H	
33	L1-RDI-SB-18 (13-15) 201708 /4	1503, 1584, 1583		1110		SO	25				2	2	2	1		H	
34	L1-RDI-SB-19 (4-5) 201708 /4	1600, 1604, 1599		1155		SO	25				2	2	2	1		A	
35	L1-RDI-SB-19 (5-7) 201708 /4	1569, 1135, 1570		1200		SO	25				2	2	2	1		H	
36	L1-RDI-SB-19 (7-9) 201708 /4	1131, 1583, 1568		1205		SO	25				2	2	2	1		H	
37	L1-RDI-SB-19 (9-11) 201708 /4	1569, 1129, 1568		1210		SO	25				2	2	2	1		H	
38	L1-RDI-SB-19 (11-13) 201708 /4	1568, 1134, 1564		1225		SO	25				2	2	2	1		H	
39	L1-RDI-SB-19 (13-15) 201708 /4	1562, 1133, 1561		1230		SO	25				2	2	2	1		H	
40	L1-RDI-TB-5 201708 /4	—	—	—	—	TB	2	2								H	
41	L1-RDI-FB-5 201708 /4	—	8/14/17	1400	SC	FB	2	2								H	

Turnaround Time (Business days)
_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other
Emergency & Rush T/A data available VIA Lablink

Approved by (SGS Accutest PM) / Date:

Data Deliverable Information
__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULL T1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X_NYASP Category B
__State Forms
_X_EDD Format AKRF
Other

Comments / Special Instructions
H = extract and hold analysis
A = analyze
Keep SDG open
Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/14/17 1515	1 Chris Lau	2 Chris Lau	8/14/17 1740	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___Intact ___Not Intact	Preserved where applicable ___	On Ice ___ Cooler Temp.

5.1 5

JC48865: Chain of Custody
Page 4 of 36

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 4 OF 4

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9664
Sampler(s) Name(s) Phone #: Silvia Clement & Adrianna Bosco 646-688-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro
Billing Information (if different from Report to): Company Name
Street Address
City State Zip
Attention:

Requested Analysis: CVOCs - EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB-Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI	MEOH	NONE	CVOCs - EPA 8260	LAB USE ONLY
37	L1-RDI-SB-19 (9-11) MS/MSD 201708/4	1164, 1149, 1003	8/14/17	1210	AB	SO	10				4	X	4	2		H	
42	L1-RDI-SB-X (9-11) 201708/4	1565, 1564, 1123		—		SO	5				2	X	2	1		H	
43	L1-RDI-SB-20 (4-5) 201708/4	1134, 1144, 1553		1240		SO	5				2	X	2	1		A	
44	L1-RDI-SB-20 (5-7) 201708/4	1552, 1115, 1557		1300		SO	5				2	X	2	1		H	
45	L1-RDI-SB-20 (7-9) 201708/4	1128, 1553, 1547		1310		SO	5				2	X	2	1		H	
46	L1-RDI-SB-20 (9-11) 201708/4	1541, 1551, 1126		1320		SO	5				2	X	2	1		H	
47	L1-RDI-SB-20 (11-13) 201708/4	1147, 1543, 1542		1330		SO	5				2	X	2	1		H	
48	L1-RDI-SB-20 (13-15) 201708/4	1532, 1533, 1137		1340		SO	5				2	X	2	1		H	
	L1-RDI-SB-21 (4-5) 201708					SO	4				1	X	2	1		A	
	L1-RDI-SB-21 (5-7) 201708					SO	4				1	X	2	1		H	
	L1-RDI-SB-21 (7-9) 201708					SO	4				1	2	2	1		H	
	L1-RDI-SB-21 (9-11) 201708					SO	4				1	2	2	1		H	

Turnaround Time (Business days)

_X_ Std. 10 Business Days
__ 5 Day RUSH
__ 3 Day RUSH
__ 2 Day RUSH
__ 1 Day RUSH
__ other _____
Emergency & Rush T/A data available VIA Lablink

Approved by (SGS Accutest PM) / Date:

Data Deliverable Information

__ Commercial "A" (Level 1)
__ Commercial "B" (Level 2)
__ FULLT1 (Level 3+4)
__ NJ Reduced
__ Commercial "C"
__ NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__ NYASP Category A
_X_ NYASP Category B
__ State Forms
__ EDD Format AKRF
Other _____

Comments / Special Instructions

H = extract and hold analysis
A = analyze
Keep SDG open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/14/17 1515	1	2	8/14/17 1740	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___ Intact ___ Not Intact	Preserved where applicable ___	On Ice ___ Cooler Temp.

5.1 5

JC48865: Chain of Custody
Page 5 of 36

SGS ACCUTEST

SCL
FB
STB

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
SGS Accutest Quote #:
Sorte Order Contract #: JC48865
SGS Accutest Job #:

Client / Reporting Information

Company Name: AKRF, INC.
Street Address: 440 PARK AVE S. 7TH FLR
City: NY State: NY Zip: 10016
Project Contact: AMY JORDAN E-mail: AJORDAN@AKRF.COM
Phone #: 646-388-9864 Fax #:
Sampler(s) Name(s): A. BSLW / S. CLEMENT Phone #: 646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 32164 Flatbush St.
City: Brooklyn State: NY
Project #: 12492
Client Purchase Order #:
Project Manager: A. JORDAN / D. SHAPIRO

Billing Information (if different from Report to):
Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet): CVOCs - EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	CVOCs - EPA 8260	LAB USE ONLY
49	L1-RDI-SB-21(4-5)20170815	411,491,490	8/15/17	8:00	AB	SO	4					1	2	1		A	P67
50	L1-RDI-SB21(5-7)20170815	502,503,417		8:05			4					1	2	1		H	14W1
51	L1-RDI-SB21(7-9)20170815	533,534,433		8:10			4					1	2	1		H	4958
52	L1-RDI-SB-21(9-11)20170815	519,518,425		8:15			4					1	2	1		H	4959
53	L1-RDI-SB-21(11-13)20170815	243,242,441		8:20			4					1	2	1		H	14W2
54	L1-RDI-SB-21(13-15)20170815	408,484,485		8:25			4					1	2	1		H	U556
55	L1-RDI-SB-22(4-5)20170815	418,504,505		8:55			4					1	2	1		A	4957
56	L1-RDI-SB-22(5-7)20170815	494,495,413		9:00			4					1	2	1		H	
57	L1-RDI-SB-22(7-9)20170815	494,404,495		9:05			4					1	2	1		H	
58	L1-RDI-SB-22(9-11)20170815	409,487,486		9:10			4					1	2	1		H	
59	L1-RDI-SB-22(11-13)20170815	406,499,418		9:15			4					1	2	1		H	
60	L1-RDI-SB-22(13-15)20170815	423,512		9:20			4					1	2	1		H	

D.I. slurry VOC vials frozen storage
Date 8/15/17 Time: 2127 Initials: AB

INITIAL ASESSMENT: AJK
LABEL VERIFICATION: DS

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL-T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format AKRF
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

H = extract and hold analysis
A = analyze
keep SDG open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	8/15/15 1515	1 [signature]	2 [signature]	8/15/17 1740	2 [signature]
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Intact / Not intact	Preserved where applicable

On Ice: Y
Cooler Temp: 2.5, 3.3° C

Form SM088-01CRev Date 9/13/16

JC48865: Chain of Custody
Page 6 of 36

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #: JC48865
SGS Accutest Quote #: | SGS Accutest Job #:

Client / Reporting Information

Company Name: AKRF, INC.
Street Address: 440 PARK AVES. 7TH FLR
City: NY State: NY Zip: 10016
Project Contact: AMY JORDAN A.JORDAN@AKRF.com
Phone #: 1646-388-9864 Fax #:
Sampler(s) Name(s): A. BUSO / S. CLEMENS Phone #: 1646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3204 Fulton St.
City: ~~NY~~ Brooklyn State: NY
Project #: 12492
Client Purchase Order #:
Project Manager: A. JORDAN / D. SHAPIRO
Billing Information (if different from Report to):
Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet): CVOCs - EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	None	DI Water	MeOH	ENCORE		LAB USE ONLY
61	L1-RDI-SB-23(4-5)20170815	511,421,508	8/15/17	9:30	AB	SO	4					1	2	1		A	
62	L1-RDI-SB-23(5-7)20170815	254,458,255		9:35			4					1	2	1		H	
63	L1-RDI-SB-23(7-9)20170815	253,252,459		9:40			4					1	2	1		H	
64	L1-RDI-SB-23(9-11)20170815	423,515,514		9:45			4					1	2	1		H	
65	L1-RDI-SB-23(11-13)20170815	412,492,493		9:55			4					1	2	1		H	
66	L1-RDI-SB-23(13-15)20170815	498,499,415		10:00			4					1	2	1		H	
67	L1-RDI-TB-6 20170815	—	8/7/17	1300	—	TB										H	
68	L1-RDI-FB-6 20170815	—	8/15/17	1515	SC	FB										H	
69	L1-RDI-~~SB~~-23(9-11)MS/MSD 20170815	530,531,432, 414,413,404		9:45	AB	SO	8					2	4	2		H	
69	~~L1-RDI-SB~~ L1-RDI-SB~~X~~(9-11) 20170815	521, ~~522~~ 426		—			4					1	2	1		H	
70	L1-RDI-SB-24(4-5)20170815	420, 508, 509		10:15			4					1	2	1		A	
71	L1-RDI-SB-24(5-7)20170815	506, 507		~~10:1~~ 10:20			4					1	2	1		H	

Turnaround Time (Business days)
- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other _____

Approved By (SGS Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format AKRF
- [ ] Other _____

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

A = analyze
H = extract and hold analysis
keep SDG open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date/Time:	Received By:	Relinquished by:	Date/Time:	Received By:
1 [signature]	8/15/15 1515	1 Chris Laul	2 Chris Laul	8/15/17 1710	2 [signature]
3		3	4		4
5		5			

Custody Seal #: Intact / Not Used — Preserved where applicable — On Ice — Cooler Temp.

Form SM089-01CRev.Date 9/13/16

5.1 5

JC48865: Chain of Custody
Page 7 of 36

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 2 OF 5

FED EX Tracking #: | Bottle Order Control #: JC48865
SGS Accutest Quote #: | SGS Accutest Job #:

Client / Reporting Information

Company Name: AKRF, INC.
Street Address: 440 PARK AVE S. 7TH FLR
City: NY State: NY Zip: 10016
Project Contact: AMY JORDAN AJORDAN@AKRF.com
Phone #: 646-388-9864 Fax #:
Sampler(s) Name(s): A. BUSKO / S. CLEMENT 646-388-9376 Phone #:

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 2264 Fulton St.
City: Brooklyn State: NY
Project #: 12492
Client Purchase Order #:
Project Manager: A. JORDAN / D. SHAPIRO
Attention:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:

Requested Analysis (see TEST CODE sheet): CVOCs - EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MSDS/Matrix #	Collection Date	Collection Time	Sampled By	Matrix	# of Bottles	Preservative: HCl	MeOH	HNO3	NaOH/ZnAc	NONE	DI Water	MeOH	ENCORE	CVOCs - EPA 8260	LAB USE ONLY
72	L1-RDI-SB-24(7-9)20170815	410, 501, 502	8/15/17	1025	AB	SO	4					1	2	1		H	
73	L1-RDI-SB-24(9-11)20170815	524, 488, 525		1030			4					1	2	1		H	
74	L1-RDI-SB-24(11-13)20170815	482, 483, 407		1035			4					1	2	1		H	
75	L1-RDI-SB-24(13-15)20170815	300, 241, 302		1040			4					1	2	1		H	
76	L1-RDI-SB-25(4-5)20170815	400, 4182, 4183		1100			4					1	2	1		A	
77	L1-RDI-SB-25(5-7)20170815	403, 4184, 4188		1105			4					1	2	1		H	
78	L1-RDI-SB-25(7-9)20170815	4172, 395, 4173		1110			4					1	2	1		H	
79	L1-RDI-SB-25(9-11)20170815	489, 488, 410		1115			4					1	2	1		H	
80	L1-RDI-SB-25(11-13)20170815	4170, 4171, 394		1120			4					1	2	1		H	
81	L1-RDI-SB-25(13-15)20170815	4176, 397, 4177		1125			4					1	2	1		H	
~~82~~	~~L1-RDI-SB-26~~																

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format AKRF
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

H = extract and hold analysis
A = analyze
keep SDGs open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [illegible]	8/15/17 1515	1 Chris Paul	2 Chris Paul	8/15/17 1740	2 [illegible]
3		3	4		4
5		5	Custody Seal #	Intact / Broken	Preserved where applicable / On Ice / Cooler Temp.

Form SM086-01CRev.Date 9/13/16

JC48865: Chain of Custody
Page 8 of 36

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 4 OF 5

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9664
Sampler(s) Name(s) Phone #: Shira Clement & Adrianna Bosco ~~646-865-3376~~ 646-388-9570

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to):
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis: CVOCs - EPA 8260

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	MeOH	HNO3	H2SO4	NONE	DI	MEOH	ENCORE	CVOCs - EPA 8260	LAB USE ONLY
82	L1-RDI-SB-26 (4-5) 20170815	4182, 402, 4186	8/15/17	11:30	AB	SO	4					1	2	1		A	
83	L1-RDI-SB-26 (5-7) 20170815	4174, 475, 396		11:45		SO	4					1	2	1		H	
84	L1-RDI-SB-26 (7-9) 20170815	4180, 4181, 399		11:50		SO	4					1	2	1		H	
85	L1-RDI-SB-26 (9-11) 20170815	540, 398, 481		11:55		SO	4					1	2	1		H	
86	L1-RDI-SB-26 (11-13) 20170815	244, 463, 245		12:00		SO	4					1	2	1		H	
87	L1-RDI-SB-26 (13-15) 20170815	465, 4200, 4193		12:05		SO	4					1	2	1		H	
88	L1-RDI-SB-27 (4-5) 20170815	398, 4178, 4179		12:30		SO	4					1	2	1		A	
89	L1-RDI-SB-27 (5-7) 20170815	437, 296, 297		12:35		SO	4					1	2	1		H	
90	L1-RDI-SB-27 (7-9) 20170815	434, 537, 536		12:40		SO	4					1	2	1		H	
91	L1-RDI-SB-27 (9-11) 20170815	391, 4169, 4140		12:50		SO	4					1	2	1		H	
92	L1-RDI-SB-27 (11-13) 20170815	401, 4185, 4184		13:10		SO	4					1	2	1		H	
93	L1-RDI-SB-27 (13-15) 20170815	280, 331, 445		13:15		SO	4					1	2	1		H	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

Turnaround Time (Business days):
_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other
Emergency & Rush T/A data available VIA Lablink

Approved by SGS Accutest PM: Date:

Data Deliverable Information:
__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X__NYASP Category B
__State Forms
_X_EDD Format AKRF
Other

Comments / Special Instructions:
H = extract and hold analysis
A = analyze
Keep SDG open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/15/15 1515	1 Chris Lad	2 Chris Lad	8/15/17 17:40	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___ Intact / Not Intact	Preserved where applicable ___	On Ice X / Cooler Temp.

5.1 5

JC48865: Chain of Custody
Page 9 of 36

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 5 OF 5

FED-EX Tracking #

Bottle Order Control #

SGS Accutest Quote #

SGS Accutest Job # JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646 388 9864
Sampler(s) Name(s) Phone #: Shira Clement & Adnanna Bosco ~~646-588-9576~~ 6410-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro
Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI	MEOH	EnCore	CVOCs - EPA 8260
94	L1-RDI-TB-7 201708/5	—	8/15/17	1330	A	TB	2	2								H
95	L1-RDI-FB-7 201708/5	—	8/15/17	~~1300~~	SC	FB	2	2								H
96	L1-RDI-SB-27 (9-11) MS/MSD 201708/5	528,430,528		1250	AB	SO	8					2	4	2		H
96	L1-RDI-SB-X (9-11) 201708/5	284,443,285		—		SO	4					1	2	1		H
97	L1-RDI-SB-28 (4-5) 201708/5	438,295,294		13:25		SO	4					1	2	1		A
98	L1-RDI-SB-28 (5-7) 201708/5	290,291,440		13:30		SO	4					1	2	1		H
99	L1-RDI-SB-28 (7-9) 201708/5	427,522,523		13:35		SO	4					1	2	1		H
100	L1-RDI-SB-28 (9-11) 201708/5	249,401,249		13:40		SO	4					1	2	1		H
101	L1-RDI-SB-28 (11-13) 201708/5	526,424,527		13:45		SO	4					1	2	1		H
102	L1-RDI-SB-28 (13-15) 201708/5	532,432,533		13:50		SO	4					1	2	1		H
	L1-RDI-SB-29 (4-5) 201708					SO	4					1	2	1		A
	L1-RDI-SB-29 (5-7) 201708					SO	4					1	2	1		H

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WIP - Wipe; FB - Field Blank; EB Equipment Blank; RB - Rinse Blank; TB Trip Blank

LAB USE ONLY

Turnaround Time (Business days)

Approved by (SGS Accutest PM) / Date:

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other _____
Emergency & Rush T/A data available VIA Labtrk

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results only, Commercial "B" = Results + QC Summary, NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X__NYASP Category B
State Forms
_X_EDD Format AKRF
Other _____

Comments / Special Instructions

H = extract and hold analysis
A = analyze
Keep SDG open

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/15/17 1515	1	2	8/15/17 1740	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___Intact ___Not Intact	Preserved where applicable ___	On Ice X	Cooler Temp.

5.1 5

JC48865: Chain of Custody
Page 10 of 36

SGS ACCUTEST

SCL
FB
STB

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 4

FED-EX Tracking #:
Bottle Order Control #: JC48865
SGS Accutest Quote #:
SGS Accutest Job #:

Client / Reporting Information

Company Name: AKRF, INC.
Street Address: 440 PARK AVE S. 7TH FLR
City: NY State: NY Zip: 10016
Project Contact: AMY JORDAN ASEBOLD@AKRF.COM
Phone #: 646-388-9864 Fax #:
Sampler(s) Name(s): ASEBOLD / S. CLEMENT Phone #: 646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3364 Fulton St.
City: Brooklyn State: NY
Project #: 12492
Client Purchase Order #:
Project Manager: A. JORDAN / D. SHAPIRO
Attention:

Billing Information (if different from Report to):
Company Name:
Street Address:
City State Zip

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	None	Other	MeOH	Encore	CLP VOCs - 8260	PAHs - 8270	RCRA metals - 6020/7470	LAB USE ONLY
103	L1-RDI-SB-29(4-5)20170816	1801 1802 1807	8/16/17	745	AB	SO	5					2	2	1		A			
104	L1-RDI-SB-29(5-7)20170816	1813 1822 1806	8/16/17	750	AB	SO	5					2	2	1		H			
105	FB-2 L1-RDI-FB-2 20170816	—	8/16/17	1510	SC	FB	5	2	1			2				A	A	A	
~~106~~	~~L1-RDI-TB-8 20170816~~	—	8/16/17	1520	SC	FB	~~6~~	2	~~2~~			2				H	H	H	

LAB USE ONLY: M24, P63, 14W3, 4963, 4964, E92, A34, V564

D.I. slurry vac vials frozen storage
Date: 8/17 Time: 22:3 Initials:

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush TAT data available VIA Lablink

INITIAL ASSESSMENT
LABEL VERIFICATION

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] State Forms
- [X] EDD Format AKRF
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

A = analyze ~~A please add preserved TOTB & (RCRA Metals)~~
H = extract and hold analysis.

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1 [signature]	8/16/17 1575	1 Chris Lau	2 Chris Lau	8/16/17 1720	2 [signature]
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable

On Ice: X Cooler Temp: 2.8, 3.6

Form SM088-01CRev.Date 9/13/16

5.1 5

SGS ACCUTEST

FB

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE ___ OF ___

FED EX Tracking #: | Bottle Order Control #: JC48865
SGS Accutest Quote #: | SGS Accutest Job #:

Client / Reporting Information

Company Name: AKRF, INC
Street Address: 440 Park Ave S 7th Floor
City: NY State: NY Zip: 10016
Project Contact: Amy Jordan Ajordan@akrf.com E-mail:
Phone #: 646-388-9821 Fax #:
Sampler(s) Name(s): Angela Bosco 646-388-9576 Phone #:

Project Information

Project Name: Atlantic Chestnut-1071
Street: 324 Fulton St
City: Brooklyn State: NY
Project #: 12402
Client Purchase Order #:
Project Manager: Ajordan / Dshapiro

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

PAHs-8270

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB-Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	METHOD Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	NaOH	ENCORE	PAHs-8270	LAB USE ONLY
65 105	L1-RD1-FB-2-20170816	—	8/16/17	1510		FB	1									H	E76 A29

INITIAL ASESSMENT 3 days
LABEL VERIFICATION DC2

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other _____

Approved By (SGS Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL11 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [X] NYASP Category B
- [ ] State Forms
- [X] EDD Format AKRF
- [ ] Other _____

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

HF extract and hold analysis
add to SDG from 8/16/17
close SDG

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
1	8/17/17 9:45	1	2	8/17/17	2
3		3	4		4
5		5			

Custody Seal # 752 rec'd | Intact: Yes / Not intact | Preserved where applicable | On Ice | Cooler Temp. 2.9°C IP

8/17/17

Form SM088.01CRev.Date 9/13/16

5.1 5

JC48865: Chain of Custody
Page 12 of 36

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 2 OF 4

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job # JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9864
Sampler(s) Name(s) Phone #: SJP
Shira Clement & Adrianna Bosco 646-588-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

CVOCs - EPA 8260

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preservation: NONE	DI	MEOH	Preservation: NONE	CVOCs - EPA 8260
106	L1-RDI-SB-29 (7-9) 201708 / 6	1143 1522	8/16/17	755	AB	SO	4 5		2	2	1	H
107	L1-RDI-SB-29 (9-11) 201708 / 6	1840 1791 1821		800		SO	4 5		2	2	1	H
108	L1-RDI-SB-29 (11-13) 201708 / 6	1784 1854 1785		805		SO	4 5		2	2	1	H
109	L1-RDI-SB-29 (13-15) 201708 / 6	1164 1811 1812		810		SO	4 5		2	2	1	H
110	L1-RDI-SB-30 (4-5) 201708 / 6	1772 1809 1773		830		SO	4 5		2	2	1	A
111	L1-RDI-SB-30 (5-7) 201708 / 6	1774 1775 1808		835		SO	4 5		2	2	1	H
112	L1-RDI-SB-30 (7-9) 201708 / 6	1549 1540 1139		840		SO	4 5		2	2	1	H
113	L1-RDI-SB-30 (9-11) 201708 / 6	1560 1550 1129		845		SO	4 5		2	2	1	H
114	L1-RDI-SB-30 (11-13) 201708 / 6	1540 1539 1130		850		SO	4 5		2	2	1	H
115	L1-RDI-SB-30 (13-15) 201708 / 6	1559 1558 1128		855		SO	4 5		2	2	1	H
116	L1-RDI-SB-31 (4-5) 201708 / 6	1540 1545 1149		915		SO	4 5		2	2	1	A
117	L1-RDI-SB-31(5-7) 201708 / 6	1160 1575		920		SO	4 5		2	2	1	H
	Turnaround Time (Business days)	1570										

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WIPE - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

LAB USE ONLY

Approved by (SGS Accutest PM) / Date

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other
Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X_NYASP Category B
__State Forms
_X_EDD Format AKRF
Other

Comments / Special Instructions

H = extract and hold analysis Close SDG
A = analyze ~~KEEP SDG OPEN~~
~~Keep SDG open~~ Close SDG
AB

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/16/17 1515	1	2	8/16/17 1720	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___ Intact / Not Intact	Preserved where applicable ___	On Ice ___ Cooler Temp.

5.1 5

JC48865: Chain of Custody
Page 13 of 36

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 3 OF 4

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9964
Sampler(s) Name(s) Phone #: Shira Clement & Adrianna Bosco 646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro
Billing Information (if different from Report to): Company Name
Street Address
City State Zip
Attention:

Requested Analysis

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO	NONE	DI	MEOH	ENCORE	CVOCs - EPA 8260	PAHs - EPA 8270	RCRA Metals - EPA 6000/7000	LAB USE ONLY
118	L1-RDI-SB-31 (7-9) 201708	1536 1150 1538	8/10/17	925	AB	SO	5					2	2	1		H			
119	L1-RDI-SB-31 (9-11) 201708	1534 1620 1527		930		SO	5					2	2	1		H			
120	L1-RDI-SB-31 (11-13) 201708	1540 1537 1588		935		SO	5					2	2	1		H			
121	L1-RDI-SB-31 (13-15) 201708	1804 1152 1805		940		SO	5					2	2	1		H			
122	L1-RDI-TB-2 201708	—	8/7/17	1300	—	TB	2	2								A			
~~125~~	~~L1-RDI-FB-2 201708~~	—	8/10/17	1510	SC	FB	5	2		1		2				A	A	A	
119	L1-RDI-SB-31 (9-11) MS/MSD 201708	1822 1820 1828	1805	930	AB	SO	10					4	4	2		A	A	A	
123 ~~120~~ 124 ~~121~~	L1-RDI-SB X (9-11) 201708	1894 1810 1820		—		SO	5					2	2	1		A	A	A	
125 ~~122~~	L1-RDI-SB-32 (4-5) 201708	435 539 530		1005		SO	4					1	2	1		A			
126 ~~123~~	L1-RDI-SB-32 (5-7) 201708	248 299 430		1010		SO	4					1	2	1		H			
127	L1-RDI-SB-32 (7-9) 201708	441 289 288		1015		SO	4					1	2	1		H			
128	L1-RDI-SB-32 (9-11) 201708	516 517 424		1020		SO	4					1	2	1		H			

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Turnaround Time (Business days)
_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other
Emergency & Rush TA data available VIA Lablink

Approved by (SGS Accutest PM) / Date:

Data Deliverable Information
__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X__NYASP Category B
__State Forms
__EDD Format AKRF
Other

Comments / Special Instructions
H = extract and hold analysis Close SDG
A = analyze ~~KEEP SDG OPEN~~
~~Keep SDG open~~ ~~Close SDG~~ AB
Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/10/17 1515	1	2	8/10/17 1720	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___Intact ___Not Intact	Preserved where applicable	On Ice / Cooler Temp.

5.1 5

JC48865: Chain of Custody
Page 14 of 36

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
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www.accutest.com

PAGE 4 OF 4

FED-EX Tracking #

Bottle Order Control #

SGS Accutest Quote #

SGS Accutest Job # JC48865

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9864
Sampler(s) Name(s) Phone #: Shira Clement & Adrianne Bosco 646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCL	NaOH	HNO3	H2SO4	NONE	DI	MEOH	NaO2S2O3	CVOCs - EPA 8260	PAHs - EPA 8270	RCRA Metals - EPA 6000/7000
128	L1-RDI-SB-32 (11-13) 201708 | W	440	8/16/17	1025	AB	SO	4					1	2	1		H		
129	L1-RDI-SB-32 (13-15) 201708 | W	293	1030			SO	4					1	2	1		H		
130	L1-RDI-SB-33 (4-5) 201708 | W	1601	1050			SO	15					2	2	1		A		
131	L1-RDI-SB-33 (5-7) 201708 | W	1582	1055			SO	15					2	2	1		H		
132	L1-RDI-SB-33 (7-9) 201708 | W	1584	1105			SO	15					2	2	1		H		
133	L1-RDI-SB-33 (9-11) 201708 | W	1590	1110			SO	15					2	2	1		H		
134	L1-RDI-SB-33 (11-13) 201708 | W	1605	1115			SO	15					2	2	1		H		
135	L1-RDI-SB-33 (13-15) 201708 | W	1613	1120			SO	15					2	2	1		H		
136	L1-RDI-TB-8 201708 | W	—	8/7/17	1300	—	TB	2	2								H		
~~—~~	~~L1-RDI-FB-8 201708 | W~~		~~8/10/17~~	~~1500~~	~~SC~~	~~TB~~	~~5~~	~~2~~		~~1~~	~~2~~					~~H~~	~~H~~	~~H~~
137	L1-RDI-SB-33 (5-7) MS/MSD 201708 | W	1620	1055		AB	SO	10					4	4	2		H	H	H
138	L1-RDI-SB-X (5-7) 201708 | W	1629		—	AB	SO	15					2	2	1		H	H	H

Turnaround Time (Business days): TAT

Approved by (SGS Accutest PM): Date:

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other
Emergency & Rush T/A data available VIA Lablink

Date Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X_NYASP Category B
__State Forms
_X_EDD Format AKRF
Other

Comments / Special Instructions

H = extract and hold analysis Close SDG
A = analyze KEEP ~~SDG OPEN~~
~~Keep SDG open~~ ~~Close SDG~~ AB

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/10/17 1515	1	2	8/10/17 1720	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___ Intact / Not Intact	Preserved where applicable ___ On Ice ___	Cooler Temp.

5.1 5

JC48865: Chain of Custody
Page 15 of 36

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
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www.accutest.com

PAGE 1 OF 1

FED EX Tracking #:
SGS Accutest Quote #:
Notice Order Control #: JC48865
SGS Accutest Job #:

Client / Reporting Information

Company Name: AKRF, INC.
Street Address: 440 PARK AVE S. 7TH FLR
City: NY State: NY Zip: 10016
Project Contact: AMY JORDAN AJORDAN@AKRF.COM
Phone #: 646-388-9604 Fax #:
Sampler(s) Name(s): ADRIANNA ROSS Phone #: 646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton St.
City: Brooklyn State: NY
Project #: 12492
Client Purchase Order #:
Project Manager: A JORDAN | D. SHAPIRO

Billing Information (if different from Report to):
Company Name:
Street Address:
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet): PAHs - 8270, RCRA Metals - 6020 7470

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	D Water	MEOH	ENCORE	PAHs - 8270	RCRA Metals - 6020 7470	LAB USE ONLY
138	L1-RD1-FB-B-20170816	—	8/16/17	1500	AB	FB	3			1		2				H	H	

INITIAL ASSESSMENT: JAM
LABEL VERIFICATION:

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Approved By (SGS Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] State Forms
- [x] EDD Format AKRF
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

H = extract and hold analysis
Add to SDG from 8/16!

Sample inventory is verified upon receipt in lab

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time: 8/16/17 945	Received By: 1	Relinquished By: 2	Date Time: 8/17/17 12A	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 952	Intact / Not intact	Preserved where applicable

TMS 8/17/17

Form SM088-01CRev.Date 9/13/16

5.1 5

REVISED

JC48865

SGS ACCUTEST

CHAIN OF CUSTODY

PAGE 1 OF 1

Client / Reporting Information

Company Name: AKRF INC.
Street Address: 440 PARK AVE S 7TH FLR
City: NY State: NY Zip Code:
Project Contact: AMY JORDAN
Phone: 646-388-9064
Project Name: MSP LANDING BLDG
Project Manager: A. JORDAN/D SHAPIRO

Project Information

Project Name: Atlantic Chestnut - Lot 1
Address: 2264 Atlantic St.
City: Brooklyn State: NY
Zip: 11233

Requested Analysis (see TEST CODE sheet): OVRS - 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OL - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WIPE - Wipe; FILTER - Filter Blank; TB - Trip Blank

Field ID / Point of Collection	Matrix	Date	Time	Sampled by	Total # of containers	Preservative	OVRS						LAB USE ONLY
11-RDI-FB-8 20708160	—	8/16/17	1500	AB	FB	2	2	H					-138

Turnaround Time (Business Days): ☒ Std. 10 Business Days; ☐ 5 Day RUSH; ☐ 3 Day RUSH; ☐ 2 Day RUSH; ☐ 1 Day RUSH; ☐ other

Deliverables: ☐ Commercial "A" (Level 1); ☐ Commercial "B" (Level 2); ☐ FULL91 (Level 3&4); ☐ NJ Reduced; ☐ Commercial "C"; ☐ NJ Data of Known Quality Protocol Reporting; ☐ NYASP Category A; ☒ NYASP Category B; ☐ State Forms; ☒ EDD Format AKRF; ☐ Other

Special Instructions: H= extract and hold analysis

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by	Date/Time	Received by	Relinquished by	Date/Time	Received by
1 [signature]	8/16/17	1	1		1
2		2	2		2
3		3	3		3
4		4	4		4
5		5	5		5

Custody Seal # ☐ Intact ☐ Broken ☐ Not Applicable; Cooler Temp.:

JC48865: Chain of Custody
Page 17 of 36

SCC
STB
SFB

CHAIN OF CUSTODY

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2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

SGS ACCUTEST

PAGE 1 OF 4

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job # JC55519

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10018
Project Contact E-mail: sjordan@akrf.com; dshapiro@akrf.com
Phone # Fax #: 646-388-9864
Sample(s) Name(s) Phone #: Drew Lewis

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

AKRF CVOCs - EPA 8260

Matrix Codes

DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WIPE - Wipe; FB Field Blank; EB Equipment Blank; RB - Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE (5 Water)	MEOH	ENCORE	AKRF CVOCs - EPA 8260	LAB USE ONLY
1	L1-RDI-SB-11 (5-7) 2017 1115		11/5/17	1050	DL	SO	4					1		3	A	
2	L1-RDI-SB-X (5-7) 2017 1115			1055	DL	SO	4					1		3	A	P73
1	L1-RDI-SB-11 (5-7) MS/MSD 2017 1115	*		1100	DL	SO	8					2		6	A	14B5
3	L1-RDI-TB-1 2017 1115					AQ	2	2				2		2	A	4941
4	L1-RDI-FB-1 2017 1115			1105	DL	AQ	2	2							A	4940
5	L1-RDI-SB-11 (7-9) 2017 1115			1110	DL	SO	4					1		3	A	
6	L1-RDI-SB-11 (9-11) 2017 1115			1115	DL	SO	4					1		3	A	V220
7	L1-RDI-SB-11 (11-13) 2017 1115			1120	DL	SO	4					1		3	A	
8	L1-RDI-SB-11 (13-15) 2017 1115			1125	DL	SO	4					1		3	A	
9	L1-RDI-SB-11 (15-17) 2017 1115			1130	DL	SO	4					1		3	A	
10	L1-RDI-SB-11 (17-19) 2017 1115			1132	DL	SO	4					1		3	A	
11	L1-RDI-SB-11 (19-21) 2017 1115			1135	DL	SO	4					1		3	A	

Turnaround Time (Business days)

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other
Emergency & Rush TA data available VIA Lablink

Approved by: SGS Accutest PM / Date

Date Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X_NYASP Category B
__State Forms
_X_EQD Format AKRF
Other

Comments / Special Instructions

A = analyze
* - 6-5g Encores
** - 3-5g Encores

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11/5/17 1400	1	2	11/5/17 1650	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 984	_X_ Intact __Not Intact	Preserved where applicable ___ On Ice _X_ Cooler Temp. 3.9°C

INITIAL ASESSMENT 3A Dam

LABEL VERIFICATION_____

5.1 5

JC55519: Chain of Custody
Page 1 of 6

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 2 OF 4

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job # JC55519

Client / Reporting Information

Company Name: AKRF, Inc
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: ajordan@akrf.com; dshapiro@akrf.com
Phone # Fax #: 646-388-9064
Sampler(s) Name(s) Phone #: Drew Lewis

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB Field Blank; EB Equipment Blank; RB - Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	Zn Acet	MEOH	ENCORE	AKRF CVOCs - EPA 8260	LAB USE ONLY
12	L1-RDI-SB-11 (21-23) 2017 1115	↑	11/15/17	1140	DL	SO	4					1			3	A	
13	L1-RDI-SB-11 (23-25) 2017 1115			1145	DL	SO	4					1			3	A	
14	L1-RDI-SB-11 (25-27) 2017 1115			1150	DL	SO	4					1			3	A	
15	L1-RDI-SB-11 (27-29) 2017 1115			1155	DL	SO	4					1			3	A	
16	L1-RDI-SB-11 (29-31) 2017 1115	↓	↓	1215	DL	SO	4					1			3	A	

Approved by (SGS Accutest PM) - Date

_K_Std 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other _____
Emergency & Rush TAT data available VIA Lablink

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary, NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_K__NYASP Category B
__State Forms
_K__EQD Format AKRF__
Other _____

Comments / Special Instructions

A = analyze

Sample inventory is verified upon receipt in the Laboratory.

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11/15/17 1465	1 Chris Lad	2 Chris Lad	11/15/17 1650	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 984 __Intact __Not intact	Preserved where applicable ____	On Ice X — Cooler Temp. 3.9°C

JC55519: Chain of Custody
Page 2 of 6

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 3 OF 4

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC55519

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: sjordan@akrf.com, dshapiro@akrf.com
Phone # Fax #: 646 366-0664
Sampler(s) Name(s) Phone #: Drew Lewis

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to):
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

AKRF CVOCs - EPA 8260

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WIP - Wipe
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	H2SO4	HNO3	NaOH	NaOH ZnAc	MEOH	NaHSO4	AKRF CVOCs - EPA 8260	LAB USE ONLY
17	L1-RDI-SB-26 (4-5) 2017 11/15		11.15.17	825	DL	SO	4				1			3	A	
18	L1-RDI-SB-26 (5-7) 2017 11/15			827	DL	SO	4				1			3	A	
19	L1-RDI-SB-X (5-7) 2017 11/15			829	DL	SO	4				1			3	H	
18	L1-RDI-SB-26 (5-7) MS/MSD 2017 11/15			830	DL	SO	8				2	2		6	H	
20	L1-RDI-TB-2 2017 11/15			—	—	AQ	2	2			2			2	H	
21	L1-RDI-FB-2 2017 11/15			840	DL	AQ	2	2							H	
22	L1-RDI-SB-26 (7-9) 2017 11/15			880	DL	SO	4				1			3	H	
23	L1-RDI-SB-26 (9-11) 2017 11/15			835	DL	SO	4				1			3	H	
24	L1-RDI-SB-26 (11-13) 2017 11/15			845	DL	SO	4				1			3	H	
25	L1-RDI-SB-26 (13-15) 2017 11/15			846	DL	SO	4				1			3	H	
26	L1-RDI-SB-26 (15-17) 2017 11/15			848	DL	SO	4				1			3	H	
27	L1-RDI-SB-26 (17-19) 2017 11/15			849	DL	SO	4				1			3	H	

Turnaround Time (Business days)

Approved by SGS Accutest PM: Date

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other _____
Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary, NJ Reduced = Results + QC Summary + Field Raw data
__NYASP Category A
_X_NYASP Category B
__State Forms
_X_EDD Format AKRF
Other _____

Comments / Special Instructions

H = extract and hold analysis
A = analyze

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11/15/17 1445	Chris Lad	2 Chris Lad	11/15/17 16:50	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 484	X Intact / Not Intact	Preserved where applicable ____

On Ice: X
Cooler Temp.: 3.9°C

JC55519: Chain of Custody
Page 3 of 6

5.1 5

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 4 OF 4

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC55519

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: ajordan@akrf.com, dshapiro@akrf.com
Phone # Fax #: 646-388-9864
Sampler(s) Name(s) Phone #: Drew Lewis

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

AKRF CVOCs - EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WIP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	NaSO3	AKRF CVOCs - EPA 8260	LAB USE ONLY
28	L1-RDI-SB-26 (19-21) 2017 1115		11/15/17	0851	DL	SO	4					1			3	H	
29	L1-RDI-SB-26 (21-23) 2017 1115			0900	DL	SO	4					1			3	H	
30	L1-RDI-SB-26 (23-25) 2017 1115			0905	DL	SO	4					1			3	H	
31	L1-RDI-SB-26 (25-27) 2017 1115			0907	DL	SO	4					1			3	H	
	~~L1-RDI-SB-26 (27-29) 2017 1115~~			~~0910~~	~~DL~~	~~SO~~	~~4~~					~~1~~			~~3~~	~~H~~	
	~~L1-RDI-SB-26 (29-31) 2017 1115~~				~~DL~~	~~SO~~						~~1~~			~~3~~	~~H~~	
	~~L1-RDI-SB-26 (31-33) 2017 1115~~				DL	SO						1			3	H	

11.15.17 10:00

Approved by SGS Accutest PM: Date

_X_ Std. 10 Business Days
__ 5 Day RUSH
__ 3 Day RUSH
__ 2 Day RUSH
__ 1 Day RUSH
__ other
Emergency & Rush T/A data available VIA Labtrack

Data Deliverable Information

__ Commercial "A" (Level 1)
__ Commercial "B" (Level 2)
__ FULL T1 (Level 3+4)
__ NJ Reduced
__ Commercial "C"
__ NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary full Required + Results + QC Summary + Partial Raw data
__ NYASP Category A
_X_ NYASP Category B
__ State Forms
_X_ EDD Format AKRF
Other _____

Comments / Special Instructions

H = extract and hold analysis
A = analyze
Close SDG

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	11/17 1405	1 Chris Lard	2 Chris Lard	11/15/17 1650	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 984 _X_ Intact __ Not Intact	Preserved where applicable ___	On Ice _X_ Cooler Temp. 3.9°C

5.1 5

JC55519: Chain of Custody
Page 4 of 6

SLL
FB
STB

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 2

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job # JC57756

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: sjordan@akrf.com; dshapiro@akrf.com
Phone # Fax #: 646-388-9864
Sampler(s) Name(s) Phone #: Elizabeth Malamoros

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro
Billing Information (if different from Report to):
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis: AKRF CVOCs - EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	EnCore	AKRF CVOCs - EPA 8260	LAB USE ONLY
1	L1-RDI-SB-26 (4-5) 20171220		12/20/17	1155	EM	SO	4					1			3	A	P83
2	L1-RDI-SB-26 (5-7) 20171220			1200	EM	SO	4					1			3	A	1451
3	L1-RDI-SB-X (5-7) 20171220			1205	EM	SO	4					1			3	H	49118
2	L1-RDI-SB-26 (5-7) MS/MSD 20171220			1210	EM	SO	8					1			3	H	
4	L1-RDI-TB-2 20171220			—	—	AQ	2	2								H	V560
5	L1-RDI-FB-2 20171220			1320	EM	AQ	2	2								H	
6	L1-RDI-SB-26 (7-9) 20171220			1215	EM	SO	4					1			3	H	
7	L1-RDI-SB-26 (9-11) 20171220			1220	EM	SO	4					1			3	H	
8	L1-RDI-SB-26 (11-13) 20171220			1225	EM	SO	4					1			3	H	
9	L1-RDI-SB-26 (13-15) 20171220			1230	EM	SO	4					1			3	H	
10	L1-RDI-SB-26 (15-17) 20171220			1235	EM	SO	4					1			3	H	
11	L1-RDI-SB-26 (17-19) 20171220	0		1240	EM	SO	4					1			3	H	

Turnaround Time (Business days): X Std. 10 Business Days; X 5 Day RUSH; 3 Day RUSH; 2 Day RUSH; 1 Day RUSH; other; Emergency & Rush TAT data available VIA Labink

Approved by (SGS Acct. Mgr.) / Date: INITIAL ASESSMENT; LABEL VERIFICATION

Data Deliverable Information: Commercial "A" (Level 1); Commercial "B" (Level 2); FULLT1 (Level 3+4); NJ Reduced; Commercial "C"; NJ Data of Known Quality Protocol Reporting; NYASP Category A; X NYASP Category B; State Forms; X EDD Format AKRF; Other

Comments / Special Instructions: H = extract and hold analysis; A = analyze 0 3x5 gram Encores

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	12/20/17 10:00	1 Chris Laul	2 Chris Laul	12/20/17 1826	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 860	X Intact / Not Intact	Preserved where applicable; On Ice X; Cooler Temp. 2.3 °C

5.1 5

JC57756: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 2 OF 2

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job # JC57756

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: ajordan@akrf.com; dshapiro@akrf.com
Phone # Fax #: 646-388-9864
Sampler(s) Name(s) Phone #: Elizabeth Metamoros

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis: AKRF CVOCs - EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AKRF CVOCs - EPA 8260	LAB USE ONLY
12	L1-RDI-SB-26 (19-21) 20171220		12/20/17	12:45	EM	SO	4					1		3		H	
13	L1-RDI-SB-26 (21-23) 20171220			12:50	EM	SO	4					1		3		H	
14	L1-RDI-SB-26 (23-25) 20171220			12:55	EM	SO	4					1		3		H	
15	L1-RDI-SB-26 (25-27) 20171220			13:00	EM	SO	4					1		3		H	
16	L1-RDI-SB-26 (27-29) 20171220			13:05	EM	SO	4					1		3		H	
17	L1-RDI-SB-26 (29-31) 20171220			13:10	EM	SO	4					1		3		H	
	~~L1-RDI-SB-26 (31-33) 20171220~~			~~13:15~~	~~EM~~	~~SO~~	~~4~~					~~1~~		~~3~~		~~H~~	

Approved by (SGS Accutest PM) / Date:

- X Std. 10 Business Days
- X 5 Day RUSH
- _3 Day RUSH
- _2 Day RUSH
- _1 Day RUSH
- _other
- Emergency & Rush TAT data available VIA Lablink

Data Deliverable Information

- _Commercial "A" (Level 1)
- _Commercial "B" (Level 2)
- _FULLT1 (Level 3+4)
- _NJ Reduced
- _Commercial "C"
- _NJ Data of Known Quality Protocol Reporting

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data

- _NYASP Category A
- X NYASP Category B
- _State Forms
- X EDD Format AKRF
- Other

Comments / Special Instructions

H = extract and hold analysis
A = analyze
Close SDG 3KS9 Encore

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	12/20/17 16:00	1 Chris Lord	2 Chris Lord	12/20/17 1825	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 8100	X Intact / Not Intact	Preserved where applicable ___

On Ice: X
Cooler Temp. 2.3°C

JC57756: Chain of Custody
Page 2 of 3

Appendix B
Case Narratives

January 31, 2018

Ms. Deborah Shapiro
AKRF, Inc.
440 Park Avenue South
New York, NY 10016

Re: SGS Accutest – Dayton, NJ Jobs # JC48865 - Reissues

Dear Ms. Shapiro,

The final reports for SGS jobs number JC48865 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the Metals parameter reporting list has been revised. report data has also been excluded for JC48865 -123A; the metal analysis has been resubmitted and only include the correct data set for sample -12 and -21 to meet Clients requirement. The attached revised report incorporates these revisions.

Please contact client services at (732) 329-0200 if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client:	AKRF	**Job No**	JC48865
Site:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY	**Report Date**	1/31/2018 2:09:05 PM

Between 08/11/2017 and 08/16/2017, 64 Sample(s), 3 Trip Blank(s) and 3 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC48865 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V1A7373

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC49030-1MS, JC49030-2DUP were used as the QC samples indicated. (Batch)
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for Chloroform are outside control limits for sample JC49030-2DUP. High RPD due to low concentration of hit (Batch)

Matrix: AQ **Batch ID:** V1A7376

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC49151-1DUP, JC49151-2MS were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria. (Batch)

Matrix: AQ **Batch ID:** V1A7381

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49379-2MS, JC49379-5DUP were used as the QC samples indicated. (Batch)

Matrix: SO **Batch ID:** V3C6322

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-119MS, JC48865-119MSD, JC48865-8MS, JC48865-8MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Trichloroethene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Trichloroethene are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MSD for 1,1,1-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichlorobenzene, 1,2-Dichloroethane, Carbon tetrachloride, Chloroform, cis-1,2-Dichloroethene, Methylene chloride, Tetrachloroethene, trans-1,2-Dichloroethene, Trichloroethene, Vinyl chloride are outside control limits for sample JC48865-8MSD. Outside control limits due to matrix interference.

Matrix: SO **Batch ID:** V3V1470

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-1MS, JC48865-1MSD were used as the QC samples indicated.
- JC48865-61 for Dibromofluoromethane: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix: SO **Batch ID:** V3V1473

- All samples were analyzed within the recommended method holding time.

JGR 2/16/18

SGS

MS Volatiles By Method SW846 8260C

Matrix: SO **Batch ID:** V3V1473

- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49203-1DUP, JC49203-3MS were used as the QC samples indicated. (Batch)
- JC48865-61: Confirmation run for surrogate recoveries.
- JC48865-16 for cis-1,2-Dichloroethene: This compound in BS is outside in house QC limits bias high.
- V3V1473-BS for cis-1,2-Dichloroethene: High percent recoveries and no associated positive reported in the QC batch.

Matrix: SO **Batch ID:** V3V1476

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-91MS, JC48865-91MSD were used as the QC samples indicated.
- RPD(s) for MSD for 1,1,1-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichlorobenzene, 1,2-Dichloroethane, Carbon tetrachloride, Chloroform, cis-1,2-Dichloroethene, Methylene chloride, Tetrachloroethene, trans-1,2-Dichloroethene, Trichloroethene are outside control limits for sample JC48865-91MSD. Outside control limits due to matrix interference.

Matrix: SO **Batch ID:** V3V1477

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-128MS, JC48865-129DUP were used as the QC samples indicated.
- RPD(s) for Duplicate for Trichloroethene are outside control limits for sample JC48865-129DUP. High RPD due to possible sample nonhomogeneity.

Matrix: SO **Batch ID:** V3V1487

- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-84MS, JC48865-85DUP were used as the QC samples indicated.
- The following samples were run outside of holding time for method SW846 8260C: JC48865-83, JC48865-84, JC48865-85 Sample analyzed outside the holding time per client's request.
- RPD(s) for Duplicate for Trichloroethene are outside control limits for sample JC48865-85DUP. High RPD due to possible sample nonhomogeneity.
- JC48865-85DUP: Sample analyzed outside the holding time per client's request.
- JC48865-84MS: Sample analyzed outside the holding time per client's request.

Matrix: SO **Batch ID:** VD10166

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC48972-4MS, JC48972-4MSD were used as the QC samples indicated. (Batch)
- All method blanks for this batch meet method specific criteria.
- JC48865-28: Diluted due to high concentration of target compound.
- JC48865-82: Confirmation run.

Matrix: SO **Batch ID:** VD10169

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49336-1MS, JC49336-1MSD were used as the QC samples indicated. (Batch)

Matrix: SO **Batch ID:** VE10617

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC49017-5MS, JC49017-5MSD were used as the QC samples indicated. (Batch)
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** VE10620

2/16/18

MS Volatiles By Method SW846 8260C

Matrix: SO	Batch ID: VE10620

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC49135-6MS, JC49135-6MSD were used as the QC samples indicated. (Batch)
- All method blanks for this batch meet method specific criteria.

Matrix: SO	Batch ID: VV7165

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49050-1DUP, JC49050-2MS were used as the QC samples indicated. (Batch)

Matrix: SO	Batch ID: VX7394

- Sample(s) JC48865-86MS, JC48865-87DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The following samples were run outside of holding time for method SW846 8260C: JC48865-86, JC48865-87 Sample analyzed outside the holding time per client's request.

Matrix: SO	Batch ID: VY7563

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC48865-29MS, JC48865-30DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

MS Semi-volatiles By Method SW846 8270D

Matrix: AQ	Batch ID: OP5376

- All samples were extracted within the recommended method holding time.
- Sample(s) JC48908-1MS, JC48908-1MSD were used as the QC samples indicated. (Batch)
- All method blanks for this batch meet method specific criteria.

Matrix: SO	Batch ID: OP5363

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-1MS, JC48865-1MSD were used as the QC samples indicated.

Matrix: SO	Batch ID: OP5430

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49075-6MS, JC49075-6MSD were used as the QC samples indicated.

SAP 2/16/18

Metals Analysis By Method SW846 6010C

Matrix: AQ	Batch ID: MP2448

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48887-1AFSDL, JC48887-1AMS, JC48887-1AMSD, JC48887-1ASDL were used as the QC samples for metals. (Batch)
- RPD(s) for Serial Dilution for Chromium are outside control limits for sample MP2448-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: AQ	Batch ID: MP2474

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49063-1MS, JC49063-1MSD, JC49063-1SDL were used as the QC samples for metals. (Batch)
- RPD(s) for Serial Dilution for Arsenic, Chromium are outside control limits for sample MP2474-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: SO	Batch ID: MP2446

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-1MS, JC48865-1MSD, JC48865-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Cadmium are outside control limits for sample MP2446-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: SO	Batch ID: MP2484

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49051-6MS, JC49051-6MSD, JC49051-6SDL were used as the QC samples for metals. (Batch)
- RPD(s) for Serial Dilution for Selenium, Silver are outside control limits for sample MP2484-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Matrix: SO	Batch ID: MP2504

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49211-2MS, JC49211-2MSD, JC49211-2SDL were used as the QC samples for metals. (Batch)
- RPD(s) for Serial Dilution for Arsenic, Cadmium, Silver are outside control limits for sample MP2504-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals Analysis By Method SW846 7470A

Matrix: AQ	Batch ID: MP2477

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48784-1AFMS, JC48784-1AFMSD were used as the QC samples for metals. (Batch)

Matrix: AQ	Batch ID: MP2525

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49208-1MSD, JC49208-1PS, JC49208-1DUP, JC49208-1MS were used as the QC samples for metals. (Batch)
- Matrix Spike Recovery(s) for Mercury are outside control limits. Spike recovery indicates possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for Mercury are outside control limits. Spike recovery indicates possible matrix interference.
- RPD(s) for Duplicate for Mercury are outside control limits for sample MP2525-D1. High rpd due to possible sample nonhomogeneity.

SGS

Metals Analysis By Method SW846 7471B

Matrix: SO	Batch ID: MP2482

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-1MS, JC48865-1MSD were used as the QC samples for metals.

Matrix: SO	Batch ID: MP2516

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC48865-12AMS, JC48865-12AMSD were used as the QC samples for metals.

General Chemistry By Method SM2540 G-97

Matrix: SO	Batch ID: GN68260

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN68282

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN68316

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN68328

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN68420

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN68539

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN68541

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN68557

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN69039

- The data for SM2540 G-97 meets quality control requirements.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client:	AKRF	**Job No**	JC55519
Site:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY	**Report Date**	12/12/2017 8:57:51 A

On 11/15/2017, 16 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 4.8 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC55519 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V2D7214

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC56039-1MS, JC56039-1MSD were used as the QC samples indicated. (Batch)
- RPD(s) for MSD for Vinyl chloride are outside control limits for sample JC56039-1MSD. Outside control limits due to matrix interference. (Batch)

Matrix: SO **Batch ID:** V3C6378

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC54804-123DUP, JC54804-124MS were used as the QC samples indicated. (Batch)
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Trichloroethene are outside control limits.
- RPD(s) for Duplicate for cis-1,2-Dichloroethene, Trichloroethene are outside control limits for sample JC54804-123DUP. Analytical precision exceeds in-house control limits.
- JC55519-14 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-2 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-15 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-12 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-11 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-10 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-7 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-5 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-6 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-1 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-17 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-16 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC55519-9 for 1,2-Dichloroethane: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** V3C6379

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC55519-1MS, JC55519-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Trichloroethene are outside control limits. Outside control limits due to matrix interference.

JAM 2/17/18

MS Volatiles By Method SW846 8260C

Matrix: SO	Batch ID: V3C6379

- RPD(s) for MSD for Trichloroethene are outside control limits for sample JC55519-1MSD. Outside control limits due to matrix interference.

Matrix: SO	Batch ID: V3V1562

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC55847-2MS, JC55847-2MSD were used as the QC samples indicated. (Batch)

Matrix: SO	Batch ID: V3V1563

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC55545-10MS, JC55545-10MSD were used as the QC samples indicated. (Batch)

Matrix: SO	Batch ID: VI8720

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC55519-18MS, JC55519-18MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Trichloroethene are outside of in house control limits.
- Matrix Spike Duplicate Recovery(s) for Trichloroethene are outside of in house control limits.
- RPD(s) for MSD for Trichloroethene are outside of in house control limits for sample JC55519-18MSD.

General Chemistry By Method SM2540 G-97

Matrix: SO	Batch ID: GN72759

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN72761

- The data for SM2540 G-97 meets quality control requirements.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

SGS 12/17/18

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client:	AKRF	**Job No**	JC57756
Site:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY	**Report Date**	1/8/2018 4:49:15 PM

On 12/20/2017, 15 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC57756 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** V2D7254

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC57935-4MS, JC57935-4MSD were used as the QC samples indicated. (Batch)

Matrix: SO **Batch ID:** VI8745

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC57756-2MS, JC57756-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Carbon tetrachloride, Trichloroethene are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MSD for 1,2-Dichlorobenzene, Trichloroethene are outside control limits for sample JC57756-2MSD. Outside control limits due to matrix interference.
- JC57756-2MSD for Trichloroethene: Outside control limits due to matrix interference.
- JC57756-7 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-6 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-3 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-3 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-1 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-1 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-17 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-2 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-7 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-2 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-13 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-17 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-16 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-16 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-15 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-15 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-14 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-6 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-13 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-8 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.

JM 1/8/18

Volatiles by GCMS By Method SW846 8260C

Matrix: SO	Batch ID: VI8745

- JC57756-12 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-12 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-11 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-11 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-10 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-10 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-9 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-9 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.
- JC57756-8 for Carbon tetrachloride: Associated CCV outside of control limits high, sample was ND.
- JC57756-14 for 1,1,1-Trichloroethane: Associated CCV outside of control limits high, sample was ND.

Wet Chemistry By Method SM2540 G-97

Matrix: SO	Batch ID: GN74263

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN74364

- The data for SM2540 G-97 meets quality control requirements.

Matrix: SO	Batch ID: GN74366

- The data for SM2540 G-97 meets quality control requirements.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

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Appendix C
Data Summary Form I's
with Qualifications

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-34(13-15) 20170811		
Lab Sample ID:	JC48865-1	Date Sampled:	08/11/17
Matrix:	SO - Soil	Date Received:	08/11/17
Method:	SW846 8260C	Percent Solids:	95.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36747.D	1	08/17/17 02:08	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00065	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00071	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0050	0.0025	mg/kg	
127-18-4	Tetrachloroethene	0.0026	0.0020	0.00064	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	0.0358	0.0010	0.00055	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00077	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-34(13-15) 20170811		
Lab Sample ID:	JC48865-1	Date Sampled:	08/11/17
Matrix:	SO - Soil	Date Received:	08/11/17
Method:	SW846 8270D SW846 3546	Percent Solids:	95.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P40608.D	1	08/23/17 07:35	CS	08/16/17 12:00	OP5363	E6P1871
Run #2							

	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.033	0.011	mg/kg	
208-96-8	Acenaphthylene	ND	0.033	0.017	mg/kg	
120-12-7	Anthracene	ND	0.033	0.020	mg/kg	
56-55-3	Benzo(a)anthracene	0.0270	0.033	0.0094	mg/kg	J
50-32-8	Benzo(a)pyrene	0.0197	0.033	0.015	mg/kg	J
205-99-2	Benzo(b)fluoranthene	0.0466	0.033	0.015	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.0175	0.033	0.017	mg/kg	J
207-08-9	Benzo(k)fluoranthene	ND	0.033	0.015	mg/kg	
218-01-9	Chrysene	0.0299	0.033	0.010	mg/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.033	0.015	mg/kg	
206-44-0	Fluoranthene	0.0332	0.033	0.015	mg/kg	
86-73-7	Fluorene	ND	0.033	0.015	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0162	0.033	0.016	mg/kg	J
91-20-3	Naphthalene	ND	0.033	0.0094	mg/kg	
85-01-8	Phenanthrene	0.0206	0.033	0.011	mg/kg	J
129-00-0	Pyrene	0.0334	0.033	0.011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%		26-134%
321-60-8	2-Fluorobiphenyl	63%		39-124%
1718-51-0	Terphenyl-d14	76%		36-134%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-SB-34(13-15) 20170811		
Lab Sample ID:	JC48865-1	**Date Sampled:**	08/11/17
Matrix:	SO - Soil	**Date Received:**	08/11/17
		Percent Solids:	95.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

4.1

4

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.2	2.2	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Barium	27.7	22	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.55	0.55	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Chromium	11.0	1.1	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Lead	26.9	2.2	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	08/17/17	08/17/17	JA	SW846 7471B [2]	SW846 7471B [4]
Selenium	< 2.2	2.2	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.55	0.55	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA42619
(2) Instrument QC Batch: MA42622
(3) Prep QC Batch: MP2446
(4) Prep QC Batch: MP2482

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-35(13-15) 20170811		
Lab Sample ID:	JC48865-2	Date Sampled:	08/11/17
Matrix:	SO - Soil	Date Received:	08/11/17
Method:	SW846 8260C	Percent Solids:	97.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36748.D	1	08/17/17 02:34	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00069	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00035	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00055	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00076	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00043	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00063	mg/kg	
75-09-2	Methylene chloride	ND	0.0054	0.0027	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00068	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00062	mg/kg	
79-01-6	Trichloroethene	0.00080	0.0011	0.00059	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0021	0.00082	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	101%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-35(13-15) 20170811		
Lab Sample ID:	JC48865-2	Date Sampled:	08/11/17
Matrix:	SO - Soil	Date Received:	08/11/17
Method:	SW846 8270D SW846 3546	Percent Solids:	97.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P40575.D	1	08/22/17 15:43	FW	08/16/17 12:00	OP5363	E6P1870
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.033	0.011	mg/kg	
208-96-8	Acenaphthylene	ND	0.033	0.017	mg/kg	
120-12-7	Anthracene	ND	0.033	0.020	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.033	0.0094	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.033	0.015	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.033	0.015	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.033	0.017	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.033	0.016	mg/kg	
218-01-9	Chrysene	ND	0.033	0.010	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.033	0.015	mg/kg	
206-44-0	Fluoranthene	ND	0.033	0.015	mg/kg	
86-73-7	Fluorene	ND	0.033	0.015	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.033	0.016	mg/kg	
91-20-3	Naphthalene	ND	0.033	0.0094	mg/kg	
85-01-8	Phenanthrene	ND	0.033	0.011	mg/kg	
129-00-0	Pyrene	ND	0.033	0.011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		26-134%
321-60-8	2-Fluorobiphenyl	60%		39-124%
1718-51-0	Terphenyl-d14	73%		36-134%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-SB-35(13-15) 20170811		
Lab Sample ID:	JC48865-2	**Date Sampled:**	08/11/17
Matrix:	SO - Soil	**Date Received:**	08/11/17
		Percent Solids:	97.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.1	2.1	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Barium	21.9	21	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.52	0.52	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Chromium	11.4	1.0	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Lead	2.1	2.1	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	08/17/17	08/17/17	JA	SW846 7471B [2]	SW846 7471B [4]
Selenium	< 2.1	2.1	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.52	0.52	mg/kg	1	08/15/17	08/16/17	AB	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA42619
(2) Instrument QC Batch: MA42622
(3) Prep QC Batch: MP2446
(4) Prep QC Batch: MP2482

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-36(13-15) 20170811		
Lab Sample ID:	JC48865-3	Date Sampled:	08/11/17
Matrix:	SO - Soil	Date Received:	08/11/17
Method:	SW846 8260C	Percent Solids:	96.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36749.D	1	08/17/17 03:00	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00065	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00032	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00051	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00070	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00040	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00058	mg/kg	
75-09-2	Methylene chloride	ND	0.0050	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00063	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00058	mg/kg	
79-01-6	Trichloroethene	0.00056	0.0010	0.00055	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0020	0.00076	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-129%
17060-07-0	1,2-Dichloroethane-D4	104%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-36(13-15) 20170811		
Lab Sample ID:	JC48865-3	Date Sampled:	08/11/17
Matrix:	SO - Soil	Date Received:	08/11/17
Method:	SW846 8270D SW846 3546	Percent Solids:	96.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P40576.D	1	08/22/17 16:08	FW	08/16/17 12:00	OP5363	E6P1870
Run #2							

	Initial Weight	Final Volume
Run #1	31.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.033	0.011	mg/kg	
208-96-8	Acenaphthylene	ND	0.033	0.017	mg/kg	
120-12-7	Anthracene	ND	0.033	0.020	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.033	0.0094	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.033	0.015	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.033	0.015	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.033	0.017	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.033	0.016	mg/kg	
218-01-9	Chrysene	ND	0.033	0.010	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.033	0.015	mg/kg	
206-44-0	Fluoranthene	ND	0.033	0.015	mg/kg	
86-73-7	Fluorene	ND	0.033	0.015	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.033	0.016	mg/kg	
91-20-3	Naphthalene	ND	0.033	0.0094	mg/kg	
85-01-8	Phenanthrene	ND	0.033	0.011	mg/kg	
129-00-0	Pyrene	ND	0.033	0.011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		26-134%
321-60-8	2-Fluorobiphenyl	61%		39-124%
1718-51-0	Terphenyl-d14	70%		36-134%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-SB-36(13-15) 20170811		
Lab Sample ID:	JC48865-3	**Date Sampled:**	08/11/17
Matrix:	SO - Soil	**Date Received:**	08/11/17
		Percent Solids:	96.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.1	2.1	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Barium	< 21	21	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.52	0.52	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Chromium	13.9	1.0	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Lead	2.7	2.1	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.032	0.032	mg/kg	1	08/17/17	08/17/17	JA	SW846 7471B [2]	SW846 7471B [4]
Selenium	< 2.1	2.1	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.52	0.52	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA42619
(2) Instrument QC Batch: MA42622
(3) Prep QC Batch: MP2446
(4) Prep QC Batch: MP2482

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-TB-1 20170811		
Lab Sample ID:	JC48865-4	Date Sampled:	08/11/17
Matrix:	AQ - Trip Blank Soil	Date Received:	08/11/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A173620.D	1	08/17/17 17:58	VC	n/a	n/a	V1A7373
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-FB-1 20170811		
Lab Sample ID:	JC48865-5	Date Sampled:	08/11/17
Matrix:	AQ - Field Blank Soil	Date Received:	08/11/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A173621.D	1	08/17/17 18:28	VC	n/a	n/a	V1A7373
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-FB-1 20170811		
Lab Sample ID:	JC48865-5	Date Sampled:	08/11/17
Matrix:	AQ - Field Blank Soil	Date Received:	08/11/17
Method:	SW846 8270D SW846 3510C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E96171.D	1	08/17/17 14:11	KLS	08/16/17 09:00	OP5376	E3E4283
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1.0	0.20	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.21	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.22	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.35	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.34	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.18	ug/l	
86-73-7	Fluorene	ND	1.0	0.18	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.34	ug/l	
91-20-3	Naphthalene	ND	1.0	0.24	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.23	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		34-128%
321-60-8	2-Fluorobiphenyl	73%		38-119%
1718-51-0	Terphenyl-d14	96%		26-129%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-FB-1 20170811		
Lab Sample ID:	JC48865-5	**Date Sampled:**	08/11/17
Matrix:	AQ - Field Blank Soil	**Date Received:**	08/11/17
		Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 3.0	3.0	ug/l	1	08/15/17	08/16/17	ND	SW846 6010C [2]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	08/15/17	08/16/17	ND	SW846 6010C [2]	SW846 3010A [3]
Cadmium	< 3.0	3.0	ug/l	1	08/15/17	08/16/17	ND	SW846 6010C [2]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	08/15/17	08/16/17	ND	SW846 6010C [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	08/15/17	08/16/17	ND	SW846 6010C [2]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	08/17/17	08/17/17	JA	SW846 7470A [1]	SW846 7470A [4]
Selenium	< 10	10	ug/l	1	08/15/17	08/16/17	ND	SW846 6010C [2]	SW846 3010A [3]
Silver	< 10	10	ug/l	1	08/15/17	08/16/17	ND	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA42620
(2) Instrument QC Batch: MA42621
(3) Prep QC Batch: MP2448
(4) Prep QC Batch: MP2477

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-X(13-15) 20170811		
Lab Sample ID:	JC48865-6 (L1-RDI-SB-23 (13-15) 20170811)	Date Sampled:	08/11/17
Matrix:	SO - Soil	Date Received:	08/11/17
Method:	SW846 8260C	Percent Solids:	96.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36750.D	1	08/17/17 03:26	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00067	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00073	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00061	mg/kg	
75-09-2	Methylene chloride	ND	0.0052	0.0026	mg/kg	
127-18-4	Tetrachloroethene	0.0018	0.0021	0.00066	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00060	mg/kg	
79-01-6	Trichloroethene	0.0274	0.0010	0.00057	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00079	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	102%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

8/17/16118

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.6
4

Client Sample ID:	L1-RDI-SB-X(13-15) 20170811		
Lab Sample ID:	JC48865-6 (L1-RDI-SB-3Y(13-15) 20170811)	Date Sampled:	08/11/17
Matrix:	SO - Soil	Date Received:	08/11/17
Method:	SW846 8270D SW846 3546	Percent Solids:	96.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P40609.D	1	08/23/17 07:59	CS	08/16/17 12:00	OP5363	E6P1871
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.034	0.012	mg/kg	
208-96-8	Acenaphthylene	ND	0.034	0.017	mg/kg	
120-12-7	Anthracene	ND	0.034	0.021	mg/kg	
56-55-3	Benzo(a)anthracene	0.0256	0.034	0.0097	mg/kg	J
50-32-8	Benzo(a)pyrene	0.0216	0.034	0.016	mg/kg	J
205-99-2	Benzo(b)fluoranthene	0.0395	0.034	0.015	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.0215	0.034	0.017	mg/kg	J
207-08-9	Benzo(k)fluoranthene	ND	0.034	0.016	mg/kg	
218-01-9	Chrysene	0.0289	0.034	0.011	mg/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.034	0.015	mg/kg	
206-44-0	Fluoranthene	0.0356	0.034	0.015	mg/kg	
86-73-7	Fluorene	ND	0.034	0.016	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0167	0.034	0.016	mg/kg	J
91-20-3	Naphthalene	ND	0.034	0.0097	mg/kg	
85-01-8	Phenanthrene	0.0213	0.034	0.012	mg/kg	J
129-00-0	Pyrene	0.0304	0.034	0.011	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		26-134%
321-60-8	2-Fluorobiphenyl	59%		39-124%
1718-51-0	Terphenyl-d14	83%		36-134%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2/18/18

Report of Analysis

4.6

4

Client Sample ID:	L1-RDI-SB-X(13-15) 20170811			
Lab Sample ID:	JC48865-6	CL1-RDI-SB-34 (13-15) 20170811	**Date Sampled:**	08/11/17
Matrix:	SO - Soil		**Date Received:**	08/11/17
			Percent Solids:	96.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY			

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.1	2.1	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Barium	26.9	21	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.54	0.54	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Chromium	10.6	1.1	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Lead	25.3	2.1	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	08/17/17	08/17/17	JA	SW846 7471B [2]	SW846 7471B [4]
Selenium	< 2.1	2.1	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.54	0.54	mg/kg	1	08/15/17	08/17/17	AB	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA42619
(2) Instrument QC Batch: MA42622
(3) Prep QC Batch: MP2446
(4) Prep QC Batch: MP2482

RL = Reporting Limit

2/16/18

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-15(5) 20170814		
Lab Sample ID:	JC48865-7	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	83.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36751.D	1	08/17/17 03:52	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	6.1 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00064	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00032	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00099	0.00051	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00099	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00099	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00099	0.00070	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00099	0.00040	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00099	0.00058	mg/kg	
75-09-2	Methylene chloride	ND	0.0049	0.0025	mg/kg	
127-18-4	Tetrachloroethene	0.0426	0.0020	0.00063	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00057	mg/kg	
79-01-6	Trichloroethene	0.0167	0.00099	0.00054	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00076	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	105%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-15(5) 20170814		
Lab Sample ID:	JC48865-7A	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8270D SW846 3546	Percent Solids:	83.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E96293.D	1	08/23/17 14:43	KLS	08/18/17 01:19	OP5430	E3E4288
Run #2							

	Initial Weight	Final Volume
Run #1	31.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.039	0.013	mg/kg	
208-96-8	Acenaphthylene	ND	0.039	0.020	mg/kg	
120-12-7	Anthracene	ND	0.039	0.024	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.039	0.011	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.039	0.018	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.039	0.017	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.039	0.019	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.039	0.018	mg/kg	
218-01-9	Chrysene	ND	0.039	0.012	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.039	0.017	mg/kg	
206-44-0	Fluoranthene	ND	0.039	0.017	mg/kg	
86-73-7	Fluorene	ND	0.039	0.018	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.039	0.018	mg/kg	
91-20-3	Naphthalene	ND	0.039	0.011	mg/kg	
85-01-8	Phenanthrene	ND	0.039	0.013	mg/kg	
129-00-0	Pyrene	ND	0.039	0.012	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	100%		26-134%
321-60-8	2-Fluorobiphenyl	77%		39-124%
1718-51-0	Terphenyl-d14	99%		36-134%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-SB-15(5) 20170814		
Lab Sample ID:	JC48865-7A	**Date Sampled:**	08/14/17
Matrix:	SO - Soil	**Date Received:**	08/14/17
		Percent Solids:	83.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	5.6	2.5	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Barium	62.5	25	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.63	0.63	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Chromium	27.6	1.3	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Lead	10.8	2.5	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.036	0.036	mg/kg	1	08/18/17	08/19/17	JA	SW846 7471B [2]	SW846 7471B [4]
Selenium	< 2.5	2.5	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.63	0.63	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA42636
(2) Instrument QC Batch: MA42637
(3) Prep QC Batch: MP2484
(4) Prep QC Batch: MP2516

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-15(7) 20170814		
Lab Sample ID:	JC48865-8	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	93.9
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C139285.D	1	08/24/17 12:58	PS	n/a	n/a	V3C6322
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00069	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00055	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00075	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00043	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00062	mg/kg	
75-09-2	Methylene chloride	ND	0.0053	0.0027	mg/kg	
127-18-4	Tetrachloroethene	0.0012	0.0021	0.00068	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00062	mg/kg	
79-01-6	Trichloroethene	ND	0.0011	0.00058	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00081	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		72-129%
17060-07-0	1,2-Dichloroethane-D4	106%		73-132%
2037-26-5	Toluene-D8	91%		80-120%
460-00-4	4-Bromofluorobenzene	112%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-15(15) 20170814		
Lab Sample ID:	JC48865-12	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	97.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36752.D	1	08/17/17 04:18	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0022	0.00073	mg/kg	
67-66-3	Chloroform	ND	0.0022	0.00036	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00058	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00020	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00079	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00045	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00065	mg/kg	
75-09-2	Methylene chloride	ND	0.0056	0.0028	mg/kg	
127-18-4	Tetrachloroethene	0.0022	0.0022	0.00071	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00065	mg/kg	
79-01-6	Trichloroethene	0.0014	0.0011	0.00061	mg/kg	
75-01-4	Vinyl chloride	ND	0.0022	0.00086	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	102%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-15(15) 20170814		
Lab Sample ID:	JC48865-12A	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8270D SW846 3546	Percent Solids:	97.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E96294.D	1	08/23/17 15:09	KLS	08/18/17 01:19	OP5430	E3E4288
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.034	0.012	mg/kg	
208-96-8	Acenaphthylene	ND	0.034	0.017	mg/kg	
120-12-7	Anthracene	ND	0.034	0.021	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.034	0.0095	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.034	0.015	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.034	0.015	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.034	0.017	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.034	0.016	mg/kg	
218-01-9	Chrysene	ND	0.034	0.011	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.034	0.015	mg/kg	
206-44-0	Fluoranthene	ND	0.034	0.015	mg/kg	
86-73-7	Fluorene	ND	0.034	0.015	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.034	0.016	mg/kg	
91-20-3	Naphthalene	ND	0.034	0.0095	mg/kg	
85-01-8	Phenanthrene	ND	0.034	0.011	mg/kg	
129-00-0	Pyrene	ND	0.034	0.011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	101%		26-134%
321-60-8	2-Fluorobiphenyl	78%		39-124%
1718-51-0	Terphenyl-d14	102%		36-134%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-SB-15(15) 20170814		
Lab Sample ID:	JC48865-12A	**Date Sampled:**	08/14/17
Matrix:	SO - Soil	**Date Received:**	08/14/17
		Percent Solids:	97.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.1	2.1	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Barium	< 21	21	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.53	0.53	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Chromium	9.2	1.1	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Lead	3.5	2.1	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.034	0.034	mg/kg	1	08/18/17	08/19/17	JA	SW846 7471B [2]	SW846 7471B [4]
Selenium	< 2.1	2.1	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.53	0.53	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA42636
(2) Instrument QC Batch: MA42637
(3) Prep QC Batch: MP2484
(4) Prep QC Batch: MP2516

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-TB-4 20170814		
Lab Sample ID:	JC48865-13	Date Sampled:	08/14/17
Matrix:	AQ - Trip Blank Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A173822.D	1	08/24/17 01:35	VC	n/a	n/a	V1A7381
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-FB-4 20170814		
Lab Sample ID:	JC48865-14	Date Sampled:	08/14/17
Matrix:	AQ - Field Blank Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A173823.D	1	08/24/17 02:04	VC	n/a	n/a	V1A7381
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	100%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-X(7) 20170814		
Lab Sample ID:	JC48865-15 (L1-RDI-SB-15(7) 20170814)	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	97.1
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C139286.D	1	08/24/17 13:26	PS	n/a	n/a	V3C6322
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00068	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00061	mg/kg	
75-09-2	Methylene chloride	ND	0.0053	0.0026	mg/kg	
127-18-4	Tetrachloroethene	0.0012	0.0021	0.00067	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00061	mg/kg	
79-01-6	Trichloroethene	0.00061	0.0011	0.00057	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0021	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		72-129%
17060-07-0	1,2-Dichloroethane-D4	107%		73-132%
2037-26-5	Toluene-D8	91%		80-120%
460-00-4	4-Bromofluorobenzene	111%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Pam 2/16/18

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-16(5) 20170814		
Lab Sample ID:	JC48865-16	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	89.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36817.D	1	08/19/17 03:18	TDN	n/a	n/a	V3V1473
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00068	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethene [a]	ND	0.0010	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00061	mg/kg	
75-09-2	Methylene chloride	ND	0.0052	0.0026	mg/kg	
127-18-4	Tetrachloroethene	0.0137	0.0021	0.00066	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00060	mg/kg	
79-01-6	Trichloroethene	0.0054	0.0010	0.00057	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-129%
17060-07-0	1,2-Dichloroethane-D4	104%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

(a) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-16(5) 20170814		
Lab Sample ID:	JC48865-16A	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8270D SW846 3546	Percent Solids:	89.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6P40610.D	1	08/23/17 08:23	CS	08/16/17 08:00	OP5363	E6P1871
Run #2							

	Initial Weight	Final Volume
Run #1	31.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.036	0.012	mg/kg	
208-96-8	Acenaphthylene	ND	0.036	0.018	mg/kg	
120-12-7	Anthracene	ND	0.036	0.022	mg/kg	
56-55-3	Benzo(a)anthracene	0.117	0.036	0.010	mg/kg	
50-32-8	Benzo(a)pyrene	0.0888	0.036	0.016	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.145	0.036	0.016	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.0670	0.036	0.018	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.0404	0.036	0.017	mg/kg	
218-01-9	Chrysene	0.160	0.036	0.011	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.0248	0.036	0.016	mg/kg	J
206-44-0	Fluoranthene	0.185	0.036	0.016	mg/kg	
86-73-7	Fluorene	ND	0.036	0.017	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0596	0.036	0.017	mg/kg	
91-20-3	Naphthalene	0.0203	0.036	0.010	mg/kg	J
85-01-8	Phenanthrene	0.165	0.036	0.012	mg/kg	
129-00-0	Pyrene	0.184	0.036	0.012	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		26-134%
321-60-8	2-Fluorobiphenyl	73%		39-124%
1718-51-0	Terphenyl-d14	84%		36-134%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-SB-16(5) 20170814		
Lab Sample ID:	JC48865-16A	**Date Sampled:**	08/14/17
Matrix:	SO - Soil	**Date Received:**	08/14/17
		Percent Solids:	89.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	10.4	2.3	mg/kg	1	08/19/17	08/21/17	GT	SW846 6010C [2]	SW846 3050B [3]
Barium	257	23	mg/kg	1	08/19/17	08/21/17	GT	SW846 6010C [2]	SW846 3050B [3]
Cadmium	0.58	0.58	mg/kg	1	08/19/17	08/21/17	GT	SW846 6010C [2]	SW846 3050B [3]
Chromium	21.2	1.2	mg/kg	1	08/19/17	08/21/17	GT	SW846 6010C [2]	SW846 3050B [3]
Lead	312	2.3	mg/kg	1	08/19/17	08/21/17	GT	SW846 6010C [2]	SW846 3050B [3]
Mercury	< 0.036	0.036	mg/kg	1	08/18/17	08/19/17	JA	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.3	2.3	mg/kg	1	08/19/17	08/21/17	GT	SW846 6010C [2]	SW846 3050B [3]
Silver	< 0.58	0.58	mg/kg	1	08/19/17	08/21/17	GT	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA42637
(2) Instrument QC Batch: MA42646
(3) Prep QC Batch: MP2504
(4) Prep QC Batch: MP2516

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-16(15) 20170814		
Lab Sample ID:	JC48865-21	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	95.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36754.D	1	08/17/17 05:10	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00068	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00061	mg/kg	
75-09-2	Methylene chloride	ND	0.0052	0.0026	mg/kg	
127-18-4	Tetrachloroethene	0.00092	0.0021	0.00067	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00061	mg/kg	
79-01-6	Trichloroethene	ND	0.0010	0.00057	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	102%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-16(15) 20170814		
Lab Sample ID:	JC48865-21A	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8270D SW846 3546	Percent Solids:	95.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E96296.D	1	08/23/17 16:54	KLS	08/18/17 01:19	OP5430	E3E4288
Run #2							

	Initial Weight	Final Volume
Run #1	31.7 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.033	0.011	mg/kg	
208-96-8	Acenaphthylene	ND	0.033	0.017	mg/kg	
120-12-7	Anthracene	ND	0.033	0.020	mg/kg	
56-55-3	Benzo(a)anthracene	ND	0.033	0.0094	mg/kg	
50-32-8	Benzo(a)pyrene	ND	0.033	0.015	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	0.033	0.015	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	0.033	0.017	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.033	0.015	mg/kg	
218-01-9	Chrysene	ND	0.033	0.010	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.033	0.015	mg/kg	
206-44-0	Fluoranthene	ND	0.033	0.015	mg/kg	
86-73-7	Fluorene	ND	0.033	0.015	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.033	0.016	mg/kg	
91-20-3	Naphthalene	ND	0.033	0.0093	mg/kg	
85-01-8	Phenanthrene	ND	0.033	0.011	mg/kg	
129-00-0	Pyrene	ND	0.033	0.011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		26-134%
321-60-8	2-Fluorobiphenyl	83%		39-124%
1718-51-0	Terphenyl-d14	102%		36-134%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range.
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-SB-16(15) 20170814		
Lab Sample ID:	JC48865-21A	**Date Sampled:**	08/14/17
Matrix:	SO - Soil	**Date Received:**	08/14/17
		Percent Solids:	95.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.1	2.1	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Barium	26.5	21	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.54	0.54	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Chromium	7.6	1.1	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Lead	2.5	2.1	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	08/18/17	08/19/17	JA	SW846 7471B [2]	SW846 7471B [4]
Selenium	< 2.1	2.1	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.54	0.54	mg/kg	1	08/17/17	08/20/17	GT	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA42636
(2) Instrument QC Batch: MA42637
(3) Prep QC Batch: MP2484
(4) Prep QC Batch: MP2516

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-17(4-5) 20170814		
Lab Sample ID:	JC48865-22	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	83.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36834.D	1	08/19/17 15:08	TDN	n/a	n/a	V3V1473
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00067	mg/kg	
67-66-3	Chloroform	0.0012	0.0021	0.00033	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00053	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00073	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00060	mg/kg	
75-09-2	Methylene chloride	ND	0.0052	0.0026	mg/kg	
127-18-4	Tetrachloroethene	0.0880	0.0021	0.00066	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00060	mg/kg	
79-01-6	Trichloroethene	0.0312	0.0010	0.00057	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00079	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	109%		73-132%
2037-26-5	Toluene-D8	94%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-18(4-5) 20170814		
Lab Sample ID:	JC48865-28	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	84.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	D251923.D	1	08/18/17 19:06	XC	n/a	n/a	VD10166
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	10.0 ml	100 ul
Run #2			

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.25	0.082	mg/kg	
67-66-3	Chloroform	0.0949	0.25	0.041	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.13	0.065	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.13	0.033	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.13	0.023	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.13	0.089	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.616	0.13	0.050	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.13	0.073	mg/kg	
75-09-2	Methylene chloride	ND	0.63	0.31	mg/kg	
127-18-4	Tetrachloroethene	19.4	0.25	0.080	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.25	0.073	mg/kg	
79-01-6	Trichloroethene	11.1	0.13	0.069	mg/kg	
75-01-4	Vinyl chloride	ND	0.25	0.096	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		72-129%
17060-07-0	1,2-Dichloroethane-D4	83%		73-132%
2037-26-5	Toluene-D8	113%		80-120%
460-00-4	4-Bromofluorobenzene	101%		77-125%

(a) Diluted due to high concentration of target compound.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-18(5-7) 20170814		
Lab Sample ID:	JC48865-29	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	95.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175142.D	1	08/22/17 21:11	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00068	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00061	mg/kg	
75-09-2	Methylene chloride	ND	0.0052	0.0026	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00067	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00061	mg/kg	
79-01-6	Trichloroethene	ND	0.0010	0.00057	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		72-129%
17060-07-0	1,2-Dichloroethane-D4	101%		73-132%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-18(7-9) 20170814		
Lab Sample ID:	JC48865-30	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	96.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175143.D	1	08/22/17 21:39	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00066	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0051	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00065	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	ND	0.0010	0.00055	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00077	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-129%
17060-07-0	1,2-Dichloroethane-D4	100%		73-132%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	110%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-18(9-11) 20170814		
Lab Sample ID:	JC48865-31	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	95.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175144.D	1	08/22/17 22:08	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	4.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0022	0.00072	mg/kg	
67-66-3	Chloroform	ND	0.0022	0.00036	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00057	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00020	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00079	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00045	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00065	mg/kg	
75-09-2	Methylene chloride	ND	0.0056	0.0028	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0022	0.00071	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00065	mg/kg	
79-01-6	Trichloroethene	ND	0.0011	0.00061	mg/kg	
75-01-4	Vinyl chloride	ND	0.0022	0.00085	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	102%		73-132%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-18(11-13) 20170814		
Lab Sample ID:	JC48865-32	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	95.1
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175145.D	1	08/22/17 22:36	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00068	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00061	mg/kg	
75-09-2	Methylene chloride	ND	0.0053	0.0026	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00067	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00061	mg/kg	
79-01-6	Trichloroethene	ND	0.0011	0.00058	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	99%		73-132%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-18(13-15) 20170814		
Lab Sample ID:	JC48865-33	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	95.9
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175146.D	1	08/22/17 23:04	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00068	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00061	mg/kg	
75-09-2	Methylene chloride	ND	0.0052	0.0026	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00066	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00061	mg/kg	
79-01-6	Trichloroethene	ND	0.0010	0.00057	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	101%		73-132%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	107%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-19(4-5) 20170814		
Lab Sample ID:	JC48865-34	**Date Sampled:**	08/14/17
Matrix:	SO - Soil	**Date Received:**	08/14/17
Method:	SW846 8260C	**Percent Solids:**	83.9
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36756.D	1	08/17/17 06:02	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	4.3 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0028	0.00090	mg/kg	
67-66-3	Chloroform	0.0043	0.0028	0.00045	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0014	0.00072	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0014	0.00036	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0014	0.00025	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0014	0.00098	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0322	0.0014	0.00056	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.0014	0.0014	0.00081	mg/kg	
75-09-2	Methylene chloride	ND	0.0069	0.0035	mg/kg	
127-18-4	Tetrachloroethene	0.172	0.0028	0.00088	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0028	0.00081	mg/kg	
79-01-6	Trichloroethene	0.176	0.0014	0.00076	mg/kg	
75-01-4	Vinyl chloride	ND	0.0028	0.0011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	101%		73-132%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-20(4-5) 20170814		
Lab Sample ID:	JC48865-43	Date Sampled:	08/14/17
Matrix:	SO - Soil	Date Received:	08/14/17
Method:	SW846 8260C	Percent Solids:	81.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36757.D	1	08/17/17 06:28	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0026	0.00083	mg/kg	
67-66-3	Chloroform	0.0035	0.0026	0.00041	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00066	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00033	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0013	0.00023	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0013	0.00090	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0013	0.00051	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00075	mg/kg	
75-09-2	Methylene chloride	ND	0.0064	0.0032	mg/kg	
127-18-4	Tetrachloroethene	0.120	0.0026	0.00081	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0026	0.00074	mg/kg	
79-01-6	Trichloroethene	0.0854	0.0013	0.00070	mg/kg	
75-01-4	Vinyl chloride	ND	0.0026	0.00098	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		72-129%
17060-07-0	1,2-Dichloroethane-D4	99%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.29 4

Client Sample ID:	L1-RDI-SB-21(4-5) 201708015		
Lab Sample ID:	JC48865-49	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	82.9
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36758.D	1	08/17/17 06:54	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00066	mg/kg	
67-66-3	Chloroform	0.00062	0.0020	0.00033	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00053	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00060	mg/kg	
75-09-2	Methylene chloride	ND	0.0051	0.0026	mg/kg	
127-18-4	Tetrachloroethene	0.0107	0.0020	0.00065	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	0.0125	0.0010	0.00056	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00078	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	99%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

LOM 2/16/18

SGS Accutest

Report of Analysis

4.30 4

Client Sample ID:	L1-RDI-SB-22(4-5) 201708015		
Lab Sample ID:	JC48865-55	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	89.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36759.D	1	08/17/17 07:20	TDN	n/a	n/a	V3V1470
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00062	mg/kg	
67-66-3	Chloroform	0.00062	0.0019	0.00031	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00095	0.00049	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00095	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00095	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00095	0.00067	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00095	0.00038	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00095	0.00055	mg/kg	
75-09-2	Methylene chloride	ND	0.0047	0.0024	mg/kg	
127-18-4	Tetrachloroethene	0.0139	0.0019	0.00060	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00055	mg/kg	
79-01-6	Trichloroethene	0.0489	0.00095	0.00052	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00073	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.31

4

Client Sample ID:	L1-RDI-SB-23(4-5) 201708015		
Lab Sample ID:	JC48865-61	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	88.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36760.D	1	08/17/17 07:46	TDN	n/a	n/a	V3V1470
Run #2 [a]	3V36836.D	1	08/19/17 16:00	TDN	n/a	n/a	V3V1473

	Initial Weight
Run #1	4.3 g
Run #2	4.4 g

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0026	0.00086	mg/kg	
67-66-3	Chloroform	ND	0.0026	0.00043	mg/kg	UJ
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00068	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00034	mg/kg	UJ
107-06-2	1,2-Dichloroethane	ND	0.0013	0.00024	mg/kg	
75-35-4	1,1-Dichloroethene	0.0012	0.0013	0.00093	mg/kg	~~J~~ J
156-59-2	cis-1,2-Dichloroethene	ND	0.0013	0.00053	mg/kg	UJ
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00077	mg/kg	UJ
75-09-2	Methylene chloride	ND	0.0066	0.0033	mg/kg	UJ
127-18-4	Tetrachloroethene	0.0030	0.0026	0.00084	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0026	0.00077	mg/kg	
79-01-6	Trichloroethene	0.0048	0.0013	0.00072	mg/kg	
75-01-4	Vinyl chloride	ND	0.0026	0.0010	mg/kg	UJ

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	71% [c]	65% [b]	72-129%
17060-07-0	1,2-Dichloroethane-D4	103%	106%	73-132%
2037-26-5	Toluene-D8	98%	95%	80-120%
460-00-4	4-Bromofluorobenzene	103%	104%	77-125%

(a) Confirmation run for surrogate recoveries.
(b) Outside control limits due to matrix interference.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

JAF 10/10/17

SGS Accutest

Report of Analysis

4.32 4

Client Sample ID:	L1-RDI-SB-24(4-5) 201708015		
Lab Sample ID:	JC48865-70	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	87.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36761.D	1	08/17/17 08:12	TDN	n/a	n/a	V3V1470
Run #2	E246917.D	1	08/18/17 14:42	TDN	n/a	n/a	VE10617

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.3 g		
Run #2	4.1 g	10.0 ml	10.0 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	0.0019	0.0026	0.00086	mg/kg	J
67-66-3	Chloroform	0.0100	0.0026	0.00043	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00068	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00034	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0013	0.00024	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0013	0.00094	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0054	0.0013	0.00053	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00077	mg/kg	
75-09-2	Methylene chloride	0.0572	0.0066	0.0033	mg/kg	
127-18-4	Tetrachloroethene	171[a]	2.9	0.93	mg/kg	D
71-55-6	1,1,1-Trichloroethane	ND	0.0026	0.00077	mg/kg	
79-01-6	Trichloroethene	243[a]	1.5	0.80	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0026	0.0010	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	98%	72-129%
17060-07-0	1,2-Dichloroethane-D4	103%	96%	73-132%
2037-26-5	Toluene-D8	101%	95%	80-120%
460-00-4	4-Bromofluorobenzene	111%	98%	77-125%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS

Raw Data: Y175150.D

SGS Accutest

Report of Analysis

4.33 4

Client Sample ID:	L1-RDI-SB-24(5-7) 201708015		
Lab Sample ID:	JC48865-71	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	82.9
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175150.D	1	08/23/17 00:58	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	6.4 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00061	mg/kg	
67-66-3	Chloroform	0.00051	0.0019	0.00030	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00094	0.00049	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00094	0.00024	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00094	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00094	0.00067	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00094	0.00038	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00094	0.00055	mg/kg	
75-09-2	Methylene chloride	ND	0.0047	0.0024	mg/kg	
127-18-4	Tetrachloroethene	0.0315	0.0019	0.00060	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00055	mg/kg	
79-01-6	Trichloroethene	0.0482	0.00094	0.00052	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00072	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		72-129%
17060-07-0	1,2-Dichloroethane-D4	103%		73-132%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	105%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-24(7-9) 201708015		
Lab Sample ID:	JC48865-72	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	85.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175151.D	1	08/23/17 01:26	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	6.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0018	0.00058	mg/kg	
67-66-3	Chloroform	ND	0.0018	0.00029	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00089	0.00046	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00089	0.00023	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00089	0.00016	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00089	0.00063	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00089	0.00036	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00089	0.00052	mg/kg	
75-09-2	Methylene chloride	ND	0.0044	0.0022	mg/kg	
127-18-4	Tetrachloroethene	0.0044	0.0018	0.00057	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0018	0.00052	mg/kg	
79-01-6	Trichloroethene	0.0094	0.00089	0.00049	mg/kg	
75-01-4	Vinyl chloride	ND	0.0018	0.00068	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	101%		73-132%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	109%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS

SGS Accutest

Report of Analysis

4.35 4

Client Sample ID:	L1-RDI-SB-24(9-11) 201708015		
Lab Sample ID:	JC48865-73	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	91.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175152.D	1	08/23/17 01:54	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0022	0.00073	mg/kg	
67-66-3	Chloroform	ND	0.0022	0.00036	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00058	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00020	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00079	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00045	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00065	mg/kg	
75-09-2	Methylene chloride	ND	0.0056	0.0028	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0022	0.00071	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00065	mg/kg	
79-01-6	Trichloroethene	0.0015	0.0011	0.00061	mg/kg	
75-01-4	Vinyl chloride	ND	0.0022	0.00085	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	101%		73-132%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	111%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2/16/18

SGS Accutest

Report of Analysis

4.36

4

Client Sample ID:	L1-RDI-SB-24(11-13) 201708015		
Lab Sample ID:	JC48865-74	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	94.6
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175153.D	1	08/23/17 02:22	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0022	0.00071	mg/kg	
67-66-3	Chloroform	ND	0.0022	0.00036	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00057	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00020	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00078	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00044	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00064	mg/kg	
75-09-2	Methylene chloride	ND	0.0055	0.0028	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0022	0.00070	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00064	mg/kg	
79-01-6	Trichloroethene	0.0017	0.0011	0.00060	mg/kg	
75-01-4	Vinyl chloride	ND	0.0022	0.00084	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	99%		73-132%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	112%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: Y175154.D

SGS Accutest

Report of Analysis

4.37

4

Client Sample ID:	L1-RDI-SB-24(13-15) 201708~~0~~15		
Lab Sample ID:	JC48865-75	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	92.7
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175154.D	1	08/23/17 02:51	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00065	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00032	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00071	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00040	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00058	mg/kg	
75-09-2	Methylene chloride	ND	0.0050	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00064	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00058	mg/kg	
79-01-6	Trichloroethene	0.0014	0.0010	0.00055	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00076	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-129%
17060-07-0	1,2-Dichloroethane-D4	99%		73-132%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	110%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.38

4

Client Sample ID:	L1-RDI-SB-25(4-5) 201708015		
Lab Sample ID:	JC48865-76	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	88.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36762.D	1	08/17/17 08:38	TDN	n/a	n/a	V3V1470
Run #2	E246918.D	1	08/18/17 15:13	TDN	n/a	n/a	VE10617

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.3 g		
Run #2	3.9 g	10.0 ml	2.0 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	0.0024	0.0021	0.00070	mg/kg	
67-66-3	Chloroform	0.0138	0.0021	0.00035	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00055	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00076	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0045	0.0011	0.00043	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.0017	0.0011	0.00063	mg/kg	
75-09-2	Methylene chloride	ND	0.0054	0.0027	mg/kg	
127-18-4	Tetrachloroethene	0.0321	0.0021	0.00068	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00062	mg/kg	
79-01-6	Trichloroethene	1220 (a)	7.6	4.2	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0021	0.00082	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	95%	72-129%
17060-07-0	1,2-Dichloroethane-D4	101%	98%	73-132%
2037-26-5	Toluene-D8	100%	91%	80-120%
460-00-4	4-Bromofluorobenzene	105%	102%	77-125%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2/16/18

SGS Accutest

Report of Analysis

4.39 4

Client Sample ID:	L1-RDI-SB-25(5-7) 201708015		
Lab Sample ID:	JC48865-77	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	86.6
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175155.D	1	08/23/17 03:19	PS	n/a	n/a	VY7563
Run #2	E247005.D	1	08/23/17 10:19	TDN	n/a	n/a	VE10620

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.7 g		
Run #2	5.5 g	10.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00066	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0051	0.0025	mg/kg	
127-18-4	Tetrachloroethene	0.00069	0.0020	0.00065	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	1.48 a	0.11	0.062	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00077	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%	92%	72-129%
17060-07-0	1,2-Dichloroethane-D4	100%	86%	73-132%
2037-26-5	Toluene-D8	105%	94%	80-120%
460-00-4	4-Bromofluorobenzene	111%	92%	77-125%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-25(7-9) 201708015		
Lab Sample ID:	JC48865-78	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	92.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175156.D	1	08/23/17 03:47	PS	n/a	n/a	VY7563
Run #2	E247014.D	1	08/23/17 14:57	TDN	n/a	n/a	VE10620
Run #3	E247010.D	1	08/23/17 12:54	TDN	n/a	n/a	VE10620

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.8 g		
Run #2	6.5 g	10.0 ml	10.0 ul
Run #3	6.5 g	10.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00061	mg/kg	
67-66-3	Chloroform	0.00064	0.0019	0.00030	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00093	0.00048	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00093	0.00024	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00093	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00093	0.00066	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00093	0.00038	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00093	0.00054	mg/kg	
75-09-2	Methylene chloride	ND	0.0047	0.0023	mg/kg	
127-18-4	Tetrachloroethene	0.0015	0.0019	0.00059	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00054	mg/kg	
79-01-6	Trichloroethene	25.1[a]	0.87	0.48	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0019	0.00071	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	96%	93%	92%	72-129%
17060-07-0	1,2-Dichloroethane-D4	101%	89%	88%	73-132%
2037-26-5	Toluene-D8	105%	89%	88%	80-120%
460-00-4	4-Bromofluorobenzene	108%	97%	95%	77-125%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-25(9-11) 201708015		
Lab Sample ID:	JC48865-79	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	95.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175157.D	1	08/23/17 04:15	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00063	mg/kg	
67-66-3	Chloroform	ND	0.0019	0.00031	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00097	0.00050	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00097	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00097	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00097	0.00069	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00097	0.00039	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00097	0.00057	mg/kg	
75-09-2	Methylene chloride	ND	0.0048	0.0024	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0019	0.00062	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00056	mg/kg	
79-01-6	Trichloroethene	0.0136	0.00097	0.00053	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	100%		73-132%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	112%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.42

4

Client Sample ID:	L1-RDI-SB-25(11-13) 201708015		
Lab Sample ID:	JC48865-80	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	92.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y175158.D	1	08/23/17 04:44	PS	n/a	n/a	VY7563
Run #2							

	Initial Weight
Run #1	5.4 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00065	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00032	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00051	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00071	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00040	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00058	mg/kg	
75-09-2	Methylene chloride	ND	0.0050	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00064	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00058	mg/kg	
79-01-6	Trichloroethene	0.0028	0.0010	0.00055	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00076	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	99%		73-132%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	112%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.43 4

Client Sample ID:	L1-RDI-SB-25(13-15) 201708015		
Lab Sample ID:	JC48865-81	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	94.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36868.D	1	08/22/17 22:21	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0023	0.00075	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00037	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00059	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00030	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0012	0.00021	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00081	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00046	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00067	mg/kg	
75-09-2	Methylene chloride	ND	0.0058	0.0029	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0023	0.00073	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00067	mg/kg	
79-01-6	Trichloroethene	0.0031	0.0012	0.00063	mg/kg	
75-01-4	Vinyl chloride	ND	0.0023	0.00088	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	110%		73-132%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-26(4-5) 201708015		
Lab Sample ID:	JC48865-82	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	88.2
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V170239.D	1	08/17/17 17:32	SY	n/a	n/a	VV7165
Run #2	D251982.D	1	08/22/17 15:17	RS	n/a	n/a	VD10169
Run #3 [a]	D251924.D	1	08/18/17 19:36	XC	n/a	n/a	VD10166

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.9 g		
Run #2	5.5 g	10.0 ml	20.0 ul
Run #3	5.5 g	10.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00062	mg/kg	
67-66-3	Chloroform	0.00077	0.0019	0.00031	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00096	0.00050	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00096	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00096	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00096	0.00068	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.00075	0.00096	0.00039	mg/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.00096	0.00056	mg/kg	
75-09-2	Methylene chloride	ND	0.0048	0.0024	mg/kg	
127-18-4	Tetrachloroethene	0.0119	0.0019	0.00061	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00056	mg/kg	
79-01-6	Trichloroethene	37.2 b	0.55	0.30	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0019	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	108%	100%	97%	72-129%
17060-07-0	1,2-Dichloroethane-D4	91%	84%	83%	73-132%
2037-26-5	Toluene-D8	103%	115%	113%	80-120%
460-00-4	4-Bromofluorobenzene	91%	99%	99%	77-125%

(a) Confirmation run.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.45 4

Client Sample ID:	L1-RDI-SB-26(5-7) 201708015		
Lab Sample ID:	JC48865-83	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	88.1
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3V37147.D	1	09/06/17 11:05	TDN	n/a	n/a	V3V1487
Run #2							

	Initial Weight
Run #1	5.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00062	mg/kg	R
67-66-3	Chloroform	ND	0.0019	0.00031	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00096	0.00050	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00096	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00096	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00096	0.00068	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00096	0.00039	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00096	0.00056	mg/kg	
75-09-2	Methylene chloride	ND	0.0048	0.0024	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0019	0.00061	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00056	mg/kg	
79-01-6	Trichloroethene	0.0047	0.00096	0.00053	mg/kg	J-
75-01-4	Vinyl chloride	ND	0.0019	0.00074	mg/kg	R

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	102%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	109%		77-125%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

10/17/17

SGS Accutest

Report of Analysis

4.46 4

Client Sample ID:	L1-RDI-SB-26(7-9) 201708015		
Lab Sample ID:	JC48865-84	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	87.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3V37148.D	1	09/06/17 11:31	TDN	n/a	n/a	V3V1487
Run #2							

	Initial Weight
Run #1	6.3 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0018	0.00059	mg/kg	R
67-66-3	Chloroform	ND	0.0018	0.00029	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00090	0.00047	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00090	0.00023	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00090	0.00016	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00090	0.00064	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00090	0.00036	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00090	0.00053	mg/kg	
75-09-2	Methylene chloride	ND	0.0045	0.0023	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0018	0.00058	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0018	0.00053	mg/kg	
79-01-6	Trichloroethene	0.0054	0.00090	0.00049	mg/kg	J-
75-01-4	Vinyl chloride	ND	0.0018	0.00069	mg/kg	R

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-129%
17060-07-0	1,2-Dichloroethane-D4	104%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	117%		77-125%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

10/17/17 SGS

SGS Accutest

Report of Analysis

4.47

4

Client Sample ID:	L1-RDI-SB-26(9-11) 201708015		
Lab Sample ID:	JC48865-85	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	83.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3V37149.D	1	09/06/17 11:57	TDN	n/a	n/a	V3V1487
Run #2							

	Initial Weight
Run #1	6.5 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0018	0.00060	mg/kg	R
67-66-3	Chloroform	ND	0.0018	0.00030	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00092	0.00048	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00092	0.00024	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00092	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00092	0.00065	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00092	0.00037	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00092	0.00054	mg/kg	
75-09-2	Methylene chloride	ND	0.0046	0.0023	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0018	0.00059	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0018	0.00054	mg/kg	
79-01-6	Trichloroethene	0.0081	0.00092	0.00050	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0018	0.00071	mg/kg	R

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-129%
17060-07-0	1,2-Dichloroethane-D4	106%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	116%		77-125%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS

SGS Accutest

Report of Analysis

4.48

4

Client Sample ID:	L1-RDI-SB-26(11-13) 201708015		
Lab Sample ID:	JC48865-86	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	93.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	X174492.D	1	09/06/17 10:51	XC	n/a	n/a	VX7394
Run #2							

	Initial Weight
Run #1	5.1 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00068	mg/kg	R
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00061	mg/kg	
75-09-2	Methylene chloride	ND	0.0052	0.0026	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00067	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00061	mg/kg	
79-01-6	Trichloroethene	ND	0.0010	0.00057	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	105%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	94%		77-125%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-26(13-15) 201708015		
Lab Sample ID:	JC48865-87	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	92.7
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	X174493.D	1	09/06/17 11:21	XC	n/a	n/a	VX7394
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0022	0.00070	mg/kg	R
67-66-3	Chloroform	ND	0.0022	0.00035	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00056	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00076	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00043	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00063	mg/kg	
75-09-2	Methylene chloride	ND	0.0054	0.0027	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0022	0.00069	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00063	mg/kg	
79-01-6	Trichloroethene	0.0012	0.0011	0.00059	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0022	0.00083	mg/kg	R

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		72-129%
17060-07-0	1,2-Dichloroethane-D4	105%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	95%		77-125%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

10/17/17

SGS Accutest

Report of Analysis

4.50 4

Client Sample ID:	L1-RDI-SB-27(4-5) 201708015		
Lab Sample ID:	JC48865-88	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	85.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V170240.D	1	08/17/17 18:01	SY	n/a	n/a	VV7165
Run #2	D251925.D	1	08/18/17 20:06	XC	n/a	n/a	VD10166

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.3 g		
Run #2	6.2 g	10.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0016	0.00052	mg/kg	
67-66-3	Chloroform	0.0011	0.0016	0.00026	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00080	0.00041	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00080	0.00021	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00080	0.00014	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00080	0.00056	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0011	0.00080	0.00032	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00080	0.00047	mg/kg	
75-09-2	Methylene chloride	ND	0.0040	0.0020	mg/kg	
127-18-4	Tetrachloroethene	0.0029	0.0016	0.00051	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0016	0.00046	mg/kg	
79-01-6	Trichloroethene	9.67 [a]	0.10	0.056	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0016	0.00061	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	97%	72-129%
17060-07-0	1,2-Dichloroethane-D4	91%	83%	73-132%
2037-26-5	Toluene-D8	99%	112%	80-120%
460-00-4	4-Bromofluorobenzene	90%	100%	77-125%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-27(5-7) 201708015		
Lab Sample ID:	JC48865-89	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	85.6
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36869.D	1	08/22/17 22:47	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	7.1 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0016	0.00053	mg/kg	
67-66-3	Chloroform	0.0010	0.0016	0.00027	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00082	0.00042	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00082	0.00021	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00082	0.00015	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00082	0.00058	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0013	0.00082	0.00033	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.00074	0.00082	0.00048	mg/kg	J
75-09-2	Methylene chloride	ND	0.0041	0.0021	mg/kg	
127-18-4	Tetrachloroethene	0.0022	0.0016	0.00052	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0016	0.00048	mg/kg	
79-01-6	Trichloroethene	0.139	0.00082	0.00045	mg/kg	
75-01-4	Vinyl chloride	ND	0.0016	0.00063	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	112%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	107%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS

SGS Accutest

Report of Analysis

4.52

4

Client Sample ID:	L1-RDI-SB-27(7-9) 201708015		
Lab Sample ID:	JC48865-90	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	85.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36870.D	1	08/22/17 23:13	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	6.8 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0017	0.00056	mg/kg	
67-66-3	Chloroform	0.00096	0.0017	0.00028	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00086	0.00044	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00086	0.00022	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00086	0.00016	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00086	0.00061	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.00090	0.00086	0.00035	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00086	0.00050	mg/kg	
75-09-2	Methylene chloride	ND	0.0043	0.0022	mg/kg	
127-18-4	Tetrachloroethene	0.0012	0.0017	0.00055	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0017	0.00050	mg/kg	
79-01-6	Trichloroethene	0.0751	0.00086	0.00047	mg/kg	
75-01-4	Vinyl chloride	ND	0.0017	0.00066	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	110%		73-132%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.53 4

Client Sample ID:	L1-RDI-SB-27(9-11) 201708015		
Lab Sample ID:	JC48865-91	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	93.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36867.D	1	08/22/17 21:54	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	5.3 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00066	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0051	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00065	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	0.0049	0.0010	0.00055	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00078	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		72-129%
17060-07-0	1,2-Dichloroethane-D4	112%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2/16/18

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-27(11-13) 201708015		
Lab Sample ID:	JC48865-92	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	94.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36874.D	1	08/23/17 00:57	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00069	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00055	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00075	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00043	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00062	mg/kg	
75-09-2	Methylene chloride	ND	0.0053	0.0026	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00067	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00062	mg/kg	
79-01-6	Trichloroethene	0.0019	0.0011	0.00058	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00081	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	111%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.55 4

Client Sample ID:	L1-RDI-SB-27(13-15) 201708015		
Lab Sample ID:	JC48865-93	**Date Sampled:**	08/15/17
Matrix:	SO - Soil	**Date Received:**	08/15/17
Method:	SW846 8260C	**Percent Solids:**	94.6
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36875.D	1	08/23/17 01:24	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00066	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0051	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00065	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	0.0031	0.0010	0.00056	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00078	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	112%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: V170241.D D251926.D

SGS Accutest

Report of Analysis

4.56

4

Client Sample ID:	L1-RDI-SB-28(4-5) 201708015		
Lab Sample ID:	JC48865-97	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	87.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V170241.D	1	08/17/17 18:30	SY	n/a	n/a	VV7165
Run #2	D251926.D	1	08/18/17 20:36	XC	n/a	n/a	VD10166

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.2 g		
Run #2	6.3 g	10.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0018	0.00060	mg/kg	
67-66-3	Chloroform	0.0017	0.0018	0.00030	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00092	0.00048	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00092	0.00024	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00092	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00092	0.00065	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0022	0.00092	0.00037	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.0033	0.00092	0.00054	mg/kg	
75-09-2	Methylene chloride	ND	0.0046	0.0023	mg/kg	
127-18-4	Tetrachloroethene	0.0031	0.0018	0.00059	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0018	0.00054	mg/kg	
79-01-6	Trichloroethene	6.33 [a]	0.098	0.054	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0018	0.00071	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%	97%	72-129%
17060-07-0	1,2-Dichloroethane-D4	99%	84%	73-132%
2037-26-5	Toluene-D8	103%	113%	80-120%
460-00-4	4-Bromofluorobenzene	92%	99%	77-125%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

12/16/18

Raw Data: 3V36876.D

SGS Accutest

Report of Analysis

4.57 4

Client Sample ID:	L1-RDI-SB-28(5-7) 201708015		
Lab Sample ID:	JC48865-98	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	85.2
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36876.D	1	08/23/17 01:50	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	6.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0018	0.00057	mg/kg	
67-66-3	Chloroform	0.00049	0.0018	0.00028	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00088	0.00045	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00088	0.00023	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00088	0.00016	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00088	0.00062	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00088	0.00035	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00088	0.00051	mg/kg	
75-09-2	Methylene chloride	ND	0.0044	0.0022	mg/kg	
127-18-4	Tetrachloroethene	0.0016	0.0018	0.00056	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0018	0.00051	mg/kg	
79-01-6	Trichloroethene	0.160	0.00088	0.00048	mg/kg	
75-01-4	Vinyl chloride	ND	0.0018	0.00067	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		72-129%
17060-07-0	1,2-Dichloroethane-D4	115%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: 3V36877.D

SGS Accutest

Report of Analysis

4.58 4

Client Sample ID:	L1-RDI-SB-28(7-9) 201708015		
Lab Sample ID:	JC48865-99	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	93.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36877.D	1	08/23/17 02:16	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00061	mg/kg	
67-66-3	Chloroform	ND	0.0019	0.00030	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00094	0.00049	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00094	0.00024	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00094	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00094	0.00066	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00094	0.00038	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00094	0.00055	mg/kg	
75-09-2	Methylene chloride	ND	0.0047	0.0024	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0019	0.00060	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00055	mg/kg	
79-01-6	Trichloroethene	0.0070	0.00094	0.00051	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00072	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		72-129%
17060-07-0	1,2-Dichloroethane-D4	113%		73-132%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	105%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-28(9-11) 201708015		
Lab Sample ID:	JC48865-100	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	90.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36878.D	1	08/23/17 02:42	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00065	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00032	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00071	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00040	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0050	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00064	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00058	mg/kg	
79-01-6	Trichloroethene	0.0083	0.0010	0.00055	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00077	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	110%		73-132%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.60

4

Client Sample ID:	L1-RDI-SB-28(11-13) 201708015		
Lab Sample ID:	JC48865-101	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	94.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36879.D	1	08/23/17 03:08	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	5.8 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0018	0.00060	mg/kg	
67-66-3	Chloroform	ND	0.0018	0.00030	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00092	0.00047	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00092	0.00024	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00092	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00092	0.00065	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00092	0.00037	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00092	0.00054	mg/kg	
75-09-2	Methylene chloride	ND	0.0046	0.0023	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0018	0.00058	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0018	0.00053	mg/kg	
79-01-6	Trichloroethene	0.0040	0.00092	0.00050	mg/kg	
75-01-4	Vinyl chloride	ND	0.0018	0.00070	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	112%		73-132%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS

SGS Accutest

Report of Analysis

4.61 4

Client Sample ID:	L1-RDI-SB-28(13-15) 201708015		
Lab Sample ID:	JC48865-102	Date Sampled:	08/15/17
Matrix:	SO - Soil	Date Received:	08/15/17
Method:	SW846 8260C	Percent Solids:	95.1
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36880.D	1	08/23/17 03:34	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00070	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00035	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00055	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00019	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00076	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00043	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00063	mg/kg	
75-09-2	Methylene chloride	ND	0.0054	0.0027	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00068	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00062	mg/kg	
79-01-6	Trichloroethene	0.0081	0.0011	0.00059	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00082	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	114%		73-132%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	105%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-SB-29(4-5) 20170816		
Lab Sample ID:	JC48865-103	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	84.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36839.D	1	08/19/17 17:18	TDN	n/a	n/a	V3V1473
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00062	mg/kg	
67-66-3	Chloroform	ND	0.0019	0.00031	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00095	0.00049	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00095	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00095	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00095	0.00067	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00095	0.00038	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00095	0.00056	mg/kg	
75-09-2	Methylene chloride	ND	0.0048	0.0024	mg/kg	
127-18-4	Tetrachloroethene	0.0053	0.0019	0.00061	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00055	mg/kg	
79-01-6	Trichloroethene	0.133	0.00095	0.00052	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00073	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		72-129%
17060-07-0	1,2-Dichloroethane-D4	107%		73-132%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-FB-2 20170816		
Lab Sample ID:	JC48865-105	Date Sampled:	08/16/17
Matrix:	AQ - Field Blank Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A173689.D	1	08/19/17 12:06	VC	n/a	n/a	V1A7376
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	L1-RDI-FB-2 20170816		
Lab Sample ID:	JC48865-105A	**Date Sampled:**	08/16/17
Matrix:	AQ - Field Blank Soil	**Date Received:**	08/16/17
		Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3.7	3.0	ug/l	1	08/18/17	08/21/17	ND	SW846 6010C [3]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	08/18/17	08/19/17	ND	SW846 6010C [1]	SW846 3010A [4]
Cadmium	< 3.0	3.0	ug/l	1	08/18/17	08/19/17	ND	SW846 6010C [1]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	08/18/17	08/21/17	ND	SW846 6010C [3]	SW846 3010A [4]
Lead	< 3.0	3.0	ug/l	1	08/18/17	08/19/17	ND	SW846 6010C [1]	SW846 3010A [4]
Mercury	< 0.20	0.20	ug/l	1	08/21/17	08/21/17	JA	SW846 7470A [2]	SW846 7470A [5]
Selenium	< 10	10	ug/l	1	08/18/17	08/21/17	ND	SW846 6010C [3]	SW846 3010A [4]
Silver	< 10	10	ug/l	1	08/18/17	08/21/17	ND	SW846 6010C [3]	SW846 3010A [4]

(1) Instrument QC Batch: MA42638
(2) Instrument QC Batch: MA42640
(3) Instrument QC Batch: MA42644
(4) Prep QC Batch: MP2474
(5) Prep QC Batch: MP2525

RL = Reporting Limit

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-SB-30(4-5) 20170816		
Lab Sample ID:	JC48865-110	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	89.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V170243.D	1	08/17/17 19:27	SY	n/a	n/a	VV7165
Run #2							

	Initial Weight
Run #1	6.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0018	0.00058	mg/kg	
67-66-3	Chloroform	ND	0.0018	0.00029	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00090	0.00046	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00090	0.00023	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00090	0.00016	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00090	0.00064	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00090	0.00036	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00090	0.00053	mg/kg	
75-09-2	Methylene chloride	ND	0.0045	0.0023	mg/kg	
127-18-4	Tetrachloroethene	0.0059	0.0018	0.00057	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0018	0.00052	mg/kg	
79-01-6	Trichloroethene	0.105	0.00090	0.00049	mg/kg	
75-01-4	Vinyl chloride	ND	0.0018	0.00069	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		72-129%
17060-07-0	1,2-Dichloroethane-D4	94%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	93%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-SB-31(4-5) 20170816		
Lab Sample ID:	JC48865-116	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	93.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V170244.D	1	08/17/17 19:55	SY	n/a	n/a	VV7165
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00063	mg/kg	
67-66-3	Chloroform	ND	0.0019	0.00031	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00097	0.00050	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00097	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00097	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00097	0.00069	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00097	0.00039	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00097	0.00057	mg/kg	
75-09-2	Methylene chloride	ND	0.0049	0.0024	mg/kg	
127-18-4	Tetrachloroethene	0.0015	0.0019	0.00062	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00056	mg/kg	
79-01-6	Trichloroethene	0.0707	0.00097	0.00053	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		72-129%
17060-07-0	1,2-Dichloroethane-D4	94%		73-132%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	89%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-SB-31(9-11) 20170816		
Lab Sample ID:	JC48865-119	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	94.9
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C139287.D	1	08/24/17 13:54	PS	n/a	n/a	V3C6322
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00062	mg/kg	
67-66-3	Chloroform	ND	0.0019	0.00031	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00096	0.00049	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00096	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00096	0.00017	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00096	0.00068	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00096	0.00039	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00096	0.00056	mg/kg	
75-09-2	Methylene chloride	ND	0.0048	0.0024	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0019	0.00061	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00056	mg/kg	
79-01-6	Trichloroethene	0.0063	0.00096	0.00052	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00073	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		72-129%
17060-07-0	1,2-Dichloroethane-D4	107%		73-132%
2037-26-5	Toluene-D8	92%		80-120%
460-00-4	4-Bromofluorobenzene	114%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-TB-2 20170816		
Lab Sample ID:	JC48865-122	Date Sampled:	08/16/17
Matrix:	AQ - Trip Blank Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A173622.D	1	08/17/17 18:58	VC	n/a	n/a	V1A7373
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.69

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Client Sample ID:	LI-RD1-SB-X(9-11) 20170816		
Lab Sample ID:	JC48865-123 LI-RD1-SB-31(9-11) 20170816	**Date Sampled:**	08/16/17
Matrix:	SO - Soil	**Date Received:**	08/16/17
Method:	SW846 8260C	**Percent Solids:**	94.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V170245.D	1	08/17/17 20:24	SY	n/a	n/a	VV7165
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00066	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00053	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0051	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00065	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	0.0062	0.0010	0.00056	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00078	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	94%		73-132%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	89%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SOP 7/16/18

SGS Accutest

Report of Analysis

4.71

4

Client Sample ID:	LI-RD1-SB-32(4-5) 20170816		
Lab Sample ID:	JC48865-124	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	63.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V170247.D	1	08/17/17 21:21	SY	n/a	n/a	VV7165
Run #2	D251928.D	1	08/18/17 21:36	XC	n/a	n/a	VD10166

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.0 g		
Run #2	5.8 g	10.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0026	0.00086	mg/kg	
67-66-3	Chloroform	ND	0.0026	0.00043	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00068	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00034	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0013	0.00024	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0013	0.00094	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0013	0.00053	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00077	mg/kg	
75-09-2	Methylene chloride	ND	0.0066	0.0033	mg/kg	
127-18-4	Tetrachloroethene	0.0055	0.0026	0.00084	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0026	0.00077	mg/kg	
79-01-6	Trichloroethene	1.15[a]	0.17	0.091	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0026	0.0010	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%	99%	72-129%
17060-07-0	1,2-Dichloroethane-D4	94%	85%	73-132%
2037-26-5	Toluene-D8	100%	112%	80-120%
460-00-4	4-Bromofluorobenzene	89%	98%	77-125%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.72 4

Client Sample ID:	LI-RD1-SB-32(5-7) 20170816		
Lab Sample ID:	JC48865-125	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	88.6
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36881.D	1	08/23/17 04:00	TDN	n/a	n/a	V3V1476
Run #2	E247013.D	1	08/23/17 14:26	TDN	n/a	n/a	VE10620

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.6 g		
Run #2	5.9 g	10.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00065	mg/kg	
67-66-3	Chloroform	0.00048	0.0020	0.00033	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	0.0010	0.0010	0.00071	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0064	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.0019	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0050	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00064	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	9.01 a	0.10	0.056	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0020	0.00077	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	93%	72-129%
17060-07-0	1,2-Dichloroethane-D4	114%	89%	73-132%
2037-26-5	Toluene-D8	102%	94%	80-120%
460-00-4	4-Bromofluorobenzene	109%	92%	77-125%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-SB-32(7-9) 20170816		
Lab Sample ID:	JC48865-126	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	91.7
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36882.D	1	08/23/17 04:26	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	5.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00063	mg/kg	
67-66-3	Chloroform	ND	0.0019	0.00031	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00097	0.00050	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00097	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00097	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00097	0.00069	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00097	0.00039	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00097	0.00057	mg/kg	
75-09-2	Methylene chloride	ND	0.0049	0.0024	mg/kg	
127-18-4	Tetrachloroethene	0.0012	0.0019	0.00062	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00057	mg/kg	
79-01-6	Trichloroethene	0.0779	0.00097	0.00053	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	110%		73-132%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-SB-32(9-11) 20170816		
Lab Sample ID:	JC48865-127	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	94.7
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36883.D	1	08/23/17 04:52	TDN	n/a	n/a	V3V1476
Run #2							

	Initial Weight
Run #1	5.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00066	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	ND	0.0051	0.0025	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0020	0.00065	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	0.0037	0.0010	0.00056	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00078	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-129%
17060-07-0	1,2-Dichloroethane-D4	111%		73-132%
2037-26-5	Toluene-D8	102%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-SB-32(11-13) 20170816		
Lab Sample ID:	JC48865-128	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	91.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36890.D	1	08/23/17 10:31	TDN	n/a	n/a	V3V1477
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0022	0.00071	mg/kg	
67-66-3	Chloroform	ND	0.0022	0.00035	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00056	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00020	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00077	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00044	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00064	mg/kg	
75-09-2	Methylene chloride	ND	0.0054	0.0027	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0022	0.00069	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00063	mg/kg	
79-01-6	Trichloroethene	0.0022	0.0011	0.00060	mg/kg	
75-01-4	Vinyl chloride	ND	0.0022	0.00083	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-129%
17060-07-0	1,2-Dichloroethane-D4	111%		73-132%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	106%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	LI-RD1-SB-32(13-15) 20170816		
Lab Sample ID:	JC48865-129	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	78.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V36891.D	1	08/23/17 10:58	TDN	n/a	n/a	V3V1477
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0026	0.00084	mg/kg	
67-66-3	Chloroform	ND	0.0026	0.00042	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00067	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00034	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0013	0.00023	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0013	0.00092	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0013	0.00052	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00076	mg/kg	
75-09-2	Methylene chloride	ND	0.0065	0.0032	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0026	0.00082	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0026	0.00075	mg/kg	
79-01-6	Trichloroethene	0.0059	0.0013	0.00071	mg/kg	
75-01-4	Vinyl chloride	ND	0.0026	0.00099	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		72-129%
17060-07-0	1,2-Dichloroethane-D4	111%		73-132%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	105%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.77

4

Client Sample ID:	LI-RD1-SB-33(4-5) 20170816		
Lab Sample ID:	JC48865-130	Date Sampled:	08/16/17
Matrix:	SO - Soil	Date Received:	08/16/17
Method:	SW846 8260C	Percent Solids:	93.4
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V170246.D	1	08/17/17 20:53	SY	n/a	n/a	VV7165
Run #2							

	Initial Weight
Run #1	5.5 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00063	mg/kg	
67-66-3	Chloroform	ND	0.0019	0.00031	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.00097	0.00050	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00097	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.00097	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.00097	0.00069	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.00097	0.00039	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.00097	0.00057	mg/kg	
75-09-2	Methylene chloride	ND	0.0049	0.0024	mg/kg	
127-18-4	Tetrachloroethene	0.00096	0.0019	0.00062	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00057	mg/kg	
79-01-6	Trichloroethene	0.0371	0.00097	0.00053	mg/kg	
75-01-4	Vinyl chloride	ND	0.0019	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		72-129%
17060-07-0	1,2-Dichloroethane-D4	91%		73-132%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	87%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-11 (5-7) 20171115		
Lab Sample ID:	JC55519-1	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	84.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140713.D	1	11/21/17 23:32	PS	11/16/17 10:00	n/a	V3C6378
Run #2	3V39138.D	1	11/28/17 02:28	TDN	11/16/17 10:00	n/a	V3V1562

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.8 g		
Run #2	5.9 g	5.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00066	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00053	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane ~~a~~	ND	0.0010	0.00018	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0046	0.0010	0.00041	mg/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00060	mg/kg	
75-09-2	Methylene chloride	0.0028	0.0051	0.0026	mg/kg	~~J~~ J
127-18-4	Tetrachloroethene	0.0026	0.0020	0.00065	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00059	mg/kg	
79-01-6	Trichloroethene	0.120 ~~b~~	0.060	0.033	mg/kg	JD
75-01-4	Vinyl chloride	ND	0.0020	0.00078	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	94%	72-129%
17060-07-0	1,2-Dichloroethane-D4	115%	93%	73-132%
2037-26-5	Toluene-D8	98%	95%	80-120%
460-00-4	4-Bromofluorobenzene	102%	94%	77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

LOM 12/28/18

SGS Accutest

Report of Analysis

4.2 4

Client Sample ID:	L1-RDI-SB-X1(5-7) 20171115		
Lab Sample ID:	JC55519-2 (L1-RDI-SB-11(5-7) 20171115)	Date Sampled:	11/15/17
Matrix:	SO - Soil	Date Received:	11/15/17
Method:	SW846 8260C SW846 5035	Percent Solids:	83.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140714.D	1	11/21/17 23:59	PS	11/16/17 10:00	n/a	V3C6378
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0024	0.00077	mg/kg	
67-66-3	Chloroform	ND	0.0024	0.00039	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00062	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00031	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.0012	0.00021	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00084	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0024	0.0012	0.00048	mg/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00070	mg/kg	
75-09-2	Methylene chloride	0.0044	0.0060	0.0030	mg/kg	+ J
127-18-4	Tetrachloroethene	ND	0.0024	0.00076	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0024	0.00069	mg/kg	
79-01-6	Trichloroethene	0.0702	0.0012	0.00065	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0024	0.00091	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		72-129%
17060-07-0	1,2-Dichloroethane-D4	112%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	99%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

for 11/17/17 SGS

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-TB-1 20171115		
Lab Sample ID:	JC55519-3	Date Sampled:	11/15/17
Matrix:	AQ - Trip Blank Soil	Date Received:	11/15/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D171865.D	1	11/28/17 18:33	BK	n/a	n/a	V2D7214
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	92%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	105%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-FB-1 20171115		
Lab Sample ID:	JC55519-4	Date Sampled:	11/15/17
Matrix:	AQ - Field Blank Soil	Date Received:	11/15/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D171866.D	1	11/28/17 19:03	BK	n/a	n/a	V2D7214
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		80-120%
17060-07-0	1,2-Dichloroethane-D4	98%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.5 4

Client Sample ID:	L1-RDI-SB-11 (7-9) 20171115		
Lab Sample ID:	JC55519-5	Date Sampled:	11/15/17
Matrix:	SO - Soil	Date Received:	11/15/17
Method:	SW846 8260C SW846 5035	Percent Solids:	85.2
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140715.D	1	11/22/17 00:26	PS	11/16/17 10:00	n/a	V3C6378
Run #2	3V39139.D	1	11/28/17 02:54	TDN	11/16/17 10:00	n/a	V3V1562

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.5 g		
Run #2	5.7 g	5.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00069	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00055	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane [a]	ND	0.0011	0.00019	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00075	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0051	0.0011	0.00043	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00062	mg/kg	
75-09-2	Methylene chloride	ND	0.0053	0.0027	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00068	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00062	mg/kg	
79-01-6	Trichloroethene	2.38 [b]	0.060	0.033	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0021	0.00082	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	94%	72-129%
17060-07-0	1,2-Dichloroethane-D4	112%	93%	73-132%
2037-26-5	Toluene-D8	96%	93%	80-120%
460-00-4	4-Bromofluorobenzene	102%	97%	77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SG 12/18/18

SGS Accutest

Report of Analysis

4.6
4

Client Sample ID:	L1-RDI-SB-11 (9-11) 20171115		
Lab Sample ID:	JC55519-6	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	96.7
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140716.D	1	11/22/17 00:53	PS	11/16/17 10:00	n/a	V3C6378
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0022	0.00073	mg/kg	
67-66-3	Chloroform	ND	0.0022	0.00036	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00058	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.0011	0.00020	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00079	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00045	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00066	mg/kg	
75-09-2	Methylene chloride	0.0034	0.0056	0.0028	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0022	0.00072	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0022	0.00065	mg/kg	
79-01-6	Trichloroethene	0.0053	0.0011	0.00061	mg/kg	
75-01-4	Vinyl chloride	ND	0.0022	0.00086	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		72-129%
17060-07-0	1,2-Dichloroethane-D4	109%		73-132%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	100%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

JG 12/28/18

Raw Data: 3C140717.D 3V39140.D

SGS Accutest

Report of Analysis

4.7 4

Client Sample ID:	L1-RDI-SB-11 (11-13) 20171115		
Lab Sample ID:	JC55519-7	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	93.7
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140717.D	1	11/22/17 01:21	PS	11/16/17 10:00	n/a	V3C6378
Run #2	3V39140.D	1	11/28/17 03:20	TDN	11/16/17 10:00	n/a	V3V1562

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.6 g		
Run #2	5.1 g	5.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0019	0.00062	mg/kg	
67-66-3	Chloroform	0.00065	0.0019	0.00031	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00095	0.00049	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00095	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.00095	0.00017	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.00095	0.00067	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0136	0.00095	0.00038	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.0026	0.00095	0.00056	mg/kg	
75-09-2	Methylene chloride	ND	0.0048	0.0024	mg/kg	
127-18-4	Tetrachloroethene	0.0025	0.0019	0.00061	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0019	0.00055	mg/kg	
79-01-6	Trichloroethene	6.75[b]	0.056	0.030	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0019	0.00073	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%	94%	72-129%
17060-07-0	1,2-Dichloroethane-D4	113%	95%	73-132%
2037-26-5	Toluene-D8	98%	97%	80-120%
460-00-4	4-Bromofluorobenzene	104%	98%	77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-11 (13-15) 20171115		
Lab Sample ID:	JC55519-8	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	97.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140743.D	1	11/22/17 14:19	PS	11/16/17 10:00	n/a	V3C6379
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0024	0.00079	mg/kg	
67-66-3	Chloroform	ND	0.0024	0.00039	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00063	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00032	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0012	0.00022	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00086	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00049	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00071	mg/kg	
75-09-2	Methylene chloride	0.0091	0.0061	0.0031	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0024	0.00078	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0024	0.00071	mg/kg	
79-01-6	Trichloroethene	0.0023	0.0012	0.00067	mg/kg	
75-01-4	Vinyl chloride	ND	0.0024	0.00093	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		72-129%
17060-07-0	1,2-Dichloroethane-D4	109%		73-132%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	99%		77-125%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.9
4

Client Sample ID:	L1-RDI-SB-11 (15-17) 20171115		
Lab Sample ID:	JC55519-9	Date Sampled:	11/15/17
Matrix:	SO - Soil	Date Received:	11/15/17
Method:	SW846 8260C SW846 5035	Percent Solids:	97.1
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140719.D	1	11/22/17 02:15	PS	11/16/17 10:00	n/a	V3C6378
Run #2							

	Initial Weight
Run #1	4.3 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0024	0.00078	mg/kg	
67-66-3	Chloroform	ND	0.0024	0.00039	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00062	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00031	mg/kg	
107-06-2	1,2-Dichloroethane [a]	ND	0.0012	0.00022	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00085	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00048	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00070	mg/kg	
75-09-2	Methylene chloride	ND	0.0060	0.0030	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0024	0.00076	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0024	0.00070	mg/kg	
79-01-6	Trichloroethene	0.0080	0.0012	0.00066	mg/kg	
75-01-4	Vinyl chloride	ND	0.0024	0.00092	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		72-129%
17060-07-0	1,2-Dichloroethane-D4	108%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	101%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS

SGS Accutest

Report of Analysis

4.10

4

Client Sample ID:	L1-RDI-SB-11 (17-19) 20171115		
Lab Sample ID:	JC55519-10	Date Sampled:	11/15/17
Matrix:	SO - Soil	Date Received:	11/15/17
Method:	SW846 8260C SW846 5035	Percent Solids:	95.2
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140720.D	1	11/22/17 02:42	PS	11/16/17 10:00	n/a	V3C6378
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0021	0.00068	mg/kg	
67-66-3	Chloroform	ND	0.0021	0.00034	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00054	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00027	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.0011	0.00019	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00042	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00061	mg/kg	
75-09-2	Methylene chloride	0.0057	0.0053	0.0026	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0021	0.00067	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0021	0.00061	mg/kg	
79-01-6	Trichloroethene	0.0067	0.0011	0.00057	mg/kg	
75-01-4	Vinyl chloride	ND	0.0021	0.00080	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		72-129%
17060-07-0	1,2-Dichloroethane-D4	107%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	100%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-11 (19-21) 20171115		
Lab Sample ID:	JC55519-11	Date Sampled:	11/15/17
Matrix:	SO - Soil	Date Received:	11/15/17
Method:	SW846 8260C SW846 5035	Percent Solids:	96.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140721.D	1	11/22/17 03:10	PS	11/16/17 10:00	n/a	V3C6378
Run #2							

	Initial Weight
Run #1	4.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0026	0.00084	mg/kg	
67-66-3	Chloroform	ND	0.0026	0.00042	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00067	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00033	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.0013	0.00023	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0013	0.00091	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0013	0.00052	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00075	mg/kg	
75-09-2	Methylene chloride	0.0037	0.0065	0.0032	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0026	0.00082	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0026	0.00075	mg/kg	
79-01-6	Trichloroethene	0.0033	0.0013	0.00071	mg/kg	
75-01-4	Vinyl chloride	ND	0.0026	0.00099	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		72-129%
17060-07-0	1,2-Dichloroethane-D4	107%		73-132%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	99%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

12/18/18

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-11 (21-23) 20171115		
Lab Sample ID:	JC55519-12	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	94.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140722.D	1	11/22/17 03:37	PS	11/16/17 10:00	n/a	V3C6378
Run #2	3V39167.D	1	11/28/17 15:33	TDN	11/16/17 10:00	n/a	V3V1563
Run #3	3V39141.D	1	11/28/17 03:46	TDN	11/16/17 10:00	n/a	V3V1562

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.3 g		
Run #2	5.1 g	5.0 ml	10.0 ul
Run #3	5.1 g	5.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00065	mg/kg	
67-66-3	Chloroform	0.0022	0.0020	0.00032	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00051	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.0010	0.00018	mg/kg	UJ
75-35-4	1,1-Dichloroethene	0.0033	0.0010	0.00070	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0486	0.0010	0.00040	mg/kg	
156-60-5	trans-1,2-Dichloroethene	0.0106	0.0010	0.00058	mg/kg	
75-09-2	Methylene chloride	ND	0.0050	0.0025	mg/kg	
127-18-4	Tetrachloroethene	0.0039	0.0020	0.00063	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00058	mg/kg	
79-01-6	Trichloroethene	16.6[b]	0.54	0.30	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0020	0.00076	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	104%	96%	96%	72-129%
17060-07-0	1,2-Dichloroethane-D4	115%	97%	93%	73-132%
2037-26-5	Toluene-D8	105%	98%	93%	80-120%
460-00-4	4-Bromofluorobenzene	119%	98%	96%	77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

12/8/18

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-11 (23-25) 20171115		
Lab Sample ID:	JC55519-13	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	95.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140744.D	1	11/22/17 14:46	PS	11/16/17 10:00	n/a	V3C6379
Run #2							

	Initial Weight
Run #1	4.3 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0024	0.00079	mg/kg	
67-66-3	Chloroform	ND	0.0024	0.00039	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00063	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00032	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0012	0.00022	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00086	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00049	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00071	mg/kg	
75-09-2	Methylene chloride	0.0036	0.0061	0.0031	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0024	0.00078	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0024	0.00071	mg/kg	
79-01-6	Trichloroethene	0.0012	0.0012	0.00067	mg/kg	
75-01-4	Vinyl chloride	ND	0.0024	0.00093	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		72-129%
17060-07-0	1,2-Dichloroethane-D4	107%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	98%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-11 (25-27) 20171115		
Lab Sample ID:	JC55519-14	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	95.2
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140724.D	1	11/22/17 04:31	PS	11/16/17 10:00	n/a	V3C6378
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0025	0.00081	mg/kg	
67-66-3	Chloroform	ND	0.0025	0.00040	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00065	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00032	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.0013	0.00023	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0013	0.00088	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.0012	0.0013	0.00050	mg/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00073	mg/kg	
75-09-2	Methylene chloride	0.0074	0.0063	0.0031	mg/kg	
127-18-4	Tetrachloroethene	0.00086	0.0025	0.00080	mg/kg	J
71-55-6	1,1,1-Trichloroethane	ND	0.0025	0.00073	mg/kg	
79-01-6	Trichloroethene	0.214	0.0013	0.00068	mg/kg	
75-01-4	Vinyl chloride	ND	0.0025	0.00096	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		72-129%
17060-07-0	1,2-Dichloroethane-D4	106%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	99%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

4.15
4

Client Sample ID:	L1-RDI-SB-11 (27-29) 20171115		
Lab Sample ID:	JC55519-15	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	95.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140725.D	1	11/22/17 04:59	PS	11/16/17 10:00	n/a	V3C6378
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0023	0.00074	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00037	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00059	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.0011	0.00020	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00080	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00046	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00066	mg/kg	
75-09-2	Methylene chloride	0.0038	0.0057	0.0028	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0023	0.00072	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00066	mg/kg	
79-01-6	Trichloroethene	0.0045	0.0011	0.00062	mg/kg	
75-01-4	Vinyl chloride	ND	0.0023	0.00087	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		72-129%
17060-07-0	1,2-Dichloroethane-D4	109%		73-132%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	99%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS Accutest

Report of Analysis

4.16

4

Client Sample ID:	L1-RDI-SB-11 (29-31) 20171115		
Lab Sample ID:	JC55519-16	Date Sampled:	11/15/17
Matrix:	SO - Soil	Date Received:	11/15/17
Method:	SW846 8260C SW846 5035	Percent Solids:	94.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140726.D	1	11/22/17 05:26	PS	11/16/17 10:00	n/a	V3C6378
Run #2							

	Initial Weight
Run #1	4.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0023	0.00073	mg/kg	
67-66-3	Chloroform	ND	0.0023	0.00036	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00058	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane[a]	ND	0.0011	0.00020	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00080	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00045	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00066	mg/kg	
75-09-2	Methylene chloride	0.0042	0.0056	0.0028	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0023	0.00072	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0023	0.00065	mg/kg	
79-01-6	Trichloroethene	0.0057	0.0011	0.00062	mg/kg	
75-01-4	Vinyl chloride	ND	0.0023	0.00086	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		72-129%
17060-07-0	1,2-Dichloroethane-D4	110%		73-132%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	98%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2/28/18

SGS Accutest

Report of Analysis

4.17

4

Client Sample ID:	L1-RDI-SB-26 (4-5) 20171115		
Lab Sample ID:	JC55519-17	Date Sampled:	11/15/17
Matrix:	SO - Soil	Date Received:	11/15/17
Method:	SW846 8260C SW846 5035	Percent Solids:	86.1
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3C140727.D	1	11/22/17 05:53	PS	11/16/17 09:00	n/a	V3C6378
Run #2	3V39168.D	1	11/28/17 15:58	TDN	11/16/17 09:00	n/a	V3V1563
Run #3	3V39142.D	1	11/28/17 04:12	TDN	11/16/17 09:00	n/a	V3V1562

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.9 g		
Run #2	5.5 g	5.0 ml	10.0 ul
Run #3	5.5 g	5.0 ml	100 ul

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00064	mg/kg	
67-66-3	Chloroform	0.00089	0.0020	0.00032	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.00098	0.00051	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.00098	0.00025	mg/kg	
107-06-2	1,2-Dichloroethane a	ND	0.00098	0.00018	mg/kg	UJ
75-35-4	1,1-Dichloroethene	ND	0.00098	0.00070	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.00061	0.00098	0.00040	mg/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.00098	0.00057	mg/kg	
75-09-2	Methylene chloride	ND	0.0049	0.0025	mg/kg	
127-18-4	Tetrachloroethene	0.0207	0.0020	0.00063	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00057	mg/kg	
79-01-6	Trichloroethene	18.7 b	0.61	0.33	mg/kg	D
75-01-4	Vinyl chloride	ND	0.0020	0.00075	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	114%	95%	93%	72-129%
17060-07-0	1,2-Dichloroethane-D4	113%	97%	95%	73-132%
2037-26-5	Toluene-D8	103%	99%	93%	80-120%
460-00-4	4-Bromofluorobenzene	110%	98%	95%	77-125%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

JOP 2/28/18

SGS Accutest

Report of Analysis

Client Sample ID:	L1-RDI-SB-26 (5-7) 20171115		
Lab Sample ID:	JC55519-18	**Date Sampled:**	11/15/17
Matrix:	SO - Soil	**Date Received:**	11/15/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	87.9
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217112.D	1	11/22/17 14:28	PS	11/16/17 09:00	n/a	VI8720
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	0.0020	0.00065	mg/kg	
67-66-3	Chloroform	ND	0.0020	0.00032	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00051	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00071	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00040	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00058	mg/kg	
75-09-2	Methylene chloride	0.0031	0.0050	0.0025	mg/kg	J
127-18-4	Tetrachloroethene	0.0072	0.0020	0.00064	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00058	mg/kg	
79-01-6	Trichloroethene	0.0906	0.0010	0.00055	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00076	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		72-129%
17060-07-0	1,2-Dichloroethane-D4	106%		73-132%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	113%		77-125%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	L1-RDI-SB-26(4-5) 20171220		
Lab Sample ID:	JC57756-1	Date Sampled:	12/20/17
Matrix:	SO - Soil	Date Received:	12/20/17
Method:	SW846 8260C SW846 5035	Percent Solids:	86.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217725.D	1	12/22/17 16:32	PS	12/21/17 07:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	5.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0020	0.00066	mg/kg	UJ
67-66-3	Chloroform	ND	0.0020	0.00033	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0010	0.00052	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00026	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00018	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00072	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00041	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00059	mg/kg	
75-09-2	Methylene chloride	0.0025	0.0051	0.0025	mg/kg	J
127-18-4	Tetrachloroethene	0.0067	0.0020	0.00065	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0020	0.00059	mg/kg	UJ
79-01-6	Trichloroethene	0.0773	0.0010	0.00056	mg/kg	
75-01-4	Vinyl chloride	ND	0.0020	0.00078	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-129%
17060-07-0	1,2-Dichloroethane-D4	97%		73-132%
2037-26-5	Toluene-D8	91%		80-120%
460-00-4	4-Bromofluorobenzene	108%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

LO 12/28/18

SGS North America Inc.

Report of Analysis

4.2
4

Client Sample ID:	L1-RDI-SB-26(5-7) 20171220		
Lab Sample ID:	JC57756-2	**Date Sampled:**	12/20/17
Matrix:	SO - Soil	**Date Received:**	12/20/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	87.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217724.D	1	12/22/17 16:06	PS	12/21/17 07:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride[a]	ND	0.0027	0.00089	mg/kg	UJ
67-66-3	Chloroform	ND	0.0027	0.00044	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0014	0.00071	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0014	0.00035	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0014	0.00025	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0014	0.00097	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0014	0.00055	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0014	0.00080	mg/kg	
75-09-2	Methylene chloride	0.0055	0.0068	0.0034	mg/kg	J J
127-18-4	Tetrachloroethene	0.0081	0.0027	0.00087	mg/kg	J
71-55-6	1,1,1-Trichloroethane[a]	ND	0.0027	0.00080	mg/kg	UJ
79-01-6	Trichloroethene	0.0813	0.0014	0.00075	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0027	0.0010	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		72-129%
17060-07-0	1,2-Dichloroethane-D4	106%		73-132%
2037-26-5	Toluene-D8	91%		80-120%
460-00-4	4-Bromofluorobenzene	109%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

4.3
4

Client Sample ID:	L1-RDI-SB-X(5-7) 20171220		
Lab Sample ID:	JC57756-3 (L1-RDI-SB-26(5-7) 20171220)	Date Sampled:	12/20/17
Matrix:	SO - Soil	Date Received:	12/20/17
Method:	SW846 8260C SW846 5035	Percent Solids:	91.8
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217726.D	1	12/22/17 16:59	PS	12/21/17 07:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0022	0.00072	mg/kg	UJ
67-66-3	Chloroform	0.00039	0.0022	0.00036	mg/kg	J
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00057	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00029	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00020	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00079	mg/kg	
156-59-2	cis-1,2-Dichloroethene	0.00058	0.0011	0.00045	mg/kg	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00065	mg/kg	
75-09-2	Methylene chloride	0.0031	0.0056	0.0028	mg/kg	~~J~~ J
127-18-4	Tetrachloroethene	0.0146	0.0022	0.00071	mg/kg	J
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0022	0.00065	mg/kg	UJ
79-01-6	Trichloroethene	0.132	0.0011	0.00061	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0022	0.00085	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		72-129%
17060-07-0	1,2-Dichloroethane-D4	96%		73-132%
2037-26-5	Toluene-D8	92%		80-120%
460-00-4	4-Bromofluorobenzene	110%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	L1-RDI-TB-2 20171220		
Lab Sample ID:	JC57756-4	Date Sampled:	12/20/17
Matrix:	AQ - Trip Blank Soil	Date Received:	12/20/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D172769.D	1	01/03/18 00:20	BK	n/a	n/a	V2D7254
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		80-120%
17060-07-0	1,2-Dichloroethane-D4	111%		81-124%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	109%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	L1-RDI-FB-2 20171220		
Lab Sample ID:	JC57756-5	**Date Sampled:**	12/20/17
Matrix:	AQ - Field Blank Soil	**Date Received:**	12/20/17
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D172770.D	1	01/03/18 00:50	BK	n/a	n/a	V2D7254
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.21	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.47	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.62	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		80-120%
17060-07-0	1,2-Dichloroethane-D4	110%		81-124%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	110%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.6
4

Client Sample ID:	L1-RDI-SB-26(7-9) 20171220		
Lab Sample ID:	JC57756-6	**Date Sampled:**	12/20/17
Matrix:	SO - Soil	**Date Received:**	12/20/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	91.0
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217727.D	1	12/22/17 17:25	PS	12/21/17 07:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride[a]	ND	0.0022	0.00071	mg/kg	UJ
67-66-3	Chloroform	ND	0.0022	0.00035	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0011	0.00057	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0011	0.00028	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0011	0.00020	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0011	0.00078	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0011	0.00044	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0011	0.00064	mg/kg	
75-09-2	Methylene chloride	0.0061	0.0055	0.0027	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0022	0.00070	mg/kg	
71-55-6	1,1,1-Trichloroethane[a]	ND	0.0022	0.00064	mg/kg	UJ
79-01-6	Trichloroethene	0.0010	0.0011	0.00060	mg/kg	J
75-01-4	Vinyl chloride	ND	0.0022	0.00084	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		72-129%
17060-07-0	1,2-Dichloroethane-D4	93%		73-132%
2037-26-5	Toluene-D8	90%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

4.7
4

Client Sample ID:	L1-RDI-SB-26(9-11) 20171220		
Lab Sample ID:	JC57756-7	Date Sampled:	12/20/17
Matrix:	SO - Soil	Date Received:	12/20/17
Method:	SW846 8260C SW846 5035	Percent Solids:	97.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217728.D	1	12/22/17 17:52	PS	12/21/17 07:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	3.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0028	0.00090	mg/kg	UJ
67-66-3	Chloroform	ND	0.0028	0.00045	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0014	0.00072	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0014	0.00036	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0014	0.00025	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0014	0.00098	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0014	0.00056	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0014	0.00081	mg/kg	
75-09-2	Methylene chloride	0.0048	0.0069	0.0035	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0028	0.00088	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0028	0.00081	mg/kg	UJ
79-01-6	Trichloroethene	ND	0.0014	0.00076	mg/kg	
75-01-4	Vinyl chloride	ND	0.0028	0.0011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-129%
17060-07-0	1,2-Dichloroethane-D4	93%		73-132%
2037-26-5	Toluene-D8	89%		80-120%
460-00-4	4-Bromofluorobenzene	104%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.8
4

Client Sample ID:	L1-RDI-SB-26(11-13) 20171220		
Lab Sample ID:	JC57756-8	Date Sampled:	12/20/17
Matrix:	SO - Soil	Date Received:	12/20/17
Method:	SW846 8260C SW846 5035	Percent Solids:	96.1
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217729.D	1	12/22/17 18:18	PS	12/21/17 07:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	3.8 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0027	0.00089	mg/kg	UJ
67-66-3	Chloroform	ND	0.0027	0.00044	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0014	0.00071	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0014	0.00035	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0014	0.00025	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0014	0.00097	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0014	0.00055	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0014	0.00080	mg/kg	
75-09-2	Methylene chloride	0.0088	0.0068	0.0034	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0027	0.00087	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0027	0.00080	mg/kg	UJ
79-01-6	Trichloroethene	ND	0.0014	0.00075	mg/kg	
75-01-4	Vinyl chloride	ND	0.0027	0.0010	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-129%
17060-07-0	1,2-Dichloroethane-D4	92%		73-132%
2037-26-5	Toluene-D8	90%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.9
4

Client Sample ID:	L1-RDI-SB-26(13-15) 20171220		
Lab Sample ID:	JC57756-9	Date Sampled:	12/20/17
Matrix:	SO - Soil	Date Received:	12/20/17
Method:	SW846 8260C SW846 5035	Percent Solids:	96.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217730.D	1	12/22/17 18:44	PS	12/21/17 07:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	2.9 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0036	0.0012	mg/kg	UJ
67-66-3	Chloroform	ND	0.0036	0.00058	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0018	0.00092	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0018	0.00046	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0018	0.00032	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0018	0.0013	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0018	0.00072	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0018	0.0010	mg/kg	
75-09-2	Methylene chloride	0.0051	0.0090	0.0045	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0036	0.0011	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0036	0.0010	mg/kg	UJ
79-01-6	Trichloroethene	0.0024	0.0018	0.00098	mg/kg	
75-01-4	Vinyl chloride	ND	0.0036	0.0014	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-129%
17060-07-0	1,2-Dichloroethane-D4	93%		73-132%
2037-26-5	Toluene-D8	90%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

12/28/18

SGS North America Inc.

Report of Analysis

Client Sample ID:	L1-RDI-SB-26(15-17) 20171220		
Lab Sample ID:	JC57756-10	**Date Sampled:**	12/20/17
Matrix:	SO - Soil	**Date Received:**	12/20/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	97.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217731.D	1	12/22/17 19:10	PS	12/21/17 07:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.0 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0026	0.00083	mg/kg	UJ
67-66-3	Chloroform	ND	0.0026	0.00041	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00066	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00033	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0013	0.00023	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0013	0.00091	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0013	0.00052	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00075	mg/kg	
75-09-2	Methylene chloride	0.0038	0.0064	0.0032	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0026	0.00082	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0026	0.00075	mg/kg	UJ
79-01-6	Trichloroethene	0.0045	0.0013	0.00070	mg/kg	
75-01-4	Vinyl chloride	ND	0.0026	0.00098	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		72-129%
17060-07-0	1,2-Dichloroethane-D4	92%		73-132%
2037-26-5	Toluene-D8	89%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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SGS North America Inc.

Report of Analysis

Client Sample ID:	L1-RDI-SB-26(17-19) 20171220		
Lab Sample ID:	JC57756-11	**Date Sampled:**	12/20/17
Matrix:	SO - Soil	**Date Received:**	12/20/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	90.5
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217732.D	1	12/22/17 19:37	PS	12/21/17 10:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.6 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0024	0.00078	mg/kg	UJ
67-66-3	Chloroform	ND	0.0024	0.00039	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00062	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00031	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0012	0.00022	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00085	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00048	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00070	mg/kg	
75-09-2	Methylene chloride	0.0037	0.0060	0.0030	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0024	0.00077	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0024	0.00070	mg/kg	UJ
79-01-6	Trichloroethene	0.0020	0.0012	0.00066	mg/kg	
75-01-4	Vinyl chloride	ND	0.0024	0.00092	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		72-129%
17060-07-0	1,2-Dichloroethane-D4	93%		73-132%
2037-26-5	Toluene-D8	89%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

4.12 4

Client Sample ID:	L1-RDI-SB-26(19-21) 20171220		
Lab Sample ID:	JC57756-12	Date Sampled:	12/20/17
Matrix:	SO - Soil	Date Received:	12/20/17
Method:	SW846 8260C SW846 5035	Percent Solids:	95.7
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217733.D	1	12/22/17 20:03	PS	12/21/17 10:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.4 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0024	0.00077	mg/kg	UJ
67-66-3	Chloroform	ND	0.0024	0.00038	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00061	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00031	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0012	0.00021	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00084	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00048	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00069	mg/kg	
75-09-2	Methylene chloride	0.0048	0.0059	0.0030	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0024	0.00076	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0024	0.00069	mg/kg	UJ
79-01-6	Trichloroethene	0.0015	0.0012	0.00065	mg/kg	
75-01-4	Vinyl chloride	ND	0.0024	0.00091	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		72-129%
17060-07-0	1,2-Dichloroethane-D4	92%		73-132%
2037-26-5	Toluene-D8	90%		80-120%
460-00-4	4-Bromofluorobenzene	103%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

LOR 12/28/18

SGS North America Inc.

Report of Analysis

Client Sample ID:	L1-RDI-SB-26(21-23) 20171220		
Lab Sample ID:	JC57756-13	**Date Sampled:**	12/20/17
Matrix:	SO - Soil	**Date Received:**	12/20/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	96.9
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217734.D	1	12/22/17 20:30	PS	12/21/17 10:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.1 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0025	0.00082	mg/kg	UJ
67-66-3	Chloroform	ND	0.0025	0.00041	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0013	0.00065	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0013	0.00033	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0013	0.00023	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0013	0.00089	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0013	0.00051	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0013	0.00073	mg/kg	
75-09-2	Methylene chloride	0.0043	0.0063	0.0031	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0025	0.00080	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0025	0.00073	mg/kg	UJ
79-01-6	Trichloroethene	0.0022	0.0013	0.00069	mg/kg	
75-01-4	Vinyl chloride	ND	0.0025	0.00096	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		72-129%
17060-07-0	1,2-Dichloroethane-D4	91%		73-132%
2037-26-5	Toluene-D8	90%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

LOM 2/28/18

SGS North America Inc.

Report of Analysis

Client Sample ID:	L1-RDI-SB-26(23-25) 20171220		
Lab Sample ID:	JC57756-14	**Date Sampled:**	12/20/17
Matrix:	SO - Soil	**Date Received:**	12/20/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	96.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217735.D	1	12/22/17 20:56	PS	12/21/17 10:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0025	0.00080	mg/kg	UJ
67-66-3	Chloroform	ND	0.0025	0.00040	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00064	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00032	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0012	0.00022	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00087	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00050	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00072	mg/kg	
75-09-2	Methylene chloride	0.0070	0.0062	0.0031	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0025	0.00079	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0025	0.00072	mg/kg	UJ
79-01-6	Trichloroethene	0.0019	0.0012	0.00068	mg/kg	
75-01-4	Vinyl chloride	ND	0.0025	0.00095	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	115%		72-129%
17060-07-0	1,2-Dichloroethane-D4	92%		73-132%
2037-26-5	Toluene-D8	89%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.15

4

Client Sample ID:	L1-RDI-SB-26(25-27) 20171220		
Lab Sample ID:	JC57756-15	**Date Sampled:**	12/20/17
Matrix:	SO - Soil	**Date Received:**	12/20/17
Method:	SW846 8260C SW846 5035	**Percent Solids:**	96.2
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217736.D	1	12/22/17 21:22	PS	12/21/17 10:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride [a]	ND	0.0025	0.00080	mg/kg	UJ
67-66-3	Chloroform	ND	0.0025	0.00040	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00064	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00032	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0012	0.00022	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00087	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00050	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00072	mg/kg	
75-09-2	Methylene chloride	0.0091	0.0062	0.0031	mg/kg	
127-18-4	Tetrachloroethene	ND	0.0025	0.00079	mg/kg	
71-55-6	1,1,1-Trichloroethane [a]	ND	0.0025	0.00072	mg/kg	UJ
79-01-6	Trichloroethene	0.0024	0.0012	0.00068	mg/kg	
75-01-4	Vinyl chloride	ND	0.0025	0.00095	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	117%		72-129%
17060-07-0	1,2-Dichloroethane-D4	92%		73-132%
2037-26-5	Toluene-D8	89%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS

SGS North America Inc.

Report of Analysis

4.16

4

Client Sample ID:	L1-RDI-SB-26(27-29) 20171220		
Lab Sample ID:	JC57756-16	Date Sampled:	12/20/17
Matrix:	SO - Soil	Date Received:	12/20/17
Method:	SW846 8260C SW846 5035	Percent Solids:	96.3
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217737.D	1	12/22/17 21:48	PS	12/21/17 10:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	4.2 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride[a]	ND	0.0025	0.00080	mg/kg	UJ
67-66-3	Chloroform	ND	0.0025	0.00040	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0012	0.00064	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0012	0.00032	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0012	0.00022	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0012	0.00087	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0012	0.00050	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0012	0.00072	mg/kg	
75-09-2	Methylene chloride	0.0037	0.0062	0.0031	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0025	0.00079	mg/kg	
71-55-6	1,1,1-Trichloroethane[a]	ND	0.0025	0.00072	mg/kg	UJ
79-01-6	Trichloroethene	0.0026	0.0012	0.00068	mg/kg	
75-01-4	Vinyl chloride	ND	0.0025	0.00095	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	117%		72-129%
17060-07-0	1,2-Dichloroethane-D4	91%		73-132%
2037-26-5	Toluene-D8	89%		80-120%
460-00-4	4-Bromofluorobenzene	102%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

4.17 4

Client Sample ID:	L1-RDI-SB-26(29-31) 20171220		
Lab Sample ID:	JC57756-17	Date Sampled:	12/20/17
Matrix:	SO - Soil	Date Received:	12/20/17
Method:	SW846 8260C SW846 5035	Percent Solids:	97.2
Project:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I217738.D	1	12/22/17 22:15	PS	12/21/17 10:00	n/a	VI8745
Run #2							

	Initial Weight
Run #1	3.7 g
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
56-23-5	Carbon tetrachloride[a]	ND	0.0028	0.00090	mg/kg	UJ
67-66-3	Chloroform	ND	0.0028	0.00045	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0014	0.00072	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0014	0.00036	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0014	0.00025	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.0014	0.00098	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.0014	0.00056	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.0014	0.00081	mg/kg	
75-09-2	Methylene chloride	0.0050	0.0070	0.0035	mg/kg	J
127-18-4	Tetrachloroethene	ND	0.0028	0.00089	mg/kg	
71-55-6	1,1,1-Trichloroethane[a]	ND	0.0028	0.00081	mg/kg	UJ
79-01-6	Trichloroethene	0.0020	0.0014	0.00076	mg/kg	
75-01-4	Vinyl chloride	ND	0.0028	0.0011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		72-129%
17060-07-0	1,2-Dichloroethane-D4	92%		73-132%
2037-26-5	Toluene-D8	88%		80-120%
460-00-4	4-Bromofluorobenzene	101%		77-125%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

DATA USABILITY SUMMARY REPORT – DUSR
DATA VALIDATION SUMMARY

ORGANIC ANALYSIS

**SELECTIVE ION MONITORING (SIM) 1,4-DIOXANE VOLATILES
BY GC/MS METHOD 8260C
PART 375 CHLORINATED VOLATILE ANALYTES
BY GC/MS METHOD 8260C
AND
PERFLUOROOCTANOIC ACID AND PERFLUOROOCTANESULFONIC ACID
BY LIQUID CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY (LC/MS/MS)
BY MODIFIED EPA METHOD 537**

**For Groundwater Samples Collected
August 28, 2017 through August 30, 2017
From Atlantic Chestnut – Lot 1
3264 Fulton Street
Brooklyn, NY
Collected by AKRF, Inc.
Project # 12492-0009**

**SAMPLE DELIVERY GROUP NUMBER:
JC49698
BY SGS ACCUTEST – DAYTON, NJ (ELAP#10983)
SGS ORLANDO, FLORIDA (ELAP#12022)**

SUBMITTED TO:

**Amy Jordon
AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016**

October 16, 2017

PREPARED BY:

**Lori A. Beyer/President
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14 West Point Drive
East Northport, NY 11731**

Lori A. Beyer

(516) 523-7891; email LABValidation@aol.com

Atlantic Chestnut – Lot 1; 3264 Fulton Street, Brooklyn, New York – Data Usability Summary Report (Data Validation):
August 2017 Groundwater Sampling Event; - 1,4-Dioxane SIM Volatiles, Chlorinated Part 375 Volatiles, Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) by EPA Modified Method 537.

Table of Contents:

Introduction
Data Qualifier Definitions
Sample Receipt

1.0 Volatile Organics by GC/MS SW846 Method SIM 8260C and 8260C
- 1.1 Holding Time
- 1.2 System Monitoring Compound (Surrogate) Recovery
- 1.3 Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
- 1.4 Laboratory Control Sample/Blank Spikes
- 1.5 Blank Contamination
- 1.6 GC/MS Instrument Performance Check (Tuning)
- 1.7 Initial and Continuing Calibrations
- 1.8 Internal Standards
- 1.9 Field Duplicates
- 1.10 Target Compound List Identification
- 1.11 Compound Quantification and Reported Detection Limits
- 1.12 Overall System Performance

2.0 PFOA and PFOS Organics by LC/MS/MS EPA Modified Method 537
- 2.1 Holding Time
- 2.2 Surrogate Recovery
- 2.3 Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
- 2.4 Laboratory Control Sample
- 2.5 Method Blanks
- 2.6 Initial and Continuing Calibrations
- 2.7 Internal Standards
- 2.8 Field Duplicates
- 2.9 Target Compound List Identification
- 2.10 Compound Quantification and Reported Detection Limits
- 2.11 Overall System Performance

APPENDICES:
A. Chain of Custody Documents
B. Case Narratives

Introduction:

A validation was performed on groundwater samples and the associated quality control samples (MS/MSD/Field Duplicate/Field Blank/Trip Blank) for organic analysis for samples collected under chain of custody documentation by AKRF, Inc. and submitted to SGS Accutest Dayton, NJ for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below. Analysis was performed in accordance with requested tests per the chain of custody documents. The 8260C samples were analyzed by SGS Accutest Dayton and PFOA/PFOS by SGS Accutest Orlando, utilizing SW846/EPA Methods and submitted under NYSDEC ASP Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing for groundwater samples consisted of 1,4-Dioxane (SIM) Volatile Organics, Chlorinated Part 375 Analyte list Volatile Organics and PFOA and PFOS.

The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic and Inorganic Data Review and EPA Region II SOPs for 8260 and in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

Sample ID	Lab ID	Matrix	Analysis
LI-RI-MW-1 20170828	JC49698-1	Groundwater	1,4-Dioxane, PFOA, PFOS
LI-RI-MW-2 20170828	JC49698-2	Groundwater	1,4-Dioxane, PFOA, PFOS
LI-RI-MW-3 20170828	JC49698-3	Groundwater	1,4-Dioxane, PFOA, PFOS
LI-RI-MW-4 20170828	JC49698-4	Groundwater	1,4-Dioxane, PFOA, PFOS
LI-RI-MW-5 20170828	JC49698-5	Groundwater	1,4-Dioxane, PFOA, PFOS
LI-RDI-MW-7D 20170828	JC49698-6	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-6D 20170829 (Plus, MS/MSD)	JC49698-7	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-XD 20170829 (Field Duplicate of LI-RI-MW-6D 20170829)	JC49698-8	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-6I 20170829	JC49698-9	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-6S 20170829	JC49698-10	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-7I 20170829	JC49698-11	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-7S 20170829	JC49698-12	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-FB-3-7S 20170829	JC49698-13	Aqueous	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-TB-3 20170829	JC49698-14	Aqueous	Chlorinated VOAs
LI-RDI-MW-8S 20170829	JC49698-15	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-8I 20170830	JC49698-16	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-8D 20170830	JC49698-17	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-9S 20170830	JC49698-18	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-9I 20170830	JC49698-19	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS
LI-RDI-MW-9D 20170830	JC49698-20	Groundwater	1,4-Dioxane, Chlorinated VOAs, PFOA, PFOS

Data Qualifier Definitions:

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

R - The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.

J+ - The result is an estimated quantity, but the result may be biased high.

J- - The result is an estimated quantity, but the result may be biased low.

D - Analyte concentration is from diluted analysis.

Sample Receipt:
The Chain of Custody documents indicates that the samples were received at SGS Accutest via laboratory courier upon completion of the sampling events. Sample login notes were generated. The cooler temperature for all aqueous sample receipts were recorded upon receipt at SGS Accutest and determined to be acceptable (<6.0 degrees C) for all coolers. The actual temperatures are recorded on the chain of custody documents, sample receipt checklists in addition to the case narrative provided in Appendix B of this report.

No unresolved problems and/or discrepancies were noted, consequently, the integrity of the groundwater samples has been assumed to be good.

The EQUIS EDD includes all usable (qualified) and unusable (rejected) results for the samples identified above. The spreadsheet summarizes the detailed narrative section of the report.

NOTE:
L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

1.0 Chlorinated Volatile Organics by GC/MS SW846 Method 8260C and 1,4-Dioxane by SIM 8260C.

The following method criteria were reviewed: holding times, SMCs, MS, MSD, LCS, Laboratory Spiked Blanks, Method Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results are valid and useable as noted within the following text:

1.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Samples pertaining to this SDG were performed within the Method required holding times as well as the technical holding times for data validation of 14 days from collection to analysis. No data validation qualifiers were required based upon holding time.

1.2 System Monitoring Compound (Surrogate) Recovery

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specification, qualifications are required to be applied to associated samples and analytes.

Surrogate recoveries (%R) for Dibromofluoromethane, 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene were found to be within acceptable limits for surrogate compounds for all analyses pertaining to this SDG for Chlorinated analysis. Surrogate 1,4-Dioxane-d8 also recovered within limits for SIM analysis.

1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

MS/MSD analyses were conducted for each analytical sequence and were spiked with all components as required by the analytical procedure.

Site specific MS/MSD was performed on LI-RDI-6D 20170829. Acceptable recovery and RPD were observed for all spiked analytes (1,4-Dioxane and Chlorinated compounds). MS/MSD was also performed on LI-RDI-MW-8I 20170830 for 1,4-Dioxane. Acceptable recovery and RPD were observed in this MS/MSD analysis.

The National Functional Guidelines and EPA Region 2 SOPs state that "No qualifications to the data is necessary based on MS data alone."

No qualifications to the data were required based on professional judgment for batch (non-site specific) MS/MSD analysis.

1.4 Laboratory Control Sample/Blank Spikes

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

LCS/Blank Spikes or LCS/LCS Duplicates were analyzed for each sequence. Recovery values were acceptable for all spiked analytes.

1.5 Blank Contamination

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

Blank Type	Blank Result	Sample Result	Action for Samples
Method, Storage, field, Trip, Instrument	Detects	Not Detected	No qualification required
	<CRQL*	<CRQL*	Report CRQL value with a U
		>/= CRQL* and <2x the CRQL**	No qualification required
	>CRQL*	</= CRQL*	Report CRQL value with a U
		>/=CRQL* and </= blank concentration	Report blank value for sample concentration with a U
		>/= CRQL* and > blank concentration	No qualification required
	=CRQL*	</= CRQL*	Report CRQL value with a U
		>CRQL*	No qualification required
	Gross Contamination**	Detects	Report blank value for sample concentration with a U

*2x the CRQL for methylene chloride, 2-butanone and acetone.
**4x the CRQL for methylene chloride, 2-butanone, and acetone
***Qualifications based on instrument blank results affect only the sample analyzed immediately after the sample that has target compounds that exceed the calibration range or non-target compounds that exceed 100 ug/L.

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

A) **Method Blank Contamination:**

Target analytes were not detected in the method blanks associated with sample analysis.

B) **Field Blank Contamination:**

Target analytes were not detected in the Field Blank.

C) **Trip Blank Contamination:**

Target analytes were not detected in the Trip Blank.

1.6 GC/MS Instrument Performance Check

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses conducted for this SDG.

1.7 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can produce acceptable performance at the beginning of an experimental sequence.

The continuing calibration checks document that the instrument is giving satisfactory daily performance. Initial calibration verifications were acceptable.

A) Response Factor GC/MS:
The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes

detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R". Method 8260C allows for a minimum response factor of 0.1 for Acetone and 2-Butanone. Validation criteria allows response factor to be /=>0.01 for poor responders (Acetone, MEK, Carbon Disulfide, Chloroethane, Chloromethane, Cyclohexane, 1,2-Dibromoethane, Dichlorodifluoromethane, cis-1,2-Dichloroethene, 1,2-Dichloropropane, 1,2-Dibromo-3-chloropropane, Isopropylbenzene, Methyl Acetate, Methylene Chloride, Methylcyclohexane, MTBE, trans-1,2-Dichloroethene, 4-Methyl-2-Pentanone, 2-Hexanone, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-Trifluoroethane.

All the response factors for the target analytes reported were found to be within acceptable limits (>/=0.05) and (>/= 0.01 for poor responders) and minimum response criteria in Table 4 of Method 8260C, for the initial and continuing calibrations for all reported analytes.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <20% and %D must be <20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >20% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Closing CCV must meet 30% criteria. Poor responders must be </= 40%.

*Method 8260C allows for several analytes to be outside requirements due to the large number of compounds.

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (20%) and (40% for poor responders) for all reported compounds.

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (20%) and (40% for poor responders) for all reported compounds.

1.8 Internal Standards

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

All samples were spiked with the internal standards Tert Butyl Alcohol-D9, Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-D5 and 1,4-Dichlorobenzene-d4 for 8260C analysis. Internal standard 4-Bromofluorobenzene was utilized for SIM analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with this SDG.

1.9 Field Duplicates

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Acceptable RPD is 25%. Field Duplicate LI-RDI-MW-XD 20170829 was collected on LI-RDI-MW-6D 20170829. Acceptable precision was observed for 1,4-Dioxane and was non-detect in both analyses. Chloroform demonstrated %D of 51.4%. Results in the parent and field duplicate have been qualified, "J."

Laboratory Duplicate was performed on LI-RDI-MW-8D 20170830 for 1,4-Dioxane. This analyte was not detected in either

the parent or the duplicate analysis. Acceptable precision was observed.

1.10 Target Compound List Identification

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within =/- 0.06RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.

1.11 Compound Quantification and Reported Detection Limits

GC/MS quantitative analysis is acceptable. Correct internal standards per SW846 and response factors were used to calculate final concentrations.

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).

Groundwater samples were all analyzed undiluted.

1.12 Overall System Performance

Good resolution and chromatographic performance were observed.

Tentatively Identified Compounds (TICs) were not required.

2.0 PFOA and PFOS Organics by LC/MS/MS EPA Modified Method 537

The following method criteria were reviewed: holding times, Surrogates, MS, MSD, LCS/Laboratory Spiked Blanks, Method Blanks, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The PFOA/PFOS results are valid and useable as noted within the following text:

2.1 Holding Time

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

Samples pertaining to this SDG were extracted and performed within the method required holding times of 14 days from collection to extraction and 28 days from extraction to analysis for sample containers preserved with Trizma. No data validation qualifiers were required based upon holding time.

2.2 System Monitoring Compound (Surrogate) Recovery

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specification, qualifications are required to be applied to associated samples and analytes.

Surrogate recoveries (%R) for 13C2-PFHxA (61-134%) and 13C2-PFDA (62-128%) were found to be within acceptable limits for all analyses pertaining to this SDG.

2.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

MS/MSD analyses were conducted for each analytical sequence and were spiked with PFOA and PFOS as required by the analytical procedure.

Site specific MS/MSD was performed on LI-RI-MW-1 20170828, LI-RDI-MW-6D 20170829. Acceptable recovery and RPD were observed.

The National Functional Guidelines and EPA Region 2 SOPs state that "No qualifications to the data is necessary based on MS data alone."

No qualifications to the data were required based on professional judgment for batch (non-site specific) MS/MSD analysis.

2.4 Laboratory Control Sample/Blank Spikes

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

LCS/Blank Spikes were analyzed for each sequence. Recovery values were acceptable.

2.5 Blank Contamination

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

Blank Type	Blank Result	Sample Result	Action for Samples
Method, Storage, field, Trip, Instrument	Detects	Not Detected	No qualification required
	<CRQL*	<CRQL*	Report CRQL value with a U
		>/= CRQL* and <2x the CRQL**	No qualification required
	>CRQL*	</= CRQL*	Report CRQL value with a U
		>/=CRQL* and </= blank concentration	Report blank value for sample concentration with a U
		>/= CRQL* and > blank concentration	No qualification required
	=CRQL*	</= CRQL*	Report CRQL value with a U
		>CRQL*	No qualification required
	Gross Contamination**	Detects	Report blank value for sample concentration with a U

Below is a summary of the compounds in the blanks and the associated qualifications that have been applied:

A) Method Blank Contamination:

Target analytes were not detected in the method blanks associated with sample analysis.

B) Field Blank Contamination:

Target analytes were not detected in the field blank associated with sample analysis.

2.6 Initial and Continuing Calibrations

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can produce acceptable performance at the beginning of an experimental sequence.

The continuing calibration checks document that the instrument is giving satisfactory daily performance. Initial and continuing calibration verifications were acceptable.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be >/= 0.05 in both initial and continuing calibrations. A value <0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

All the response factors for the target analytes reported were found to be within acceptable limits (>/=0.05) for the initial and continuing calibrations for all reported analytes.

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure

of the instrument's daily performance. Percent RSD must be <20% and %D must be <20%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is >20% and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 20% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high-level results will be qualified, "J" in the portion of the curve where non-linearity exists. Closing CCV must meet 30% criteria. Acceptable correlation coefficient was observed for target analytes (>0.995)

Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (20%) for all reported compounds.

Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (20%) for all reported compounds.

2.7 Internal Standards

Internal Standards (IS) performance criteria ensure that the LC/MS/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 1 (-50% to +50%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/-60 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +50%) range of the associated standard, all the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 60 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

All samples were spiked with the internal standards 13C3-PFPeA, 13C2-6:2FTS, 13C2-PFOA, 13C4-PFOS, d3-MeFOSAA and 13C2-PFDoDA prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with this SDG.

2.8 Field Duplicates

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Acceptable RPD is 25%. Field Duplicate LI-RDI-MW-XD 20170829 was collected on LI-RDI-MW-6D 20170829. Target compounds were not detected in either analysis. Acceptable precision was observed.

2.9 Target Compound List Identification

TCL compounds are identified on the LC/MS/MS by using the analyte's relative retention time (RRT) obtained from known standards.

LC/MS/MS raw data met the qualitative criteria for identification. All retention times were within required specifications.

2.10 Compound Quantification and Reported Detection Limits

LC/MS/MS quantitative analysis is acceptable. Samples were extracted by solid phase extraction techniques. Correct internal standards per EPA Method 537 and response factors were used to calculate final concentrations.

As required, the laboratory reported "J" values between the reporting limits (RL) and Method Detection Limits (MDLs). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).

Groundwater samples were all analyzed undiluted.

2.11 Overall System Performance

Good resolution and chromatographic performance were observed.

Reviewer's Signature Lori A Beyer **Date** 10/16/2017

Appendix A
Chain of Custody
Documents

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC49698

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy.Jordan@akrf.com
Phone # Fax #: 646-388-9964
Sampler(s) Name(s) Phone #: Marco Bellatta & Adrianna Bosco 646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro
Billing Information (if different from Report to): Company Name: | Street Address: | City State Zip: | Attention:

Requested Analysis

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MeOH	EnCore	PFOA / PFOS by Modified EPA Method 537	1,4-Dioxane by EPA 8260C SIM	CVOCs by EPA 8260	LAB USE ONLY
1	LI-RI-MW-1 20170828		8/28/17	1030	AB/MB	GW	5	3				2				X	X		
2	LI-RI-MW-2 20170828			930			5	3				2				X	X		SUB
3	LI-RI-MW-3 20170828			1350			5	3				2				X	X		
4	LI-RI-MW-4 20170828			1250			5	3				2				X	X		V657
5	LI-RI-MW-5 20170828			1125			5	3				2				X	X		
6	LI-RDI-MW-7D 20170828			1450	AB/MB	GW	8	6				2				X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WI - Wipe; FB Field Blank; EB Equipment Blank; RB - Rinse Blank; TB - Trip Blank

Turnaround Time (Business days)

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other ____
Emergency & Rush T/A data available VIA Lablink

Approved by (SGS Accutest PM) / Date:
INITIAL ASSESSMENT 28/17
LABEL VERIFICATION ____

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X__NYASP Category B
__State Forms
_X_EDD Format __AKRF__
Other ____

Comments / Special Instructions

Keep SDG open
PFOA / PFOS to be analyzed by SGS Accutest of Orlando, FL.
Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/28/17 15:15	1 Chris Lau	2 Chris Lau	8/28/17 17:20	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___ Intact X Not Intact	Preserved where applicable ___	On Ice X	Cooler Temp. 3.6°C IR

5.1 5

JC49698: Chain of Custody
Page 6 of 6

GW
FB
WTB

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC49698

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9864
Sampler(s) Name(s) Phone #: Marco Ballelta & Adrianna Bosco 646-388-9576

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3284 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

PFOA / PFOS by Modified EPA Method 537; 1,4-Dioxane by EPA 8260C SIM; CVOCs by EPA 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED Sediment; OIL Oil; LIQ. Other Liquid; AIR - Air; SOL - Other Solid; WIPE - Wipe; FB-Field Blank; EB Equipment Blank; RB- Rinse Blank; TB- Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved: DI	NaOH	HNO3	H2SO4	NONE	Sodium Bisulfate	MEOH	DI/ACN	PFOA / PFOS by Modified EPA Method 537	1,4-Dioxane by EPA 8260C SIM	CVOCs by EPA 8260	LAB USE ONLY
7	LI-RDI-MW-6D 20170829		8/29/17	1005	AB	GW	8	6				2				X	X	X	
8	LI-RDI-MW-6DMS/MSD 20170829			1005	AB	GW	16	12				4				X	X	X	SUB
9	LI-RDI-MW-XD 20170829			—	AB	GW	8	6				2				X	X	X	
10	LI-RDI-MW-6I 20170829			1232	AB	GW	8	6				2				X	X	X	V669
11	LI-RDI-MW-6S 20170829			1430	AB	GW	8	6				2				X	X	X	V668
12	LI-RDI-MW-7I 20170829			1137	MB	GW	8	6				2				X	X	X	
13	LI-RDI-MW-7S 20170829			1307	MB	GW	8	6				2				X	X	X	
14	LI-RDI-FB-3 20170829			1400	AB	FB	6	4				2				X	X	X	
15	LI-RDI-TB-3 20170829		8/29/17	09:00	—	TB	2	2										X	
	LI-RDI-MW-8S 20170829		8/29/17	1533	MB	GW	8	6				2				X	X	X	

Turnaround Time (Business days)

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other _____
Emergency & Rush T/A data available VIA Lablink

Approved by (SGS Accutest PM) / Date:
INITIAL ASESSMENT 2A / 8/P
LABEL VERIFICATION

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary, NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X_NYASP Category B
__State Forms
_X_EDD Format __AKRF__
Other _____

Comments / Special Instructions

Keep SDG open – Add to SDG from 8/28/17
PFOA / PFOS to be analyzed by SGS Accutest of Orlando, FL.

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/29/17 1530	1	2	8/29/17 1810	2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ___Intact X Not Intact	Preserved where applicable ___	On Ice X

Cooler Temp. 3.9°C

5.1 5

JC49698: Chain of Custody
Page 1 of 6

GW

CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job # JC49698

Client / Reporting Information

Company Name: AKRF, Inc.
Street Address: 440 Park Avenue South, 7th Floor
City State Zip: New York, NY 10016
Project Contact E-mail: Amy Jordan ajordan@akrf.com
Phone # Fax #: 646-388-9864
Sampler(s) Name(s) Phone #: Marco Dallella & Adrianna Bosco 646-388-9570

Project Information

Project Name: Atlantic Chestnut - Lot 1
Street: 3264 Fulton Street
City State: Brooklyn NY
Project #: 12492
Client Purchase Order #:
Project Manager: Amy Jordan & Deborah Shapiro

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	MEOH	DI Water	PFOA / PFOS by Modified EPA Method 537	1,4-Dioxane by EPA 8260C SIM	CVOCs by EPA 8260	LAB USE ONLY
16	U-RDI-MW-8I 20170830		8/30/17	1117	MB	GW	8	6				2			X	X	X	V650
17	U-RDI-MW-8D 20170830		↓	937	MB	↓	8	6				2			X	X	X	
18	U-RDI-MW-9S 20170830			1145	AB		8	6				2			X	X	X	
19	U-RDI-MW-9I 20170830			1343	MB		8	6				2			X	X	X	
20	U-RDI-MW-9D 20170830		↓	1005	AB	↓	8	6				2			X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB Field Blank; EB Equipment Blank; RB- Rinse Blank; TB Trip Blank

INITIAL ASESSMENT 7E24
LABEL VERIFICATION

Turnaround Time (Business days)

_X_Std. 10 Business Days
__5 Day RUSH
__3 Day RUSH
__2 Day RUSH
__1 Day RUSH
__other ____
Emergency & Rush TAT data available VIA Lablink

Approved by (SGS Accutest PM) / Date

Data Deliverable Information

__Commercial "A" (Level 1)
__Commercial "B" (Level 2)
__FULLT1 (Level 3+4)
__NJ Reduced
__Commercial "C"
__NJ Data of Known Quality Protocol Reporting
Commercial "A" = Results Only, Commercial "B" = Results + QC Summary, NJ Reduced = Results + QC Summary + Partial Raw data
__NYASP Category A
_X__NYASP Category B
__State Forms
_X_EDD Format__AKRF__
Other ____

Comments / Special Instructions

~~Keep SDG open~~ Close SDG on 8/30/17
PFOA / PFOS to be analyzed by SGS Accutest of Orlando, FL.

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8/31/17 1345	1	2	8/31/17 1745	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp.
5		5	X Intact / Not Intact		X / 4.1 °C IP

5.1 5

CHAIN OF CUSTODY

SGS ACCUTEST

2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC49698

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Project Contact: Matthew.Cordova@sgs.com E-mail:
Phone #: 732-329-0200 Fax #:
Sampler(s) Name(s): AB Phone:

Project Information

Project Name: Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (If different from Report to)
Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LC537PFOA_S_	LAB USE ONLY
7	LI-RDI-MW-6D 20170829		8/29/17	10:05:00 AM	AB	AQ	2					2				X	
7D	LI-RDI-MW-6D MSD 20170829		8/29/17	10:05:00 AM	AB	AQ	2					2				X	
7S	LI-RDI-MW-6D MS 20170829		8/29/17	10:05:00 AM	AB	AQ	2					2				X	
8	LI-RDI-MW-XD 20170829		8/29/17	12:00:00 AM	AB	AQ	2					2				X	
9	LI-RDI-MW-6I 20170829		8/29/17	12:32:00 PM	AB	AQ	2					2				X	
10	LI-RDI-MW-6S 20170829		8/29/17	2:30:00 PM	AB	AQ	2					2				X	
11	LI-RDI-MW-7I 20170829		8/29/17	11:37:00 AM	MB	AQ	2					2				X	
12	LI-RDI-MW-7S 20170829		8/29/17	1:07:00 PM	MB	AQ	2					2				X	
13	LI-RDI-FB-3 20170829		8/29/17	2:00:00 PM	AB	AQ	2					2				X	
15	LI-RDI-MW-8S-20170829		8/29/17	3:33:00 PM	MB	AQ	2					2				X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [x] other 14

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [x] Other NYASPB

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	8-30-17 1700	1 FEDEX	2		2 10:30 9-1-17
3		3	4		4
5		5			

Custody Seal # 512 [ ] Intact [ ] Not Intact | Preserved where applicable [ ] | On Ice [ ] | Cooler Temp. 3.4

8.1

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JC49698: Chain of Custody
Page 1 of 3
SGS Accutest Southeast

SGS Accutest Sample Receipt Summary

Job Number: JC49698 **Client:** **Project:**

Date / Time Received: 8/28/2017 5:20:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labelling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

5.1

5

JC49698: Chain of Custody
Page 2 of 6

SGS Accutest Sample Receipt Summary

Job Number: JC49698 **Client:** **Project:**

Date / Time Received: 8/29/2017 6:10:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 2: (3.9);

Cooler Temps (Corrected) °C: Cooler 2: (3.1);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

5.1

5

JC49698: Chain of Custody
Page 3 of 6

SGS Accutest Sample Receipt Summary

Job Number: JC49698 **Client:** **Project:**

Date / Time Received: 8/30/2017 5:45:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 3: (4.1);

Cooler Temps (Corrected) °C: Cooler 3: (3.3);

Cooler Security	Y	or N		Y	or N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	or N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

Quality Control Preservation	Y	or N	N/A
1. Trip Blank present / cooler:	☐	☑	☐
2. Trip Blank listed on COC:	☐	☑	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☑

Sample Integrity - Documentation	Y	or N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	or N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	or N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

SM089-02
Rev. Date 12/1/16

5.1

5

JC49698: Chain of Custody
Page 4 of 6

SGS Accutest Sample Receipt Summary

Job Number: JC49698 **Client:** ALNJ **Project:** ATLANTIC CHESTNUT

Date / Time Received: 9/1/2017 9:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 5633 9350 9650

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 3: (4.2);

Cooler Temps (Corrected) °C: Cooler 3: (4.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram ____ 5-Gram ____ Number of 5035 Field Kits: ____ Number of Lab Filtered Metals: ____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) ____

Residual Chlorine Test Strip Lot #: ____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 9/1/2017 9:15:00 AM Reviewer: HW Date: 9/1/2017

8.1
8

JC49698: Chain of Custody
Page 2 of 3

SGS Accutest Sample Receipt Summary

Job Number: JC49698 **Client:** SGS **Project:** ATLANTIC CHESTNUT

Date / Time Received: 8/30/2017 9:15:00 AM **Delivery Method:** FX **Airbill #'s:** 563393505514

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram 5-Gram Number of 5035 Field Kits: Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify)

Residual Chlorine Test Strip Lot #:

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 8/30/2017 9:15:00 AM Reviewer: P.H Date: 8/30/2017

8.1

8

JC49698: Chain of Custody
Page 3 of 3

Appendix B
Case Narratives

CASE NARRATIVE / CONFORMANCE SUMMARY

2

Client:	AKRF	**Job No**	JC49698
Site:	Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY	**Report Date**	9/15/2017 4:44:46 PM

Between 08/28/2017 and 08/30/2017, 18 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.3 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC49698 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** VA8931

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC49698-7MS, JC49698-7MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

MS Volatiles By Method SW846 8260C BY SIM

Matrix: AQ **Batch ID:** V3A6776

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49698-7MS, JC49698-7MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V3A6777

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC49698-16MS, JC49698-17DUP were used as the QC samples indicated.

MS Semi-volatiles By Method EPA 537 MOD

Matrix: AQ	Batch ID: F:OP66662

- The data for EPA 537 MOD meets quality control requirements.
- JC49698-5: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-4: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-3: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-6: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-1: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-2: Analysis performed at SGS Accutest, Orlando FL.

Matrix: AQ	Batch ID: F:OP66700

- The data for EPA 537 MOD meets quality control requirements.
- JC49698-13: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-10: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-9: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-11: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-15: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-16: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-17: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-8: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-7: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-12: Analysis performed at SGS Accutest, Orlando FL.

Matrix: AQ	Batch ID: F:OP66710

- The data for EPA 537 MOD meets quality control requirements.
- JC49698-19: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-20: Analysis performed at SGS Accutest, Orlando FL.
- JC49698-18: Analysis performed at SGS Accutest, Orlando FL.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: SGS Accutest New Jersey **Job No:** JC49698

Site: AKRFNYNY: Atlantic Chestnut- Lot 1, 3264 Fulton Street, Brooklyn, NY **Report Date:** 9/15/2017 4:08:43 PM

18 Sample(s) and 1 Field Blank(s) were collected on/ between 08/28/2017 and 08/30/2017 and were received at SGS Accutest Southeast (SASE) between 09/01/2017 and 08/30/2017 properly preserved, at 4 Deg. C and intact. These Samples received an SASE job number of JC49698. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method EPA 537 MOD

Matrix: AQ **Batch ID:** OP66662

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JC49698-1MS, JC49698-1MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** OP66700

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JC49698-7MS, JC49698-7MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** OP66710

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA47222-3MS, FA47222-3MSD were used as the QC samples indicated. (Batch)

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Kim Benham, Client Services (signature on file)

JOM 101517

APPENDIX G

INVESTIGATION-DERIVED WASTE (IDW) DISPOSAL MANIFESTS

B470

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 64426

2. Page 1 of

3. Generator's Name and Mailing Address: Atlantic Chesnut Affordable Housing Development LLC c/o Phipps Houses 901 Broadway (13th floor) NY, NY 10003

4. Generator's Phone ( )

site: 3264 Fulton Ave. Brooklyn, NY (Lot 1)

5. Transporter 1 Company Name: AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number: N.Y.R.0.0.0.1.0.7.3.2.6

A. Transporter's Phone: 631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address: Dale Transfer Corp. 129 Dale Street West Babylon, NY 11704

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non Hazardous Purged Water	006	DM	280	g
b. Non Hazardous Soil Cuttings	005	DM	1400	P
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY PHONE # 631-586-5900

WO #15-233384

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: As agent for generator

Signature: Amy [illegible]

Month 10 Day 02 Year 17

17. Transporter 1 Acknowledgment of Receipt of Materials

Printed/Typed Name: Sid Sumner

Signature: [illegible]

Month 10 Day 02 Year 17

18. Transporter 2 Acknowledgment of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 19.

Printed/Typed Name

Signature

Month Day Year

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL – RETURN TO GENERATOR

B470

LOT #1

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No. 64430

2. Page 1 of

3. Generator's Name and Mailing Address
Atlantic Chestnut Affordable Housing LLC
902 Broadway 13th Floor
NY, NY

4. Generator's Phone ( )

Site: Atlantic Chestnut - Lot 1
3264 Fulton Street
Brooklyn, NY

5. Transporter 1 Company Name
AARCO ENVIRONMENTAL SERVICES CORP.

6. US EPA ID Number
N.Y.R.0.0.0.1.0.7.3.2.6

A. Transporter's Phone
631-586-5900

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
Dale Transfer Corp.
129 Dale St.
West Babylon, NY 11704

10. US EPA ID Number
N/A

C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Drill Cuttings	001	DM	00450	P
b. Purged Water	001	DM	00055	G
c.				
d.				

D. Additional Descriptions for Materials Listed Above
WO# 15-235547

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE # 631-586-5900
DM = Drum
Profile # 2018-060 (Water)
2018-061 (Soil)

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: X As agent for generator
Signature: X [signature]
Month 02 Day 26 Year 18

17. Transporter 1 Acknowledgment of Receipt of Materials

Printed/Typed Name: Sid Sumner
Signature: [signature]
Month 02 Day 26 Year 18

18. Transporter 2 Acknowledgment of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 19.

Printed/Typed Name
Signature
Month Day Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY