TYNDALL AFB PRE-DEMOLITION SURVEY

W912DY-19-P-0053

Pre-Demolition Report for
Asbestos, Hazardous Materials & Soil Testing

For:
Facilities Reduction Program FY19 Tyndall II
Tyndall AFB, Florida
Building 108 2nd F-22 AME Storage Building

Prepared For:
US Army Corps of Engineers
Engineering & Support Service Center
4910 University Square, Suite 4
Huntsville, Alabama 35816-1822
Facilities Reduction Program
ATTN: CEHNC-ISF

March 2020

AQ#: 15671

CERTIFICATION PAGE

Pre-Demolition Report for
Asbestos, Hazardous Materials & Soils Testing

Facilities Reduction Program FY19 Tyndall II
Tyndall Air Force Base, Florida
Building 108 2nd F-22 AME Storage Building

AirQuest Project #15671

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4910 University Square, Suite 4
Huntsville, Alabama 35816-1822
ATTN: CEHNC-ISF

Prepared By:

AirQuest Environmental, Inc.
6851 Southwest 45th Street
Fort Lauderdale, Florida 33314

Adrian Amicucci Gomes
Asbestos Building Inspector

Traci-Anne Boyle, CIH, CSP
FL Asbestos Consultant #AX-60

Digitally signed by
Ted J Smith
Date: 2020.03.19
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Ted Smith, PG
FL Professional Geologist No. PG1368

March 2020

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1 INTRODUCTION AND SITE DESCRIPTION

In accordance with the Performance Work Statement (PWS) for contract W912DY-19-P-0053, AirQuest Environmental, Inc. ("AirQuest") performed pre-demolition asbestos, hazardous materials, and soil testing for Building 108 located at Tyndall Air Force Base, Florida ("the site"). The surveys were performed by AirQuest Project Team Members as shown in Table 1. Copies of applicable licenses and accreditations are included in Appendix I.

Table 1 – Survey Information

Survey	Name	Survey Date
Asbestos	Adrian Amicucci	03 December 2019
TCLP Waste Stream	Travis Holland	02 December 2019
PCB Waste Stream	Travis Holland	02 December 2019
Other Regulated Materials	Melissa Suarez	03 December 2019
Soil Sample Collection	Ted Smith	23 November 2019

TCLP – Toxicity Characteristic Leachate Procedure
PCB – Polychlorinated Biphenyl

1.1 PURPOSE

The purpose of this survey was to identify asbestos-containing materials (ACM) within the interior, exterior and roof of the building; to determine if Other Regulated Materials (ORM) materials were present; to complete a waste stream analysis for Toxicity Characteristic Leachate Procedure (TCLP) Resource Conservation and Recovery Act (RCRA)-8 metals and Polychlorinated Biphenyls (PCBs); and to collect soil samples for organochlorine pesticides (OCP) for each structure. Diagrams depicting sampling locations are provided in Appendix II.

The investigation was conducted to facilitate the repairs at Tyndall Air Force Base following Hurricane Michael.

1.2 SITE DESCRIPTION

Building 108 2nd F-22 AME Storage Bldg. was a 5,498 square foot, single-story structure built in 1961. The building was constructed of concrete block on a concrete slab foundation. The building had a standing seam metal roof deck. The interior walls were constructed of concrete block and drywall system. The floor was an unfinished concrete slab.

1.3 DEMOLITION OVERVIEW

A diagram illustrating the general layout of the site was prepared using files provided by the client if available or drawn onsite by the AirQuest inspector. AirQuest prepared aerial photographs and photographed an overview of the interior and exterior of the building for purposes of assisting contractors in evaluation of the demolition requirements. The diagram and photographs are included in Appendix III.

2 ASBESTOS SURVEY

A pre-demolition asbestos survey suitable to meet the requirements of the National Emissions Standard for Hazardous Air Pollutants (NESHAPs) and State of Florida regulations was performed at the site.

2.1 SURVEY METHODS

The sampling protocol used generally followed Asbestos Hazard Emergency Response Act (AHERA) guidelines. AHERA was promulgated by the United States Environmental Protection Agency (EPA) in 1987 and regulated public schools.

Suspect materials were differentiated into three categories: surfacing material, thermal system insulation, or miscellaneous material. Surfacing material is anything that is sprayed or troweled onto a surface; thermal system insulation is material used to insulate HVAC pipes, tanks, etc., and miscellaneous material is any other type of material.

A homogeneous area is defined as an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture. A homogeneous area is not limited to only a room but can be found in several rooms. Sample selection in the building was determined by identifying the homogeneous areas and basing sampling locations upon these areas.

In conducting the building inspection in compliance with local, state, and federal regulations, all suspected ACM which were accessible to the inspector, were either sampled to confirm the actual presence of asbestos or assumed to contain asbestos.

2.2 LABORATORY ANALYSIS

Analysis was performed using Polarized Light Microscopy (PLM) with dispersion staining. The laboratory is rated proficient through National Institute of Standards and Technology- National Voluntary Laboratory Accreditation Program (NIST-NVLAP) for bulk asbestos analysis.

NESHAP defines ACM as containing more than 1% asbestos as determined using PLM (as specified in Appendix E, Subpart E, 40 CFR part 763, Section 1, Polarized Light Microscopy).

NESHAP defines friable ACM as any material containing more than 1% asbestos that, when dry, can be crumbled, pulverized or reduced to a powder by hand pressure. If the asbestos content of a friable material is less than ten (10) percent as determined by a method other than point counting by PLM, the client may elect to verify the asbestos content by point counting using PLM.

Because of the inherent limitations of PLM bulk sample analysis, any friable sample reported as <2% asbestos by PLM was automatically analyzed by the PLM point count method to determine whether it may be regulated under the asbestos NESHAP.

Estimates of quantities of ACM were based upon the identification of suspect materials. Where suspect ACM were located behind walls, above ceilings, beneath carpeting, or other concealed conditions and the quantities cannot be verified, the estimate is based upon the conditions present during the survey. These estimates are not to be considered absolute and should be verified when the ACM is exposed.

2.3 Suspect Asbestos-Containing Materials

Homogenous areas (HA) of suspect material were identified and samples were collected and submitted under chain of custody to EMSL Analytical, Inc. ("EMSL") for laboratory analysis of asbestos by PLM. If identified, friable samples with <2% asbestos were further analyzed by the PLM point count method to confirm the PLM results. A copy of the laboratory report and chain of custody record is included in Appendix IV.

Sample descriptions and laboratory results are summarized in Table 2. Photographs of each HA are included in Appendix V.

Table 2 – Asbestos Laboratory Analysis and Summary

HA	Sample Number	Description of Suspect Material	Location	Asbestos Content %
1	108-1	Drywall System	2 North	ND
1	108-2	Drywall System	1 East	ND
1	108-3	Drywall System	1 North	ND
2	108-4	4" Gray Vinyl Base Cove	2 East	ND
2	108-5	4" Gray Vinyl Base Cove	1 North	ND
3	108-6	Wall – Concrete Block	1 North	ND
3	108-7	Wall – Concrete Block	1 North	ND
3	108-8	Wall – Concrete Block	Exterior North	ND
3	108-9	Wall – Concrete Block	Exterior South	ND
3	108-10	Wall – Concrete Block	Exterior East	ND
4	108-11	Floor – Concrete Slab	1 West	ND
4	108-12	Floor – Concrete Slab	1 North	ND
4	108-13	Floor – Concrete Slab	Exterior North	ND
4	108-14	Floor – Concrete Slab	Exterior West	ND

HA	Sample Number	Description of Suspect Material	Location	Asbestos Content %
4	108-15	Floor – Concrete Slab	Exterior South	ND
5	108-16	Gray Electrical Putty	1 East	ND
5	108-17	Gray Electrical Putty	1 East	ND
6	108-18	White Mastic at TSI Pipe	1 South	ND
6	108-19	White Mastic at TSI Pipe	1 South	ND
7	108-20	Red Fire Putty	1 South	ND
7	108-21	Red Fire Putty	1 South	ND
8	108-22	Brown Exterior Floor Expansion Material	Exterior North	ND
8	108-23	Brown Exterior Floor Expansion Material	Exterior North	ND
9	108-24	Gray Exterior Floor Expansion Mastic	Exterior South	ND
9	108-25	Gray Exterior Floor Expansion Mastic	Exterior East	ND
10	108-26	Brown Exterior Door Caulk	Exterior North	ND
10	108-27	Brown Exterior Door Caulk	Exterior West	ND
11	108-28	Brown Mastic at Rain Gutter	Exterior North	ND
11	108-29	Brown Mastic at Rain Gutter	Exterior North	ND

HA- Homogenous Area
ND – None Detected
TSI- Thermal System Insulation

3 LEAD BASED PAINT SCREENING

An inspection was conducted to screen for the existence of lead containing painted building components. Testing of the painted building components was performed using an XRF Spectrometer. The XRF is a screening instrument currently recommended by the US Department

of Housing and Urban Development (HUD) for analysis of lead levels in paint. The screening was used to assist in determining the need and relative concentrations of lead on painted building components for purposes of designing a sampling scheme for a composite waste stream analysis and demolition contractor worker protection information. The screening was not intended to be a lead-based paint survey in accordance with HUD guidelines. A summary of the screening results is included in Table 3.

Table 3 - Lead Based Paint Screening Information

Structure	Color	Substrate	Location	Results[1]	Pb (mg/cm^2)
Wall	Brown	Metal	Exterior	Negative	0.0
Wall	Brown	Metal	Exterior	Negative	-0.2
Wall	Brown	Metal	Exterior	Negative	0.0
Wall	Beige	Brick	Exterior	Negative	-0.3
Wall	Beige	Brick	Exterior	Negative	0.5
Wall	Beige	Concrete	Exterior	Negative	-0.6
Wall	White	Concrete	Interior	Negative	0.2
Wall	White	Concrete	Interior	Negative	0.1
Wall	White	Concrete	Interior	Negative	0.0
Wall	White	Drywall	Bathroom	Negative	0.0
Wall	White	Drywall	Bathroom	Negative	0.0

Pb - Lead
mg/cm^2 – milligrams per square centimeter
[1]Indicates if the material meets the Department of Housing and Urban Development definition of Lead Based Paint

4 TCLP RCRA METALS

A waste stream composite sample was collected from the building for laboratory analysis of TCLP RCRA-8 Metals.

4.1 TCLP Sample Collection

The sample composition was determined by the composition of the materials comprising the building. Each major building component (such as wood, metal, concrete, glass, etc.) was estimated as a percentage of the weight of the building whole. Once the composition of the building was estimated, representative samples were collected of each material, in an approximate weight proportion as shown in Table 4.

Table 4 - Waste Stream Composition

Waste Stream Component	Percentage of Waste
Concrete	80
Metal	10
Wood	3
Drywall	2
Miscellaneous	5
Total Percentage	100

4.2 TCLP Sample Results

The samples were submitted under chain of custody to Spectrum Environmental Laboratories ("Spectrum"), a National Environmental Laboratory Accreditation Conference (NELAC) accredited laboratory, for analysis of TCLP-RCRA-8 Metals by EPA via 1311/6010C/7470A. The results are summarized in Table 5.

Table 5 – Toxicity Characteristic Leachate Procedure Results

Sample	TCLP Results (milligrams/liter)							
	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
108-001	ND	0.145	ND	0.0370	ND	ND	ND	ND
Limit[1]	5.0	100.0	1.0	5.0	5.0	0.2	1.0	5.0

[1]Regulatory Limit per 40 CFR 261.24
ND – None Detected

5 PCBs

Samples for PCBs were collected in general accordance with the *EPA Region 1 Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)*, May 2011.

The samples were collected from representative painted surfaces to include up to a half-inch of the substrate. The samples were submitted under chain of custody to Spectrum for analysis by EPA Method SW 846 3540C/8020A.

Table 6 – PCB Results

Sample	Results (mg/kg)						
	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260
108-001 Concrete	ND	ND	ND	ND	ND	ND	ND
108-002 Paint	ND	ND	ND	ND	ND	ND	ND

[1]Regulatory Limit per 40 CFR 761.50 Subpart D is 50 mg/kg
mg/kg – milligrams/kilogram
ND – None Detected

6 OTHER REGULATED MATERIALS INVENTORY

AirQuest conducted another regulated/hazardous materials inventory in general accordance with the *Recommended Management Practices for the Removal of Hazardous Materials from Buildings Prior to Demolition* prepared by the University of Florida and sponsored by the Florida Department of Environmental Protection, 1999. The inventory included lamps, thermostats, and light switches potentially containing mercury; exit signs, emergency lights, and smoke alarms that have batteries; lighting ballasts which contain polychlorinated biphenyls (PCBs); transformers; freon, hazardous chemicals and petroleum products; and lead pipes and roof vent flashings.

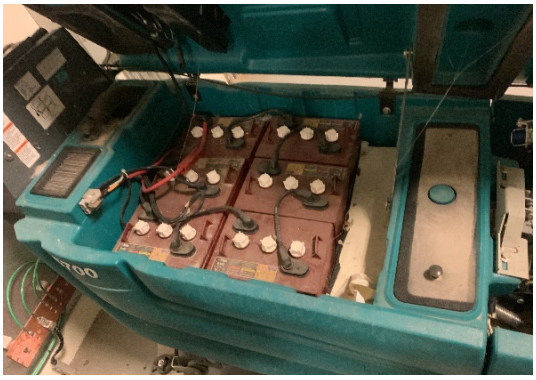
Certain assumptions for the inspection of fluorescent light ballasts for PCBs were utilized for the building inspections to be completed in a timely and cost-effective manner. As required by regulation, lighting ballasts must not contain PCBs and the label on the ballast must state "No PCB". AirQuest inventoried 100% of the fluorescent lighting fixtures and inspected a representative of each type of fixture (i.e. 2-foot, 4-foot, etc.) for the "No PCB" labeling.

Each exit sign and emergency lights were presumed to each contain a single lead-acid rechargeable battery. Quantities and types of any ORM found are summarized in Table 7.

Table 7 – Other Regulated Materials Inventory

ORM Component	Type/Location	Quantity	Photographs
Recyclables			
Fluorescent Bulbs	48" Lamp	26	
Fluorescent Bulbs	U-Shaped Bulb	2	

ORM Component	Type/Location	Quantity	Photographs
Light Ballasts	In 48" Fluorescent Fixtures	13	
	Fire Pull-Down System	2	
	Combustible Tank	1	

ORM Component Specialized ORM	Type/Location	Quantity	Photographs
Freon	In A/C Units	3	
Fire Extinguishers		3	
	Batteries	6	

ORM Component	Type/Location	Quantity	Photographs
	Electric Battery-Operated Equipment	1	

7 SOIL TESTING FOR ORGANOCHLORINE PESTICIDES

AirQuest advanced four (4) soil borings and collected two (2) samples at each boring location at depths of zero to six inches (0 - 6 in.) and eighteen to twenty-four inches (18 – 24 in.) below land surface using a properly decontaminated hand bucket auger. The samples were generally collected near the four corners of the building as shown in Appendix II.

The soil sampling was conducted in accordance with Florida Department of Environmental Protection (FDEP) Standard Operating Procedures SOP-001-01 FS 3000 (Soil) and SOP-001-01 FQ1000 (Field Quality Control Requirements). One boring log was completed for each building location documenting the observed lithology, visually estimated moisture content, noticeable odors, soil color, sample collection times, sampler's name, sampling interval and boring completion method. The soil boring log and soil boring location photographs are included in Appendix VIII.

Samples were placed in dedicated sample containers provided by the laboratory and labeled according to the referenced building/structure, collection time, sampler's name and analysis. A chain of custody form was completed to document the chronology of ownership, control and transfer of the samples. All samples were placed in a cooler filled with ice for transfer to the laboratory.

The soil samples were shipped to Eurofins TestAmerica ("TestAmerica") in Pensacola, Florida, a NELAC accredited environmental laboratory licensed in the State of Florida, for analysis by EPA Method 8081B (Organochlorine Pesticides by GC). Analytical results are summarized in Table 8. A copy of the laboratory report and chain of custody record is included in Appendix IX.

The analytical results indicate trace to moderate levels of OCPs 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, Aldrin, Dieldrin, Endrin, Endrin Ketone, Heptachlor Epoxide, and Total Chlordane above laboratory method detection limits and mostly above practical quantitation limits, in the soil samples. Sample OCP-108.2 analytical results indicate Dieldrin concentrations above Commercial/Industrial and Residential Soil Cleanup Target

Levels (SCTLs). Sample OCP-108.8 analytical results indicate Dieldrin concentrations above the Residential SCTL, but below the Commercial/Industrial SCTL. All other detected OCP constituents were below the Residential or Commercial/Industrial SCTLs listed in Chapter 62-777 FAC, the criteria used by the FDEP.

8 CONCLUSIONS AND RECOMMENDATIONS

A thorough pre-demolition inspection for asbestos and hazardous materials was conducted at the site and an inventory of the materials was created. The soils surrounding the site were sampled and analyzed for pesticides. Based upon the results of the inspections, recommendations for each contaminant are discussed separately below.

8.1 Asbestos Conclusions and Recommended Response Action

The results of our observation and laboratory analysis did not identify ACM within the samples collected from the site.

8.2 Lead Screening & OSHA Lead Guidance

Lead was identified in the paint at the site. Under the present OSHA lead construction standard, all identified lead-containing materials affected by construction activities falls under the requirements of 29 CFR 1926. There are no current government guidelines defining a lead-based paint or lead concentration that creates a hazardous atmosphere when disturbed. Based on current OSHA guidelines, for those employees who will be disturbing lead-containing paint (LCP), their employer must make an initial determination by monitoring employee exposure if any employee is exposed to lead at or above 30 micrograms per cubic meter for an eight-hour time weighted average (30 $\mu g/m^3$ 8-hour time weighted average). The employer must implement OSHA prescribed protective measures until they can demonstrate that the employee exposure is not in excess of the action level.

In general, relatively low levels of lead were detected in the various coated surfaces surveyed. Depending on the degree and type of disturbance of these surfaces (i.e. sanding, cutting, or demolishing), employers may be required to implement varying degrees of OSHA prescribed protective measures. These protective measures must be maintained until it can be demonstrated that employee exposures do not exceed the action level. The employer should also implement and maintain a written compliance program detailing the protective measures they will utilize to control lead exposure during renovation activities.

8.3 TCLP RCRA Metals / Lead

The results of the laboratory analysis indicate that the waste stream generated from the site is non-hazardous.

8.4 PCBs

The results of the sampling and analysis did not identify PCBs in composite waste stream paint and concrete samples.

Table 8 – Soil Sample Analytical Results

Sample	Sample Depth (Inches)	Results (mg/kg)								
		4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Dieldrin	Endrin	Endrin Ketone	Heptachlor Epoxide	Total Chlordane
OCP-108.1	0-6	0.0046	0.054	0.10	0.00064I	0.038	ND	ND	ND	0.0041I
OCP-108.2	18-24	0.036	0.23	0.45	0.0098	0.64	ND	ND	0.0036I	0.055
OCP-108.3	0-6	0.0038	0.040	0.090	ND	0.0077	ND	ND	ND	0.0032I
OCP-108.4	18-24	0.0080I	0.050	0.069	ND	0.0043I	ND	ND	ND	ND
OCP-108.5	0-6	0.0032I	0.015	0.014	ND	0.0033I	0.0011I	ND	ND	0.0015I
OCP-108.6	18-24	ND	0.0058I	ND	ND	0.0025I	ND	ND	ND	ND
OCP-108.7	0-6	0.0017I	0.019	0.014	ND	0.039	ND	ND	ND	ND
OCP-108.8	18-24	ND	0.033	0.025	ND	0.20	ND	0.0023I	ND	ND
SCTL (Commercial/Industrial)		22	15	15	0.3	0.3	*510	*510	0.5	14
SCTL (Residential)		4.2	2.9	2.9	0.06	0.06	*25	*25	0.1	2.8

mg/kg – milligrams/kilogram
ND – None Detected Above the Method Detection Limit
SCTL – Soil Cleanup Target Level, Chapter 62-777 Florida Administrative Code
I – The Reported Value is Between the Laboratory Method Detection Limit and the Laboratory Practical Quantitation Limit
*Due to the lack of Assigned SCTLs for Endrin Ketone/Endrin Aldehyde which are Breakdown Products of the Parent Compound Endrin, the FDEP has confirmed that it is Acceptable to use the SCTL Listed for the Parent Compound.

8.5 Other Regulated Materials

In general, the items inventoried may be recycled and reclaimed.

8.6 Soil Conclusions

The soil analytical results identified the compound Dieldrin at a concentration of 0.64 mg/kg in the 18-24 inch interval of borehole number 1 (sample OCP-108.2) and 0.20 mg/kg in the 18-24 inch interval of borehole number 4 (sample OCP-108.8). The reported concentration for sample OCP-108.2 is above the Commercial/Industrial and Residential SCTLs of 0.3 mg/kg and 0.06 mg/kg, respectively. The reported concentration for sample OCP-108.8 is above the Residential SCTL but below the Commercial/Industrial SCTL.

Upon completion of building demolition and concrete pad removal, AirQuest recommends that the area of impacted soil (northwest and southwest corners of building) be excavated and stockpiled onsite. The excavation should extend to a depth of four (4) feet below land surface (BLS) and extend out in an approximate three (3) foot radius around borehole number 1, and 4. Five (5) confirmation samples should be collected from each excavation area and submitted for laboratory analysis to confirm Dieldrin and other OCPs are below the residential FDEP SCTL.

The stockpiled soil should be protected with proper engineering controls to prevent cross contamination of surrounding soil. At a minimum, the soil should be in a secured bermed area lined and covered with polyethylene sheeting. The demolition personnel should utilize Level C PPE protection to reduce the potential for exposure to any impacted soils. Once it has been confirmed that all contaminated soils have been removed from the excavation and stockpiled, the excavated soil must be sampled and characterized for proper disposal.

9 LIMITATIONS

If any suspect hazardous/asbestos containing building materials are encountered during demolition activities that were not sampled in this report, the materials should not be disturbed until they have been sampled and identified as non-hazardous and non-ACM through appropriate investigation and/or laboratory analysis. Many of the roofs at Tyndall Air Force Base were sealed with an EPDM roofing system covering all the original roofing materials. It is possible, if not likely, that additional suspect asbestos materials are present under the EPDM and were not identified during the asbestos survey.

This report was prepared in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. This report was prepared for the exclusive use of the client and assigned agents and is not intended for any other purposes. Our report is based on the information available to us at the time of our investigation and limited in scope to the stated purpose and/or the area(s) inspected. Other conditions elsewhere in the site may differ from those in the inspected/ surveyed locations and such conditions are unknown, may change over time, and/or have not been considered. This report does not claim to identify all potential hazards and/or contaminants that may be present, nor does it imply any medical opinion on the relationship of potential health effects with any reported hazards and/ or contaminants. Our opinions are based on our findings and professional expertise, with no guaranty or warranty implied herein. Should additional information become available, we

reserve the right to determine the impact, if any, of the new information on our opinions, conclusions, and recommendations if necessary, as warranted by the discovery of the additional information. AirQuest accepts no responsibility for interpretation of this report by others. Its contents shall not be used or relied upon by other parties without prior written authorization by AirQuest.

Appendix I
Certifications

RICK SCOTT, GOVERNOR

JONATHAN ZACHEM, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT

THE ASBESTOS CONSULTANT HEREIN IS LICENSED UNDER THE
PROVISIONS OF CHAPTER 469, FLORIDA STATUTES

BOYLE, TRACI-ANNE

AIRQUEST ENVIRONMENTAL INC
6851 SW 45 ST
DAVIE FL 33314

LICENSE NUMBER: AX60

EXPIRATION DATE: NOVEMBER 30, 2020

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RICK SCOTT, GOVERNOR

JONATHAN ZACHEM, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF PROFESSIONAL GEOLOGISTS

THE PROFESSIONAL GEOLOGIST HEREIN IS LICENSED UNDER THE
PROVISIONS OF CHAPTER 492, FLORIDA STATUTES

SMITH, TED J

1735 CLARENDON AVENUE
LAKELAND FL 33803

LICENSE NUMBER: PG1368

EXPIRATION DATE: JULY 31, 2020

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The Environmental Institute

Adrian Amicucci

Social Security Number - XXX-XX-5163

Air Quest Environmental - 6851 SW 45th Street - Fort Lauderdale, Florida 33314

Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation

Asbestos in Buildings: Inspector Refresher

June 4, 2019
Course Date

June 4, 2019
Examination Date

June 3, 2020
Expiration Date

17439
Certificate Number

The ENVIRONMENTAL INSTITUTE

Thomas G. Laubenthal - Principal Instructor

Rachel G. McCain - Exam Administrator

David W. Hogue - Training Manager

Training Location: 6851 SW 45th Street - Fort Lauderdale, FL 33314

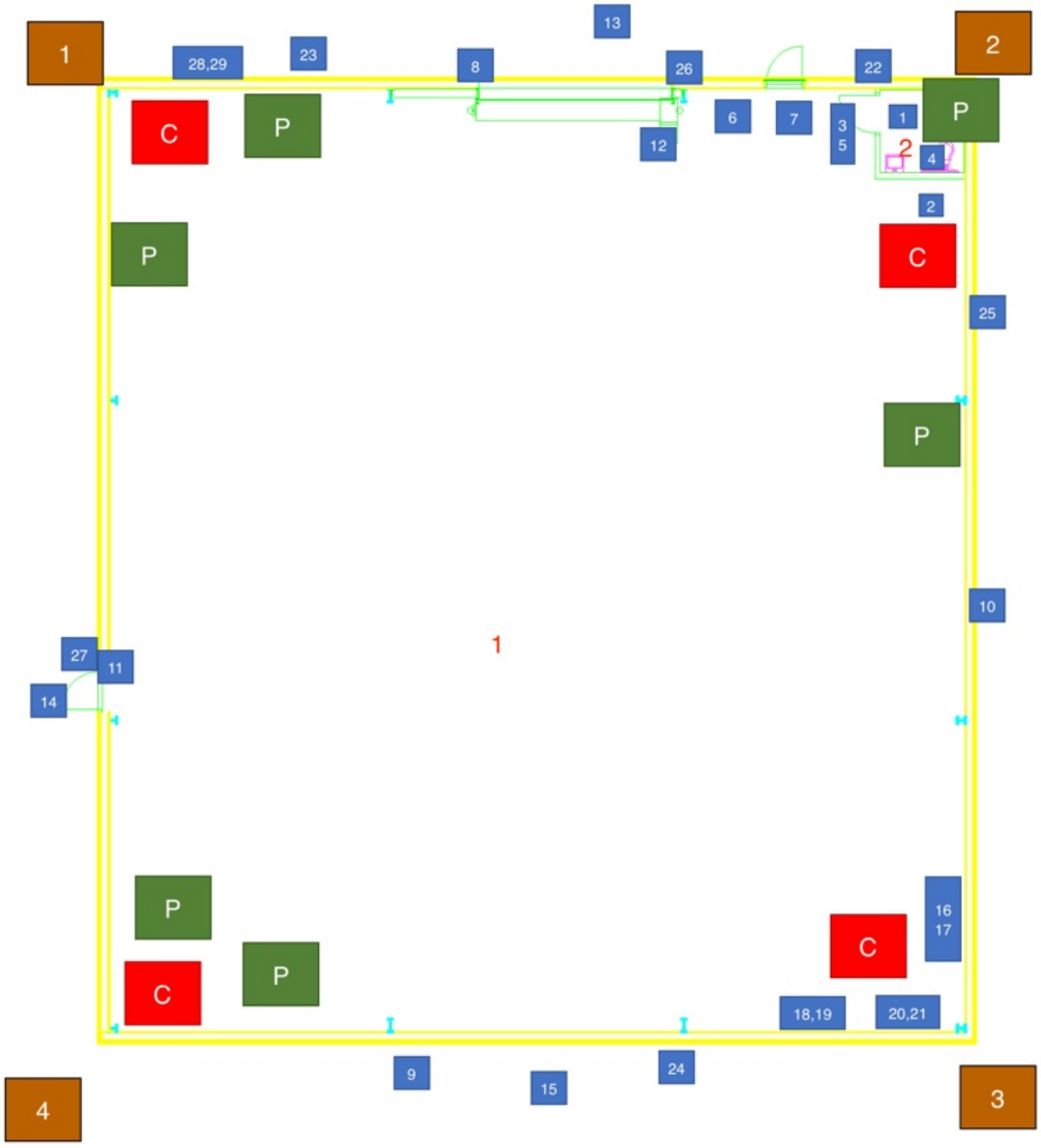
(Approved by the ABIH Certification Maintenance Committee for 1/2 CM point - Approval #11-577)

(Florida Provider Registration Number FL49-0001342 - Course #FL49-0002805)

TEI - 1395 S. Marietta Parkway SE - Building 100, Suite 124 - Marietta, GA 30067

Phone: 770-427-3600 - Website: www.tei-atl.com

Appendix II
Sample Location Diagrams



Sampling Locations

Legend	
Asbestos Sample #	1
PCB Paint Composite	P
PCB Concrete Composite	C
Soil Boring Location	1

Contract

Facilities Reduction Program
FY19 Tyndall II
W912DY-19-P-0053
Date: March 2020

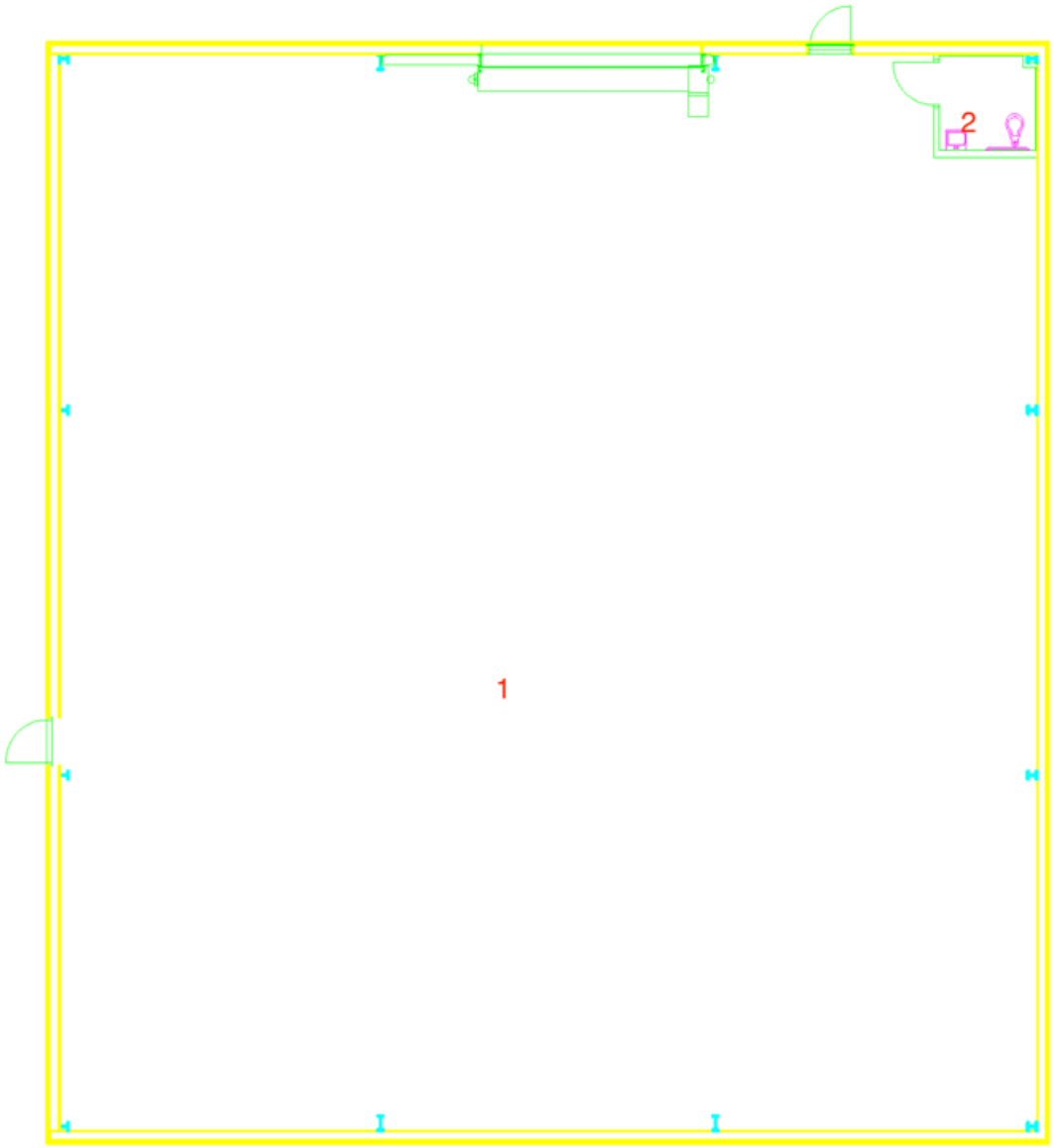
Site

Tyndall Air Force Base
Florida
Building: 2nd F-22 AME Storage Bldg
Building #: 108

AirQuest Environmental, Inc.

6851 SW 45th Street
Ft. Lauderdale, Florida 33314
AirQuest Project 15671

Appendix III
Structure Demolition Overview Diagram, Aerial Photographs and Demolition Overview Photographs



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Demolition Overview

Building Information	
Name	2ND F-22 AME Storage Bldg
Number	108
Year Built	1961
Square Feet	4,598
Stories	1

Contract

Facilities Reduction Program
FY19 Tyndall II
W912DY-19-P-0053
Date: March 2020

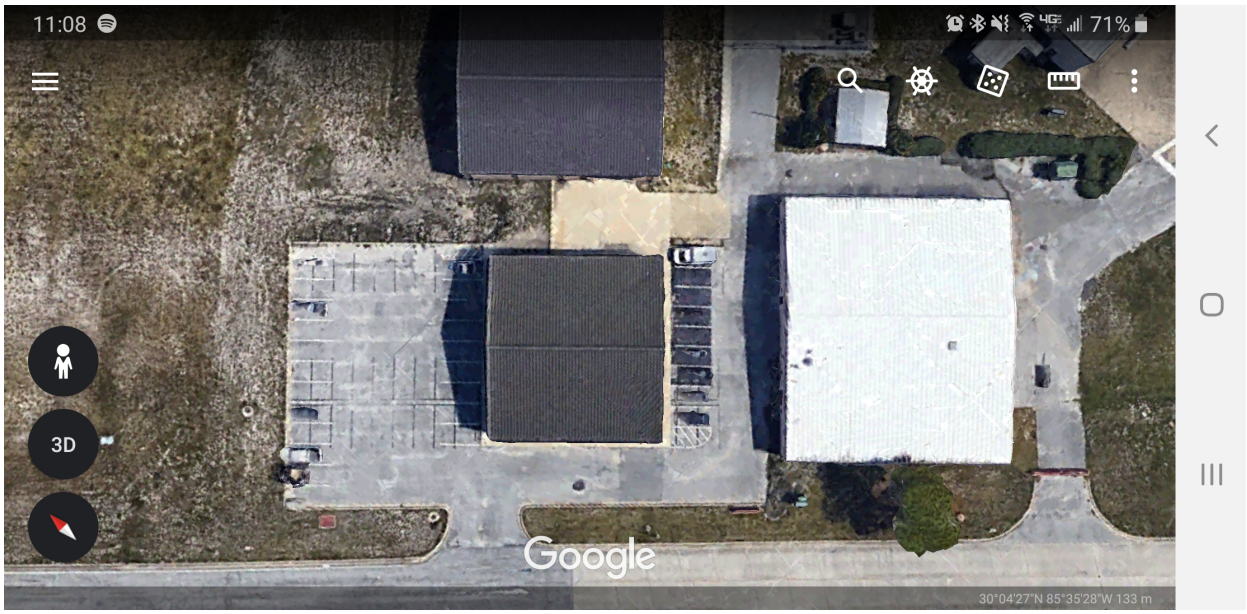
Site

Tyndall Air Force Base
Florida
Building: 2ND F-22 AME Storage Bldg
Building #: 108

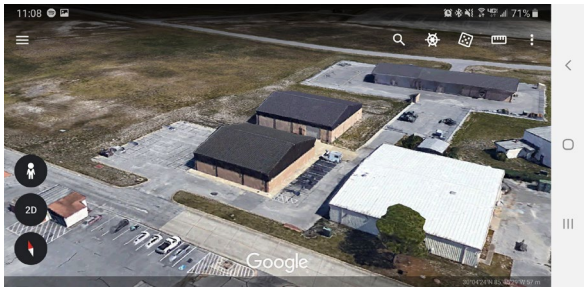
AirQuest Environmental, Inc.

6851 SW 45TH Street
Ft. Lauderdale, Florida 33314
AirQuest Project 15671

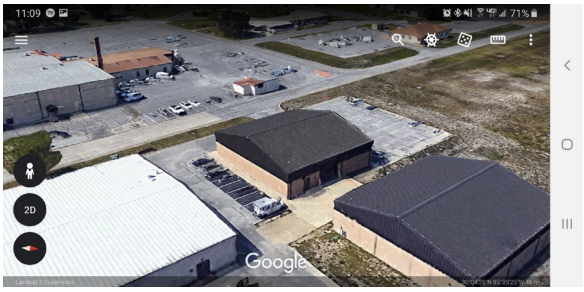
Building 108 – Pre-Hurricane Aerial Photographs



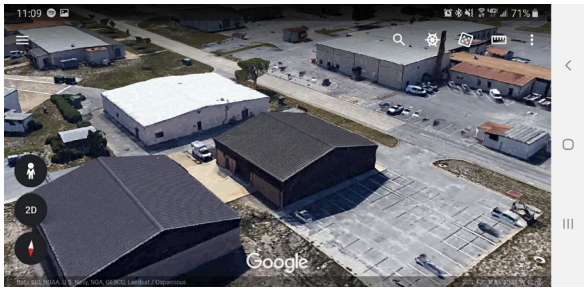
Overview



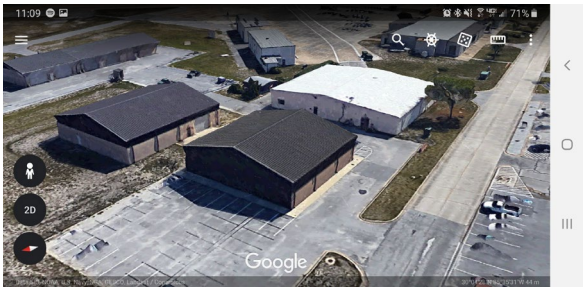
Side Angle



Side Angle



Side Angle



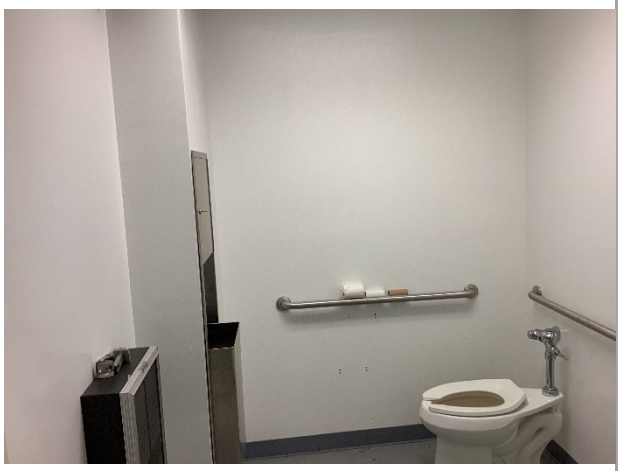
Side Angle

Images Obtained Using Google Earth

AIRQUEST ENVIRONMENTAL, INC.

Overview Bld 108 - 2ND F-22 AME STORAGE Tyndall Air Force Base	AirQuest Environmental, Inc. Project #15671 March 2020
 Exterior	 **Exterior**
 Exterior	 **Exterior**
 Exterior	 **Exterior**

AIRQUEST ENVIRONMENTAL, INC.

Overview Bld 108 - 2ND F-22 AME STORAGE Tyndall Air Force Base	AirQuest Environmental, Inc. Project #15671 March 2020
 Interior	 **Interior**
 Interior	 **Interior**
 Interior	 **Interior**

Appendix IV
Asbestos Laboratory Report and Chain of Custody Record

EMSL Analytical, Inc.

19501 NE 10th Ave. Bay A N. Miami Beach, FL 33179

Tel/Fax: (305) 650-0577 / (305) 650-0578

http://www.EMSL.com / miamilab@emsl.com

EMSL Order: 171908845
Customer ID: AQE63
Customer PO:
Project ID:

Attention: Paul LeBlanc
AirQuest Environmental, Inc.
6851 Southwest 45th Street
Fort Lauderdale, FL 33314

Project: Tyndall AFB - 15671-108

Phone: (954) 214-2640
Fax: (954) 792-2221
Received Date: 12/05/2019 9:55 AM
Analysis Date: 12/05/2019 - 12/06/2019
Collected Date: 12/03/2019

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
15671-108-1-Drywall *171908845-0001*	Drywall System	White Fibrous Heterogeneous	10% Cellulose <1% Glass	90% Non-fibrous (Other)	None Detected
15671-108-1-Joint Compound *171908845-0001A*	Drywall System	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-2-Drywall *171908845-0002*	Drywall System	White Fibrous Heterogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
15671-108-2-Joint Compound *171908845-0002A*	Drywall System	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-3-Drywall *171908845-0003*	Drywall System	White/Purple Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
15671-108-4-Cove Base *171908845-0004*	Vinyl Base Cove	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-4-Mastic *171908845-0004A*	Vinyl Base Cove	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-5-Cove Base *171908845-0005*	Vinyl Base Cove	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-5-Mastic *171908845-0005A*	Vinyl Base Cove	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-6 *171908845-0006*	Wall - Concrete Block	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-7 *171908845-0007*	Wall - Concrete Block	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-8 *171908845-0008*	Wall - Concrete Block	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-9 *171908845-0009*	Wall - Concrete Block	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-10 *171908845-0010*	Wall - Concrete Block	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-11 *171908845-0011*	Floor - Concrete Slab	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 12/06/2019 08:05:54

EMSL Analytical, Inc.

19501 NE 10th Ave. Bay A N. Miami Beach, FL 33179

Tel/Fax: (305) 650-0577 / (305) 650-0578

http://www.EMSL.com / miamilab@emsl.com

EMSL Order:	171908845
Customer ID:	AQE63
Customer PO:	
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
15671-108-12 *171908845-0012*	Floor - Concrete Slab	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-13 *171908845-0013*	Floor - Concrete Slab	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-14 *171908845-0014*	Floor - Concrete Slab	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-15 *171908845-0015*	Floor - Concrete Slab	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-16 *171908845-0016*	Electrical Putty	Gray Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
15671-108-17 *171908845-0017*	Electrical Putty	Gray Non-Fibrous Homogeneous	3% Cellulose	97% Non-fibrous (Other)	None Detected
15671-108-18 *171908845-0018*	Mastic at TSI Pipe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-19 *171908845-0019*	Mastic at TSI Pipe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-20 *171908845-0020*	Fire Putty	Red Non-Fibrous Homogeneous	<1% Glass	100% Non-fibrous (Other)	None Detected
15671-108-21 *171908845-0021*	Fire Putty	Red Non-Fibrous Homogeneous	<1% Glass	100% Non-fibrous (Other)	None Detected
15671-108-22 *171908845-0022*	Exterior Floor Expansion Material	Brown Fibrous Heterogeneous	97% Cellulose	3% Non-fibrous (Other)	None Detected
15671-108-23 *171908845-0023*	Exterior Floor Expansion Material	Brown Fibrous Homogeneous	97% Cellulose	3% Non-fibrous (Other)	None Detected
15671-108-24 *171908845-0024*	Exterior Floor Expansion Matsic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-25 *171908845-0025*	Exterior Floor Expansion Matsic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-26 *171908845-0026*	Exterior Door Caulk	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-27 *171908845-0027*	Exterior Door Caulk	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-28 *171908845-0028*	Mastic at Rain Gutter	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15671-108-29 *171908845-0029*	Mastic at Rain Gutter	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 12/06/2019 08:05:54

EMSL Analytical, Inc.

19501 NE 10th Ave. Bay A N. Miami Beach, FL 33179

Tel/Fax: (305) 650-0577 / (305) 650-0578

http://www.EMSL.com / miamilab@emsl.com

EMSL Order:	171908845
Customer ID:	AQE63
Customer PO:	
Project ID:	

Analyst(s)

Edgar Rodriguez (30)

Mary Hamel (3)

Kimberly Wallace, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. N. Miami Beach, FL NVLAP Lab Code 200204-0

Initial report from: 12/06/2019 08:05:54

171908845

AIRQUEST ENVIRONMENTAL, INC.
6851 Southwest 45th Street
Fort Lauderdale, FL 33314
Phone: 954/792-4549
Fax: 954/792-2221

Stop at First Positive: Yes / No
Turnaround Time: 24 Hr.
Email: Labresults@airquestinc.com

Sample Date:	Tuesday, December 3, 2019
Project Name:	Tyndall AFB
Project Number:	15671 - 108
Surveyor:	Adrian Amicucci
Signature:	[signature]

HA	Sample #	HA Description			Sample Location		Room HA Location	Quantity	G/F/P	Dist. Pot.	Friable	Comment/Photo#
1	15671 - 108-1			Drywall System	2	North		329 SF	G	L	Y	
1	15671 - 108-2			Drywall System	1	East		329 SF	G	L	Y	
1	15671 - 108-3			Drywall System	1	North		329 SF	G	L	Y	
2	15671 - 108-4	4"	Gray	Vinyl Base Cove	2	East		42 LF	G	L	N	
2	15671 - 108-5	4"	Gray	Vinyl Base Cove	1	North		42 LF	G	L	N	
3	15671 - 108-6			Wall - Concrete Block	1	North		Throughout	G	L	N	
3	15671 - 108-7			Wall - Concrete Block	1	North		Throughout	G	L	N	
3	15671 - 108-8			Wall - Concrete Block	Exterior	North		Throughout	G	L	N	
3	15671 - 108-9			Wall - Concrete Block	Exterior	South		Throughout	G	L	N	
3	15671 - 108-10			Wall - Concrete Block	Exterior	East		Throughout	G	L	N	
4	15671 - 108-11			Floor - Concrete Slab	1	West		2750 SF	G	L	N	
4	15671 - 108-12			Floor - Concrete Slab	1	North		2750 SF	G	L	N	
4	15671 - 108-13			Floor - Concrete Slab	Exterior	North		2750 SF	G	L	N	
4	15671 - 108-14			Floor - Concrete Slab	Exterior	West		2750 SF	G	L	N	
4	15671 - 108-15			Floor - Concrete Slab	Exterior	South		2750 SF	G	L	N	
5	15671 - 108-16		Gray	Electrical Putty	1	East		2 SF	G	L	N	
5	15671 - 108-17		Gray	Electrical Putty	1	East		2 SF	G	L	N	
6	15671 - 108-18		White	Mastic @ TSI Pipe	1	South		16 SF	G	L	N	
6	15671 - 108-19		White	Mastic @ TSI Pipe	1	South		16 SF	G	L	N	
7	15671 - 108-20		Red	Fire Putty	1	South		1 SF	G	L	N	

Relinquished By: [signature] Date & Time: 12.03.19 6:00pm
Received By: AC Emsl Fedex Date & Time: 12-05-19 9:55 ☐ Fedex: _____
Relinquished By: _____ Date & Time: _____
Received By: _____ Date & Time: _____ ☐ Hand Couriered Page 1 of 2

OrderID: 171908845

171908845

AIRQUEST ENVIRONMENTAL, INC.
6851 Southwest 45th Street
Fort Lauderdale, FL 33314
Phone: 954/792-4549
Fax: 954/792-2221

Stop at First Positive: Yes (No)
Turnaround Time: 24 Hr.
Email: Labresults@airquestinc.com

Sample Date:	Tuesday, December 3, 2019
Project Name:	Tyndall AFB
Project Number:	15671 - 108
Surveyor:	Adrian Amicucci
Signature:	

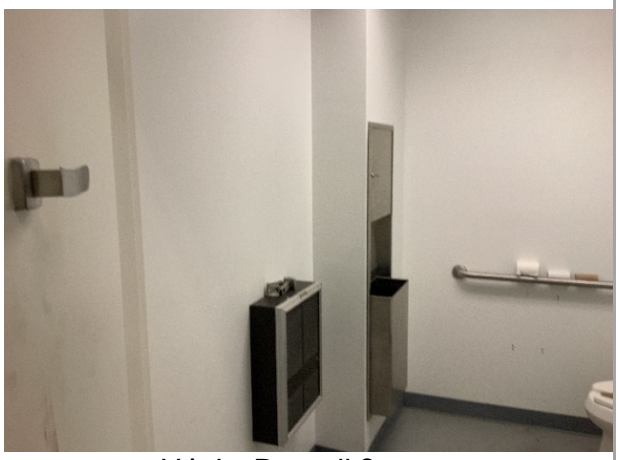
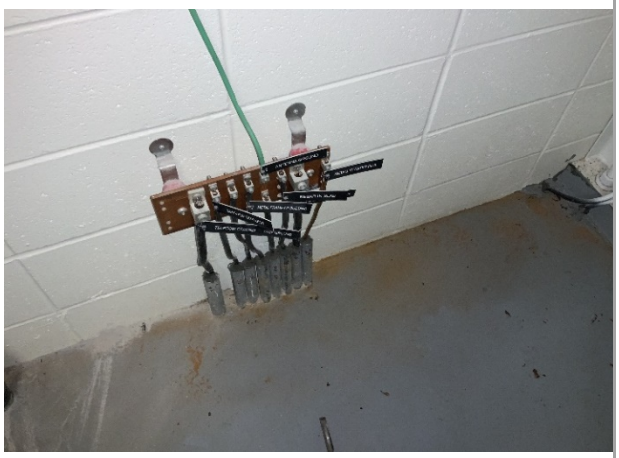
HA	Sample #	HA Description			Sample Location		Room HA Location	Quantity	G/F/P	Dist. Pot.	Friable	Comment/Photo#
7	15671 - 108-21		Red	Fire Putty	1	South		1 SF	G	L	N	
8	15671 - 108-22		Brown	Exterior Floor Expansion Material	Exterior	North		78 LF	G	L	N	
8	15671 - 108-23		Brown	Exterior Floor Expansion Material	Exterior	North		78 LF	G	L	N	
9	15671 - 108-24		Gray	Exterior Floor Expansion Mastic	Exterior	South		36 LF	G	L	N	
9	15671 - 108-25		Gray	Exterior Floor Expansion Mastic	Exterior	East		36 LF	G	L	N	
10	15671 - 108-26		Brown	Exterior Door Caulk	Exterior	North		67 LF	G	L	N	
10	15671 - 108-27		Brown	Exterior Door Caulk	Exterior	West		67 LF	G	L	N	
11	15671 - 108-28		Brown	Mastic @ Rain Gutter	Exterior	North		2 SF	G	L	N	
11	15671 - 108-29		Brown	Mastic @ Rain Gutter	Exterior	North		2 SF	G	L	N	

Relinquished By: _____ Date & Time 12.03.19 6:00PM
Received By. _____ Date & Time: _____ ☐ Fedex: _____
Relinquished By _____ Date & Time: _____
Received By: _____ Date & Time: _____ ☐ Hand Couriered

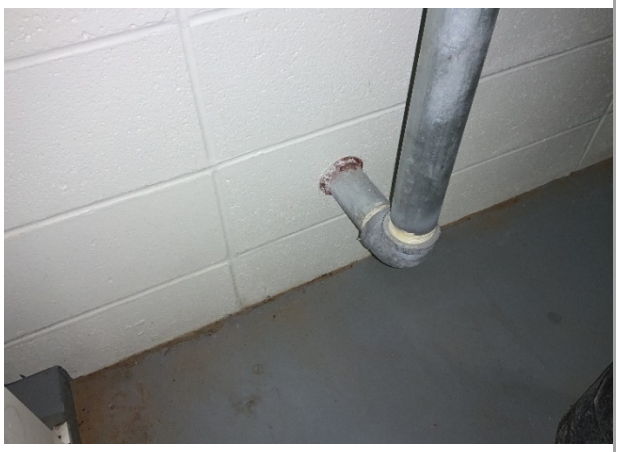
OrderID: 171908845

Appendix V
Suspect Asbestos Containing Material Photographs

AIRQUEST ENVIRONMENTAL, INC.

HA Photolog Bld 108 - 2ND F-22 AME STORAGE Tyndall Air Force Base	AirQuest Environmental, Inc. Project #15671 March 2020
 HA 1 - Drywall System	 HA 2 - 4" Gray Vinyl Base Cove
 HA 3 - Concrete Block Wall	 HA 4 - Concrete Slab Floor
 HA 5 - Gray Electrical Putty	 HA 6 - White Mastic at TSI Pipes

AIRQUEST ENVIRONMENTAL, INC.

HA Photolog Bld 108 - 2ND F-22 AME STORAGE Tyndall Air Force Base	AirQuest Environmental, Inc. Project #15671 March 2020
 HA 7 - Red Fire Putty	 HA 8 - Brown Exterior Floor Expansion Material
 HA 9 - Gray Exterior Floor Expansion Mastic	 HA 10 - Brown Exterior Door Caulk
 HA 11 - Brown Mastic at Rain Gutter	

Appendix VI
TCLP Laboratory Report and Chain of Custody Record

NELAP Certificate No. E86006

1460 West McNab Road
Fort Lauderdale, FL 33309
1-800-ANALYTE Phone
(954) 978-6400 Phone
(954) 978-2233 Fax

13 December 2019
Lab Work Order (COC): 19L0110

Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale, FL 33314

RE: **15671 Tyndall AFB**

Project Location: **Tyndall AFB**

Dear Paul LeBlanc:

This report details the analytical results of samples collected at the above-referenced project location as well as the results of any associated quality control samples. These samples were received by Florida Spectrum Environmental Services at **12/04/2019 09:15**.

All Analyses were performed according to the TNI/NELAP standard unless indicated by a "~" on the report.

Your samples will be retained by Florida Spectrum Environmental for a period of at least 30 days following sample receipt or until the longest of the preparation and/or analytical hold times expires, whichever is shorter. After that time, they will be properly disposed without further notice, unless there exists an explicit contractual agreement to the contrary. We reserve the right to return any unused samples, extracts, or related materials or solutions to you if we consider it necessary. Examples might include those samples identified as hazardous wastes, submissions where the sample sizes significantly exceed those required for analysis, samples containing controlled substances, etc.

We thank you for selecting Florida Spectrum Environmental to serve your analytical needs. Should you have any questions or require additional information regarding any of the information in this report, please feel free to contact us at any time. We appreciate the opportunity to be of service.

Florida Spectrum Environmental Inc.

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/13/2019
Work Order # 19L0110
Project: 15671 Tyndall AFB
Tyndall AFB

DETECTED ANALYTE SUMMARY

Client Sample ID	Laboratory ID	Matrix	Analyte	Result	Units	Collection Date	Collection Time
108-001	19L0110-01	Solid	Chromium	0.0370	mg/L	12/2/2019	0:00
108-001	19L0110-01	Solid	Barium	0.145	mg/L	12/2/2019	0:00
108-001	19L0110-01	Solid	Fluid Type (1,2,or 3)	1.00	.	12/2/2019	0:00

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/13/2019
Work Order # 19L0110
Project: 15671 Tyndall AFB
Tyndall AFB

Lab ID: 19L0110-01
Client Sample ID: 108-001
Matrix: Solid

Collection Date: 12/02/19 00:00
Received Date: 12/04/19 09:15
Collected By: Travis Holland

Laboratory Analysis Report

Parameter	Result	QC	Units	Dil	MDL	PQL	Method	Date Ext.	Date Analy.	Analyst
TCLP Extraction by EPA 1311										
Fluid Type (1,2,or 3)	1.00		.	1			EPA 1311	12/04 16:00	12/05 10:00	MAZ
TCLP Metals by 6000/7000 Series Methods										
Arsenic	ND	U	mg/L	1	0.029	0.100	EPA 6010/3010	12/05 10:30	12/05 14:49	MAZ
Barium	0.145		mg/L	1	0.0008	0.0100	EPA 6010/3010	12/05 10:30	12/05 14:49	MAZ
Cadmium	ND	U	mg/L	1	0.0032	0.0100	EPA 6010/3010	12/05 10:30	12/05 14:49	MAZ
Chromium	0.0370	I	mg/L	1	0.0074	0.0500	EPA 6010/3010	12/05 10:30	12/05 14:49	MAZ
Lead	ND	U	mg/L	1	0.014	0.100	EPA 6010/3010	12/05 10:30	12/05 14:49	MAZ
Mercury	ND	U	mg/L	1	0.0015	0.0045	EPA 7470	12/10 09:00	12/11 12:11	MAZ
Selenium	ND	U	mg/L	1	0.031	0.150	EPA 6010/3010	12/05 10:30	12/05 14:49	MAZ
Silver	ND	U	mg/L	1	0.0012	0.0080	EPA 6010/3010	12/05 10:30	12/05 14:49	MAZ

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/13/2019
Work Order # 19L0110
Project: 15671 Tyndall AFB
Tyndall AFB

TCLP Metals by 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 19L0011 - EPA 3010A										
Blank (19L0011-BLK1)				Prepared & Analyzed: 12/05/2019						
Arsenic	ND	0.100	mg/L							U
Chromium	ND	0.0500	"							U
Cadmium	ND	0.0100	"							U
Lead	ND	0.100	"							U
Barium	ND	0.0100	"							U
Silver	ND	0.0080	"							U
Selenium	ND	0.150	"							U
LCS (19L0011-BS1)				Prepared & Analyzed: 12/05/2019						
Chromium	0.4820	0.0050	mg/L	0.5000		96.4	80-120			
Barium	0.4676	0.0010	"	0.5000		93.5	80-120			
Arsenic	0.4914	0.010	"	0.5000		98.3	80-120			
Cadmium	0.4865	0.0010	"	0.5000		97.3	80-120			
Selenium	0.4962	0.015	"	0.5000		99.2	80-120			
Lead	0.4743	0.010	"	0.5000		94.9	80-120			
Silver	0.4734	0.0008	"	0.5000		94.7	80-120			
Matrix Spike (19L0011-MS1)	**Source: 19L0112-01**			Prepared & Analyzed: 12/05/2019						
Cadmium	4.984	0.0100	mg/L	5.000	0.0120	99.4	75-125			
Barium	4.967	0.0100	"	5.000	0.1510	96.3	75-125			
Arsenic	5.166	0.100	"	5.000	ND	103	75-125			
Silver	4.902	0.0080	"	5.000	ND	98.0	75-125			
Chromium	4.981	0.0500	"	5.000	0.0180	99.3	75-125			
Selenium	5.108	0.150	"	5.000	ND	102	75-125			
Lead	4.853	0.100	"	5.000	ND	97.1	75-125			
Matrix Spike Dup (19L0011-MSD1)	**Source: 19L0112-01**			Prepared & Analyzed: 12/05/2019						
Barium	5.001	0.0100	mg/L	5.000	0.1510	97.0	75-125	0.682	20	
Cadmium	5.016	0.0100	"	5.000	0.0120	100	75-125	0.640	20	
Chromium	5.037	0.0500	"	5.000	0.0180	100	75-125	1.12	20	
Arsenic	5.216	0.100	"	5.000	ND	104	75-125	0.963	20	
Selenium	5.140	0.150	"	5.000	ND	103	75-125	0.625	20	

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/13/2019
Work Order # 19L0110
Project: 15671 Tyndall AFB
Tyndall AFB

TCLP Metals by 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 19L0011 - EPA 3010A										
Matrix Spike Dup (19L0011-MSD1)	**Source: 19L0112-01**			Prepared & Analyzed: 12/05/2019						
Silver	4.939	0.0080	mg/L	5.000	ND	98.8	75-125	0.752	20	
Lead	4.886	0.100	"	5.000	ND	97.7	75-125	0.678	20	
Batch 19L0030 - EPA 7470A Prep										
Blank (19L0030-BLK1)				Prepared: 12/10/2019 Analyzed: 12/11/2019						
Mercury	ND	0.0045	mg/L							U
LCS (19L0030-BS1)				Prepared: 12/10/2019 Analyzed: 12/11/2019						
Mercury	0.0113	0.0004	mg/L	0.01000		113	80-120			
Matrix Spike (19L0030-MS1)	**Source: 19L0112-01**			Prepared: 12/10/2019 Analyzed: 12/11/2019						
Mercury	0.0882	0.0045	mg/L	0.1000	ND	88.2	80-120			
Matrix Spike Dup (19L0030-MSD1)	**Source: 19L0112-01**			Prepared: 12/10/2019 Analyzed: 12/11/2019						
Mercury	0.0864	0.0045	mg/L	0.1000	ND	86.4	80-120	2.01	20	

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/13/2019
Work Order # 19L0110
Project: 15671 Tyndall AFB
Tyndall AFB

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
V	Indicated that the analyte was detected in both the sample and the associated method blank.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
Z	Too many colonies were present for accurate counting.

QC=Qualifier Codes as defined by DEP 62-160
Unless indicated, soil results are reported on actual (wet) weight basis.
Work performed by outside (subcontracted) labs denoted by SUB in Analyst Field.

Results relate only to this sample.

Maria Castellanos - Lab Manager

Authorized CSM Signature (954) 978-6400
Florida-Spectrum Environmental Services,Inc.
Certification# E86006

All NELAP certified analysis are performed in accordance with Chapter 64E-1 Florida Administrative code, which has been determined to be equivalent to NELAC standards. Analysis certified by programs other than NELAP are designated with a "~".

19L0110

Chain of Custody
Laboratory Sample Submittal Form

AirQuest Environmental, Inc.
6851 SW 45th Street
Fort Lauderdale, Florida 33314

Phone: (954) 792-4549
Fax: (954) 792-2221
Toll Free: (877) 247-8146
Email: labresults@airquestinc.com

Sample Date: 12-2-19
Project Number: 15671
Building Number 108
Collected By: T. Holland

Bulk Sample Type	
Code	**Description**
PLM	Asbestos Samples for PLM Analysis (NESHAPS)
TL	Tape Lift Sample for Fungi
SW	Swab Sample for Fungi
WP	Wipe Sample for Fungi
BF	Bulk Sample for Fungi
BB	Bulk Sample for E. Coli/Total Coliform
PC	Paint Chip Sample for Lead Content
TCLP	RCRA TCLP Bulk Sample

Air Sample Type	
Code	**Description**
PCM	Air Sample for Asbestos Fibers-PCM (NIOSH 7400)
TEM	Air Sample for Asbestos Fibers-TEM (AHERA)
AOC	AirOCell Sample for Fungi & Particulate
AS	N6 Sample for Viable Fungi
ASB	N6 Sample for Bacteria

Item	Code	HA	Sample Number	Description	Location	Volume	Comments
1	TCLP		108 -001	Misc. building material	composite sample	372 g	
2	TCLP						
3	TCLP						
4	TCLP						
5	TCLP						
6	TCLP						
7	TCLP						
8	TCLP						
9	TCLP						
10	TCLP						

Relinquished by: Tim Holland Date & Time: 12-2-19
Received by: _____ Date & Time: _____
Relinquished by: Fedex Date & Time: _____
Received by: _____ Date & Time: 12/4/19 0915

Initial Tracking #
☐ Fedex: _____
☐ Hand Couriered

19.6
no ice

Appendix VII
PCB Laboratory Report and Chain of Custody Record

NELAP Certificate No. E86006

1460 West McNab Road
Fort Lauderdale, FL 33309
1-800-ANALYTE Phone
(954) 978-6400 Phone
(954) 978-2233 Fax

10 December 2019
Lab Work Order (COC): 19L0119

Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale, FL 33314

RE: **15671 Tyndall AFB**

Project Location: **Tyndall AFB**

Dear Paul LeBlanc:

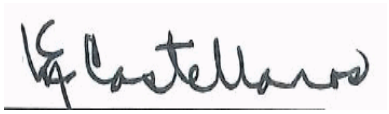
This report details the analytical results of samples collected at the above-referenced project location as well as the results of any associated quality control samples. These samples were received by Florida Spectrum Environmental Services at **12/04/2019 09:15**.

All Analyses were performed according to the TNI/NELAP standard unless indicated by a "~" on the report.

Your samples will be retained by Florida Spectrum Environmental for a period of at least 30 days following sample receipt or until the longest of the preparation and/or analytical hold times expires, whichever is shorter. After that time, they will be properly disposed without further notice, unless there exists an explicit contractual agreement to the contrary. We reserve the right to return any unused samples, extracts, or related materials or solutions to you if we consider it necessary. Examples might include those samples identified as hazardous wastes, submissions where the sample sizes significantly exceed those required for analysis, samples containing controlled substances, etc.

We thank you for selecting Florida Spectrum Environmental to serve your analytical needs. Should you have any questions or require additional information regarding any of the information in this report, please feel free to contact us at any time. We appreciate the opportunity to be of service.

Florida Spectrum Environmental Inc.



Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/10/2019

Work Order # 19L0119

Project: 15671 Tyndall AFB

Tyndall AFB

DETECTED ANALYTE SUMMARY

Client Sample ID	Laboratory ID	Matrix	Analyte	Result	Units	Collection Date	Collection Time

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/10/2019
Work Order # 19L0119
Project: 15671 Tyndall AFB
Tyndall AFB

Lab ID: 19L0119-01
Client Sample ID: 108-001
Matrix: Solid

Collection Date: 12/02/19 00:00
Received Date: 12/04/19 09:15
Collected By: Travis Holland

Laboratory Analysis Report

Polychlorinated Biphenyls (as Congeners) by EPA Method 8082

Parameter	Result	QC	Units	Dil	MDL	PQL	Method	Date Ext.	Date Analy.	Analyst
PCB-1016	ND	U	mg/kg wet	3	0.00386	0.0116	EPA 8082/3550	12/05 10:50	12/07 15:26	AC
PCB-1221	ND	U	mg/kg wet	3	0.00222	0.00665	EPA 8082/3550	12/05 10:50	12/07 15:26	AC
PCB-1232	ND	U	mg/kg wet	3	0.00584	0.0175	EPA 8082/3550	12/05 10:50	12/07 15:26	AC
PCB-1242	ND	U	mg/kg wet	3	0.00232	0.00697	EPA 8082/3550	12/05 10:50	12/07 15:26	AC
PCB-1248	ND	U	mg/kg wet	3	0.00144	0.00432	EPA 8082/3550	12/05 10:50	12/07 15:26	AC
PCB-1254	ND	U	mg/kg wet	3	0.00236	0.00707	EPA 8082/3550	12/05 10:50	12/07 15:26	AC
PCB-1260	ND	U	mg/kg wet	3	0.00430	0.0129	EPA 8082/3550	12/05 10:50	12/07 15:26	AC

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/10/2019
Work Order # 19L0119
Project: 15671 Tyndall AFB
Tyndall AFB

Lab ID: 19L0119-02
Client Sample ID: 108-002
Matrix: Solid

Collection Date: 12/02/19 00:00
Received Date: 12/04/19 09:15
Collected By: Travis Holland

Laboratory Analysis Report

Polychlorinated Biphenyls (as Congeners) by EPA Method 8082

Parameter	Result	QC	Units	Dil	MDL	PQL	Method	Date Ext.	Date Analy.	Analyst
PCB-1016	ND	U	mg/kg wet	6	0.00773	0.0232	EPA 8082/3550	12/05 10:50	12/07 16:00	AC
PCB-1221	ND	U	mg/kg wet	6	0.00443	0.0133	EPA 8082/3550	12/05 10:50	12/07 16:00	AC
PCB-1232	ND	U	mg/kg wet	6	0.0117	0.0351	EPA 8082/3550	12/05 10:50	12/07 16:00	AC
PCB-1242	ND	U	mg/kg wet	6	0.00465	0.0139	EPA 8082/3550	12/05 10:50	12/07 16:00	AC
PCB-1248	ND	U	mg/kg wet	6	0.00288	0.00863	EPA 8082/3550	12/05 10:50	12/07 16:00	AC
PCB-1254	ND	U	mg/kg wet	6	0.00472	0.0141	EPA 8082/3550	12/05 10:50	12/07 16:00	AC
PCB-1260	ND	U	mg/kg wet	6	0.00861	0.0258	EPA 8082/3550	12/05 10:50	12/07 16:00	AC

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/10/2019
Work Order # 19L0119
Project: 15671 Tyndall AFB
Tyndall AFB

Polychlorinated Biphenyls (as Congeners) by EPA Method 8082 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 19L0215 - EPA 3550C										
Blank (19L0215-BLK1)				Prepared: 12/05/2019 Analyzed: 12/07/2019						
PCB-1016	ND	0.00386	mg/kg wet							U
PCB-1221	ND	0.00222	"							U
PCB-1232	ND	0.00584	"							U
PCB-1242	ND	0.00232	"							U
PCB-1248	ND	0.00144	"							U
PCB-1254	ND	0.00236	"							U
PCB-1260	ND	0.00430	"							U
LCS (19L0215-BS1)				Prepared: 12/05/2019 Analyzed: 12/07/2019						
PCB-1016	0.265	0.00386	mg/kg wet	0.3366		78.7	13-139			
PCB-1260	0.281	0.00430	"	0.3336		84.2	20-119			
Matrix Spike (19L0215-MS1)		**Source: 19L0121-01**		Prepared: 12/05/2019 Analyzed: 12/07/2019						
PCB-1016	0.816	0.0116	mg/kg wet	1.004	ND	81.3	10-149			
PCB-1260	0.852	0.0129	"	0.9950	ND	85.6	10-137			
Matrix Spike Dup (19L0215-MSD1)		**Source: 19L0121-01**		Prepared: 12/05/2019 Analyzed: 12/07/2019						
PCB-1016	0.717	0.0116	mg/kg wet	1.004	ND	71.4	10-149	12.9	30	
PCB-1260	0.720	0.0129	"	0.9950	ND	72.4	10-137	16.8	30	
Blank (19L0215-BLK1)				Prepared: 12/05/2019 Analyzed: 12/07/2019						
Surrogate: Decachlorobiphenyl	*0.0223*		*mg/kg wet*	*0.03326*		*67.0*	*10-110*			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	*0.0197*		*"*	*0.03326*		*59.3*	*22-159*			
LCS (19L0215-BS1)				Prepared: 12/05/2019 Analyzed: 12/07/2019						
Surrogate: Decachlorobiphenyl	*0.0260*		*mg/kg wet*	*0.03329*		*78.0*	*10-110*			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	*0.0221*		*"*	*0.03329*		*66.3*	*22-159*			

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/10/2019
Work Order # 19L0119
Project: 15671 Tyndall AFB
Tyndall AFB

Polychlorinated Biphenyls (as Congeners) by EPA Method 8082 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 19L0215 - EPA 3550C										
Matrix Spike (19L0215-MS1)	**Source: 19L0121-01**			Prepared: 12/05/2019 Analyzed: 12/07/2019						
Surrogate: Decachlorobiphenyl	*0.0938*		*mg/kg wet*	*0.09930*		*94.5*	*10-110*			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	*0.0871*		*"*	*0.09930*		*87.8*	*22-159*			
Matrix Spike Dup (19L0215-MSD1)	**Source: 19L0121-01**			Prepared: 12/05/2019 Analyzed: 12/07/2019						
Surrogate: Decachlorobiphenyl	*0.0938*		*mg/kg wet*	*0.09930*		*94.4*	*10-110*			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	*0.0902*		*"*	*0.09930*		*90.8*	*22-159*			

Report To:
Paul LeBlanc
AirQuest Environmental, Inc.
6851 SW 45th Street
Ft. Lauderdale FL, 33314

Report Printed: 12/10/2019
Work Order # 19L0119
Project: 15671 Tyndall AFB
Tyndall AFB

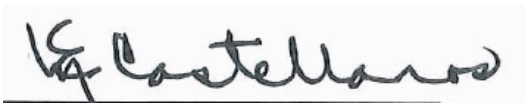
Notes and Definitions

U	Indicated that the compound was analyzed for but not detected. This shall be used to indicate that the specific component was not detected. The value associated with the qualifier shall be the laboratory method detection limit.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
V	Indicated that the analyte was detected in both the sample and the associated method blank.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
Z	Too many colonies were present for accurate counting.

QC=Qualifier Codes as defined by DEP 62-160
Unless indicated, soil results are reported on actual (wet) weight basis.
Work performed by outside (subcontracted) labs denoted by SUB in Analyst Field.

Results relate only to this sample.

Maria Castellanos - Lab Manager



Authorized CSM Signature (954) 978-6400
Florida-Spectrum Environmental Services,Inc.
Certification# E86006

All NELAP certified analysis are performed in accordance with Chapter 64E-1 Florida Administrative code, which has been determined to be equivalent to NELAC standards. Analysis certified by programs other than NELAP are designated with a "~".

CHAIN OF CUSTODY RECORD

WORK ORDER # 19L0119

Logged in LIMS by _____
Meets Acceptance Criteria: Y N

Florida Spectrum Environmental Services, Inc.
Doc. Ctrl: 040119-003
Date: 8/15/19 Rev. 2

☐ 1460 W. McNab Road, Ft Laud. FL 33309 Tel: (954) 978-6400 Fax: (954) 978-2233
☐ 108 Airport Park Dr., Garden City, GA 31408 Tel: (912) 238-5050 Fax: (912) 234-4815
☐ 528 Gooch Rd., Fort Meade, FL 33841 Tel: (863) 285-8145 Fax: (863) 285-7030
☐ 610 Parrot Ave. N, Okeechobee, FL 34972 Tel: (863) 763-3336 Fax: (863) 763-1544
☐ 111 E. Easton Drive, Lakeland, FL 33803 Tel: (863) 686-4271 Fax: (863) 686-4389

Original-Return w/report | Yellow-Lab File Copy | Pink - Sampler Copy

DUE DATE Requested

RUSH RESERVATION #

Rush Surcharges apply

Report to: (company name)	AirGuest Inc	Report to Address:	6851 SW 45th St. Ft. Lauderdale FL 33314
Invoice to: (company name)	Purchase Order #	Invoice to Address:	
Project Name and/or Number	Tyndall AFB	Site Location:	TAFB
Project Contact:	Phone:	Fax:	Email:
Sampler Name: (printed)	T. Holland Affiliation: AQ	Sampler Signature	T. Holland

ORDER # Lab Control Number / Shaded Areas For Laboratory Use Only	Sample ID	Date Sampled	Time Sampled	Matrix (DW SW GW WW S SED HW BIO SEA OIL X AIR)	Bottle & Pres. Combo Codes	Number of Containers Received & NELAC Letter Suffixes # A-?	Analysis Required: PCB 8082	Analysis Required	Analysis Required	Analysis Required	Analysis Required	Analysis Required	Analysis Required	Field Tests: TEMP °C	Field Tests: PH	Field Tests: COND	Field Tests: CHLOR
1 01	108-001	12-2-19		S	S2	1	V										
2 02	108-002	12-2-19		S	1	1	V										
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Special Comments:

"I waive TNI protocol" (emergency) (sign here) >

Total

Deliverables: QA/QC Report Needed? Yes No *(additional charge)*

	Signature	Affiliation	Date/Time
1	Relinquished by: T. Holland	AQ	12-2-19
1	Received by:		
2	Relinquished by: Fed Ex		
2	Received by:		12/4/19 0915
3	Relinquished by:		
3	Received by:		

Sample Custody & Field Comments

Received on Ice: (Y) N
Temp as received 1.8
Custody seals? Y (N)
RAD-9 _____ GUN-1 _____

FIELD TIME
Sampling _____ hrs Pick Up _____ hrs
Misc. Charges _____

Bottle Type
A-liter amber
B-Bacteria bag/bottle
F-500 ml O-125 ml
H-Plastic Amber Liter
L-liter bottle
S2-2 oz soil jar
S4-4 oz soil jar / S8-8 oz soil jar
T-250 ml
V-40 ml vial
W-wide mouth
X-other TED-Tedlar Air Bag

Preservatives
A-ascorbic acid P-H3PO4
C-HCL S-H2SO4
Cu-CuSO4 T-Na2S2O3
DI-DI water U-Unpreserved
H-HNO3 N-NaOH
M-MCAB NH4-NH4CL
MeOH-Methanol Y-Sterile
Z-zinc acetate

Additional Preservatives
Hex-Hex Cr Buffer
EDA-Ethylene Diamine

Appendix VIII
Soil Boring Logs and
Soil Boring Location Photographs

BORING LOG

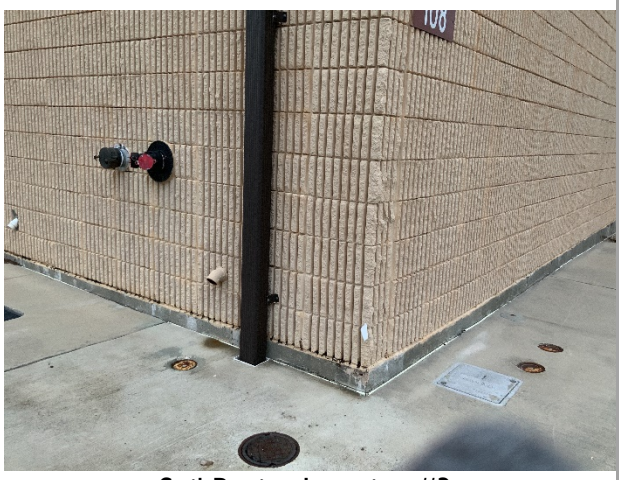
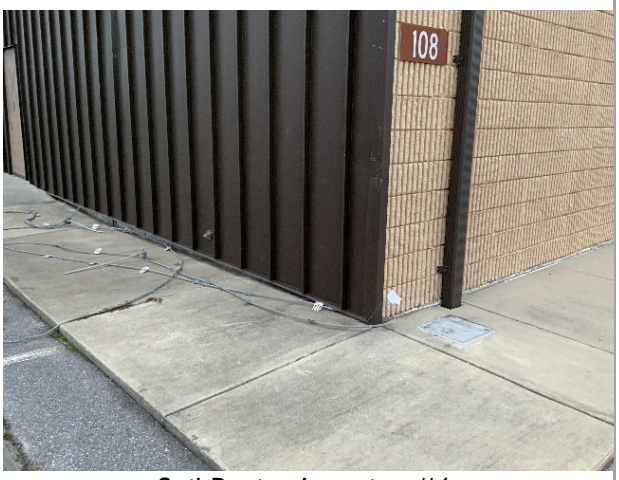
Boring Number: Building # 108			
Site Name: Tyndall AFB, Florida	Borehole Start Date: 11/23/19 End Date:	Borehole Start Time: End Time:	
Environmental Contractor: AirQuest Environmental Inc.	Geologist's Name: Ted Smith	Environmental Technician's	
Drilling Company: AirQuest Environmental Inc.	Pavement Thickness (inches): N/A	Borehole Diameter (inches): 2"	Borehole Depth (feet): 2'
Drilling Method(s):	Direct Push	Hand Auger	
Disposition of Drill Cuttings: Backfill			
Borehole Completion: Backfill and compacted with	Concrete	Asphalt	Drill Cuttings

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content
	0			Slab / Pavement / Grass / Dirt		
	6"		6"	SAND, SP, Very dark gray, 10YR 3/1, fine-grained quartz. Organic stained.		
			12"			
			18"			
	24"		24"			

Sample Type Codes: **PH** = Post Hole; **HA** = Hand Auger; **SS** = Split Spoon; **ST** = Shelby Tube; **DP** = Direct Push; **SC** = Sonic Core; **DC** = Drill Cuttings

Moisture Content Codes: **D** = Dry; **M** = Moist; **W** = Wet; **S** = Saturated

AIRQUEST ENVIRONMENTAL, INC.

Soil Locations Bld 108 - 2ND F-22 AME STORAGE Tyndall Air Force Base	AirQuest Environmental, Inc. Project #15671 March 2020
 Soil Boring Location #1	 Soil Boring Location #2
 Soil Boring Location #3	 Soil Boring Location #4

Appendix IX
Soil Laboratory Report and Chain of Custody Record

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-180393-1
Laboratory Sample Delivery Group: Building 108
Client Project/Site: Tyndall AFB Project No.15671

For:
Air Quest Environmental Inc
6851 SW 45th Street
Fort Lauderdale, Florida 33314

Attn: Teresa A Thomas

Mark Swafford

Authorized for release by:
12/26/2019 8:47:13 AM

Mark Swafford, Project Manager I
(850)471-6207
mark.swafford@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

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Client Sample Results 5
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Receipt Checklists 20

Case Narrative

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Job ID: 400-180393-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-180393-1

Comments
No additional comments.

Receipt
The samples were received on 11/27/2019 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC Semi VOA
Method 8081B: The following samples were diluted due to sample matrix, such as color, odor, appearance, viscosity: OCP.108.4 (400-180393-4), OCP.108.5 (400-180393-5), OCP.108.6 (400-180393-6), OCP.108.7 (400-180393-7) and OCP.108.8 (400-180393-8). Elevated reporting limits (RL) are provided.

Method 8081B: The following samples were diluted to bring the concentration of target analytes within the calibration range: OCP.108.1 (400-180393-1), OCP.108.2 (400-180393-2) and OCP.108.3 (400-180393-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-180393-1	OCP.108.1	Solid	11/23/19 09:14	11/27/19 09:20	
400-180393-2	OCP.108.2	Solid	11/23/19 09:16	11/27/19 09:20	
400-180393-3	OCP.108.3	Solid	11/23/19 09:21	11/27/19 09:20	
400-180393-4	OCP.108.4	Solid	11/23/19 09:23	11/27/19 09:20	
400-180393-5	OCP.108.5	Solid	11/23/19 09:26	11/27/19 09:20	
400-180393-6	OCP.108.6	Solid	11/23/19 09:30	11/27/19 09:20	
400-180393-7	OCP.108.7	Solid	11/23/19 09:33	11/27/19 09:20	
400-180393-8	OCP.108.8	Solid	11/23/19 09:36	11/27/19 09:20	

Client Sample ID: OCP.108.1

Date Collected: 11/23/19 09:14
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-1

Matrix: Solid
Percent Solids: 93.6

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.0046**		0.0021	0.00020	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
4,4'-DDE	**0.054**		0.0018	0.00028	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Aldrin	**0.00064**	**I**	0.0018	0.00063	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
alpha-BHC	0.00025	U	0.0018	0.00025	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
beta-BHC	0.00052	U	0.0018	0.00052	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
cis-Chlordane	**0.0015**	**I**	0.0018	0.00029	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
delta-BHC	0.00033	U	0.0018	0.00033	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Dieldrin	**0.038**		0.0018	0.00037	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Endosulfan I	0.00022	U	0.0018	0.00022	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Endosulfan II	0.00024	U	0.0018	0.00024	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Endosulfan sulfate	0.00022	U	0.0018	0.00022	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Endrin	0.00020	U	0.0018	0.00020	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Endrin aldehyde	0.00030	U	0.0018	0.00030	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Endrin ketone	0.00036	U	0.0018	0.00036	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
gamma-BHC (Lindane)	0.00023	U	0.0018	0.00023	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Heptachlor	0.00025	U	0.0018	0.00025	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Heptachlor epoxide	0.00047	U	0.0018	0.00047	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Methoxychlor	0.00034	U	0.0018	0.00034	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
Toxaphene	0.030	U	0.18	0.030	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1
trans-Chlordane	**0.0026**		0.0018	0.00028	mg/Kg	☼	12/05/19 14:44	12/14/19 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*26 - 129*	*12/05/19 14:44*	*12/14/19 13:23*	*1*
Tetrachloro-m-xylene	*48*		*31 - 122*	*12/05/19 14:44*	*12/14/19 13:23*	*1*

Method: 8081B - Organochlorine Pesticides (GC) - DL

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	**0.10**		0.0088	0.0040	mg/Kg	☼	12/05/19 14:44	12/24/19 19:48	5

Client Sample ID: OCP.108.2

Date Collected: 11/23/19 09:16
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-2

Matrix: Solid
Percent Solids: 93.6

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.036**		0.010	0.00099	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
4,4'-DDE	**0.23**		0.0088	0.0014	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Aldrin	**0.0098**		0.0088	0.0032	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
alpha-BHC	0.0012	U	0.0088	0.0012	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
beta-BHC	0.0026	U	0.0088	0.0026	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
cis-Chlordane	**0.017**		0.0088	0.0015	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
delta-BHC	0.0017	U	0.0088	0.0017	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Endosulfan I	0.0011	U	0.0088	0.0011	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Endosulfan II	0.0012	U	0.0088	0.0012	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Endosulfan sulfate	0.0011	U	0.0088	0.0011	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Endrin	0.00099	U	0.0088	0.00099	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Endrin aldehyde	0.0015	U	0.0088	0.0015	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Endrin ketone	0.0018	U	0.0088	0.0018	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
gamma-BHC (Lindane)	0.0011	U	0.0088	0.0011	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Heptachlor	0.0012	U	0.0088	0.0012	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Heptachlor epoxide	**0.0036**	**I**	0.0088	0.0023	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Methoxychlor	0.0017	U	0.0088	0.0017	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
Toxaphene	0.15	U	0.88	0.15	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5
trans-Chlordane	**0.038**		0.0088	0.0014	mg/Kg	☼	12/05/19 14:44	12/14/19 12:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*26 - 129*	*12/05/19 14:44*	*12/14/19 12:53*	*5*
Tetrachloro-m-xylene	*57*		*31 - 122*	*12/05/19 14:44*	*12/14/19 12:53*	*5*

Method: 8081B - Organochlorine Pesticides (GC) - DL

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	**0.45**		0.035	0.016	mg/Kg	☼	12/05/19 14:44	12/24/19 20:13	20
Dieldrin	**0.64**		0.035	0.0075	mg/Kg	☼	12/05/19 14:44	12/24/19 20:13	20

Client Sample ID: OCP.108.3

Date Collected: 11/23/19 09:21
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-3

Matrix: Solid
Percent Solids: 91.7

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.0038**		0.0022	0.00021	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
4,4'-DDE	**0.040**		0.0018	0.00029	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Aldrin	0.00066	U	0.0018	0.00066	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
alpha-BHC	0.00026	U	0.0018	0.00026	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
beta-BHC	0.00054	U	0.0018	0.00054	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
cis-Chlordane	**0.0011**	**I**	0.0018	0.00030	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
delta-BHC	0.00035	U	0.0018	0.00035	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Dieldrin	**0.0077**		0.0018	0.00039	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Endosulfan I	0.00023	U	0.0018	0.00023	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Endosulfan II	0.00025	U	0.0018	0.00025	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Endosulfan sulfate	0.00023	U	0.0018	0.00023	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Endrin	0.00021	U	0.0018	0.00021	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Endrin aldehyde	0.00031	U	0.0018	0.00031	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Endrin ketone	0.00038	U	0.0018	0.00038	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
gamma-BHC (Lindane)	0.00024	U	0.0018	0.00024	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Heptachlor	0.00026	U	0.0018	0.00026	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Heptachlor epoxide	0.00049	U	0.0018	0.00049	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Methoxychlor	0.00036	U	0.0018	0.00036	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
Toxaphene	0.031	U	0.18	0.031	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1
trans-Chlordane	**0.0021**		0.0018	0.00029	mg/Kg	☼	12/05/19 14:44	12/14/19 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*48*		*26 - 129*	*12/05/19 14:44*	*12/14/19 12:23*	*1*
Tetrachloro-m-xylene	*36*		*31 - 122*	*12/05/19 14:44*	*12/14/19 12:23*	*1*

Method: 8081B - Organochlorine Pesticides (GC) - DL

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	**0.090**		0.0092	0.0042	mg/Kg	☼	12/05/19 14:44	12/24/19 20:38	5

Client Sample ID: OCP.108.4

Date Collected: 11/23/19 09:23
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-4

Matrix: Solid
Percent Solids: 93.8

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.0080**	**I**	0.010	0.0010	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
4,4'-DDE	**0.050**		0.0089	0.0014	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
4,4'-DDT	**0.069**		0.0089	0.0040	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Aldrin	0.0032	U	0.0089	0.0032	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
alpha-BHC	0.0013	U	0.0089	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
beta-BHC	0.0026	U	0.0089	0.0026	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
cis-Chlordane	0.0015	U	0.0089	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
delta-BHC	0.0017	U	0.0089	0.0017	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Dieldrin	**0.0043**	**I**	0.0089	0.0019	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Endosulfan I	0.0011	U	0.0089	0.0011	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Endosulfan II	0.0012	U	0.0089	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Endosulfan sulfate	0.0011	U	0.0089	0.0011	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Endrin	0.0010	U	0.0089	0.0010	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Endrin aldehyde	0.0015	U	0.0089	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Endrin ketone	0.0018	U	0.0089	0.0018	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
gamma-BHC (Lindane)	0.0012	U	0.0089	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Heptachlor	0.0013	U	0.0089	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Heptachlor epoxide	0.0024	U	0.0089	0.0024	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Methoxychlor	0.0017	U	0.0089	0.0017	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
Toxaphene	0.15	U	0.89	0.15	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5
trans-Chlordane	0.0014	U	0.0089	0.0014	mg/Kg	☼	12/05/19 15:30	12/15/19 02:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*26 - 129*	*12/05/19 15:30*	*12/15/19 02:16*	*5*
Tetrachloro-m-xylene	*34*		*31 - 122*	*12/05/19 15:30*	*12/15/19 02:16*	*5*

Client Sample ID: OCP.108.5

Date Collected: 11/23/19 09:26
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-5

Matrix: Solid
Percent Solids: 94.8

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.0032**	**I**	0.010	0.00099	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
4,4'-DDE	**0.015**		0.0089	0.0014	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
4,4'-DDT	**0.014**		0.0089	0.0040	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Aldrin	0.0032	U	0.0089	0.0032	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
alpha-BHC	0.0013	U	0.0089	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
beta-BHC	0.0026	U	0.0089	0.0026	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
cis-Chlordane	0.0015	U	0.0089	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
delta-BHC	0.0017	U	0.0089	0.0017	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Dieldrin	**0.0033**	**I**	0.0089	0.0019	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Endosulfan I	0.0011	U	0.0089	0.0011	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Endosulfan II	0.0012	U	0.0089	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Endosulfan sulfate	0.0011	U	0.0089	0.0011	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Endrin	**0.0011**	**I**	0.0089	0.00099	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Endrin aldehyde	0.0015	U	0.0089	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Endrin ketone	0.0018	U	0.0089	0.0018	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
gamma-BHC (Lindane)	0.0012	U	0.0089	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Heptachlor	0.0013	U	0.0089	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Heptachlor epoxide	0.0024	U	0.0089	0.0024	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Methoxychlor	0.0017	U	0.0089	0.0017	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
Toxaphene	0.15	U	0.89	0.15	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5
trans-Chlordane	**0.0015**	**I**	0.0089	0.0014	mg/Kg	☼	12/05/19 15:30	12/15/19 02:46	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*26 - 129*	*12/05/19 15:30*	*12/15/19 02:46*	*5*
Tetrachloro-m-xylene	*38*		*31 - 122*	*12/05/19 15:30*	*12/15/19 02:46*	*5*

Client Sample ID: OCP.108.6

Date Collected: 11/23/19 09:30
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-6

Matrix: Solid
Percent Solids: 80.0

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0012	U	0.012	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
4,4'-DDE	**0.0058**	**I**	0.011	0.0017	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
4,4'-DDT	0.0048	U	0.011	0.0048	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Aldrin	0.0038	U	0.011	0.0038	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
alpha-BHC	0.0015	U	0.011	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
beta-BHC	0.0031	U	0.011	0.0031	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
cis-Chlordane	0.0017	U	0.011	0.0017	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
delta-BHC	0.0020	U	0.011	0.0020	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Dieldrin	**0.0025**	**I**	0.011	0.0022	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Endosulfan I	0.0013	U	0.011	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Endosulfan II	0.0014	U	0.011	0.0014	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Endosulfan sulfate	0.0013	U	0.011	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Endrin	0.0012	U	0.011	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Endrin aldehyde	0.0018	U	0.011	0.0018	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Endrin ketone	0.0022	U	0.011	0.0022	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
gamma-BHC (Lindane)	0.0014	U	0.011	0.0014	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Heptachlor	0.0015	U	0.011	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Heptachlor epoxide	0.0028	U	0.011	0.0028	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Methoxychlor	0.0021	U	0.011	0.0021	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
Toxaphene	0.18	U	1.1	0.18	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5
trans-Chlordane	0.0017	U	0.011	0.0017	mg/Kg	☼	12/05/19 15:30	12/15/19 03:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*26 - 129*	*12/05/19 15:30*	*12/15/19 03:16*	*5*
Tetrachloro-m-xylene	*38*		*31 - 122*	*12/05/19 15:30*	*12/15/19 03:16*	*5*

Client Sample ID: OCP.108.7

Date Collected: 11/23/19 09:33
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-7

Matrix: Solid
Percent Solids: 89.9

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	**0.0017**	**I**	0.011	0.0011	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
4,4'-DDE	**0.019**		0.0094	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
4,4'-DDT	**0.014**		0.0094	0.0043	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Aldrin	0.0034	U	0.0094	0.0034	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
alpha-BHC	0.0013	U	0.0094	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
beta-BHC	0.0028	U	0.0094	0.0028	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
cis-Chlordane	0.0016	U	0.0094	0.0016	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
delta-BHC	0.0018	U	0.0094	0.0018	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Dieldrin	**0.039**		0.0094	0.0020	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Endosulfan I	0.0012	U	0.0094	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Endosulfan II	0.0013	U	0.0094	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Endosulfan sulfate	0.0012	U	0.0094	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Endrin	0.0011	U	0.0094	0.0011	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Endrin aldehyde	0.0016	U	0.0094	0.0016	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Endrin ketone	0.0019	U	0.0094	0.0019	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
gamma-BHC (Lindane)	0.0012	U	0.0094	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Heptachlor	0.0013	U	0.0094	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Heptachlor epoxide	0.0025	U	0.0094	0.0025	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Methoxychlor	0.0018	U	0.0094	0.0018	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
Toxaphene	0.16	U	0.94	0.16	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5
trans-Chlordane	0.0015	U	0.0094	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 03:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*26 - 129*	*12/05/19 15:30*	*12/15/19 03:45*	*5*
Tetrachloro-m-xylene	*47*		*31 - 122*	*12/05/19 15:30*	*12/15/19 03:45*	*5*

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Client Sample ID: OCP.108.8
Date Collected: 11/23/19 09:36
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-8
Matrix: Solid
Percent Solids: 91.1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0010	U	0.011	0.0010	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
4,4'-DDE	**0.033**		0.0092	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
4,4'-DDT	**0.025**		0.0092	0.0042	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Aldrin	0.0033	U	0.0092	0.0033	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
alpha-BHC	0.0013	U	0.0092	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
beta-BHC	0.0027	U	0.0092	0.0027	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
cis-Chlordane	0.0015	U	0.0092	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
delta-BHC	0.0017	U	0.0092	0.0017	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Dieldrin	**0.20**		0.0092	0.0019	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Endosulfan I	0.0011	U	0.0092	0.0011	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Endosulfan II	0.0012	U	0.0092	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Endosulfan sulfate	0.0011	U	0.0092	0.0011	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Endrin	0.0010	U	0.0092	0.0010	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Endrin aldehyde	0.0016	U	0.0092	0.0016	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Endrin ketone	**0.0023**	**I**	0.0092	0.0019	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
gamma-BHC (Lindane)	0.0012	U	0.0092	0.0012	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Heptachlor	0.0013	U	0.0092	0.0013	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Heptachlor epoxide	0.0024	U	0.0092	0.0024	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Methoxychlor	0.0018	U	0.0092	0.0018	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
Toxaphene	0.16	U	0.92	0.16	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5
trans-Chlordane	0.0015	U	0.0092	0.0015	mg/Kg	☼	12/05/19 15:30	12/15/19 04:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*26 - 129*	*12/05/19 15:30*	*12/15/19 04:15*	*5*
Tetrachloro-m-xylene	*41*		*31 - 122*	*12/05/19 15:30*	*12/15/19 04:15*	*5*

Lab Chronicle

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Client Sample ID: OCP.108.1
Date Collected: 11/23/19 09:14
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	468267	12/02/19 17:15	NB	TAL PEN

Client Sample ID: OCP.108.1
Date Collected: 11/23/19 09:14
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-1
Matrix: Solid
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546	DL		468886	12/05/19 14:44	SHB	TAL PEN
Total/NA	Analysis	8081B	DL	5	471674	12/24/19 19:48	DS	TAL PEN
Total/NA	Prep	3546			468886	12/05/19 14:44	SHB	TAL PEN
Total/NA	Analysis	8081B		1	470057	12/14/19 13:23	PP1	TAL PEN

Client Sample ID: OCP.108.2
Date Collected: 11/23/19 09:16
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	468267	12/02/19 17:15	NB	TAL PEN

Client Sample ID: OCP.108.2
Date Collected: 11/23/19 09:16
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-2
Matrix: Solid
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546	DL		468886	12/05/19 14:44	SHB	TAL PEN
Total/NA	Analysis	8081B	DL	20	471674	12/24/19 20:13	DS	TAL PEN
Total/NA	Prep	3546			468886	12/05/19 14:44	SHB	TAL PEN
Total/NA	Analysis	8081B		5	470057	12/14/19 12:53	PP1	TAL PEN

Client Sample ID: OCP.108.3
Date Collected: 11/23/19 09:21
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	468267	12/02/19 17:15	NB	TAL PEN

Client Sample ID: OCP.108.3
Date Collected: 11/23/19 09:21
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-3
Matrix: Solid
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546	DL		468886	12/05/19 14:44	SHB	TAL PEN
Total/NA	Analysis	8081B	DL	5	471674	12/24/19 20:38	DS	TAL PEN
Total/NA	Prep	3546			468886	12/05/19 14:44	SHB	TAL PEN
Total/NA	Analysis	8081B		1	470057	12/14/19 12:23	PP1	TAL PEN

Lab Chronicle

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Client Sample ID: OCP.108.4
Date Collected: 11/23/19 09:23
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	468267	12/02/19 17:15	NB	TAL PEN

Client Sample ID: OCP.108.4
Date Collected: 11/23/19 09:23
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-4
Matrix: Solid
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			468891	12/05/19 15:30	SHB	TAL PEN
Total/NA	Analysis	8081B		5	470171	12/15/19 02:16	DS	TAL PEN

Client Sample ID: OCP.108.5
Date Collected: 11/23/19 09:26
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	468267	12/02/19 17:15	NB	TAL PEN

Client Sample ID: OCP.108.5
Date Collected: 11/23/19 09:26
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-5
Matrix: Solid
Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			468891	12/05/19 15:30	SHB	TAL PEN
Total/NA	Analysis	8081B		5	470171	12/15/19 02:46	DS	TAL PEN

Client Sample ID: OCP.108.6
Date Collected: 11/23/19 09:30
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	468267	12/02/19 17:42	NB	TAL PEN

Client Sample ID: OCP.108.6
Date Collected: 11/23/19 09:30
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-6
Matrix: Solid
Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			468891	12/05/19 15:30	SHB	TAL PEN
Total/NA	Analysis	8081B		5	470171	12/15/19 03:16	DS	TAL PEN

Client Sample ID: OCP.108.7
Date Collected: 11/23/19 09:33
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	468267	12/02/19 17:42	NB	TAL PEN

Lab Chronicle

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Client Sample ID: OCP.108.7

Date Collected: 11/23/19 09:33
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-7

Matrix: Solid
Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			468891	12/05/19 15:30	SHB	TAL PEN
Total/NA	Analysis	8081B		5	470171	12/15/19 03:45	DS	TAL PEN

Client Sample ID: OCP.108.8

Date Collected: 11/23/19 09:36
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	468267	12/02/19 17:42	NB	TAL PEN

Client Sample ID: OCP.108.8

Date Collected: 11/23/19 09:36
Date Received: 11/27/19 09:20

Lab Sample ID: 400-180393-8

Matrix: Solid
Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			468891	12/05/19 15:30	SHB	TAL PEN
Total/NA	Analysis	8081B		5	470171	12/15/19 04:15	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Laboratory: Eurofins TestAmerica, Pensacola

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E81010	06-30-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture

Method Summary

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Method	Method Description	Protocol	Laboratory
8081B	Organochlorine Pesticides (GC)	SW846	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN
3546	Microwave Extraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Definitions/Glossary

Client: Air Quest Environmental Inc
Project/Site: Tyndall AFB Project No.15671

Job ID: 400-180393-1
SDG: Building 108

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Eurofins TestAmerica, Pensacola
3355 McLemore Drive

Pensacola, FL 32514-7045
phone 850.474.1001 fax 850.474.4789

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	**Project Manager: Paul LeBlanc**	COC No:
AirQuest Environmental, Inc.	Email:labresults@airquestinc.com	**Site Contact:**
6851 SW 45 Street	Tel/Fax: (954) 214-2640	**Lab Contact:**
Fort Lauderdale, Florida 33314	**Analysis Turnaround Time**	**Date:** 11/23/19
(954) 792-4549 Phone	☐ CALENDAR DAYS ☐ WORKING DAYS	**Carrier:**
	TAT if different from Below _____	1 of 1 COCs
Project Name: Tyndall AFB Phase II	☑ 2 weeks	TALS Project #:
Site: Tyndall AFB	☐ 1 week	Sampler: T. Smith
P O # 15671	☐ 2 days	**For Lab Use Only:**
	☐ 1 day	Walk-in Client:
		Lab Sampling:
		Job / SDG No.:

400-180393 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8081B- (MOD) TCL Pesticides by 8081	Sample Specific Notes:
OCP.108.1	11-23-19	0914	G	Solid	1			X	
OCP.108.2		0916	G	Solid	1			X	
OCP.108.3		0921	G	Solid	1			X	
OCP.108.4		0923	G	Solid	1			X	
OCP.108.5		0926	G	Solid	1			X	
OCP.108.6		0930	G	Solid	1			X	
OCP.108.7		0933	G	Solid	1			X	
OCP.108.8	11-23-19	0936	G	Solid	1			X	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

4.4°C IR8

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____	Corr'd:_____	Therm ID No.:_____
Relinquished by:	Company: AirQuest	Date/Time: 11/26 2:00	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 11/27/19 920

Form No. CA-C-WI-002, Rev. 4.27, dated 10/22/2019

Login Sample Receipt Checklist

Client: Air Quest Environmental Inc

Job Number: 400-180393-1
SDG Number: Building 108

Login Number: 180393
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	