



Approved  
Ed Green  
01 Aug 18

A handwritten signature in black ink that reads "Ed Green".

July 30, 2018

Ms. Jennifer Simpkins  
Kimley-Horn and Associates  
7740 N. 16<sup>th</sup> Street, Suite 300  
Phoenix, Arizona 85020

No ACM detected  
LCP > OSHA (Sample # L-6)

RE:           **Job# 01-18-0142**  
                  Limited Asbestos and Lead Paint Survey  
                  **Chandler Heights Rd Improvements**  
                  **Chandler Heights Road (McQueen Road to Gilbert Road)**  
                  **ADOT TRACS NO. 0000 MA CHN T0099 01C**  
                  Chandler, Maricopa County, Arizona

Dear Ms. Simpkins:

In accordance with your authorization to proceed, The Green Way Environmental Group (GWEG) has conducted a Limited Asbestos and Lead Paint Survey at the above-referenced project location. Based on information provided by Kimley-Horn and Associates, Inc. (Kimley-Horn) the project includes impacts on a select few utility monuments, underground pipes, fences, as well as some concrete sidewalk, gutter, irrigations canals, valley gutter, irrigation feature head walls, and associated materials. The scope of work for this Limited Asbestos and Lead Paint Survey is consistent with the Maricopa County and federal NESHAP regulations, as well as, ADOT Specifications. This letter report includes summaries of our activities, findings, and recommendations.

## PROJECT BACKGROUND

GWEG was retained by Kimley-Horn to conduct a limited asbestos and lead paint survey located at various locations along Chandler Heights Road from McQueen Road to Gilbert Road. The survey was limited to the suspect building materials scheduled to be impacted by a road improvement project.

## ACTIVITIES

On July 15 & 24, 2018 Mr. Ritchie Bump, an Environmental Protection Agency (EPA) Lead-Paint Inspector and Asbestos Hazard Emergency Response Act (AHERA) Certified Building Inspector with GWEG, collected Seventy-One (71) bulk samples of suspect asbestos-containing

*Asbestos Sampling • Mold Inspections • Lead-Based Paint Sampling • Post-Remediation Sampling*

*The Green Way Environmental Group, LLC • 3370 North Hayden Road, Suite 123-187*

*Scottsdale, Arizona 85251 • Tel: (480) 639-0389*



building materials from the site and nine (9) sample materials suspected of containing lead-based paint (LBP).

The asbestos samples were submitted via chain of custody protocol to EMSL Analytical, Inc. (EMSL) of Phoenix, Arizona for analysis. EMSL is approved by the Arizona Department of Health Services pursuant to Arizona Revised Statute (A.R.S.) § 36-495.02 (5) to perform airborne and bulk asbestos fiber analysis (ADHS No. AZ0912). In addition, EMSL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP No. 200811-0) for bulk asbestos fiber analysis. Sample analysis was conducted via Polarized Light Microscopy (PLM) in general accordance with EPA Method 600/R-93/116 and/or 600/M4-82-020. The analytical laboratory reports are attached to this letter report.

The LBP samples were also submitted via chain of custody protocol to Fiberquant Analytical Services, Inc. (FBQT) and EMLab P&K (EMLAB) both of Phoenix, Arizona for analysis. FBQT and EMLAB are both American Industrial Hygiene Association (AIHA) Accredited Laboratories for Environmental Lead. LBP sample analysis was conducted in general accordance with EPA SW-846 Method 7420. The analytical laboratory reports are attached to this letter report.

**FINDINGS**

According to federal regulations, any material containing greater than one percent (1%) asbestos as determined by PLM or greater than 0.5% lead by weight as determined by the above Method is considered asbestos-containing material (ACM) and/or LBP, respectively. Materials considered asbestos or containing lead are highlighted in **bold**. A summary of the samples collected by GWEG is presented in the following tables:

<b>Table 1 – Asbestos Results</b>					
<b>Sample No.</b>	<b>Sample Description</b>	<b>Location</b>	<b>Approximate Quantity (SF/LF/EA/NM)</b>	<b>Friable Y/N</b>	<b>Asbestos Content</b>
1A	Saw-cut Concrete Location	Near South Bedford Drive	580 SF	N	ND
1B		Near South Senate Street		N	ND



**Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018**

<b>Table 1 – Asbestos Results</b>					
Sample No.	Sample Description	Location	Approximate Quantity (SF/LF/EA/NM)	Friable Y/N	Asbestos Content
1C		Adams Avenue Intersection		N	ND
1D		Near San Tan Junior High School		N	ND
1E		Near 130 <sup>th</sup> Street & CHR		N	ND
1F		Near Riggs Meadows Drive & CHR		N	ND
2A	Concrete Curb/Gutter	Near South Bedford Drive	1,240 SF	N	ND
2B		Near South Senate Street		N	ND
2C		Adams Avenue Intersection		N	ND
2D		Near San Tan Junior High School		N	ND
2E		South Tower Avenue		N	ND
2F		Salt Cedar Street & CHR		N	ND
2G		130 <sup>th</sup> Street & CHR		N	ND
2H		132 <sup>nd</sup> Street & CHR		N	ND



**Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018**

<b>Table 1 – Asbestos Results</b>					
<b>Sample No.</b>	<b>Sample Description</b>	<b>Location</b>	<b>Approximate Quantity (SF/LF/EA/NM)</b>	<b>Friable Y/N</b>	<b>Asbestos Content</b>
2I		Lindl Drive & CHR		N	ND
2J		Riggs Ranch Street & CHR		N	ND
2K		East Side of Retention Pond & CHR		N	ND
2L		West Drive into Shopping Center & CHR		N	ND
2M		East Drive into Shopping Center & CHR		N	ND
3A	Concrete Sidewalk	Near South Bedford Drive	1,675 SF	N	ND
3B		Near South Senate Street		N	ND
3C		Adams Avenue Intersection		N	ND
3D		Near San Tan Junior High School		N	ND
3E		Salt Cedar Street & CHR		N	ND
3F		East Drive into Shopping Center & CHR		N	ND
4A	Valley Gutter Concrete	Near South Bedford Drive	760 SF	N	ND



**Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018**

<b>Table 1 – Asbestos Results</b>					
<b>Sample No.</b>	<b>Sample Description</b>	<b>Location</b>	<b>Approximate Quantity (SF/LF/EA/NM)</b>	<b>Friable Y/N</b>	<b>Asbestos Content</b>
4B		Near San Tan Junior High School		N	ND
4C		Salt Cedar Street & CHR		N	ND
4D		East Side of Retention Pond & CHR		N	ND
4E		West Drive into Shopping Center & CHR		N	ND
4F		East Drive into Shopping Center & CHR		N	ND
5A		Concrete irrigation Ditch		East of South Senate Street	31,350 SF
5B	West of Adams Avenue		N	ND	
5C	Across From San Tan Jr. High School		N	ND	
5D	Just West of South Tower Avenue		N	ND	
5E	Just West of Cooper Road		N	ND	
5F	SWC of Cooper Road & CHR		N	ND	
5G	Near Salt Cedar Street		N	ND	



**Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018**

<b>Table 1 – Asbestos Results</b>					
<b>Sample No.</b>	<b>Sample Description</b>	<b>Location</b>	<b>Approximate Quantity (SF/LF/EA/NM)</b>	<b>Friable Y/N</b>	<b>Asbestos Content</b>
5H		130 <sup>th</sup> Street & CHR		N	ND
6A	Concrete Pavement	West of Adams Avenue	430 SF	N	ND
6B		Cooper Road & CHR		N	ND
6C		Salt Cedar Street & CHR		N	ND
6D		Lindl Drive & CHR		N	ND
7A	Concrete Headwall	SWC of Adams Ave and CHR	660 SF	N	ND
7B		Cooper Road and CHR		N	ND
7C		Near 130 <sup>th</sup> Street & CHR		N	ND
7D		SWC of Riggs Ranch Street & CHR		N	ND
8A	Concrete Pipe (underground)	NWC of Adams Ave and CHR	300 LF (UAC)	N	ND
8B		NWC of Adams Ave and CHR		N	ND
8C		NWC of Adams Ave and CHR		N	ND



**Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018**

<b>Table 1 – Asbestos Results</b>					
<b>Sample No.</b>	<b>Sample Description</b>	<b>Location</b>	<b>Approximate Quantity (SF/LF/EA/NM)</b>	<b>Friable Y/N</b>	<b>Asbestos Content</b>
8D		Just West of Cooper Road & CHR		N	ND
9A	Concrete Bridges	Near South 126 <sup>th</sup> Street	770 SF	N	ND
9B		Near South 126 <sup>th</sup> Street		N	ND
9C		Between 126 <sup>th</sup> Street & Cooper Road		N	ND
9D		Between 126 <sup>th</sup> Street & Cooper Road		N	ND
9E		Between 126 <sup>th</sup> Street & Cooper Road		N	ND
9F		Just West of Cooper Road		N	ND
10A		Block/ Concrete Wall		Monument Fence Across From School	3,300 SF
10B	East of Cooper Road		N	ND	
10C	East of Cooper Road		N	ND	
LA-1	Green Paint	Utility Pedestal West of Adams Avenue	10 SF	N	ND
LA-2	White Paint	Utility Pedestal West of Adams Avenue	5 SF	N	ND



**Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018**

<b>Table 1 – Asbestos Results</b>					
<b>Sample No.</b>	<b>Sample Description</b>	<b>Location</b>	<b>Approximate Quantity (SF/LF/EA/NM)</b>	<b>Friable Y/N</b>	<b>Asbestos Content</b>
LA-3	Tan Paint	Monument Fence Across From School	30 SF	N	ND
ADA-A	Concrete ADA Pads	SEC of CHR & Adams Avenue	70 SF	N	ND
ADA-B		SEC of CHR & Adams Avenue		N	ND
ADA-C		SEC of CHR & Adams Avenue		N	ND
L-5	White/Asphalt	West End of Project	5,380 SF	N	ND
L-6	Yellow/Asphalt	West End of Project	2,050 SF	N	ND
L-7	Yellow/Fire Hydrant	Just East of Copper Road on South Side of CHR	15 SF	N	ND
L-8	White/Asphalt	East End of Project	6,210 SF	N	ND
L-9	Yellow/Asphalt	East End of Project	2,440 SF	N	ND
<b>CHR = Chandler Heights Road</b> <b>UAQ = Unable to Accurately Quantify (Underground)</b> <b>SF = Square Feet</b> <b>LF = Linear Feet</b> <b>EA = Each</b> <b>NM = Not Measured</b> <b>ND = Non-Detect or Below Laboratory Detection Limits</b>					



**Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018**

<b>Table 2 – Lead Results</b>			
<b>Sample No.</b>	<b>Paint Description/Substrate</b>	<b>Location</b>	<b>Lead Content (% by Weight)</b>
L-1	Green/Metal	Utility Pedestal West of Adams Avenue	<0.0075
L-2	White/Metal	Utility Pedestal West of Adams Avenue	<0.0092
L-3	Tan/Block Fence	Monument Fence Across From School	<0.0015
L-4	Red/Concrete	ADA Pads	<0.0040
L-5	White/Asphalt	West End of Project	<0.0039
L-6	Yellow/Asphalt	West End of Project	0.0240
L-7	Yellow/Fire Hydrant	Just East of Copper Road on South Side of CHR	<0.0040
L-8	White/Asphalt	East End of Project	<0.0039
L-9	Yellow/Asphalt	East End of Project	<0.0036
% = Percent by Weight BRL = Below Lab Reporting Limits			

**CONCLUSIONS AND RECOMMENDATIONS**

**None of the above materials, sampled by GWEG, contained asbestos above 1%.**

**None of the paint chip samples, collected by GWEG, contained lead at levels greater than 0.5% by weight (lead).**



If additional suspect building materials are discovered during the road improvement project activities, the materials should be sampled and analyzed for asbestos and/or lead content prior to disturbance or should be assumed ACM or LBP and handled as such.

## **LIMITATIONS**

The Green Way Environmental Group's conclusions and recommendations, as presented in this report, are based on limited sampling and analysis. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated.

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No other warranty, expressed or implied, is made regarding the professional conclusions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities.

The Green Way Environmental Group, LLC appreciates the opportunity to provide environmental consulting services to Kimley-Horn and Associates, Inc. and looks forward to future projects. Please contact us at (480) 639-0389 if you have any questions pertaining to this report.

Sincerely,  
**THE GREEN WAY ENVIRONMENTAL GROUP, LLC**

Mr. Ritchie Bump  
Principal Hygienist

Figures:            Figures 1 through 4 (Sample Location Maps)

Appendices:       Appendix A – Personnel Certifications  
                         Appendix B – Asbestos Laboratory Reports and Chain-of-Custodies  
                         Appendix C – Lead Paint Laboratory Reports and Chain-of-Custodies

Distribution:       (1)            Addressee



**FIGURES**

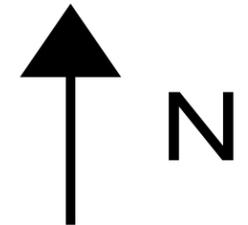
**FIGURES 1 THROUGH 4 (SAMPLE LOCATION MAPS)**

# Chandler Heights Road Improvements - McQueen to Adams Avenue



**NO  
ASBESTOS  
DETECTED**

**NO LEAD  
PAINT  
DETECTED**



## LEGEND

**1X** Asbestos Sample Location (typical)

**L-X** Lead Paint Sample Location (typical)

## THE GREEN WAY ENVIRONMENTAL GROUP, LLC

3370 North Hayden Road Suite 123-187  
Scottsdale, Arizona 85251

### Sample Location Map

Chandler Heights Road Improvements - McQueen Road to Gilbert Road  
Chandler, Arizona

DATE

July 2018

FIGURE

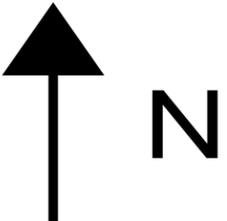
1

# Chandler Heights Road Improvements - Adams Avenue to Cooper Road



NO  
ASBESTOS  
DETECTED

NO LEAD  
PAINT  
DETECTED



**LEGEND**

○-1X Asbestos Sample Location (typical)

○-L-X Lead Paint Sample Location (typical)

**THE GREEN WAY ENVIRONMENTAL GROUP, LLC**

3370 North Hayden Road Suite 123-187  
Scottsdale, Arizona 85251

**Sample Location Map**

Chandler Heights Road Improvements - McQueen Road to Gilbert Road  
Chandler, Arizona

**DATE**

July 2018

**FIGURE**

2

# Chandler Heights Road Improvements - Cooper Road to 132nd Street



**NO ASBESTOS DETECTED**

**NO LEAD PAINT DETECTED**

## LEGEND

- 1X Asbestos Sample Location (typical)
- L-X Lead Paint Sample Location (typical)

<b>THE GREEN WAY ENVIRONMENTAL GROUP, LLC</b> 3370 North Hayden Road Suite 123-187 Scottsdale, Arizona 85251			
<b>Sample Location Map</b>		<b>DATE</b>	<b>FIGURE</b>
Chandler Heights Road Improvements - McQueen Road to Gilbert Road Chandler, Arizona		July 2018	3

# Chandler Heights Road Improvements - 132nd Street to Gilbert Road



**NO  
ASBESTOS  
DETECTED**

**NO LEAD  
PAINT  
DETECTED**

## LEGEND

- 1X Asbestos Sample Location (typical)
- ♂-L-X Lead Paint Sample Location (typical)

**THE GREEN WAY ENVIRONMENTAL GROUP, LLC**

3370 North Hayden Road Suite 123-187  
Scottsdale, Arizona 85251

## Sample Location Map

Chandler Heights Road Improvements - McQueen Road to Gilbert Road  
Chandler, Arizona

**DATE**

July 2018

**FIGURE**

4



**Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018**

---

**ATTACHMENT A**  
**PERSONNEL CERTIFICATIONS**

***Asbestos Sampling • Mold Inspections • Lead-Based Paint Sampling • Post-Remediation Sampling***

***The Green Way Environmental Group, LLC • 3370 North Hayden Road, Suite 123-187***

***Scottsdale, Arizona 85251 • Tel: (480) 639-0389***

---

---

# THE ASBESTOS INSTITUTE

*Certifies that*

## **Ritchie Bump**

# **AHERA Building Inspector Refresher**

has attended and received instruction in the EPA approved course

on

**November 07, 2017**

and successfully completed and passed the competency exam.

**4646-352-110717**

Date of Examination:

7-Nov-2017

Date of Expiration:

07-Nov-2018



William T. Cavness  
Director



Approved Instructor

### **THE ASBESTOS INSTITUTE**

20033 N. 19<sup>th</sup> Ave, Building 6, Phoenix, AZ 85027  
602-864-6564 – [www.theasbestosinstitute.com](http://www.theasbestosinstitute.com)

*This training meets all requirements for asbestos certification under Toxic Substance Control Act Title II.*

# United States Environmental Protection Agency

This is to certify that



Richard A Bump

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Inspector

## In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires June 20, 2020

LBP-I-1177458-1

Certification #

June 06, 2017

Issued On

A handwritten signature in black ink, appearing to read "Adrienne Priselac".

Adrienne Priselac, Manager, Toxics Office

Land Division





*Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018*

---

**ATTACHMENT B**

**ASBESTOS LABORATORY REPORTS AND CHAIN-OF-CUSTODIES**



# EMSL Analytical, Inc.

3356 West Catalina Drive Phoenix, AZ 85017

Tel/Fax: (602) 276-4344 / (602) 276-4053

<http://www.EMSL.com> / [phoenixlab@emsl.com](mailto:phoenixlab@emsl.com)

EMSL Order: 121804448

Customer ID: GWEG25

Customer PO:

Project ID:

**Attention:** Ritchie Bump  
The Green Way Environmental Group  
PO Box 5705  
Scottsdale, AZ 85261

**Phone:** (480) 440-5664

**Fax:**

**Received Date:** 07/17/2018 4:55 PM

**Analysis Date:** 07/18/2018

**Collected Date:** 07/17/2018

**Project:** 01-18-0142 KH (CHR - McQueen To Gilbert)

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1A 121804448-0001	Sawcut Concrete Material	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1B 121804448-0002	Sawcut Concrete Material	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1C 121804448-0003	Sawcut Concrete Material	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1D 121804448-0004	Sawcut Concrete Material	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1E 121804448-0005	Sawcut Concrete Material	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1F 121804448-0006	Sawcut Concrete Material	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2A 121804448-0007	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2B 121804448-0008	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2C 121804448-0009	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2D 121804448-0010	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2E 121804448-0011	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2F 121804448-0012	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2G 121804448-0013	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2H 121804448-0014	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2I 121804448-0015	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2J 121804448-0016	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 07/18/2018 19:06:54



# EMSL Analytical, Inc.

3356 West Catalina Drive Phoenix, AZ 85017

Tel/Fax: (602) 276-4344 / (602) 276-4053

<http://www.EMSL.com> / [phoenixlab@emsl.com](mailto:phoenixlab@emsl.com)

**EMSL Order:** 121804448  
**Customer ID:** GWEG25  
**Customer PO:**  
**Project ID:**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
2K 121804448-0017	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2L 121804448-0018	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2M 121804448-0019	Concrete Curb / Gutter	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3A 121804448-0020	Concrete Sidewalk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3B 121804448-0021	Concrete Sidewalk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3C 121804448-0022	Concrete Sidewalk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3D 121804448-0023	Concrete Sidewalk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3E 121804448-0024	Concrete Sidewalk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3F 121804448-0025	Concrete Sidewalk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4A 121804448-0026	Valley Gutter Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4B 121804448-0027	Valley Gutter Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4C 121804448-0028	Valley Gutter Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4D 121804448-0029	Valley Gutter Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4E 121804448-0030	Valley Gutter Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4F 121804448-0031	Valley Gutter Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5A 121804448-0032	Concrete Irrigation Ditch	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5B 121804448-0033	Concrete Irrigation Ditch	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5C 121804448-0034	Concrete Irrigation Ditch	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5D 121804448-0035	Concrete Irrigation Ditch				Not Submitted

Initial report from: 07/18/2018 19:06:54



# EMSL Analytical, Inc.

3356 West Catalina Drive Phoenix, AZ 85017

Tel/Fax: (602) 276-4344 / (602) 276-4053

<http://www.EMSL.com> / [phoenixlab@emsl.com](mailto:phoenixlab@emsl.com)

**EMSL Order:** 121804448  
**Customer ID:** GWEG25  
**Customer PO:**  
**Project ID:**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
5E 121804448-0036	Concrete Irrigation Ditch	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5F 121804448-0037	Concrete Irrigation Ditch	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5G 121804448-0038	Concrete Irrigation Ditch	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5H 121804448-0039	Concrete Irrigation Ditch				Not Submitted
6A 121804448-0040	Concrete Pavement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6B 121804448-0041	Concrete Pavement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6C 121804448-0042	Concrete Pavement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6D 121804448-0043	Concrete Pavement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7A 121804448-0044	Concrete Headwall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7B 121804448-0045	Concrete Headwall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7C 121804448-0046	Concrete Headwall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7D 121804448-0047	Concrete Headwall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8A 121804448-0048	Concrete Pipe (Underground)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8B 121804448-0049	Concrete Pipe (Underground)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8C 121804448-0050	Concrete Pipe (Underground)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8D 121804448-0051	Concrete Pipe (Underground)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9A 121804448-0052	Concrete Bridges	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9B 121804448-0053	Concrete Bridges	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9C 121804448-0054	Concrete Bridges	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 07/18/2018 19:06:54



# EMSL Analytical, Inc.

3356 West Catalina Drive Phoenix, AZ 85017

Tel/Fax: (602) 276-4344 / (602) 276-4053

<http://www.EMSL.com> / [phoenixlab@emsl.com](mailto:phoenixlab@emsl.com)

<b>EMSL Order:</b> 121804448
<b>Customer ID:</b> GWEG25
<b>Customer PO:</b>
<b>Project ID:</b>

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
9D <i>121804448-0055</i>	Concrete Bridges	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9E <i>121804448-0056</i>	Concrete Bridges				Not Submitted
9F <i>121804448-0057</i>	Concrete Bridges				Not Submitted
10A <i>121804448-0058</i> <i>Paint excluded.</i>	Block/Concrete Wall	Gray Fibrous Homogeneous	2% Glass	98% Non-fibrous (Other)	None Detected
10B <i>121804448-0059</i> <i>Paint excluded.</i>	Block/Concrete Wall	Gray Non-Fibrous Homogeneous	2% Glass	98% Non-fibrous (Other)	None Detected
10C <i>121804448-0060</i> <i>Paint excluded.</i>	Block/Concrete Wall	Gray Non-Fibrous Homogeneous	2% Glass	98% Non-fibrous (Other)	None Detected
LA-1 <i>121804448-0061</i>	Green Paint	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
LA-2 <i>121804448-0062</i>	White Paint	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
LA-3 <i>121804448-0063</i>	Tan Paint	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

Jessica Garza (18)

Jacob Markey (41)

Michelle Wilson, 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. Phoenix, AZ NVLAP Lab Code 200811-0, AZ0937

Initial report from: 07/18/2018 19:06:54



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

**Asbestos Chain of Custody**  
EMSL Order Number (Lab Use Only):

121804448

EMSL ANALYTICAL, INC.  
3356 W CATALINA  
PHOENIX, AZ 85017  
PHONE: (602) 276-4344  
FAX: 4053

Company : The Greenway Group		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 3370 North Hayden Road Suite 123-187		Third Party Billing requires written authorization from third party	
City: Scottsdale	State/Province: AZ	Zip/Postal Code: 85251	Country:
Report To (Name): Ritchie Bump;		Fax #:	
Telephone #: 480-888-6938	Email: LABRESULTS@GWEG-AZ.COM		
Project Name/Number: 01-18-0142 KH (CHR-McQueen to Gilbert)			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: <input type="checkbox"/> U.S. State Samples Taken:	

**Turnaround Time (TAT) Options\* - Please Check**

3 Hours  6 Hours  24 Hrs  48 Hrs  3 Days  4 Days  5 Days  10 Days

\*For TEM Air 3 hours/6 hours, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<b>PCM - Air</b> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	<b>TEM - Air</b> <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b> <input type="checkbox"/>
---	--	--

Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: *R. Bump* Samplers Signature: *[Signature]*

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A	SEE ATTACHED	Bulk	7/15/18
↓	↓	↓	↓
LA-3			

Client Sample # (s): *[Signature]* Total # of Samples: *63*

Relinquished (Client): *[Signature]* Date: *7/17/18 - 7/17/18* Time: *15:40/15:00*

Received (Lab): *[Signature]* Date: *7/17/18* Time: *4:58*

Comments/Special Instructions:

# BULK SAMPLING LOG

Date: 7/15/2018  
 Job #: 01-18-0142  
 Address: CHR (McQueen Road to Gilbert Road)  
 Space: \_\_\_\_\_  
 Lab: EN 32  
 Inspector: Richie Bump Cert #: \_\_\_\_\_

12/804498

The Green Way Environmental Group, LLC  
 3370 North Hayden Road Suite 123-187  
 Scottsdale, Arizona  
 O: (480) 639-0389



g	Sample #	Material	Sample Location	Quantity	Results	Friability	Condition	Air Erosion	Contact	Vibration
	1A	Sawcut Concrete Material	INTERSECTIONS							
	1B		& Middle							
	1C									
	1D									
	1E									
	1F									
	2A	Concrete Curb/Gutter	Driveways							
	2B		& Intersections							
	2C									
	2D									
	2E									
	2F									
	2G									
	2H									
	2I									
	2J									
	2K									
	2L									
	2M									
	3A	Concrete Sidewalk	Driveways & Intersections							
	3B									

Order ID: 121804448  
 Friability Codes: N=Non-Friable; F=Friable

Relinquished by: \_\_\_\_\_

Date: \_\_\_\_\_

Condition Codes: G=Good; F=Fair; P=Poor

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

Erosion Codes: L=Low; M=Moderate; H=High

Relinquished by: \_\_\_\_\_

Date: \_\_\_\_\_

Contact and Vibration Codes: L=Low; M=Moderate; H=High

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

# BULK SAMPLING LOG

Date : 7/15/2018  
 Job # : 01-18-0142  
 Address : CHR (McQueen Road to Gilbert Road)  
 Space : EML  
 Lab : EMLab  
 Inspector: Ritchie Bump Cert #:

The Green Way Environmental Group, LLC  
 3370 North Hayden Road Suite 123-187  
 Scottsdale, Arizona  
 O: (480) 639-0389



Sample #	Material	Sample Location	Quantity	Results	Friability	Condition	Air Erosion	Contact	Vibration
3C	Concrete Sidewalk	Driveways + Intersections							
3D									
3E									
3F									
4A	Valley Gutter Concrete	Intersection							
4B									
4C		Intersections							
4D									
4E									
4F									
5A	Concrete Irrigation Ditch	South Side Dr CHR							
5B									
5C									
5D									
5E									
5F									
5G									
5H									
6A	Concrete Pavement	Intersections							
6B		Features							
6C									

Friability Codes: N=Non-Friable; F=Friable

Condition Codes: G=Good; F=Fair; P=Poor

Air Erosion, Contact and Vibration Codes: L=Low; M=Moderate; H=High

Order ID: 121804448

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

# BULK SAMPLING LOG

Date: 7/15/2018  
 Job #: 01-18-0142  
 Address: CHR (McQueen Road & Gilbert Road)  
 Space: EML  
 Lab: EMLab  
 Inspector: Richie Bump Cert #: \_\_\_\_\_

The Green Way Environmental Group, LLC  
 3370 North Hayden Road Suite 123-187  
 Scottsdale, Arizona  
 O: (480) 639-0389



Sample #	Material	Sample Location	Quantity	Results	Friability	Condition	Air Erosion	Contact	Vibration
6D	Concrete Pavement	Intersection Features							
7A	Concrete Headwall	Intersection Features							
7B		↓							
7C		↓							
7D		↓							
8A	Concrete Pipe (underground)	Irrigation Pipe Outfalls							
8B		↓							
8C		↓							
8D		↓							
9A	Concrete Bridges	Residential Drives							
9B		↓							
9C		↓							
9D		↓							
9E		↓							
9F		↓							
10A	Block/Concrete Wall	South Side (CHR)							
10B		↓							
10C		↓							
LA-1	Green Paint	Utility Pedestal							
LA-2	White Paint	↓							
LA-3	TRV Paint	MONUMENT FENCE							

Order ID: 121804448

Friability Codes: N=Non-Friable; F=Friable  
 Condition Codes: G=Good; F=Fair; P=Poor  
 Air Erosion, Contact and Vibration Codes: L=Low; M=Moderate; H=High

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date: \_\_\_\_\_



# EMSL Analytical, Inc.

3356 West Catalina Drive Phoenix, AZ 85017

Tel/Fax: (602) 276-4344 / (602) 276-4053

<http://www.EMSL.com> / [phoenixlab@emsl.com](mailto:phoenixlab@emsl.com)

<b>EMSL Order:</b> 121804609
<b>Customer ID:</b> GWEG25
<b>Customer PO:</b>
<b>Project ID:</b>

<b>Attention:</b> Ritchie Bump The Green Way Environmental Group PO Box 5705 Scottsdale, AZ 85261	<b>Phone:</b> (480) 440-5664 <b>Fax:</b> <b>Received Date:</b> 07/24/2018 4:10 PM <b>Analysis Date:</b> 07/24/2018 - 07/25/2018 <b>Collected Date:</b> 07/24/2018
<b>Project:</b>	

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
ADA-A <small>121804609-0001</small>	ADA PAD	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
ADA-B <small>121804609-0002</small>	ADA PAD	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
ADA-C <small>121804609-0003</small>	ADA PAD	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

Isai Portillo (1)  
Lindsay Rye (2)

Michelle Wilson, 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. Phoenix, AZ NVLAP Lab Code 200811-0, AZ0937

Initial report from: 07/25/2018 12:46:11



EMSL ANALYTICAL, INC.  
LABORATORY • PRODUCTS • TRAINING

# Asbestos Bulk Building Material Chain of Custody

**EMSL Order Number** *(Lab Use Only):*

121804609

EMSL ANALYTICAL, INC.  
3356 W CATALINA  
PHOENIX, AZ 85017  
PHONE: (602) 276-4344  
FAX: 4053

<b>Company :</b> The Greenway Group		<b>EMSL-Bill to:</b> <input type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
<b>Street:</b> 3370 North Hayden Road Suite 123-187		<i>Third Party Billing requires written authorization from third party</i>	
<b>City:</b> Scottsdale	<b>State/Province:</b> AZ	<b>Zip/Postal Code:</b> 85251	<b>Country:</b>
<b>Report To (Name):</b> Ritchie Bump		<b>Telephone #:</b> 480-888-6938	<b>Fax #:</b>
<b>Email Address:</b> labresults@gweg-az.com			
<b>Project Name/Number:</b>			
<b>U.S. State Samples Taken:</b>		<b>Please Provide Results:</b> <input type="checkbox"/> Fax <input type="checkbox"/> Email <b>Purchase Order:</b>	
<b>Turnaround Time (TAT) Options* – Please Check</b>			
<input type="checkbox"/> 3 Hour	<input checked="" type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week
<small>*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.</small>			
<b>PLM - Bulk (reporting limit)</b>		<b>TEM - Bulk</b>	
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)		<input type="checkbox"/> TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1	
<input type="checkbox"/> PLM EPA NOB (<1%)		<input type="checkbox"/> NY ELAP Method 198.4 (TEM)	
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)		<input type="checkbox"/> Chatfield Protocol (semi-quantitative)	
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)		<input type="checkbox"/> TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2	
<input type="checkbox"/> NIOSH 9002 (<1%)		<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique	
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)		<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique	
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)		<b>Other</b>	
<input type="checkbox"/> OSHA ID-191 Modified		<input type="checkbox"/>	
<input type="checkbox"/> Standard Addition Method			
<input type="checkbox"/> Check For Positive Stop – Clearly Identify Homogenous Group		<b>Date Sampled:</b>	
<b>Samplers Name:</b>		<b>Samplers Signature:</b>	
<b>Sample #</b>	<b>Material Description</b>	<b>Sample Location</b>	
ADA - A	ADA pad	S/E corner of Adams Ave + CHR	
ADA - B	ADA pad	S/E corner of Adams Ave + CHR	
ADA - C	ADA pad	S/W corner of Adams Ave + CHR	
<b>Client Sample # (s):</b> —		<b>Total # of Samples:</b>	
<b>Relinquished (Client):</b> <i>Ron Powell</i>		<b>Date:</b> 7-24-18	<b>Time:</b> 4:10
<b>Received (Lab):</b> <i>[Signature]</i>		<b>Date:</b> 7/24/18	<b>Time:</b> 4:10
<b>Comments/Special Instructions:</b>			



Report for:

**Mr. Ritchie Bump, EIT**  
**The Green Way Environmental Group**  
PO Box 5705  
Scottsdale, AZ 85261-5705

---

Regarding: Project: 01-18-0142KH; CHR-Mcque Gilbert  
EML ID: 1967489

Approved by:

Approved Signatory  
Danny Li

Dates of Analysis:  
Asbestos PLM: 07-27-2018 and 07-30-2018

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)

---

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: The Green Way Environmental Group  
 C/O: Mr. Ritchie Bump, EIT  
 Re: 01-18-0142KH; CHR-Mcque Gilbert

Date of Sampling: 07-24-2018  
 Date of Receipt: 07-25-2018  
 Date of Report: 07-30-2018

**ASBESTOS PLM REPORT**

<b>Total Samples Submitted:</b>	5
<b>Total Samples Analyzed:</b>	5
<b>Total Samples with Layer Asbestos Content &gt; 1%:</b>	0

**Location: L-4, ADA Pad (Red)**

Lab ID-Version‡: 9281260-1

Sample Layers	Asbestos Content
Red Non-Fibrous Material	ND
<b>Sample Composite Homogeneity:</b>	Moderate

**Location: L-5, White R.S.**

Lab ID-Version‡: 9281261-1

Sample Layers	Asbestos Content
Off-White Non-Fibrous Material	ND
<b>Sample Composite Homogeneity:</b>	Moderate

**Location: L-6, Road Strip (RS) (Yellow)**

Lab ID-Version‡: 9281262-1

Sample Layers	Asbestos Content
Yellow Non-Fibrous Material	ND
<b>Sample Composite Homogeneity:</b>	Moderate

**Location: L-8, White (Road Stripe)**

Lab ID-Version‡: 9281263-1

Sample Layers	Asbestos Content
Off-White Non-Fibrous Material	ND
<b>Sample Composite Homogeneity:</b>	Moderate

**Location: L-9, Yellow (Road Stripe)**

Lab ID-Version‡: 9281264-1

Sample Layers	Asbestos Content
Yellow Non-Fibrous Material	ND
<b>Sample Composite Homogeneity:</b>	Moderate

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".





***Limited Asbestos and Lead Paint Survey  
Chandler Heights Road Improvement Project  
July 30, 2018***

---

## **ATTACHMENT C**

### **LEAD PAINT LABORATORY REPORTS AND CHAIN-OF-CUSTODIES**

***Asbestos Sampling • Mold Inspections • Lead-Based Paint Sampling • Post-Remediation Sampling***

***The Green Way Environmental Group, LLC • 3370 North Hayden Road, Suite 123-187***

***Scottsdale, Arizona 85251 • Tel: (480) 639-0389***



**Atomic Absorption Spectrometer (AAS) Analysis of Paint**

**JobNumber:** 201806585

**Client:**

GREEN WAY GROUP, THE

PO BOX 5705

SCOTTSDALE, AZ 85261-5705

Office Phone: (480) 639-0389

FAX: (480) 588-7856

**# Samples:** 3 AA **Rec:** 7/17/2018 **Method:** Modified SW 846 3050b/7420 Pb in paint by weight AA Analysis

**Client Job:** 01-18-0142 CHR (McQueen to Gilbert)

**PO Number:**

**Report Date:** 7/18/2018

**Date Analyzed:** 7/18/2018

**Routing Number:** -

**Method and Analysis Information:** Fiberquant Internal SOP: AApw

The received samples were analyzed for Pb (total) using "Test Methods for Evaluating Solid Waste" (SW 846, December 1996 updates). The extraction/digestion method was SW 3050b. The analytical method is "flame atomic absorption, direct aspiration", SW 7420. Briefly the procedures are as follows. The incoming paint samples are first homogenized by mixing and crushing. A sub-sample is weighed to 0.0001 gm into a 50ml centrifuge tube. To the run stream are added the quality assurance samples described below. Six mls of concentrated HNO3 and one ml of 30% H2O2 are added to each container. The tubes are capped and heated for 1 hour at 95 deg. C. After cooling, the contents of the centrifuge tube are brought up to exactly 25 mls, completing the digestion/extraction.

The sample and quality assurance extractions are then analyzed on a Thermo M5 flame atomic absorption spectrometer or a Perkin Elmer Analyst 200. The wavelengths and other instrumental settings are set according to the manufacturer's recommendations, or as otherwise specified in the published method. Absorptions are recorded from sample and standard solutions. A calibration curve is fitted to at least three standard solutions, and the concentrations of the sample extracts are calculated from the curve. The ppm (ug/gm) and weight percent for each sample is calculated from the sub-sample weight, extract volume, and extract concentration.

The results from this analysis is generally compared to either the HUD guidelines, in which a sample is positive if it contains >0.5% (5000 ppm) Pb, or the Consumer Products Safety Commission (CPSC) limit, in which a paint or surface coating containing greater than 90 ppm is defined as lead-containing. The expected coefficient of variation for this method is approximately 20-30%. The results are reported to two significant figures. The Sample Reporting Limit (RL) listed below is twice the Sample Detection Limit, which is calculated for each sample from the experimentally determined Method Detection Limit. The limit of reliable quantitation is generally regarded as five to ten times the limit of detection. Therefore, samples smaller than 0.1 gm may give results too near the CPSC standard to be reliable. Problems in analysis or other information is provided in the "Analytical Notes" below. Blanks, if analyzed, are treated the same as samples and are not used for correcting non-blank results.

The following on-going quality assurance program was followed to ensure reproducible and dependable results: All analysts are degreed chemists trained extensively in-house for at least six months prior to un-supervised runs. Blank matrix samples are analyzed at a rate of 5% (at least one per run). Reference standards are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. Spiked matrix samples are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. Duplicate samples are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. For each instrumental run, the spectrometer is checked for sensitivity and stability. The calibration standards are made fresh weekly, and checked each run against a calibration verification standard from another source. All calculations are performed twice - once in a calibration spreadsheet, and once during the report generation, and also checked by hand. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. Fiberquant participates in the Environmental Lead Proficiency Analytical Testing (ELPAT) program, is accredited by AIHA-LAP, LLC for environmental lead in paint (Lab # 101593), and is recognized by the National Lead Laboratory Accreditation Program (NLLAP) for the analysis of Pb in paint. Accreditation does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

**Job Analysis Notes:**

**Calibration Curve:**

**Pb**

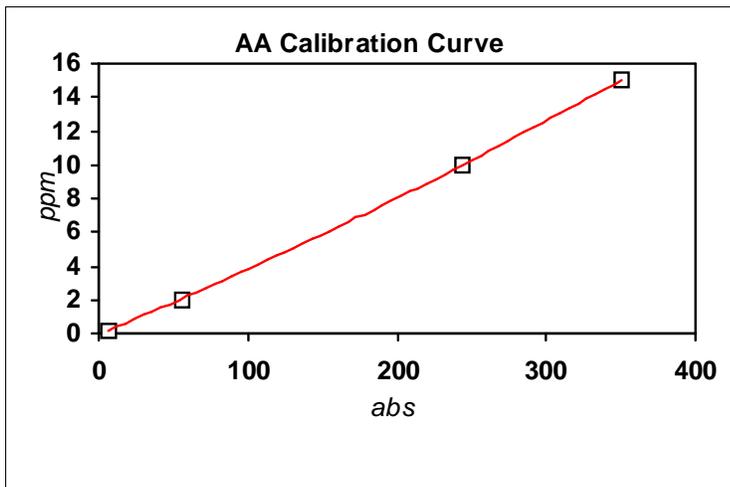
**Run # 13052**

**7/17/2018**

Instrument: AA200

Standards:	ppm	avg. mAbs.
1	0.2	6
2	2	56
3	10	244
4	15	351

ax2 0.00001733  
 bx 0.03686621  
 c -0.06094534  
 R2 0.99995677



**Analysis Results:**

Job Number: 201806585

AApw

Lab Number	Client Number	Date	Condition	Weight (gm)	ug/ml	ml	Dil	Analyte	wt %	ppm	RL(ppm)
2018-06585- 1	L-1	7/15/2018	acceptable	0.0671	-0.061	25	1	Pb	<0.0075	<75	75
2018-06585- 2	L-2	7/15/2018	acceptable	0.0542	-0.061	25	1	Pb	<0.0092	<92	92
2018-06585- 3	L-3	7/15/2018	acceptable	0.3328	-0.061	25	1	Pb	<0.0015	<15	15

*Martin Esquer*

**Analyst:** MARTIN A. ESQUER

Printed: 18-Jul-18

Original Print Date: 18-Jul-18

*Larry S. Pierce*

Larry S. Pierce, Approved Accreditation Signatory

# RUSH

## FIBERQUANT ANALYTICAL SERVICES

**Fiberquant Analytical Services** 5025 S. 33<sup>rd</sup> St.;  
Phoenix, AZ 85040; Phone: 602-276-6139; FAX: 602-276-4558;  
info@fiberquant.com

### Analysis Request/Chain-of-Custody Form

Submitted by (Company)	The Green Way Env. Group		
Address	PO Box 5705		
City, State, Zip Code	Scottsdale, AZ, 85261-5705		
Phone	(480) 639-0389	FAX	
Email	LABRESULTS@GWEG-AZ.COM		

Invoice to (Company)	Same As Above		
Address			
City, State, Zip Code			
Phone		FAX	

Contact (print)	Ritchie Bump		
Sampled by (signature)			
Job Number or Project Name	51-18-0142		
PO Number	CHR (McQueen to Gilbert)		

<Analysis Method Requested> ONLY ONE METHOD per COC		Turn-around-time (choose one)				
		Rush	Norm	Ext.		
Asbestos by PLM	Method > Improved <input type="checkbox"/> or Interim <input type="checkbox"/>	Urg. Rush <3 hrs <input type="checkbox"/>	<6 hrs <input type="checkbox"/>	1-3 days <input type="checkbox"/>	15-30 days <input type="checkbox"/>	
	Analyze > All <input type="checkbox"/> or ATPF <input type="checkbox"/>					
	If ATPF then > by Layer <input type="checkbox"/> or by Sample <input type="checkbox"/>					
	Single Layer Protocol > Yes <input type="checkbox"/> or No <input type="checkbox"/>					
Fibers by PCM	Method > 7400(Area) <input type="checkbox"/> ORM (Personal) <input type="checkbox"/>	<4 hr <input type="checkbox"/>	24hr <input type="checkbox"/>	-		
Asbestos by TEM	in Air > AHERA <input type="checkbox"/> Mod. AHERA <input type="checkbox"/>	<6hr <input type="checkbox"/>	24 hr <input type="checkbox"/>	3-5d <input type="checkbox"/>		
	in Water* > Water <input type="checkbox"/> Sludge <input type="checkbox"/>	1-2d <input type="checkbox"/>	3-5d <input type="checkbox"/>	N/A		
	in Bulk (Annex2) > Chatfield <input type="checkbox"/> Full Quanti <input type="checkbox"/>					
	in Dust > Vacuum Dust (ASTM D-5755) <input type="checkbox"/>	3-5d <input type="checkbox"/>	5-10d <input type="checkbox"/>	N/A		
Pb by FLAA	Analyte > Pb <input type="checkbox"/> Other <input type="checkbox"/>	<6 hrs <input checked="" type="checkbox"/>	2-3 days <input type="checkbox"/>	N/A		
	Filter > MCE <input type="checkbox"/>					
	Matrix >	Paint > by Area (mg/cm2) <input type="checkbox"/>				
		by Weight (ppm) <input checked="" type="checkbox"/>				
	Soil > <input type="checkbox"/>					
	Wipe > <input type="checkbox"/>					
	Check here certifying wipes used are ASTM E1792 compliant <input type="checkbox"/>					
Fungi	Air Sample > Zef <input type="checkbox"/> Aller <input type="checkbox"/> Oth <input type="checkbox"/>	<6 hrs <input type="checkbox"/>	1-2 days <input type="checkbox"/>	N/A		
	Bulk > Sample <input type="checkbox"/> Swab <input type="checkbox"/>					
	Tape Lift > Qualitative (% & type) <input type="checkbox"/> or Quantitative (type/cm2) <input type="checkbox"/>					
Soot	ASTM D6602-03B	Optical <input type="checkbox"/>	<6 hrs <input type="checkbox"/>	1-2 days <input type="checkbox"/>	N/A	
		Optical & TEM <input type="checkbox"/>	1-2 days <input type="checkbox"/>	3-5days <input type="checkbox"/>	N/A	
Other		Call	Call			

Sample # (1 per line)	Description/Location	Sample Date	Sample Time	Vol. or Area
1) L-1	GREEN / Metal	7/15/18		
2) L-2	WHITE / Metal			
3) L-3	TAN / STUCCO			
4)				
5)				
6)				
7)				
8)				
9)				
10)				
11)				
12)				
13)				
14)				
15)				
16)				
17)				
18)				
19)				
20)				

1) Relinquished by:	Date: 7/17/18	Time: 15:03	3) Relinquished by:	Date: 7/17/18	Time: 15:03
2) Received by:	Date: 7/17/18	Time: 16:23	4) Received by:	Date:	Time:
* TEM Water: Sampler's name Required by State of Arizona			Print Name	Fiberquant assigned Job Number >	201806585
Review of Analysis Request (Initials): JAH				Page	of

Note: Data completed by client (including number and identity of samples) is assumed to be correct until it is verified at time of sample preparation.



Report for:

**Mr. Ritchie Bump, EIT**  
**The Green Way Environmental Group**  
PO Box 5705  
Scottsdale, AZ 85261-5705

---

Regarding: Project: 01-18-0142KH; CHR-Mcque Gilbert  
EML ID: 1967489

Approved by:

Dates of Analysis:  
Lead - Flame AA: 07-25-2018

Technical Manager  
Andrew Ikeda

Service SOPs: Lead - Flame AA (EM-BC-S-8443)  
AIHA-LAP, LLC accredited service, Lab ID #178697

---

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Client: The Green Way Environmental Group  
 C/O: Mr. Ritchie Bump, EIT  
 Re: 01-18-0142KH; CHR-Mcque Gilbert

Date of Sampling: 07-24-2018  
 Date of Receipt: 07-25-2018  
 Date of Report: 07-25-2018

**LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY**

Location:	L-4: ADA Pad (Red)	L-5: White R.S.	L-6: Road Strip (RS) (Yellow)
Comments (see below)	A	A	A
Lab ID-Version‡:	9268683-1	9268684-1	9268685-1
Analysis Date:	07/25/2018	07/25/2018	07/25/2018
Sample type	Bulk sample	Bulk sample	Bulk sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	40 ppm	39 ppm	38 ppm
Sample size	0.2518 grams	0.2555 grams	0.2626 grams
§ Total Lead Result	< 40 ppm	< 39 ppm	240 ppm

**Comments:** A) The relative percent difference of the matrix duplicate pair was above control limits. The laboratory control sample and matrix blank were both within control limits and validated the batch.

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

\*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: The Green Way Environmental Group  
 C/O: Mr. Ritchie Bump, EIT  
 Re: 01-18-0142KH; CHR-Mcque Gilbert

Date of Sampling: 07-24-2018  
 Date of Receipt: 07-25-2018  
 Date of Report: 07-25-2018

**LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY**

Location:	L-7: Fire Hydrant (Yellow)	L-8: White (Road Stripe)	L-9: Yellow (Road Stripe)
Comments (see below)	A	A	A
Lab ID-Version‡:	9268686-1	9268687-1	9268688-1
Analysis Date:	07/25/2018	07/25/2018	07/25/2018
Sample type	Paint Chip sample	Bulk sample	Bulk sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	40 ppm	39 ppm	36 ppm
Sample size	0.2483 grams	0.2554 grams	0.2764 grams
§ Total Lead Result	< 40 ppm	< 39 ppm	< 36 ppm

**Comments:** A) The relative percent difference of the matrix duplicate pair was above control limits. The laboratory control sample and matrix blank were both within control limits and validated the batch.

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

\*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

# CHAIN OF CUSTODY EMLab P&K

www.EMLabPK.com

Cherry Hill, NJ: 1936 Olney Avenue, Cherry Hill, NJ 08003 • (856) 871-1984  
 Phoenix, AZ: 1501 West Krudsen Drive, Phoenix, AZ 85027 • (800) 651-4802  
 San Bruno, CA: 1150 Bryhill Drive, #100, San Bruno, CA 94066 • (866) 886-6553

WEATHER	Fog	Rain	Snow	Wind	Clear
None					
Light					
Moderate					
Heavy					

Company: The Green Way Environmental Group, LLC  
 Address: 3370 North Hayden Road, #123-187, Scottsdale, AZ 85251  
 Contact: Ritchie Burns  
 Special Instructions: email results to: labresults@gweg-az.com  
 Phone: (480) 398-8998

Project ID: 01-18-0142 KK  
 Project Desc: CAREY DE RUFF / ELBEN  
 Project: [Blank]  
 Zip Code: 784418  
 Sampling Date & Time: 7/24/18  
 PO Number: [Blank]

STANDARD	TEST	RESULTS
STD - Standard (DEFAULT)	RAIN SD	
ND - Next Business Day		
SD - Same Business Day Rush		
WH - Weekend/Holiday		

ST - Spore Trap	T - Tape	D - Dust
BC - BioCassette	Zeilon	SW - Swab
AIS - Andersen	Allergenco, Burkard...	SO - Soil
SAS - Surface Air Sample	P - Potable Water	B - Bulk
CP - Contact Plate	NP - Non-Potable Water	O - Other

Non-Culturable	Culturable	Request
Spore Trap	BioCassette, Andersen, ST	Asbestos Analysis - PCM Airborne Fiber Count (NIOSH 740)
Tape Swab	Swab, Water, Bulk, Dust, Soil, Contact Plate	Asbestos Analysis - PLM (EPA method 800/R-93-116)
Bulk		PCR (please specify test)
		XXXXXX FAA LEAD (% by weight)

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <http://www.emlab.com/submit-services/terms.html>

Copyright © 2002-2009 EMLab P&K