Close Out Documents

AP-72A – 2716 E 46th Ave.

Asbestos Abatement and Structural Demolition

Prepared for:

Kiewit Infrastructure Co.
Attn: Megan Wood
160 Inverness Drive West. Suite 110
Englewood CO 80112

Contents:

1. Closeout Letter

January 22, 2019

Kiewit Infrastructure Co.
160 Inverness Drive West, Suite 110
Englewood, CO 80112

Re: SSCR AP-72A 2716 E 46th Ave.

Dear Kiewit Infrastructure Co.

This letter is confirm that all the work associated with the asbestos abatement and demolition of the structure located at 2716 E 46th Ave. Denver, CO 80216, also referred as parcel AP-72A, is complete.

The scope of work included the removal of Regulated Building Materials (RBMs), asbestos abatement, demolition of a 1,600 square foot residential structure, and the removal of the curb and driveway.

This document has been prepared to furnish you with key documents associated with this project for your records.

On behalf of the JKS Industries team, we would like to extend our appreciation to working with you on this project and look forward to working with you in the future.

Regards,

Jeffrey Knight,
President

2. CDPHE Asbestos Abatement Permit

Colorado Department of Public Health and Environment
Air Pollution Control Division – Indoor Environment Program – Asbestos/IAQ Unit
4300 Cherry Creek Drive South, APCD-IE-B1
Denver, Colorado 80246-1530
Phone: 303-692-3100 – Fax: 303-782-0278
E-mail: asbestos@state.co.us

ASBESTOS ABATEMENT PERMIT

This permit is granted subject to Colorado Air Quality Control Commission Regulation No. 8, Part B, adopted December 21, 2007, and effective January 30, 2008, the Colorado Air Pollution Prevention and Control Act (25-7-101 or 25-7-501 et seq., C.R.S.) and the following provisions. It is only for the purpose of allowing asbestos abatement.

ADDITIONAL PERMIT PROVISIONS:

By performing work under this permit the abatement contractor agrees that the Division may revoke or suspend this permit should the Division find that the contractor:

- has violated or has aided and abetted in the violation of 25-7-101 or 25-7-501 et seq., C.R.S. or Regulation No. 8, Part B, or an order of the Division or Commission,
- has failed to meet any permit and notification requirement or failed to correct any violations cited by the Division during any inspection within a reasonable period of time, as may be determined by the Division,
- has used misrepresentation or fraud in obtaining this permit, or,
- has committed any act or omission which does not meet generally accepted standards of the practice of asbestos abatement.

As a contractor, you may be subject to other licenses and permits, depending on the requirements of the county and municipality in which the work is being performed. The Colorado Department of Public Health and Environment, Air Pollution Control Division strongly suggests that you check with county and municipal authorities in order to determine any other local building/permitting requirements that must be met.

THE ORIGINAL PERMIT MUST BE POSTED ON SITE AT ALL TIMES.

Immediately notify the Asbestos/IAQ Unit of project modifications by fax (number above) or e-mail (address above) and the appropriate county health department by fax. Project modifications include changes in the scope of work or the scheduled work dates, etc.

This asbestos abatement permit is valid beginning 10/23/2018 through 11:59 PM on 10/22/2019.
The actual scheduled work dates are from 11/28/2018 through 11/29/2018.

Approval issued on: 11/19/2018
Record number: 143493

Notice Number: 18DE7238A-22

Variance: None
Comments: None

For the location specified below:

AP-72A residential
Basement Room
2716 E. 46th Ave
Denver
Denver County

This permit has been issued to:

JKS Industries, LLC
747 Sheridan Blvd Unit 9A
Lakewood, CO 80214

Fee paid: $80.00
Check number: CC 4845

Project Supervisor:
Andre M. Williams
Cerification No.: 15776

Project AMS:
Logan Greenfield
Cerification No.: 20715

Project Manager:
WAIVED
Certification No.: 15045

Issued by: CA

Colorado Department of Public Health and Environment

ASBESTOS ABATEMENT NOTIFICATION and PERMIT APPLICATION FORM

FEE MUST ACCOMPANY THIS FORM. INCOMPLETE APPLICATIONS WILL BE RETURNED.

Single Family Residential Dwelling (SFRD) > 50 LF or 32 SF or a 55-gal. drum, but ≤ 260 LF or 160 SF or a 55-gallon drum			*Public and Commercial Building, School, and Single-Family Residential Dwelling:* > 260 LF or 160 SF or a 55-gallon drum		
[code 200] ☐	$0	Courtesy Notice	[code 100] ☐	$0	Courtesy Notice
[code 205] ☐	$60	Non-Public Access Notice (Opt Out)	[code 105] ☐	$80	Non-Public Access Notice
[code 210] ☐	$60	Notice	[code 110] ☐	$80	Notice
[code 230] ☐	$180	30-Day Permit	[code 130/232] ☐	$400	30-Day P&C/SFRD Permit
[code 290] ☐	$300	90-Day Permit	[code 190/292] ☐	$800	90-Day P&C/SFRD Permit
[code 265] ☐	$420	365-Day Permit	[code 165/267] ☐	$1200	365-Day P&C/SFRD Permit
[code 180/280] ☐	$55	Notice or Permit Transfer	[code 177] ☒	$80	Phase 22 of Multiple Phase Permit #

Submit form to:
Permit Coordinator
Colorado Dept. of Public Health and Environment
APCD-IE-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530
Phone: 303-692-3100
Fax: 303-782-0278
asbestos@state.co.us

Abatement Contractor

Company Name	JKS Industries
Street Address	747 Sheridan Blvd. Unit 9A
City	Lakewood
State	CO
Zip code	80214
Telephone #	(303) 238-0207
Fax #	(303) 238-0452
Project Supervisor	Andre Williams
CO. Cert #	15776

Abatement Site

Building Name	(AP-72A) AP-72 Residential
Specify location in the building where work will take place (e.g. floor, room, wing, etc.)	Basement Room
Street Address	2716 E 46th Avenue
City	Denver
County	Denver
Zip code	80216
Building Contact	Doug Messier
Cell Phone #	(817) 320-6749

Building Owner

Owner Name	CDOT
Contact	Athony DaVito
Street Address	2000 S. Holly St.
City	Denver
State	CO
Zip code	80222
Telephone #	(303) 512-5900
Fax #	( )

Project Personnel

CO Project Mgr. Name	See Project Manaer Waiver form from CDOT
Cell Phone #	( )
CO Project Designer #	
CO Project Designer Name	Daniel Beecke
Cell Phone #	(303) 232-2660
CO Project Designer #	1947
Consulting Firm Name	All Phase Consulting, Inc.
Registration #	15979
A.M.S. Name	Logan Greenfield
Cell Phone #	(719) 545-0375
CO A.M.S. Cert #	20715

Project Information

Start Date	11/28/2018
End Date	11/29/2018
Start Time	6:30am AM PM
End Time	AM 5:00 PM
Check the day(s) of operation	Su ☐ M ☒ Tu ☒ W ☒ Th ☒ F ☒ Sa ☒
Emergency?	Y☐ N☒
Type of ACM: TSI, Texture, VAT, etc.	Paper Duct Wrap
Linear Feet / Type	0
Square Feet / Type	5 SF of Paper Duct Wrap
55 gal. Drums	

Disposal Site

Landfill Name	Denver Arapahoe Disposall
Street Address	3500 South Gun Club Road
City	Aurora
State	CO
Zip code	80018

CDPHE Use Only

Postmark or Delivery date	11/14/18
Approved by:	[signature]
Form of Payment & #	CC# 4845/80.00
PM req'd?	Y N W
Permit #	18DE7238A-22
Record #	143493
Date Issued:	

Please describe below the work practices and procedures to be employed in conducting the abatement of asbestos. **BE SPECIFIC**. Indicate type(s) or ACBM to be abated (e.g. VAT, ceiling tile, TSI, etc.). Use another page if necessary.

This Multi-Phase 22 project will consist in removal and disposal of 5 SF of paper duct warp under a secondary Glovebag containmnet. The friable materials will be removed using small hand tools (carpenters hammer, cats claw, crow bar and chisels) the material will be kept wet (1500 psi airless sprayer with amended water). The material will be enclosed in a glovebag and a secondary containment, will employ negative air pressure, a two chamber decontaminatin with HEPA vaccum and wet rags. This work will be completed per the Appendix A small scale projects guide lines. All work will be in accordance with Colorado Regulation #8 Part B. The secondary glove bag conatinment will be inspected and cleared by a State Certified AMS.

NOV 1 4 2018

3. CDPHE Demolition Permit

Colorado Department of Public Health and Environment
Air Pollution Control Division – Indoor Environment Program – Asbestos/IAQ Air Unit
4300 Cherry Creek Drive South, APCD-IE-B1
Denver, Colorado 80246-1530
Phone: 303-692-3100 – Fax: 303-782-0278
E-mail: asbestos@state.co.us

DEMOLITION APPROVAL NOTICE

This approval notice is granted subject to Colorado Air Quality Control Commission Regulation No. 8, Part B, adopted December 21, 2007, and effective January 30, 2008 and the Colorado Air Pollution Prevention and Control Act C.R.S. (25-7-101 and 25-7-501 et seq). This notice signifies that the structure was inspected for asbestos, luminous exit signs (containing radioactive material), and Ozone-Depleting Refrigerants and the demolition contractor has properly notified the Colorado Department of Public Health and Environment pursuant to Regulation No. 8, Part B.

As a contractor, you may be subject to other demolition licenses and permits, depending on the requirements of the county and municipality in which the work is being performed. The Colorado Department of Public Health and Environment, Air Pollution Control Division, strongly suggests that you check with county and municipal authorities in order to determine any other local building/permitting requirements that must be met.

Please note that certain asbestos-containing materials (ACM) may remain in the structure during demolition. Therefore, any demolition debris left behind after the completion of post-demolition site cleanup may constitute a "reason to know of asbestos-contaminated soil" at the site, subject to the requirements of Section 5.5 of the Solid Waste Regulations (6 CCR 1007-2, Part 1).

THE ORIGINAL APPROVAL NOTICE MUST BE POSTED ON SITE AT ALL TIMES.

Immediately notify the Asbestos/IAQ Unit of project modifications by fax (number above) or e-mail (address above) and the appropriate county health department by fax. Project modifications include changes in the scope of work or the scheduled work dates, etc.

This demolition approval notice is valid beginning 12/12/2018.
The actual scheduled work dates are from 12/12/2018 through 12/31/2018.

Approval issued on: 12/11/2018
Record number: 144112
Notice Number: 18DE8240D
For the location specified below:

AP-72A Residential

2716 E. 46th Ave
Denver
Denver County

Fee Paid: $60.00
Check number: 5813

Asbestos Building Inspector:
Logan Greenfield
Cerification No.: 20715

Inspection Date: 12/06/2018

This notice has been issued to:

JKS Industries, Inc.
747 Sheridan Blvd. Unit 9A
Lakewood, CO 80214

Issued by: SM

DEMOLITION NOTIFICATION APPLICATION FORM

APPLICATION FEE MUST ACCOMPANY THIS FORM
INCOMPLETE APPLICATIONS WILL BE RETURNED
(Notice will be mailed to the demolition contractor unless specified otherwise)

Fee: $50 + $5 per 1000 ft² of area to be demolished = $ 60.00
(See instruction #1 on reverse side)

Colorado Department of Public Health and Environment

Submit form to:
Permit Coordinator
Colorado Dept. of Public Health and Environment
APCD-IE-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530
Phone: 303-692-3100
Fax: 303-782-0278
Asbestos@state.co.us

Demolition Contractor

Company Name: JKS Industries
Street: 747 Sheridan Blvd. #9A
City: Lakewood | State: CO | Zip Code: 80214
Telephone #: (303) 238-0207 | Fax #: (303) 238-0452
Project Manager: Jeffrey Knight | Cell Phone #: (720) 402-4410
I certify that the Certified Asbestos Building Inspector has informed me about any remaining asbestos-containing materials in the facility to be demolished.
Signature: [signature] | Print Name: Jeffrey Knight
Landfill Receiving Building Debris: Denver Arapahoe Disposal Site

Demolition Site

Building Name: AP-72A Residential
Square footage of footprint of facility or portion of facility to be demolished: 1600
Street: 2716 E 46th Ave
City: Denver | County: Denver | Zip Code: 80216
Proposed Start Date: 12/12/2018 | Proposed Completion Date: 12/31/2018
Method/Means of Demolition:
☒ Wrecking ☐ Burning† ☐ Implosion ☐ Moving ☐ Other, specify:

†Burning requires additional authorization – Please call (303) 692-3100 and ask to speak to the Open Burning Permit Coordinator

Asbestos Removal Contractor

General Abatement Contractor (GAC): JKS Industries
CDPHE Asbestos Permit #: 18DE7238A-22 | Total Quantity of Asbestos Removed: 5 SF
Date Removal Completed: 12-6-18 | Telephone #: (303) 238-0207
Type(s) of Asbestos-Containing Material Removed: 5 SF Paper Duct Wrap

Building Owner

Owner's Name: CDOT
Street: 2000 S Holly St.
City: Denver | State: CO | Zip Code: 80222
Contact's Name: Anthony DaVito | Telephone #: (303) 512-5900

Certified Asbestos Inspector Certification

With my signature below, I certify that I possess current AHERA accreditation and state of Colorado certification as an Asbestos Building Inspector. I also certify that I have thoroughly inspected the facility to be demolished, as listed in the Demolition Site block above, sampled all suspect materials, had all samples analyzed for the presence of asbestos by a NVLAP-accredited laboratory, and have determined that no Regulated ACM exists anywhere in the facility.* I also certify that I have informed the owner/operator of the facility or the demolition contractor that any asbestos-containing material allowed to stay in the facility must remain non-friable during demolition. Specify type(s) of ACM remaining, below: **(check appropriate box(es))**:

☐ Vinyl asbestos floor tile (VAT) ☐ VAT mastic ☐ Tar/asphalt impregnated roofing ☐ Asphaltic pipe coatings
☐ Spray-applied tar coatings ☐ Caulking ☐ Glazing ☐ Other, specify:

Signature: **(In Blue Ink)** [signature] | Printed Name: Logan Greenfield
Date of Final Inspection: 12-6-18 | CO Cert #: 20715 | Expiration Date: Oct 18, 2019
Telephone #: (719) 545-0375 | Cell Phone #: (719) 250-0036

Building Owner or Contractor

I verify that all refrigerants from air conditioning/refrigeration appliances have been properly recovered in accordance with AQCC Regulation No. 15 (for information on CFC requirements call 692-3100). I further verify that all luminous exit signs (containing radioactive material) have been disposed of in accordance with 6 CCR 1007-1 subpart 3.6.4.3 (for information on luminous exit sign requirements call 303-692-3320).

CHECK THE APPROPRIATE BOX:
☐ Building Owner ☑ Contractor ☐ Other | Date: 12/4/18
Signature: [signature] | Print Name: JEFF KNIGHT

THIS BOX IS FOR CDPHE USE ONLY:

Postmark or Hand Delivery Date: 12/7/18 | Approved By: [signature] | Code: ☑ initial-310 ☐ transfer-380
Form of Payment & #: check # 5813 / 5160 | Permit #: [illegible] | Record #: 14412 | Date Issued:

DEC - 7 2018
APCD Stationary Source

* Regulated asbestos-containing materials means (a) friable asbestos-containing material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this regulation. Note: Asbestos-containing sheet vinyl and linoleum must be properly abated/removed prior to demolition.

APPROVED
DATE 12/7/18 CDPHE

Form: DNA08 Rev. 01/30/08

4. JKS Asbestos Certifications

Colorado Department
of Public Health
and Environment

General Abatement Contractor

This certifies that

JKS Industries, LLC

GAC No.: 18531

has met the certification requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos abatement activities in the state of Colorado.

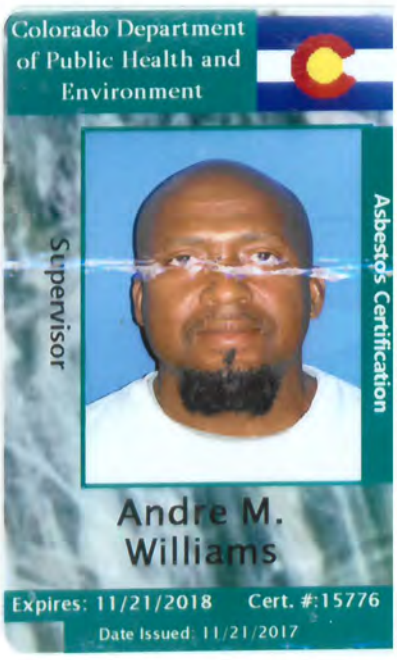
Issued: **July 18, 2018**

Expires: **July 18, 2019**

Authorized APCD Representative

SEAL

5. JKS Workers Asbestos Certifications


Colorado Department of Public Health and Environment
Supervisor
Asbestos Certification
Andre M. Williams
Expires: 11/21/2018
Cert. #:15776
Date Issued: 11/21/2017

INTERNATIONAL

Environmental and Safety Training LLC
720 Billings Street Unit F
Aurora, Colorado 80011
Phone # (720) 859-3134
Fax # (720) 859-0660

CERTIFIES THAT

ANDREE WILLIAMS

Has successfully completed
The **EPA**– APPROVED **AHERA** ANNUAL ASBESTOS REFRESHER
COURSE for **CONTRACTOR/SUPERVISOR**
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the
Toxic Substance Control Act (TSCA)

Course Date	09/15/2018
No. Hours	8
Certificate No.	CO091518-**02ASR**
Expires	09/15/2019

This course meets the requirements of AQCC Reg. #8 Part B

Invalid without raised seal

Training Director

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

Applicants Name Andrea Williams

The above individual was seen by me on 3/19/18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was preformed:

1. ✓ Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101

2. ✓ Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.

3. _____ Review of information from previous medical examinations, if available.

4. ✓ A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).

5. ✓ Determined that a chest roentgenogram was ☒ was not ☐ required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)

6. ✓ Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may ☒ may not ☐ use a respiratory device while performing his/her required duties.

7. ✓ The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.

8. ✓ In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.

9. ✓ In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

✓ There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

_____ There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations CXR q 5 yrs prn

Examining Provider

3/19/19
Date

Respirator Fit Test

I, Andree Williams, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 5/7/2018 Fit Test Conductor: Ruben Dominguez

Respirator Information

1. Manufacturer: North
2. Model: 7700M
3. Size (Circle one): SMALL (MEDIUM) LARGE
4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)? (YES) NO

Please initial the following as each test is completed:

[AW] Breathe normally through the respirator

[AW] Breathe deeply through the respirator. Be certain that your breaths are deep and regular

[AW] Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.

[AW] Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.

[AW] Do several jumping jacks to ensure that the respirator does not come loose from your face.

[AW] Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.

[AW] Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: Andree Williams Date: 5/7/18

Fit Test Conductor Signature: Ruben Dominguez Date: 5/7/2018


Colorado Department of Public Health and Environment
Asbestos Certification
Worker
Aura L.
De Paz
Expires: 6/15/2019 Cert. #:20488
Date Issued: 6/13/2018

INTERNATIONAL

Environmental and Safety Training L.LC.
720 Billings Street Unit F
Aurora, Colorado 80011
Phone # (720) 859-3134
Fax # (720) 859-0660

CERTIFIES THAT

AURA DE PAZ

Has successfully completed
The **EPA**– APPROVED **AHERA** ANNUAL ASBESTOS REFRESHER COURSE for **WORKER**
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the
Toxic Substance Control Act (TSCA)

Course Date	05/12/2018
No. Hours	8
Certificate No.	CO051218-**02AWR**
Expires	05/12/2019

This course meets the requirements of AQCC Reg. #8 Part B

INTERNATIONAL ENVIRONMENTAL SAFETY TRAINING

Invalid without raised seal

Training Director

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

Applicants Name Aura Depaz

The above individual was seen by me on 5-15-18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was preformed:

1. ✓ Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101
2. ✓ Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.
3. ✓ Review of information from previous medical examinations, if available.
4. ✓ A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).
5. ✓ Determined that a chest roentgenogram was ☑ was not ☐ required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)
6. ✓ Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may ☑ may not ☐ use a respiratory device while performing his/her required duties.
7. ✓ The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.
8. ✓ In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.
9. ✓ In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

✓ There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

_____ There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations_____

Examining Provider

05/15/18
Date

Richard Kraus M.S., PA.-C
Midtown Occupational
Health Services, P.C.
2490 W. 26th Ave., Bldg. A, Suite 300
Denver, CO 80211
303-831-9393

Respirator Fit Test

I, Aura De Paz, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 05/10/2018 Fit Test Conductor: Ruben

Respirator Information

1. Manufacturer: North
2. Model: 7700M
3. Size (Circle one): SMALL (MEDIUM) LARGE
4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)? (YES) NO

Please initial the following as each test is completed:

[ADP] Breathe normally through the respirator

[ADP] Breathe deeply through the respirator. Be certain that your breaths are deep and regular

[ADP] Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.

[ADP] Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.

[ADP] Do several jumping jacks to ensure that the respirator does not come loose from your face.

[ADP] Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.

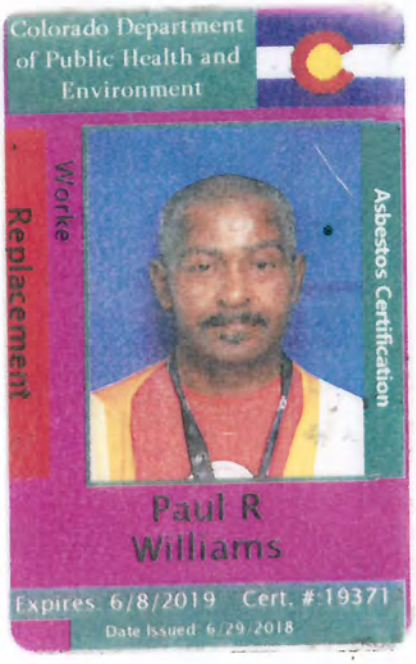
[ADP] Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

ADP 05/10/2018

Employee Signature: Aura De Paz Date: 10/05/2018

Fit Test Conductor Signature: [signature] Date: 5/10/2018


Colorado Department of Public Health and Environment
Worke
Replacement
Asbestos Certification
Paul R Williams
Expires: 6/8/2019 Cert. #:19371
Date Issued: 6/29/2018

INTERNATIONAL

Environmental and Safety Training LLC
720 Billings Street Unit F
Aurora, Colorado 80011
Phone # (720) 859-3134
Fax # (720) 859-0660

CERTIFIES THAT

PAUL WILLIAMS

Has successfully completed
The **EPA**– APPROVED **AHERA** ANNUAL ASBESTOS REFRESHER
COURSE for **CONTRACTOR/SUPERVISOR**
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the
Toxic Substance Control Act (TSCA)

Course Date	05/04/2018
No. Hours	8
Certificate No.	CO050418-**22ASR**
Expires	05/04/2019

This course meets the requirements of AQCC Reg. #8 Part B

INTERNATIONAL ENVIRONMENTAL SAFETY TRAINING

Invalid without raised seal

Training Director

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

Applicants Name Paul Williams

The above individual was seen by me on 6-15-18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was preformed:

1. ✓ Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101

2. ✓ Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.

3. ✓ Review of information from previous medical examinations, if available.

4. ✓ A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).

5. ✓ Determined that a chest roentgenogram was ☐ was not ☑ required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)

6. ✓ Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may ☑ may not ☐ use a respiratory device while performing his/her required duties.

7. ✓ The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.

8. ✓ In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.

9. ✓ In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

✓ There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

_____ There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations_____

Examining Provider Lawrence Cedillo D.O. JUN 15 2018 Date

Lawrence Cedillo D.O.
Midtown Occupational
Health Services, P.C.
2490 W. 26th Ave., Bldg. A, Suite 300
Denver, CO 80211
303-831-9393

Midtown Occupational Health Services
2490 W 26th Avenue
Building A, Suite 300
Denver, CO 80211

Williams, Paul **ID: 0174** **Age: 50 (3/9/1968)**

Gender	Male	Height	68 in		
Ethnicity	African	Weight	166 lb	BMI 25.2	

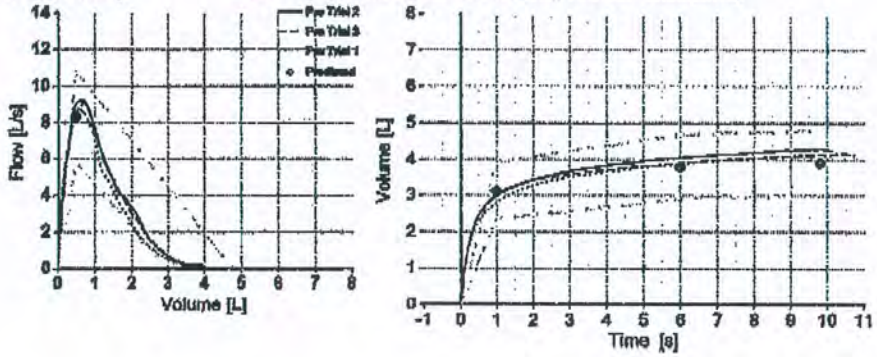
FVC (ex only) **Your FEV1 / Predicted: 96%**

Test Date	6/15/2018 10:48:16 AM	Interpretation	--	Value Selection	Best Value
Post Time		Predicted	Hankinson (NHANES III), 1999	BTPS (IN/EX)	1.12/1.02

Parameter	Pred	LLN	Pre Best	Trial 2	Trial 3	Trial 1	%Pred
FVC [L]	3.90	3.02	4.29	4.29	4.16	4.13	110
FEV1 [L]	3.12	2.34	3.00	3.00	2.98	2.80	96
FEV1/FVC [%]	80.0	69.6	69.9	69.9	71.6	67.7*	87
FEF25-75 [L/s]	3.15	1.47	1.69	1.69	1.88	1.47	54
PEF [L/s]	8.34	5.83	9.28	9.28	8.68	9.10	111
FET [s]	-	-	9.8	9.8	10.4	9.9	-

* Indicates value outside normal range or significant post change.

Session Quality Pre B (FEV1 Var=0.02L (0.8%); FVC Var=0.13L (3.1%))



Lawrence Cedillo D.O.
Midtown Occupational
Health Services, P.C.
2490 W. 26th Ave., Bldg. A, Suite 300
Denver, CO 80211
303-831-9393

JKS INDUSTRIES

RESPIRATOR FIT TEST

APPENDIX A – NORTH

EMPLOYEES WORKING UNDER THIS RESPIRATOR PROGRAM MUST ACKNOWLEDGE BY SIGNING THIS FORM. THEY HAVE BEEN FIT TESTED AND HAVE BEEN TRAINED FOR THE PROPER USE AND CARE OF THEIR RESPIRATOR. THEY HAVE READ AND UNDERSTAND THE COMPANY'S WRITTEN RESPIRATOR PROGRAM MANUAL.

Paul R. Williams

EMPLOYEE NAME PRINTED OR TYPED

3/26/2018

DATE OF FIT TEST

Ruben J. Dominguez

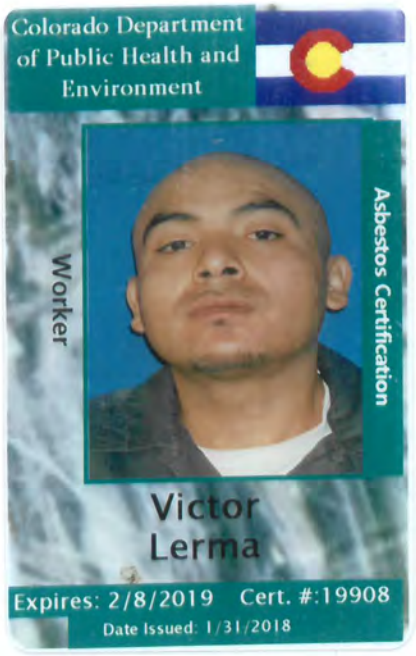
FIT TEST CONDUCTOR

RESPIRATOR:

1. MANUFACTURER: North
2. MODEL: 7700M
3. SIZE: Medium
4. APPROVAL NUMBER: TC-84A-0592

IRRITANT SMOKE X

TESTING AGENT


Colorado Department of Public Health and Environment
Asbestos Certification
Worker
Victor Lerma
Expires: 2/8/2019 Cert. #:19908
Date Issued: 1/31/2018

INTERNATIONAL

Environmental and Safety Training L.LC.
720 Billings Street Unit F
Aurora, Colorado 80011
Phone # (720) 859-3134
Fax # (720) 859-0660

CERTIFIES THAT

VICTOR LERMA

Has successfully completed
The **EPA**– APPROVED **AHERA** ANNUAL ASBESTOS REFRESHER COURSE for **WORKER**
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the
Toxic Substance Control Act (TSCA)

Course Date	01/12/2019
No. Hours	8
Certificate No.	CO011219-**16AWR**
Expires	01/12/2020

This course meets the requirements of AQCC Reg. #8 Part B

INTERNATIONAL ENVIRONMENTAL SAFETY TRAINING

Invalid without raised seal

Training Director

Midtown Occupational Health Services
2490 W. 26th Ave. Ste. 300-A Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

Applicants Name Victor Lesma

The above individual was seen by me on 02/12/18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was preformed:

1. Y Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101

2. Y Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.

3. Y Review of information from previous medical examinations, if available.

4. Y A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).

5. Y Determined that a chest roentgenogram was ☐ was not ☒ required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)

6. Y Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may ☒ may not ☐ use a respiratory device while performing his/her required duties.

7. Y The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.

8. Y In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.

9. Y In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services
2490 W. 26th Ave. Ste. 300-A Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

____ There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

_____ There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations_____

Examining Provider

02/12/18
Date

Richard Kraus M.S., PA.-C
Midtown Occupational
Health Services, P.C.
2490 W. 26th Ave., Bldg. A, Suite 300
Denver, CO 80211
303-831-9393

Respirator Fit Test

I, Victor Lerma, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 05-07 2018 Fit Test Conductor: Ruben Ochoa

Respirator Information

1. Manufacturer: North
2. Model: 7700M
3. Size (Circle one): SMALL (MEDIUM) LARGE
4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)? (YES) NO

Please initial the following as each test is completed:

[VL] Breathe normally through the respirator

[VL] Breathe deeply through the respirator. Be certain that your breaths are deep and regular

[VL] Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.

[VL] Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.

[VL] Do several jumping jacks to ensure that the respirator does not come loose from your face.

[VL] Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.

[VL] Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: [signature] Date: 5-7-18

Fit Test Conductor Signature: [signature] Date: 5/7/2018


Colorado Department of Public Health and Environment
Worker
Asbestos Certification
Jessenia Galarza-Pacheco
Expires: 6/21/2019 Cert. #:22153
Date Issued: 6/21/2018

INTERNATIONAL

Environmental and Safety Training L.LC.
720 Billings Street Unit F
Aurora, Colorado 80011
Phone # (720) 859-3134
Fax # (720) 859-0660

CERTIFIES THAT

JESSENIA GALARZA PACHECO

Has successfully completed
The **EPA**– APPROVED **AHERA** ANNUAL ASBESTOS REFRESHER COURSE for **WORKER**
And passed the requirements examination in that discipline

This course is **EPA-Approved** under Section 206 of the
Toxic Substance Control Act (TSCA)

Course Date	06/16/2018
No. Hours	8
Certificate No.	CO061618-**16AWR**
Expires	06/16/2019

This course meets the requirements of AQCC Reg. #8 Part B

Invalid without raised seal

Training Director

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

Applicants Name Jessenia Galarza

The above individual was seen by me on 07/27/18 in accordance to 29 CFR 1926.1101(Asbestos Certification) and 29CFR1910.134 (Respirator Certification). The following was preformed:

1. X Completion and review of the standardized medical questionnaire and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems per Appendix D in 1926.1101

2. X Reviewed the employer's description of this individual's duties as they relate to asbestos exposure, the anticipated exposure level, and the personal protective and respiratory equipment to be utilized by this individual.

3. X Review of information from previous medical examinations, if available.

4. X A physical examination with emphasis upon the pulmonary, cardiovascular, and gastrointestinal systems, including a pulmonary function test of forced vital capacity (FVC) and forced expiratory volume at one second (FEV-1).

5. ____ Determined that a chest roentgenogram was ☒ was not ☐ required as part of this examination. (note: according to CFR 1926.1101 (M)(2)(ii)(C) it is at the discretion of the physician whether or not a chest X-ray is required)

6. X Reviewed OSHA's Medical Evaluation Questionnaire in Appendix C Part A Section 2 in accordance with 29CFR 1910.134 and have determined that this individual may ☒ may not ☐ use a respiratory device while performing his/her required duties.

7. X The employee has been instructed to report any difficulties in using the respirators or any change of physical status to their supervisor or physician.

8. X In accordance with OSHA requirements, I have fully explained the results of the medical examination and laboratory tests to the above named patient.

9. X In accordance with OSHA I have informed this individual of the health risks involved with smoking, of the synergistic relationship between cigarette smoking and asbestos exposure in producing lung cancer, and that cessation of smoking will reduce the risk of lung cancer.

Midtown Occupational Health Services
2420 W. 26th Ave. Ste. 200-D Denver, CO 80211
Phone: (303) 831-9393 Fax: (303) 831-6335

OSHA Asbestos Certification

X There is no detected medical condition which would place this employee at an increased risk of material health impairment from exposure to asbestos, and there are no recommended limitations on the employee concerning the use of personal protective equipment or respirator.

____ There is a detected medical condition(s) which places this employee at an increased risk. See comments below for limitations:

Comments/ Limitations_____

Examining Provider

07/27/18
Date

Richard Kraus M.S., PA.-C
Midtown Occupational
Health Services, P.C.
2490 W. 26th Ave., Bldg. A, Suite 300
Denver, CO 80211
303-831-9393

Respirator Fit Test

I, Jessenia Galarza, acknowledge that I have been fit tested and trained for the proper use and care of my respirator. I have read and understand JKS's written respiratory program manual.

Date of Fit Test: 12-1-18 Fit Test Conductor: JONAC

Respirator Information

1. Manufacturer: North
2. Model: 7700M
3. Size (Circle one): SMALL (MEDIUM) LARGE
4. Approval Number: TC-84A-0592

Irritant smoke used (Circle one)? (YES) NO

Please initial the following as each test is completed:

- [x] Breathe normally through the respirator
- [x] Breathe deeply through the respirator. Be certain that your breaths are deep and regular
- [x] Turn your head from one side to the other to the fullest extent about every second without bumping the respirator on your shoulders. Ensure that your movement is complete. Inhale on each side.
- [x] Nod your head up and down to the fullest extent about every second without bumping the respirator on your chest. Ensure that your movement is complete and can be completed quickly. Inhale when you are facing up.
- [x] Do several jumping jacks to ensure that the respirator does not come loose from your face.
- [x] Move your mouth to its fullest extent; for example, yawn, move your jaw around, etc. Ensure that you can move your mouth as necessary without compromising the fit of the respirator.
- [x] Read the Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. A rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach his friends say he is looking for the pot of gold at the end of the rainbow.

Employee Signature: Jessenia Galarza Date: 12-1-18

Fit Test Conductor Signature: [signature] Date: 12-1-18

6. Project Design

6a. SSAR

July 23, 2018

Structure Survey Assessment Report AP-72A

2716 E. 46Th Ave

Denver, CO 80216

TABLE OF CONTENTS

Contents

LIST OF REPORT ACRONYMS/ABBREVIATIONS

ACMs	Asbestos Containing Materials
AHERA	Asbestos Hazard Emergency Response Act
APEC	All-Phase Environmental Consultants
AMS	Air Monitoring Specialist
CABI	Colorado Asbestos Building Inspector
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CFCs	Chlorofluorocarbons
CFR	Code of Federal Regulations
EP	Environmental Professional
EPA	Environmental Protection Agency
FAA	Flame Atomic Absorption
LBP	Lead Based Paint
LCP	Lead Containing Paint
mg/L	Milligrams per Liter
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated Biphenyls
PD	Project Designer
PEL	Permissible Exposure Limits
PLM	Polarized Light Microscopy
PPE	Personal Protective Equipment
ppm	Parts Per Million
RACM	Regulated Asbestos Building Material
RBM	Regulated Building Materials
RCRA	Resource Conservation and Recovery Act
RHMs	Recognized Hazardous Materials
SSAP	Structure Survey Assessment Plan
TC	Toxicity Characteristic
TCLP	Toxicity Characteristic Leaching Procedure
USEPA	U.S. Environmental Protection Agency
UWR	EPA Universal Waste Rule

Tables

Figures

Appendices

APEC Project # 18-3066-024

Prepared for

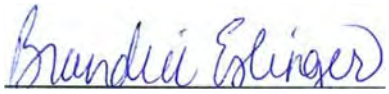
Kiewit Meridiam Partners

Prepared by

Logan Greenfield, CABI & AMS #20715

VP of Field Services

Reviewed by



Brandice Eslinger, EP, CABI & PD # 5494

President

1 Introduction

All-Phase Environmental Consultants Inc. APEC was contracted to complete an environmental building survey for suspect asbestos-containing materials (ACMs), lead-based paint (LBP), and regulated building material (RBM) at 2716 E. 46th Ave, Denver, CO 80216. This survey will identify the materials that need to be abated or removed prior to the future demolition activities.

Table 1 Project Details

Client Name:	Kiewit Meridiam Partners
Site Location:	2716 E. 46th Ave, Denver, CO 80216
Building Type	Residential House
Building Size	Building is approximately 1,276 square feet
Construction Date:	1946 – Based on the City and County of Denver Assessor's Records
Building Uses:	Residential (second house on AP-72 on the east side)
Types of Materials to be Disturbed/Description of Proposed Disturbances:	Client intends to demolish the structure. All building materials will be impacted.

This Structure Survey Assessment was conducted as part of the Central 70 Project located in Denver, Colorado. This assessment was conducted in accordance with the Structure Survey Assessment Plan (SSAP), dated March 27, 2018. The SSAP, as defined in Section 23.13.2 of Schedule 17 (Environmental Requirements) of the final Central 70 Project Agreement between the Colorado Department of Transportation (CDOT) and Kiewit Meridiam Partners, identifies the procedures for completing building and structure surveys for ACMs, LBP and universal wastes or other Recognized Hazardous Materials (RHMs), as defined by the Resource Conservation and Recovery Act (RCRA); universal waste, as defined by the U.S. Environmental Protection Agency (EPA) and 6 Code of Federal Regulations (CCR) Part 273 of the Colorado Hazardous Waste Regulations; chlorofluorocarbons (CFCs), as defined by the Clean Air Act; and polychlorinated biphenyls (PCBs), as defined by the Toxic Substances Control Act.

2 Site Survey Methodology

2.1 ASBESTOS SURVEY

On June 15, 2018, APEC certified personnel Logan Greenfield, conducted an asbestos survey for demolition at 2716 E. 46th Ave, Denver, CO 80216. The asbestos survey (inspection/sampling) was completed in accordance with the SSAP and follows guidelines established under the EPA's Asbestos Hazard Emergency Response Act (AHERA) program and as required by USEPA regulation 40 Code of Federal Regulations (CFR) Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAP). Bulk sampling of suspected ACMs was performed in strict accordance with AHERA sampling procedures detailed in 40 CFR 763.86. These include but aren't limited to labeling each sample, recording each sample on a chain of custody, taking a photo of the sample and recording the location on a site diagram. Demolition work could disturb materials that contain asbestos and put unprotected workers at risk, violating asbestos regulations, which are enforced by the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), the Colorado Department of Public Health and Environment (CDPHE), and the Denver County Health Department. All samples were collected and submitted to EMSL Analytical, Inc. in Denver, CO per APEC chain of custody protocol. The laboratory is a member of the National Voluntary Laboratory Accreditation Program (NVLAP) and is qualified to perform the required analysis (Appendix A). The analysis conducted was the EPA Interim Method for the Determination of Asbestos in Bulk Samples, using standard Polarized Light Microscopy (PLM) and dispersion staining as established in 40 CFR Part 763.

This inspection report and methodology complies with the CDPHE Asbestos Sampling and Report Requirements Memorandum dated February 28, 2018.

2.2 LEAD-BASED PAINT SURVEY

On June 15, 2018, APEC certified personnel Rick Ralston, conducted the LBP survey. The survey was conducted to evaluate the absence and/or presence of LBP or lead-containing paint (LCP) that will be impacted during future demolition activities. The survey consisted of reviewing and inspecting the interior, exterior and roof system of the structure for suspect LBP or LCP. The testing method was the use of a heat gun and/or scraping a portion of the paint down to the substrate (material under the paint). Proper chain of custody procedures were followed and samples were sent to EMSL Analytical, Inc. in Cinnaminson, NJ, via Fed Ex. The samples were analyzed by total lead (percent by weight) via Flame Atomic Absorption (FAA) by EPA Method 7420. EMSL is accredited under the American Industrial Hygiene Association's Environmental Lead Proficiency Analytical Testing program. LBP, according to the EPA, is defined as paint that contains lead in concentrations greater than 1.0 milligrams per square centimeter (mg/cm^2) as measured with an X-ray fluorescence (XRF) or 5,000 ppm when measured by weight, or 0.5 percent (%) by weight.

A total of 7 homogeneous paint color variations of suspect LBP areas were identified. One paint chip sample was collected from each suspect homogeneous area and submitted to the laboratory for analysis. Representative photographs of LBP and/or LCP were taken and are included in the photographic log (Appendix B). The paint chip sample locations were recorded and are included on the sample location drawing (Figure 3). Descriptions of the suspect homogeneous materials and a list of the collected samples are described in the 'Findings' section.

Based on the analytical results for the 7 samples, a Toxicity Characteristic Leachate Procedure (TCLP) sample was analyzed by collecting a representative sample (approximately 105 grams) of combined suspect building materials. The sample results are located in Appendix D.

2.3 SURVEY OF SUSPECTED RBMS

On June 15, 2018, APEC personnel conducted the RBM inventory consisting of inspecting the interior, exterior and roof system. The inspection was conducted to visually identify and quantify any building materials, devices and equipment suspected of containing potentially regulated materials as they pertain to the EPA Universal Waste Rule (UWR) requirements (40 CFR, Part 273). APECs inventory review consisted of the following: potential mercury-containing thermostats/switches; fluorescent light tubes and compact fluorescent bulbs; items potentially containing polychlorinated biphenyls (PCBs) (generally ballasts found within the fluorescent light fixtures); tritium powered exit signs; smoke detectors potentially containing Americium-241; and freon-containing refrigeration systems. The survey of suspected RBMS is for use by contractors conducting the removal of items from the property. Samples of suspect RBMs are not required for this type of survey, as all determinations are made by visual means.

Although not a “regulated material”, items such as gas meters, electrical meters and electrical panels are listed with the RBM inventory. These materials will require removal and/or disconnection prior to demolition and until done so should be handled with care.

3 Findings

3.1 ASBESTOS SURVEY

A total of 51 bulk samples, including 2 duplicate samples, were collected from 15 suspect homogenous materials throughout the structure. The results of the PLM analysis are presented in Table 2 and Table 3. The following samples are positive for ACMs (i.e. present greater than 1%):

Regulated Asbestos Containing Materials (RACM)

- 2716-R1-6A, 2716-R5-6B, 2716-R6-6C, and 2716-R6-6Q - Vent wrap on 5 registers in rooms 1, 2, 5, and 6

Point Counts

Point count analysis occurs for samples with <1% of asbestos. Point count analysis was not performed due to the initial PLM analysis content exceeding 1% asbestos. The laboratory analytical report is included as Appendix C.

Duplicate Samples

For quality assurance purposes, duplicate samples are taken approximately every 20th sample, per the EPA "pink book" that is used by Colorado Regulation 8 for sampling protocol. Duplicate samples are listed as a duplicate (Q) in the sample location column of Table 2 or Table 3. Two samples were collected because a total of 49 samples were obtained, and are identified as:

- 2716-R6-6Q
- 2716-EX-12Q

3.2 LEAD-BASED PAINT SURVEY

A total of 7 homogeneous paint color variations were analyzed for the presence of LBPs and LCPs (Table 4; Figure 3). Under EPA 40 CFR Part 745, LBP is defined as any paint or surface coating that contains lead equal to or exceeding 0.5% (by weight), while LCP is defined as any paint or surface coating containing lead greater than or equal to 0.06% up to 0.5% (by weight). Caution should be taken during demolition to minimize cutting, abrading, or otherwise causing an air disturbance to this material and work must be completed in accordance with the OSHA Lead in Construction Standard (29 CFR 1926.62).

One lead sample (2716E46-R1-4L) was found to be greater than 0.06% by weight and less than 0.5% by weight and is considered LCP. One sample (2716E-46-R2-2L) was greater than 0.5% by weight and is considered LBP (Table 4). The remaining 5 samples were less than the LCP and LBP thresholds, and are considered non-lead containing paint (NLC). The laboratory analytical report is included in Appendix D.

3.2.1 TCLP LEAD ANALYTICAL RESULTS

One sample analyzed as a LCP, and one sample analyzed as a LBP; therefore, TCLP analysis of lead was performed. TCLP analysis simulates the potential for the demolished building materials to leach lead if placed in the landfill and results of the analysis determine if the materials will be considered hazardous waste. TCLP analysis was performed for landfill compliance and the Toxicity Characteristic (TC) maximum concentration is 5 milligrams per liter (mg/L). The results of the TCLP analysis is 0.68 mg/L, which is below the regulated limit and therefore not considered hazardous. The analytical report is included in Appendix D.

3.3 REGULATED BUILDING MATERIALS INVENTORY SURVEY

Several suspect RBMs were visually identified throughout the structure. RBMs that are a cause of concern, when discovered, are discussed below. A complete list of the RBMs is presented in Table 5, and selected locations of the RBMs are depicted in Figure 4.

4 Conclusions and Recommendations

4.1 ASBESTOS

Approximately 12 square feet of RACM was identified as vent wrap located on the supply vent pipes in rooms 1, 2, 5, and 6 was confirmed to be ACM (can be viewed in crawlspace as well). These materials will require abatement prior to demolition of the structure because they can easily be rendered friable.

No other ACM was identified throughout the structures; however, if additional suspect materials, not sampled during this investigation, are identified during demolition, they should either be assumed to be ACM or should be sampled prior to disturbance.

Prior to demolition activities, all friable and non-friable (that can or will be rendered friable) ACM that may be impacted during the demolition must be abated by a Colorado Certified Asbestos Abatement Contractor as required by NESHAP and the CDPHE – Air Pollution Control Division: Asbestos.

According to AHERA, EPA, and the CDPHE, materials testing at less than or equal to 1% asbestos fibers are not considered to be an ACM. However, any materials containing asbestos still need to be regulated. OSHA protocol must be followed when handling materials containing any amount of asbestos. Proper personal protective equipment (PPE) and engineering controls must be utilized if these materials will be impacted during demolition activities.

4.2 LEAD-BASED PAINT

Lead was detected at concentrations above the LCP threshold in 1 of the 7 samples and the LBP threshold in 1 of the 7 samples. The remaining 5 samples are considered non-lead containing (NLC). Although LCP was identified in the samples analyzed, the TC limit of 5 mg/L was not exceeded in the TCLP lead analysis. No lead abatement is required prior to demolition. TCLP results confirmed that the waste stream is not hazardous with respect to lead content.

While the TCLP results indicate that the waste stream is not characteristically hazardous with respect to lead content, LCP and LBP are still present in the building materials. Therefore, the contractor responsible for demolition of this structure is notified with receipt of this report of the presence or potential presence of LCP and/or LBP in the building materials that comprise the building. The contractor should also notify their employees of the presence of LCP or LBP prior to any disturbance and make the US Department of Labor OSHA publication number 3142-12R 2004 available to their workers. ("Lead in Construction", http://www.osha.gov/Publications/osha3142.pdf). The standards address topics such as PELs for workers, exposure assessment, protection of employees during assessment of exposure, employee notification, PPE, medical surveillance, along with other topics related to working with LCP and LBP.

4.3 REGULATED BUILDING MATERIALS

Materials found during the regulated materials inventory within the building may require special handling or disposal prior to demolition activities. If abatement is needed, APEC recommends that the asbestos contractor or general contractor selected by the client properly dispose of these regulated materials, per applicable regulations.

With regard to RBMs, if listed, it is likely that the ballasts in the fluorescent light fixtures do contain PCBs. Where a manufactures' label is present indicating "no PCBs", the ballast can be disposed of with

recyclable metal or with other municipal waste. During removal for disposal as part of the demolition activities, each ballast should be visually inspected for the manufacture's label indicating "no PCBs". If the label does not have this notation, the ballast should be considered PCB-containing and should be disposed of as a hazardous waste in accordance with local, state, and federal regulatory guidelines. Refrigerators and air conditioning units contain freon, which will need to be reclaimed or taken to a facility capable of this activity. Mercury containing thermostats will need to be disposed of at a facility certified to take this type of material. The contractor should also carefully remove all associated fluorescent light tubes and compact fluorescent lights and recycle or dispose of these materials according to applicable regulations.

This inspection was primarily relevant to the Federal UWR requirements under 40 CFR 273. It should be noted that contractors submitting bids for removal of the RBMs should verify quantities, conditions, and locations of all RBMs prior to bid submittals and initiating demolition activities**.** The contractor is also responsible for proper recycling and/or disposal of the RBMs, and should follow all federal, state and local regulations when handling these materials.

5 Limitations

This Structure Survey Assessment Report was prepared by All-Phase Environmental Consultants, Inc., at the request of and for the sole benefit of Kiewit Meridiam Partners, or any entity controlling, controlled by, or under common control with Colorado Department of Transportation. APECs certified inspectors used reasonable diligence and professional judgement to identify all suspect asbestos-containing materials, lead based paint, and regulated building materials in the property. APEC will not be held liable for property damage or any loss of property value due to the inspection. This report is not an abatement plan and is intended to be informational only; APEC will not be held responsible for the mishandling of the information contained herein.

APEC utilized destructive inspection methods in performing this survey, however accessibility may have been a limiting condition. If additional impacted suspect materials are discovered during related work for which there are no sample documentation/results, APEC recommends pursuing one of the following alternatives: Sample and analyze the discovered suspect material(s) to determine whether it contains asbestos, lead or other regulated materials; or assume the material(s) to be containing, quantify and remove on a unit cost basis.

Notwithstanding any provision to the contrary, the total liability of “All Phase Environmental Consultants, Inc.”, and its employees, officers or directors be liable in contract, tort, strict liability warranty or otherwise, for any special, incidental or consequential damages, such as but not limited to, delay, disruption, loss of product, loss of anticipated profits or revenue, damages, cost, and expenses, including attorney’s fees, shall not exceed the aggregate amount paid to All Phase Environmental Consultants, Inc. under this Agreement regardless of the legal theory under which such liability is imposed.

Tables

Table 2 Positive Asbestos Containing Samples

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification	Estimated Quantity (Sq. ft.)
2716-R1-6A	ROOM 1	VENT WRAP 70% CHRYSOTILE	PLM	Good	VENT WRAP	REGISTERS IN ROOMS 1, 2, 5 AND 6	RACM	5 REGISTERS
2716-R5-6B	ROOM 5	VENT WRAP 70% CHRYSOTILE	PLM	Good			RACM	
2716-R6-6C	ROOM 6	VENT WRAP 70% CHRYSOTILE	PLM	Good			RACM	
2716-R6-6Q	ROOM 6	VENT WRAP 35% CHRYSOTILE	PLM	Good			RACM	

ND=Non-Detect
PLM=Polarized Light Microscopy
NA=Not Applicable
RACM=Regulated Asbestos Containing Materials

Table 3 Non-Asbestos Containing and OSHA Regulated Samples

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification
2716-R1-1A	ROOM 1	ND	PLM	Good	TEXTURED PLASTER	WALLS AND CEILING OF ROOMS 1 & 5	NA
2716-R1-1B		ND	PLM	Good			NA
2716-R5-1C	ROOM 5	ND	PLM	Good			NA
2716-R5-1D		ND	PLM	Good			NA
2716-R5-1E		ND	PLM	Good			NA
2716-R2-2A	ROOM 2	ND	PLM	Good	TEXTURED PLASTER	WALLS ND CEILINGS OF ROOM 2	NA
2716-R2-2B		ND	PLM	Good			NA
2716-R2-2C		ND	PLM	Good			NA
2716-R4-3A	ROOM 4	ND	PLM	Good	TEXTURED DRYWALL	WALLS AND CEILINGS OF ROOMS 3&4	NA
2716-R4-3B		ND	PLM	Good			NA
2716-R3-3C	ROOM 3	ND	PLM	Good			NA
2716-R6-4A	ROOM 6	ND	PLM	Good	TEXTURED PLASTER	WALLS AND CEILINGS OF ROOMS 6 AND CLOSET 1	NA
2716-R6-4B		ND	PLM	Good			NA
2716-C1-4C	CLOSET 1	ND	PLM	Good			NA
2716-R2-5A	ROOM 2	ND	PLM	Good	FLOOR TILE	FLOORS OF ROOM 2 BELOW CERAMIC	NA
2716-R2-5B		ND	PLM	Good			NA
2716-R2-5C		ND	PLM	Good			NA
2716-R2-7A	ROOM 2	ND	PLM	Good	CERAMIC TILE	FLOORS OF ROOM ,3 & 4	NA
2716-R3-7B	ROOM 3	ND	PLM	Good			NA
2716-R4-7C	ROOM 4	ND	PLM	Good			NA

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification
2716-R7-8A	ROOM 7	ND	PLM	Good	TEXTURED PLASTER-TF	TOP FLOOR WALLS AND CEILINGS ROOMS 7,8,CLOSET 2 & STAIRWELL	NA
2716-R7-8B		ND	PLM	Good			NA
2716-R8-8C	ROOM 8	ND	PLM	Good			NA
2716-C2-8D	CLOSET 2	ND	PLM	Good			NA
2716-SW-8E	STAIRWELL	ND	PLM	Good			NA
2716-R7-9A	ROOM 7	ND	PLM	Good	GREEN LINOLEUM	FLOORS OF ROOM 7 CLOSET 2 AND THE HALLWAY UNDER THE WOOD FLOORING	NA
2716-R7-9B		ND	PLM	Good			NA
2716-H-9C	HALLWAY	ND	PLM	Good			NA
2716-R8-10A	ROOM 8	ND	PLM	Good	SHEET FLOORING	FLOOR OF ROOM 8	NA
2716-R8-10B		ND	PLM	Good			NA
2716-R8-10C		ND	PLM	Good			NA
2716-EX-11A	EXTERIOR	ND	PLM	Good	BRICK/MORTAR	EXTERIOR	NA
2716-EX-11B		ND	PLM	Good			NA
2716-EX-11C		ND	PLM	Good			NA
2716-EX-12A		ND	PLM	Good	STUCCO		NA
2716-EX-12B		ND	PLM	Good			NA
2716-EX-12Q		ND	PLM	Good			NA
2716-EX-12C		ND	PLM	Good			NA
2716-EX-13A		ND	PLM	Good	ROOFING 2		NA
2716-EX-13B		ND	PLM	Good			NA
2716-EX-13C		ND	PLM	Good			NA

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification
2716-EX-14A	EXTERIOR	ND	PLM	Good	GARAGE FLASHING	EXTERIOR	NA
2716-EX-14B		ND	PLM	Good			NA
2716-EX-14C		ND	PLM	Good			NA
2716-G-15A	GARAGE	ND	PLM	Good	CMU MORTAR	GARAGE	NA
2716-G-15B		ND	PLM	Good			NA
2716-G-15C		ND	PLM	Good			NA

ND=Non-Detect
PLM=Polarized Light Microscopy
NA=Not Applicable

Table 4 Summary of Paint Chip Analysis for Lead

Sample Number	Sample Location	Lead Concentration (% wt.)	Component	Paint Description	Classification
2716E46-R2-1L	Room 2	<0.0080	Plaster	Tan	NLC
2716E46-R2-2L	**Room 2**	**3.3**	**Plaster**	**Blue/Tan**	**LBP**
2716E46-R2-3L	Room 2	<0.0080	Plaster	Brown	NLC
2716E46-R1-4L	**Room 1**	**0.082**	**Wood**	**Tan/Brown Shelac**	**LCP**
2716E46-R8-5L	Room 8	<0.0080	Plaster	Blue	NLC
2716E46-EX-6L	Exterior	0.0082	Wood	Light Brown	NLC
2716E46-G-7L	Garage	<0.0080	Wood	Cream	NLC

Table 5 Summary of Regulated Building Materials

Room	Material	Location	Quantity Fixture/Bulbs each
Room 2	Fluorescent Fixture	Ceiling	1Fixture/2 blubs
Room 5	Thermostat (Hg)	South of fireplace	1
Basement	WaterHeater	Cellar	1
Exterior	Electrical Meter	East Side of House	1
Exterior	Gas Meter	West Side of Building	1
Exterior	Breaker Box	East Side of House	1

Figures

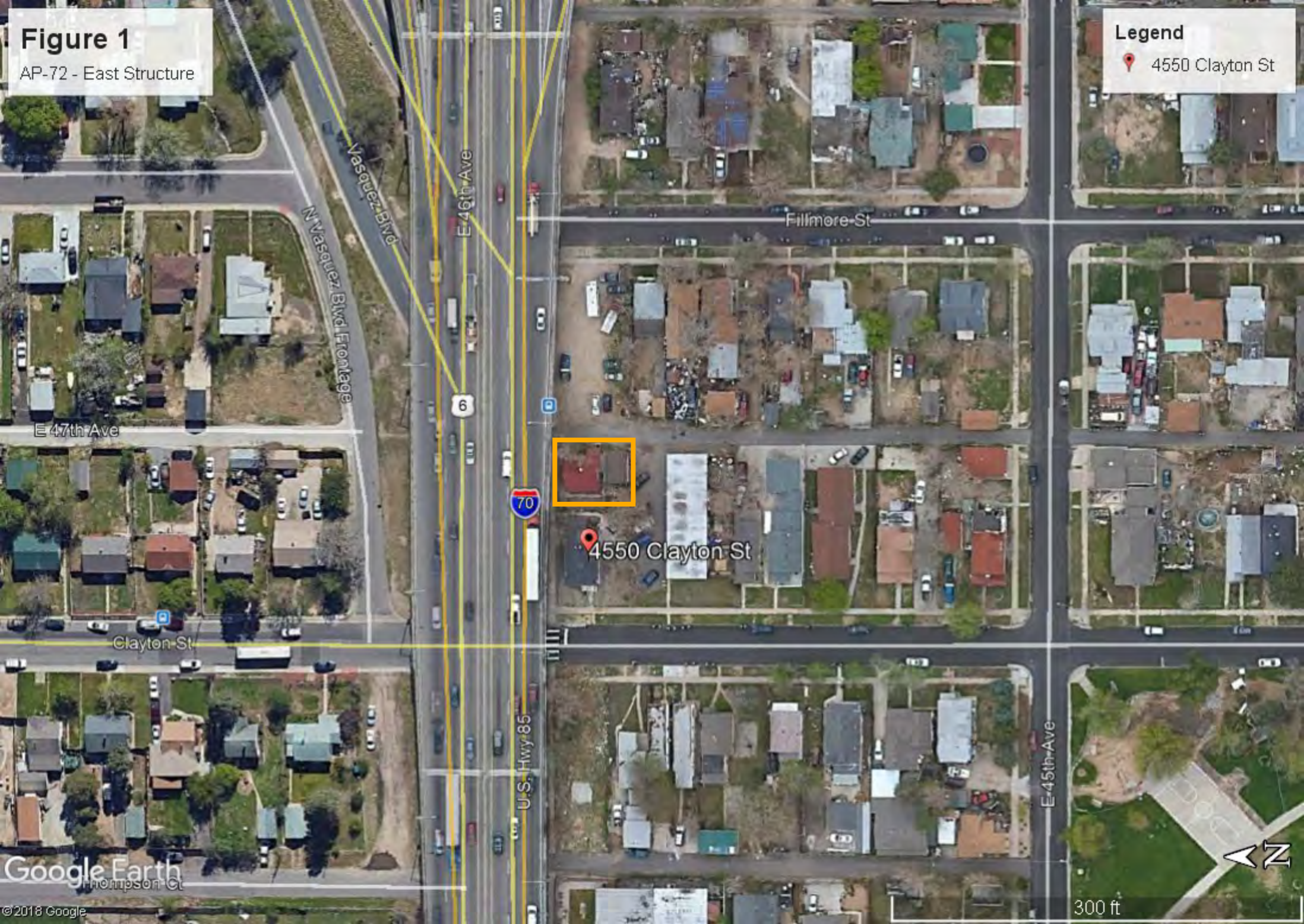
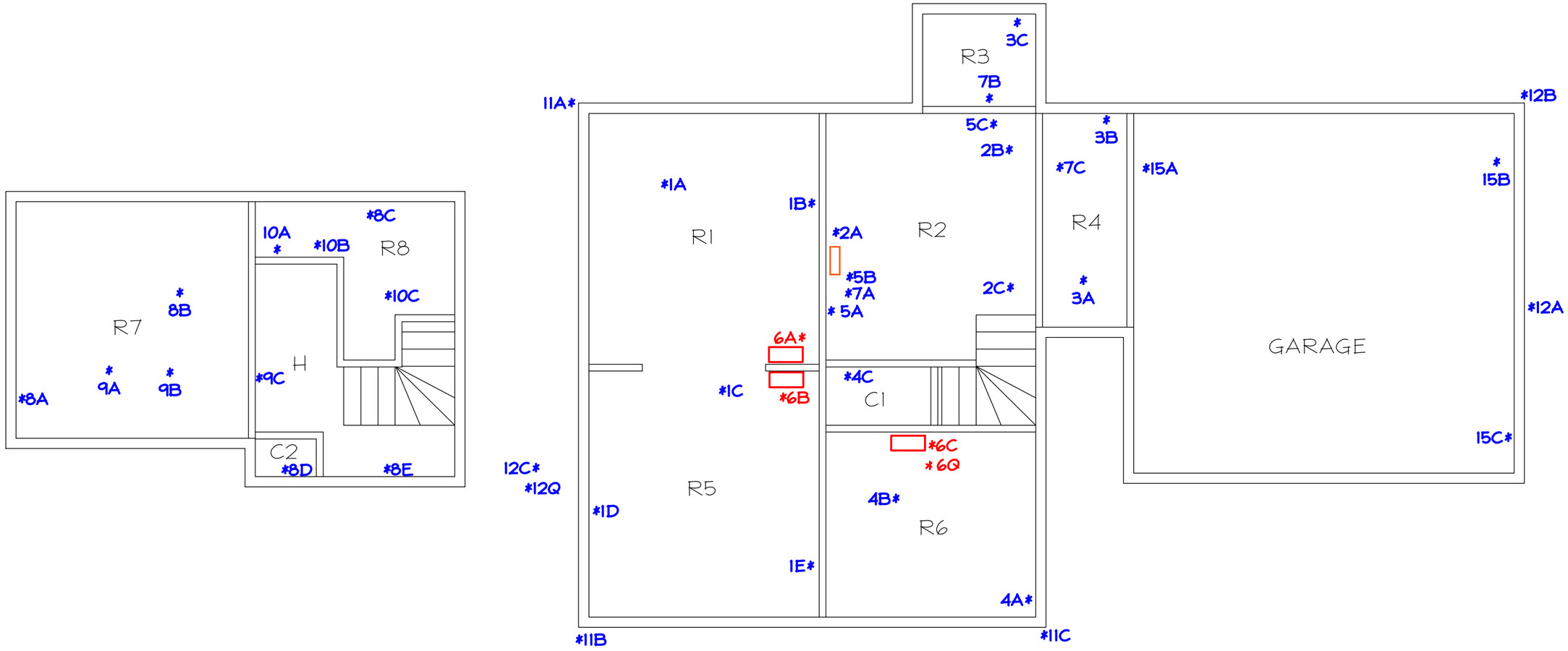


Figure 1
AP-72 - East Structure
Legend
4550 Clayton St
Vasquez Blvd
E 46th Ave
N Vasquez Blvd Frontage
Fillmore St
E 47th Ave
6
70
4550 Clayton St
Clayton St
U.S. Hwy 85
E 45th Ave
Thompson Ct
Google Earth
©2018 Google
300 ft
N



R1 = Room Numbers

4B = Asbestos Samples (Detect)

4B = Asbestos Samples (Non-Detect)

= Vent Boot Wrap Positive for Asbestos

= Vent Boot Wrap Negative for Asbestos

N

APPROVED: B.N.E.

SCALE: 3/16" =1'-0"

FIGURE 2 - Asbestos Bulk Sample Locations

CENTRAL 70 - Structure Survey Assessment Map

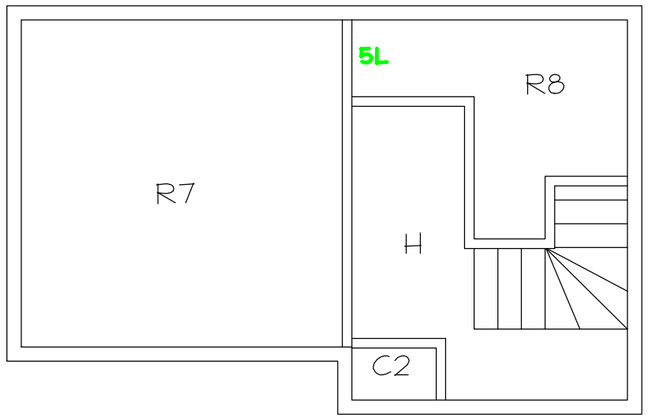
AP-72A

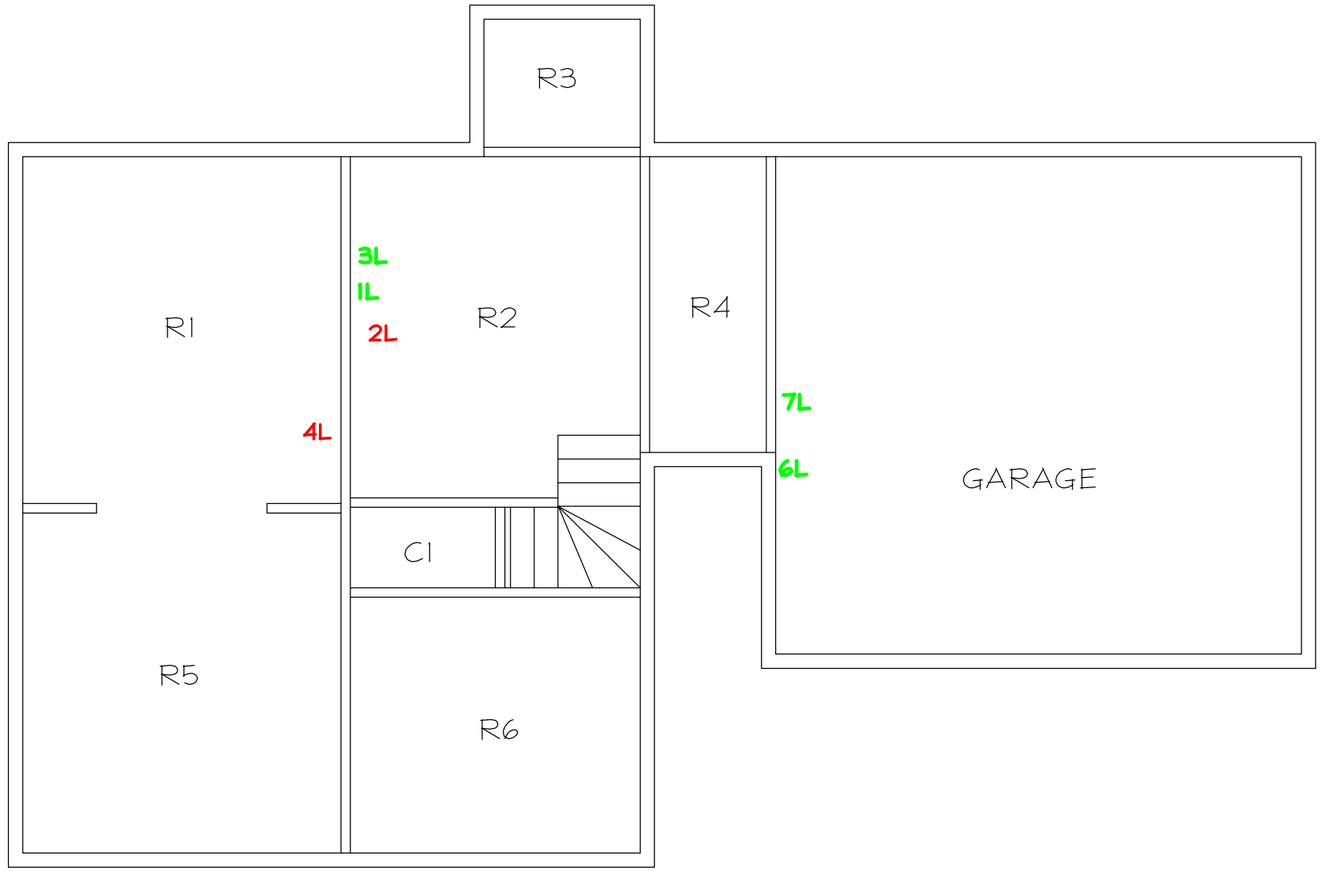
2617 E. 46th Ave., Denver, CO

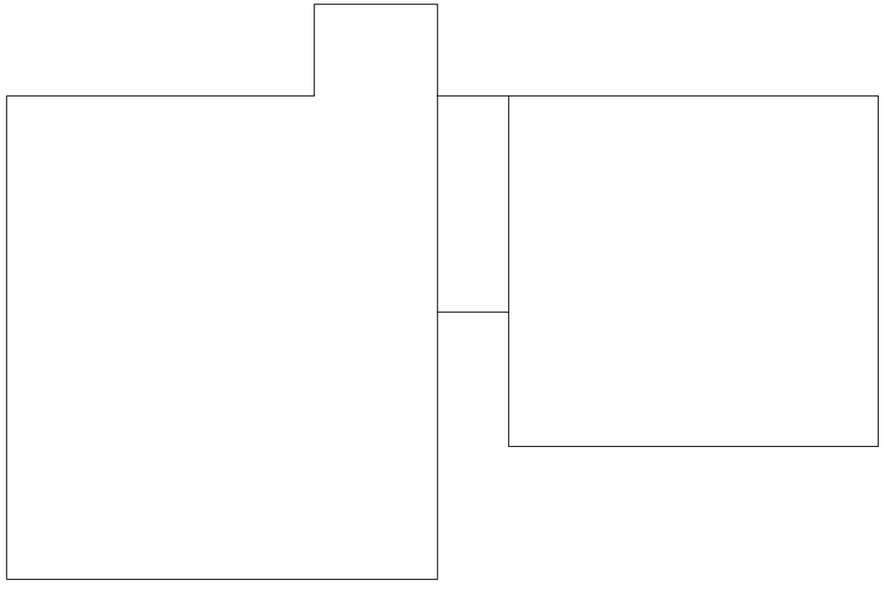
June 15, 2018

APEC #: 18-3066

ALL-PHASE
ENVIRONMENTAL CONSULTANTS, INC.
721 W 9TH STREET
Pueblo, CO 81003 Ph: (719) 545-0375







ROOF 1/8" =1'-0"

R1 = Room Numbers

4 = Lead Base Paint (Detect)

4 = Lead Containing Paint (Detect)

4 = Lead Base Paint (Non-Detect)

N

DR BY: R.A.

APPROVED: B.N.E.

SCALE: 3/16" =1'-0"

FIGURE 3 - Lead Based Paint Sample Location

CENTRAL 70 - Structure Survey Assessment Map

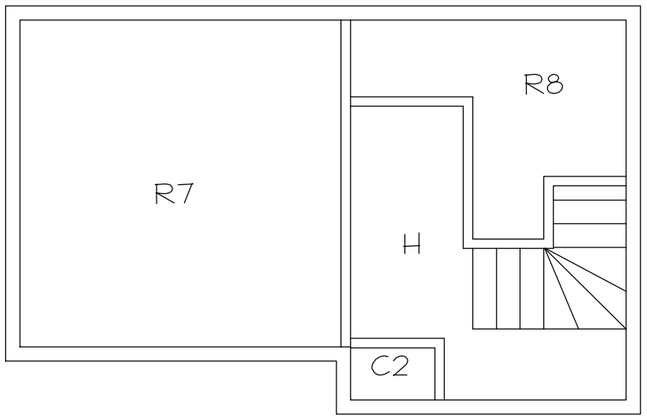
AP-72A

2617 E. 46th Ave., Denver, CO

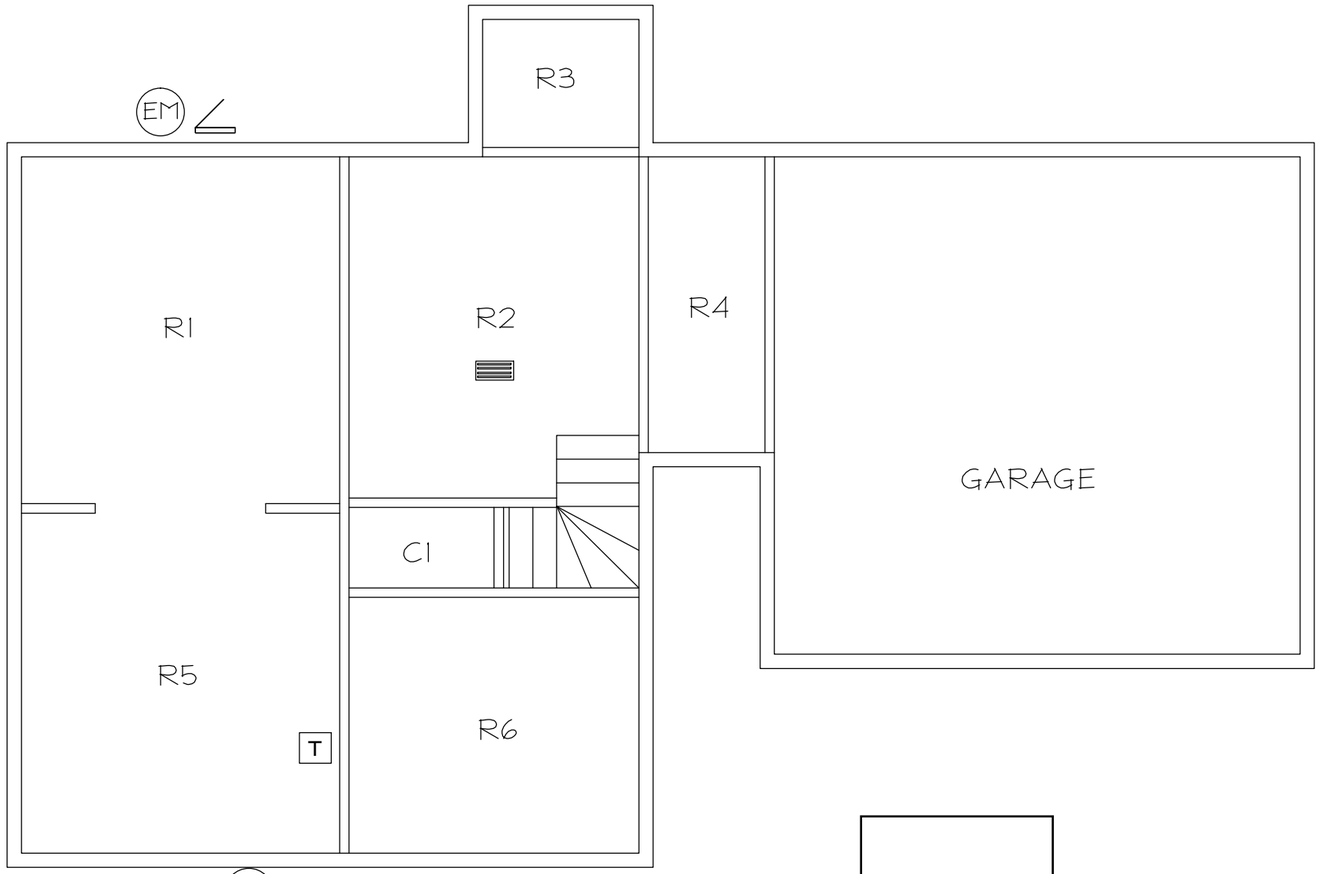
June 15, 2018

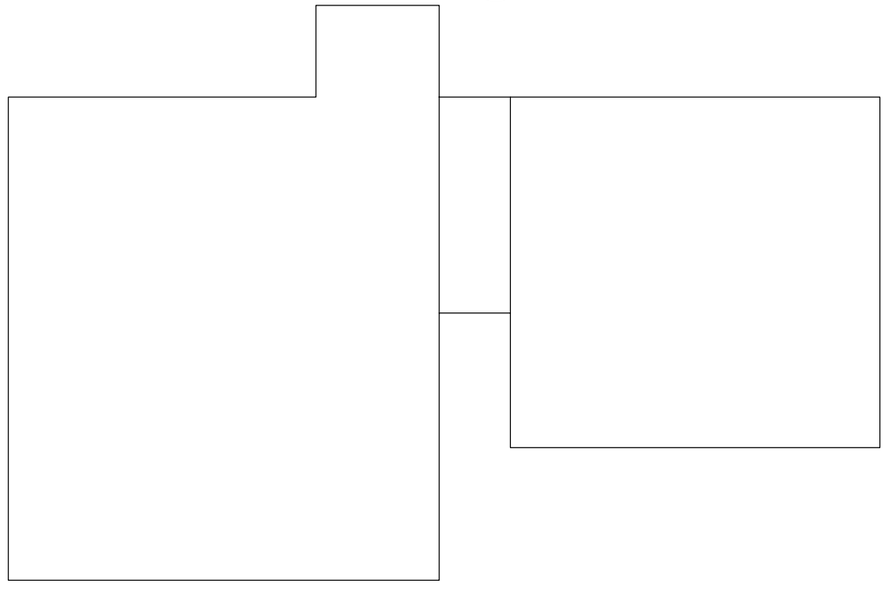
APEC #: 18-3066

ALL-PHASE
ENVIRONMENTAL CONSULTANTS, INC.
721 W 9TH STREET
Pueblo, CO 81003 Ph: (719) 545-0375

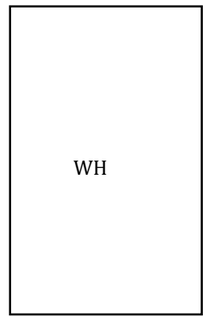


Top Floor





ROOF 1/8" =1'-0"



Cellar

R1 = Room Numbers

= Breaker Panel

= Fluorescent Lights

T = Thermostat

GM = Gas Meter

EM = Electric Meter

WH = Water Heater

N

DR BY: R.A.

APPROVED: B.N.E.

SCALE: 3/16" =1'-0"

FIGURE 4 - Regulated Building Material

CENTRAL 70 - Structure Survey Assessment Map

AP-72A

2617 E. 46th Ave., Denver, CO

June 15, 2018

APEC #: 18-3066

ALL-PHASE
ENVIRONMENTAL CONSULTANTS, INC.
721 W 9TH STREET
Pueblo, CO 81003 Ph: (719) 545-0375

A ASBESTOS, LEAD AND LABORATORY CERTIFICATIONS

Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Logan Greenfield

Certification No.: 20715

has met the requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby certified by the state of Colorado in the following discipline:

Building Inspector*

Issued: **October 18, 2017**

Expires: **October 18, 2018**

**** This certificate is valid only with the possession of a current Division-approved training course certification in the discipline specified above.***

Authorized APCD Representative

SEAL

Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Logan Greenfield

Certification No.: 20715

has met the requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby certified by the state of Colorado in the following discipline:

Building Inspector*

Issued: **September 13, 2018**

Expires: **October 18, 2019**

**** This certificate is valid only with the possession of a current Division-approved training course certification in the discipline specified above.***

Authorized APCD Representative

SEAL

CHC TRAINING

1775 West 55th Avenue
Denver, CO 80221
303.410.4941
trainingchc.com

Certifies that

Logan Greenfield

20715

Has Successfully Completed the EPA- Approved Annual Asbestos Refresher Training Course Under Section 206 of the Toxic Substance Control Act (TSCA), Title II.

BUILDING INSPECTOR

Course Date: September 20, 2017
Certificate No.: R17-1661-AI-CO
No. of Hours: 4
Expiration Date: September 20, 2018

Certification not valid without watermark

Frank Hulce

Frank Hulce - Instructor

Danaya Benedetto

Danaya Benedetto- Training Program Manager

CHC Training
Nationwide Training & Certification Experts

www.chctraining.com
303.412.6360
855.60.CERTIFY

1775 West 55th Avenue
Denver, CO 80221,
United States of America

Certificate of Achievement

This certificate is awarded to:

Logan Greenfield

In recognition of satisfactory completion of the EPA-approved annual asbestos refresher training course under section 206 of the Toxic Substance Control Act (TSCA), Title II entitled:

Building Inspector

Course Date:	September 12, 2018
Expiration Date	September 12, 2019
Course Hours:	4.0

Verify this Credential

Danaya N. Benedello
CEO & Training Program Manager

Credential License ID:
11943552

CHC Training
Est. 2007
Accredited Alumni
Safety Quality Compliance Integrity

Daniel R. Beaver
Instructor

CHC Training Certificate No.
R18-1729-AI-CO

Visit our Website

Colorado Department
of Public Health
and Environment

LEAD-BASED PAINT CERTIFICATION*

This certifies that

Richard L. Ralston

Certification No.: 9130

has met the requirements of 25-7-1104, C.R.S. and Air Quality Control Commission Regulation No. 19, and is hereby certified by the state of Colorado in the following discipline:

Risk Assessor*

Issued: **February 10, 2017**

Expires: **February 10, 2019**

** This certificate is valid only with the possession of a valid lead-based paint training certificate in the discipline specified above, issued by either a Colorado approved training provider, an EPA approved training provider, or a training provider approved by another EPA authorized program.*

Authorized APCD Representative

SEAL

CHC TRAINING

1775 West 55th Avenue
Denver, CO 80221
303.410.4941
trainingchc.com

Certifies that

Richard Ralston

Has successfully completed the required training hours and passed the examination required by the Colorado Department of Public Health and Environment for:

Lead-Based Paint Risk Assessor Refresher

For the purposes of accreditation under the Colorado Department of Public Health and Environment Regulation No. 19 and other standard developed by EPA pursuant to Title IV of TSCA

Course Date: April 6, 2016
Certificate No.: R16-031-LRA-CO
No. of Hours: 8
Expiration Date: April 6, 2019

Certification not valid without watermark

Luis E. Peon

Luis Peon - Instructor

Danaya Benedetto

Danaya Benedetto - Training Program Manager

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200828-0

EMSL Analytical, Inc.

Denver, CO

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2018-04-01 through 2019-03-31

Effective Dates

DEPARTMENT OF COMMERCE • UNITED STATES OF AMERICA •

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.
1010 Yuma Street
Denver, CO 80204
Ms. Amanda Lang
Phone: 303-740-5700
Email: alang@emsl.com
http://www.emsl.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 200828-0**

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: 100194

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

✓	**INDUSTRIAL HYGIENE**	Accreditation Expires: September 01, 2018
✓	**ENVIRONMENTAL LEAD**	Accreditation Expires: September 01, 2018
✓	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: September 01, 2018
☐	**FOOD**	Accreditation Expires:
☐	**UNIQUE SCOPES**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

William Walsh, CIH
Chairperson, Analytical Accreditation Board

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 15: 03/30/2016

Date Issued: 08/31/2016

AIHA Laboratory Accreditation Programs, LLC
SCOPE OF ACCREDITATION

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: **100194**
Issue Date: 08/31/2016

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

The EPA recognizes the AIHA-LAP, LLC ELLAP program as meeting the requirements of the National Lead Laboratory Accreditation Program (NLLAP) established under Title X of the Residential Lead-Based Paint Hazard Reduction Act of 1992 and includes paint, soil and dust wipe analysis. Air analysis is not included as part of the NLLAP.

Environmental Lead Laboratory Accreditation Program (ELLAP)

Initial Accreditation Date: 01/18/1995

Field of Testing (FoT)	Technology sub-type/ Detector	Method	Method Description (*for internal methods only*)
Paint		EPA SW-846 3050B	
		EPA SW-846 7000B	
Soil		EPA SW-846 3050B	
		EPA SW-846 7000B	
Settled Dust by Wipe		EPA SW-846 3050B	
		EPA SW-846 7000B	
Airborne Dust		NIOSH 7082	
Composited Wipes		EPA SW-846 3050B	
		EPA SW-846 7000B	

A complete listing of currently accredited Environmental Lead laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

B

POSITIVE ASBESTOS & LEAD SAMPLE MATERIAL PHOTOGRAPHS

 Vent Wrap	Samples Represented – 2716-R1-6A 2716-R5-6B 2716-R6-6C 2716-R6-6Q
 Blue/Tan - LBP	Sample Represented – 2716E46-R2-2L
 Tan/Brown - LCP	Sample Represented – 2716E46-R1-4L

C

LABORATORY RESULTS & CHAIN OF CUSTODY- ASBESTOS

EMSL Analytical, Inc.
1010 Yuma Street Denver, CO 80204
Tel/Fax: (303) 740-5700 / (303) 741-1400
http://www.EMSL.com / denverlab@emsl.com

EMSL Order: 221804458
Customer ID: ALLP62
Customer PO:
Project ID:

Attention: Logan Greenfield
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003

Project: 18-3066-CDOT-A-AP72-2nd

Phone: (719) 250-0036
Fax: (719) 542-2807
Received Date: 06/19/2018 10:05 AM
Analysis Date: 06/22/2018 - 06/25/2018
Collected Date: 06/15/2018

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**
2716-R1-1A-Texture *221804458-0001*	Textured Plaster-R1, R5	Gray/White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
			Inseparable paint / coating layer included in analysis		
2716-R1-1A-Skim Coat *221804458-0001A*	Textured Plaster-R1, R5	White Non-Fibrous Homogeneous		5% Ca Carbonate 10% Gypsum 85% Non-fibrous (Other)	**None Detected**
			Inseparable paint / coating layer included in analysis		
2716-R1-1A-Plaster *221804458-0001B*	Textured Plaster-R1, R5	Beige Fibrous Homogeneous	<1% Hair	5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**
2716-R1-1B-Texture *221804458-0002*	Textured Plaster-R1, R5	Gray/White Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
			Inseparable paint / coating layer included in analysis		
2716-R1-1B-Skim Coat *221804458-0002A*	Textured Plaster-R1, R5	White Non-Fibrous Homogeneous		10% Ca Carbonate 20% Gypsum 70% Non-fibrous (Other)	**None Detected**
2716-R1-1B-Plaster *221804458-0002B*	Textured Plaster-R1, R5	Tan Fibrous Homogeneous	<1% Hair	5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**
2716-R5-1C-Texture *221804458-0003*	Textured Plaster-R1, R5	Gray/White Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
			Inseparable paint / coating layer included in analysis		
2716-R5-1C-Skim Coat *221804458-0003A*	Textured Plaster-R1, R5	White Non-Fibrous Homogeneous		10% Ca Carbonate 20% Gypsum 70% Non-fibrous (Other)	**None Detected**
2716-R5-1C-Plaster *221804458-0003B*	Textured Plaster-R1, R5	Tan Fibrous Homogeneous	<1% Hair	5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**

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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**
2716-R5-1D-Texture *221804458-0004*	Textured Plaster-R1, R5	Tan Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R5-1D-Skim Coat *221804458-0004A*	Textured Plaster-R1, R5	White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	**None Detected**
2716-R5-1D-Plaster *221804458-0004B*	Textured Plaster-R1, R5	Gray/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R5-1E-Texture *221804458-0005*	Textured Plaster-R1, R5	White/Black Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R5-1E-Skim Coat *221804458-0005A*	Textured Plaster-R1, R5	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	**None Detected**
2716-R5-1E-Plaster *221804458-0005B*	Textured Plaster-R1, R5	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	**None Detected**
2716-R2-2A-Texture *221804458-0006*	Texture Plaster- R2	Gray/White Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R2-2A-Skim Coat *221804458-0006A*	Texture Plaster- R2	White Non-Fibrous Homogeneous		5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**
2716-R2-2A-Plaster *221804458-0006B*	Texture Plaster- R2	Tan Fibrous Homogeneous	<1% Hair	5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2716-R2-2B-Texture *221804458-0007*	Texture Plaster- R2	Gray/White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R2-2B-Skim Coat *221804458-0007A*	Texture Plaster- R2	White Non-Fibrous Homogeneous		5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**
2716-R2-2B-Plaster *221804458-0007B*	Texture Plaster- R2	Tan Fibrous Homogeneous	<1% Hair	5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**
2716-R2-2C-Texture *221804458-0008*	Texture Plaster- R2	White/Black Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R2-2C-Skim Coat *221804458-0008A*	Texture Plaster- R2	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	**None Detected**
2716-R2-2C-Plaster *221804458-0008B*	Texture Plaster- R2	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	**None Detected**
2716-R4-3A-Texture *221804458-0009*	Textured Drywall - R3, R4	Gray/White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R4-3A-Tape *221804458-0009A*	Textured Drywall - R3, R4	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	**None Detected**
2716-R4-3A-Joint Compound *221804458-0009B*	Textured Drywall - R3, R4	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2716-R4-3A-Drywall *221804458-0009C*	Textured Drywall - R3, R4	Brown/White Fibrous Homogeneous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	**None Detected**
2716-R4-3B-Texture *221804458-0010*	Textured Drywall - R3, R4	Gray/White Non-Fibrous Heterogeneous		15% Ca Carbonate 20% Gypsum 65% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R4-3B-Drywall *221804458-0010A*	Textured Drywall - R3, R4	Brown/White Fibrous Homogeneous	15% Cellulose	70% Gypsum 15% Non-fibrous (Other)	**None Detected**
2716-R4-3C-Texture *221804458-0011*	Textured Drywall - R3, R4	Tan/White Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R4-3C-Tape *221804458-0011A*	Textured Drywall - R3, R4	Yellow Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	**None Detected**
2716-R4-3C-Joint Compound *221804458-0011B*	Textured Drywall - R3, R4	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
2716-R4-3C-Drywall *221804458-0011C*	Textured Drywall - R3, R4	White Fibrous Homogeneous	15% Cellulose	65% Gypsum 20% Non-fibrous (Other)	**None Detected**
2716-R6-4A-Texture *221804458-0012*	Textured Plaster - R6, C1	Gray/White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R6-4A-Skim Coat *221804458-0012A*	Textured Plaster - R6, C1	White Non-Fibrous Homogeneous		10% Ca Carbonate 20% Gypsum 70% Non-fibrous (Other)	**None Detected**

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Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2716-R6-4A-Plaster *221804458-0012B*	Textured Plaster - R6, C1	Tan Fibrous Homogeneous	<1% Hair	5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**
2716-R6-4B-Texture *221804458-0013*	Textured Plaster - R6, C1	Gray/White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R6-4B-Skim Coat *221804458-0013A*	Textured Plaster - R6, C1	White Non-Fibrous Homogeneous		10% Ca Carbonate 20% Gypsum 70% Non-fibrous (Other)	**None Detected**
2716-R6-4B-Plaster *221804458-0013B*	Textured Plaster - R6, C1	Tan Fibrous Homogeneous	<1% Hair	5% Ca Carbonate 15% Gypsum 80% Non-fibrous (Other)	**None Detected**
2716-C1-4C-Texture *221804458-0014*	Textured Plaster - R6, C1	Brown/White Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-C1-4C-Skim Coat *221804458-0014A*	Textured Plaster - R6, C1	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	**None Detected**
2716-C1-4C-Plaster *221804458-0014B*	Textured Plaster - R6, C1	Beige Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	**None Detected**
2716-R2-5A-Floor Tile *221804458-0015*	Floor Tile	Gray Non-Fibrous Homogeneous		35% Ca Carbonate 65% Non-fibrous (Other)	**None Detected**
2716-R2-5A-Mastic *221804458-0015A*	Floor Tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2716-R2-5B-Floor Tile *221804458-0016*	Floor Tile	Gray Non-Fibrous Homogeneous		35% Ca Carbonate 65% Non-fibrous (Other)	**None Detected**
2716-R2-5B-Mastic *221804458-0016A*	Floor Tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R2-5B-Leveler *221804458-0016B*	Floor Tile	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	**None Detected**
2716-R2-5C-Floor Tile *221804458-0017*	Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R2-5C-Mastic *221804458-0017A*	Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R1-6A *221804458-0018*	Vent Wrap	Tan Fibrous Homogeneous		30% Non-fibrous (Other)	**70% Chrysotile**
2716-R5-6B *221804458-0019*	Vent Wrap	Tan Fibrous Homogeneous		30% Non-fibrous (Other)	**70% Chrysotile**
2716-R6-6C *221804458-0020*	Vent Wrap	Tan Fibrous Homogeneous		30% Non-fibrous (Other)	**70% Chrysotile**
2716-R6-6Q-Wrap *221804458-0021*	Vent Wrap	Gray/White Non-Fibrous Homogeneous		65% Non-fibrous (Other)	**35% Chrysotile**
2716-R6-6Q-Mastic *221804458-0021A*	Vent Wrap	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**

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Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2716-R2-7A-Ceramic Tile *221804458-0022*	Ceramic Tile/Mortar	Red/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R2-7A-Thinset *221804458-0022A*	Ceramic Tile/Mortar	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
2716-R3-7B-Ceramic Tile *221804458-0023*	Ceramic Tile/Mortar	Red/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R3-7B-Thinset *221804458-0023A*	Ceramic Tile/Mortar	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
2716-R4-7C-Ceramic Tile *221804458-0024*	Ceramic Tile/Mortar	Red/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R4-7C-Thinset *221804458-0024A*	Ceramic Tile/Mortar	White Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	**None Detected**
2716-R7-8A-Skim Coat *221804458-0025*	Textured Plaster - TF	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R7-8A-Plaster *221804458-0025A*	Textured Plaster - TF	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R7-8B-Texture *221804458-0026*	Textured Plaster - TF	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			

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Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2716-R7-8B-Skim Coat *221804458-0026A*	Textured Plaster - TF	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R7-8B-Plaster *221804458-0026B*	Textured Plaster - TF	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R8-8C-Texture *221804458-0027*	Textured Plaster - TF	White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-R8-8C-Skim Coat *221804458-0027A*	Textured Plaster - TF	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R8-8C-Plaster *221804458-0027B*	Textured Plaster - TF	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-C2-8D-Skim Coat *221804458-0028*	Textured Plaster - TF	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-C2-8D-Plaster *221804458-0028A*	Textured Plaster - TF	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-SW-8E-Texture *221804458-0029*	Textured Plaster - TF	White Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	**None Detected**
2716-SW-8E-Skim Coat *221804458-0029A*	Textured Plaster - TF	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-SW-8E-Plaster *221804458-0029B*	Textured Plaster - TF	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**

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2716-R7-9A *221804458-0030*	Green Linoleum	Black/Beige Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (Other)	**None Detected**
2716-R7-9B *221804458-0031*	Green Linoleum	Black/Beige Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (Other)	**None Detected**
2716-H-9C *221804458-0032*	Green Linoleum	Black/Beige Non-Fibrous Homogeneous	55% Cellulose	45% Non-fibrous (Other)	**None Detected**
2716-R8-10A-Flooring *221804458-0033*	Sheet Flooring	Beige Fibrous Homogeneous	45% Cellulose 5% Glass	50% Non-fibrous (Other)	**None Detected**
2716-R8-10A-Mastic *221804458-0033A*	Sheet Flooring	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R8-10B-Flooring *221804458-0034*	Sheet Flooring	Beige Fibrous Homogeneous	45% Cellulose 5% Glass	50% Non-fibrous (Other)	**None Detected**
2716-R8-10B-Mastic *221804458-0034A*	Sheet Flooring	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-R8-10C-Flooring *221804458-0035*	Sheet Flooring	Beige Fibrous Homogeneous	45% Cellulose 5% Glass	50% Non-fibrous (Other)	**None Detected**
2716-R8-10C-Mastic *221804458-0035A*	Sheet Flooring	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-11A-Brick *221804458-0036*	Brick/Mortar	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**

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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**
2716-EX-11A-Mortar *221804458-0036A*	Brick/Mortar	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-11B-Brick *221804458-0037*	Brick/Mortar	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-11B-Mortar *221804458-0037A*	Brick/Mortar	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-11C-Brick *221804458-0038*	Brick/Mortar	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-11C-Mortar *221804458-0038A*	Brick/Mortar	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-12A-Stucco *221804458-0039*	Stucco	Gray/Red Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other) Inseparable paint / coating layer included in analysis	**None Detected**
2716-EX-12A-Concrete *221804458-0039A*	Stucco	Tan Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	**None Detected**
2716-EX-12B-Stucco *221804458-0040*	Stucco	Gray/Various Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other) Inseparable paint / coating layer included in analysis	**None Detected**
2716-EX-12Q-Stucco *221804458-0041*	Stucco	Gray/Various Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other) Inseparable paint / coating layer included in analysis	**None Detected**

Initial report from: 06/25/2018 13:13:43

EMSL Analytical, Inc.
1010 Yuma Street Denver, CO 80204
Tel/Fax: (303) 740-5700 / (303) 741-1400
http://www.EMSL.com / denverlab@emsl.com

EMSL Order: 221804458
Customer ID: ALLP62
Customer PO:
Project ID:

Attention: Logan Greenfield
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003

Project: 18-3066-CDOT-A-AP72-2nd

Phone: (719) 250-0036
Fax: (719) 542-2807
Received Date: 06/19/2018 10:05 AM
Analysis Date: 06/22/2018 - 06/25/2018
Collected Date: 06/15/2018

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**
2716-EX-13A-Shingle 1 *221804458-0043*	Roofing - 2 layer	Red/Black Fibrous Homogeneous	20% Glass	15% Ca Carbonate 65% Non-fibrous (Other)	**None Detected**
2716-EX-13A-Mastic *221804458-0043A*	Roofing - 2 layer	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-13A-Shingle 2 *221804458-0043B*	Roofing - 2 layer	Gray/Black Fibrous Homogeneous	20% Glass	10% Ca Carbonate 70% Non-fibrous (Other)	**None Detected**
2716-EX-13B-Shingle 1 *221804458-0044*	Roofing - 2 layer	Red/Black Fibrous Homogeneous	20% Glass	10% Ca Carbonate 70% Non-fibrous (Other)	**None Detected**
2716-EX-13B-Mastic *221804458-0044A*	Roofing - 2 layer	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-13B-Shingle 2 *221804458-0044B*	Roofing - 2 layer	Gray/Black Fibrous Homogeneous		70% Non-fibrous (Other)	**None Detected**
2716-EX-13C-Shingle 1 *221804458-0045*	Roofing - 2 layer	Red/Black Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	**None Detected**
2716-EX-13C-Mastic *221804458-0045A*	Roofing - 2 layer	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-EX-13C-Shingle 2 *221804458-0045B*	Roofing - 2 layer	Gray Fibrous Homogeneous	15% Glass	85% Non-fibrous (Other)	**None Detected**
2716-G-14A-Shingle *221804458-0046*	Garage Flashing	Gray/Black Non-Fibrous Homogeneous	20% Cellulose	10% Ca Carbonate 70% Non-fibrous (Other)	**None Detected**

Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from: 06/25/2018 13:13:43

EMSL Analytical, Inc.
1010 Yuma Street Denver, CO 80204
Tel/Fax: (303) 740-5700 / (303) 741-1400
http://www.EMSL.com / denverlab@emsl.com

EMSL Order: 221804458
Customer ID: ALLP62
Customer PO:
Project ID:

Attention: Logan Greenfield
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003

Project: 18-3066-CDOT-A-AP72-2nd

Phone: (719) 250-0036
Fax: (719) 542-2807
Received Date: 06/19/2018 10:05 AM
Analysis Date: 06/22/2018 - 06/25/2018
Collected Date: 06/15/2018

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**
2716-G-14A-Flashing *221804458-0046A*	Garage Flashing	Gray/Black Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	**None Detected**
2716-G-14A-Felt *221804458-0046B*	Garage Flashing	Brown/Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	**None Detected**
2716-G-14B-Shingle *221804458-0047*	Garage Flashing	Gray/Black Fibrous Homogeneous	20% Glass	10% Ca Carbonate 70% Non-fibrous (Other)	**None Detected**
2716-G-14B-Flashing *221804458-0047A*	Garage Flashing	Gray/Black Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	**None Detected**
2716-G-14B-Felt *221804458-0047B*	Garage Flashing	Brown/Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	**None Detected**
2716-G-14C-Shingle *221804458-0048*	Garage Flashing	Black Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	**None Detected**
2716-G-14C-Flashing *221804458-0048A*	Garage Flashing	Gray/Black Fibrous Homogeneous		100% Non-fibrous (Other)	**None Detected**
2716-G-14C-Felt *221804458-0048B*	Garage Flashing	Brown Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	**None Detected**
2716-G-15A *221804458-0049*	CMU Mortar	Gray/White Non-Fibrous Heterogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	**None Detected**

Inseparable paint / coating layer included in analysis

Initial report from: 06/25/2018 13:13:43

EMSL Analytical, Inc.
1010 Yuma Street Denver, CO 80204
Tel/Fax: (303) 740-5700 / (303) 741-1400
http://www.EMSL.com / denverlab@emsl.com

EMSL Order: 221804458
Customer ID: ALLP62
Customer PO:
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Attention: Logan Greenfield
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003

Phone: (719) 250-0036
Fax: (719) 542-2807
Received Date: 06/19/2018 10:05 AM
Analysis Date: 06/22/2018 - 06/25/2018
Collected Date: 06/15/2018

Project: 18-3066-CDOT-A-AP72-2nd

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**
2716-G-15B *221804458-0050*	CMU Mortar	Gray/White Non-Fibrous Heterogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			
2716-G-15C *221804458-0051*	CMU Mortar	Gray/White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	**None Detected**
		Inseparable paint / coating layer included in analysis			

Initial report from: 06/25/2018 13:13:43

EMSL Analytical, Inc.
1010 Yuma Street Denver, CO 80204
Tel/Fax: (303) 740-5700 / (303) 741-1400
http://www.EMSL.com / denverlab@emsl.com

EMSL Order: 221804458
Customer ID: ALLP62
Customer PO:
Project ID:

Attention: Logan Greenfield
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO 81003

Project: 18-3066-CDOT-A-AP72-2nd

Phone: (719) 250-0036
Fax: (719) 542-2807
Received Date: 06/19/2018 10:05 AM
Analysis Date: 06/22/2018 - 06/25/2018
Collected Date: 06/15/2018

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

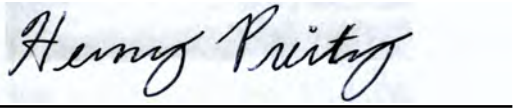
Report Comments: Report has been revised to add signature

Sample Receipt Date:	06/19/2018	Sample Receipt Time:	10:05 AM
Analysis Completed Date:	06/25/2018	Analysis Completed Time:	11:39 AM

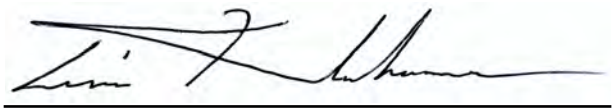
Analyst(s):

Cassandra Schorzman PLM (18)

Gentry Catlett PLM (20)

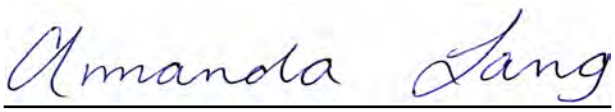


Stuart Printz PLM (55)



Timothy Kleehammer PLM (20)

Samples Reviewed and approved by:



Amanda Lang, Asbestos Laboratory Manager
or other approved signatory

Report amended: 08/30/2018 17:07:09 Replaces amended report from: 08/02/2018 15:26:50 Reason Code: Data Entry-Change to Appearance

OrderID: 221804458

EMSL Analytical, Inc.
1010 Yuma Street

Denver, CO 80204
PHONE: (303) 740-5700
FAX: (303) 741-1400

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 221804458

Company: All-Phase Environmental Consultants, Inc.		**EMSL-Bill to:** ☐ Different ☑ Same If Bill to is Different note instructions in Comments**	
Street: 721 W. 9th Street		*Third Party Billing requires written authorization from third party*	
City: Pueblo	**State/Province:** CO	**Zip/Postal Code:** 81003	**Country:** United States
Report To (Name): Logan Greenfield		**Telephone #:** 719-250-0036	
Email Address: logan@allphaseenvironmental.com		**Fax #:**	**Purchase Order:**
Project Name/Number: 18-3066-CDOT-A-AP 72 - 2nd		**Please Provide Results:** ☐ FAX ☑ E-mail ☐ Mail	
U.S. State Samples Taken: CO		**Connecticut Samples:** ☐ Commercial ☐ Residential	

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ■ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

**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.*

PCM - Air ☐ Check if samples are from NY
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ■ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable in NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NIOSH 9002 (<1%)

TEM – Air ☐ **4-4.5hr TAT (AHERA only)**
- ☐ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ Chatfield SOP
- ☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
- ☐ PLM CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ TEM Qual. via Filtration Technique
- ☐ TEM Qual. via Drop-Mount Technique

Other:
- ☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group** | **Filter Pore Size (Air Samples):** ☐ 0.8µm ☐ 0.45µm

Samplers Name: Logan Greenfield | **Samplers Signature:** [signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
2716-R1-1A	Textured Plaster - R1, R5		6-15-18
2716-R1-1B	↓		↓
2716-R5-1C			
2716-R5-1D			
2716-R5-1E			
2716-R2-2A	Textured Plaster - R2		
2716-R2-2B	↓		
2716-R2-2C			

Client Sample # (s): | **Total # of Samples:** 51

Relinquished (Client): [signature] **Date:** 6-18-18 **Time:** 1100

Received (Lab): MR **Date:** 6/19/18 **Time:** 10:05 am

Comments/Special Instructions:

EFY 7955 0259 4985

2|3

Page 1 of 3 pages

EMSL Analytical, Inc.
1010 Yuma Street

Denver, CO 80204
PHONE: (303) 740-5700
FAX: (303) 741-1400

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

221804458

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
2716-R4-3A	Textured Drywall - R3, R4		6-15-18
2716-R4-3B	↓		↓
2716-R3-3C	↓		↓
2716-R6-4A	Textured Plaster - R6, C1		↓
2716-R6-4B	↓		↓
2716-C1-4C	↓		↓
2716-R2-5A	Floor Tile		↓
2716-R2-5B	↓		↓
2716-R2-5C	↓		↓
2716-R1-6A	Vent Wrap		↓
2716-R5-6B	↓		↓
2716-R6-6C	↓		↓
2716-R6-6D	↓		↓
2716-R2-7A	Ceramic tile/Mortar		↓
2716-R3-7B	↓		↓
2716-R4-7C	↓		↓
2716-R7-8A	Textured Plaster - TF		↓
2716-R7-8B	↓		↓
2716-R8-8C	↓		↓
2716-C2-8D	↓		↓
2716-SW-8E	↓		↓
2716-R7-9A	Green Linoleum		↓
2716-R7-9B	↓		↓
2716-H-9C	↓		↓

*Comments/Special Instructions:

Page 2 of 3 pages

EMSL Analytical, Inc.
1010 Yuma Street

Denver, CO 80204
PHONE: (303) 740-5700
FAX: (303) 741-1400

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*:

221804458

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
2716-R8-10A	Sheet Flooring		6-15-18
2716-R8-10B	↓		
2716-R8-10C	↓		
2716-EX-11A	Brick/Mortar		
2716-EX-11B	↓		
2716-EX-11C	↓		
2716-EX-12A	Stucco		
2716-EX-12B	↓		
2716-EX-12C	↓		
2716-EX-13A	Roofing - 2 Layer		
2716-EX-13B	↓		
2716-EX-13C	↓		
2716-G-14A	Garage Flashing		
2716-G-14B	↓		
2716-G-14C	↓		
2716-G-15A	CMU Mortar		
2716-G-15B	↓		
2716-G-15C	↓		

*Comments/Special Instructions:

Page 3 of 3 pages

D

LABORATORY RESULTS & CHAIN OF CUSTODY - LEAD & TCLP

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 786-5974
http://www.EMSL.com cinnaminsonleadlab@emsl.com

EMSL Order:	201806942
CustomerID:	ALLP62
CustomerPO:	
ProjectID:	

Attn: **Richard Ralston**
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO

Phone:	(719) 225-6953
Fax:	(719) 542-2807
Received:	06/26/18 10:30 AM
Collected:	6/15/2018

Project: **18-3066-C70-L-AP-72A**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Weight*	*Lead Concentration*
2716E46-R2-1L	*201806942-0001*	6/15/2018	6/28/2018	0.2645 g	<0.0080 % wt
	Site: Room 2 - Kitchen - Tan				
2716E46-R2-2L	*201806942-0002*	6/15/2018	6/28/2018	0.2737 g	3.3 % wt
	Site: Room 2 - Kitchen - Blue/Tan				
2716E46-R2-3L	*201806942-0003*	6/15/2018	6/28/2018	0.2536 g	<0.0080 % wt
	Site: Room 2 - Kitchen Wall Plaster - Brown				
2716E46-R1-4L	*201806942-0004*	6/15/2018	6/28/2018	0.2630 g	0.082 % wt
	Site: Room 1 - Door From Living Room - Wood - Tan/Brown Shelac				
2716E46-R8-5L	*201806942-0005*	6/15/2018	6/28/2018	0.2576 g	<0.0080 % wt
	Site: Room 8 - Bedroom Plaster - Blue				
2716E46-EX-6L	*201806942-0006*	6/15/2018	6/28/2018	0.2555 g	0.0082 % wt
	Site: Ex - Wood - Light Brown				
2716E46-EX-7L	*201806942-0007*	6/15/2018	6/28/2018	0.2524 g	<0.0080 % wt
	Site: Ex - Garage - Metal - Cream				

Phillip Worby, Lead Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. 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. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 06/29/2018 09:45:27

OrderID: 201806942

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Lead (Pb) Chain of Custody

EMSL Order ID *(Lab Use Only)*: 201806942.

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
FAX: (856) 786-5974

Company: All-Phase Environmental Consultants, Inc	**EMSL-Bill to:** ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 721 West 9th Street	
City: Pueblo **State/Province:** CO	**Zip/Postal Code:** 81003 **Country:** US
Report To (Name): Richard Ralston	**Telephone #:** 7192256953
Email Address: rick@allphaseenvironmental.com	**Fax #:** 719-542-2807 **Purchase Order:**
Project Name/Number: 18-3066-C70-L-AP- 72A	**Please Provide Results:** ☐ Fax ☑ Email
U.S. State Samples Taken: CO	**CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hour | ☐ 6 Hour | ☐ 24 Hour | ☐ 48 Hour | ☒ 72 Hour | ☐ 96 Hour | ☐ 1 Week | ☐ 2 Week

**Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide*

Matrix	Method	Instrument	Reporting Limit	Check
Chips ☒ % by wt. ☐ mg/cm² ☐ ppm (mg/kg)	SW846-7000B	Flame Atomic Absorption	0.01%	☒
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	☐
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	☐
	NIOSH 7300M/NIOSH 7303	ICP-OES	0.5 µg/filter	☐
Wipe* ASTM ☐ non ASTM ☐ *if no box checked, non-ASTM Wipe assumed	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	☐
	SW846-6010B or C	ICP-OES	1.0 µg/wipe	☐
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW846-1311/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW846-1312/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW846-1312/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	40 mg/kg (ppm)	☐
	22 CCR App. II, SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	22 CCR App. II, SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	☐
	SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	☐
Wastewater Unpreserved ☐ Preserved with HNO_3 pH < 2 ☐	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	☐
Drinking Water Unpreserved ☐ Preserved with HNO_3 pH < 2 ☐	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☐
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	☐
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter	☐
Other:				☐

Name of Sampler: Rick Ralston **Signature of Sampler:** RRalst

	Sample #	Location	Volume/Area	Date/Time Sampled
1	2716E46-R2-1L	Kitchen Room 2	TAN	6/15/2018
2	2716E46-R2-2L	Kitchen Room 2	BLUE/TAN	"

Client Sample #s - **Total # of Samples:** 7

Relinquished (Client):	RRalst	**Date:**	6/25/2018	**Time:**	
Received (Lab):	[signature]	**Date:**	6/26/18	**Time:** 1030	

Comments:
BillTo: All-Phase Environmental Consultants, Inc, 721 West 9th Street, Pueblo, CO, 81003, US
Attention: Brandice Eslinger Phone: 719-240-4690 Email: brandice@allphaseenvironmental.com Purchase Order:

OrderID: 201806942

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

LEAD (Pb) CHAIN OF CUSTODY

EMSL ORDER ID *(Lab Use Only)*:

201806942

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
FAX: (856) 786-5974

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

	Sample #	Location	Volume/Area	Date/Time Sampled
3	2716R46-R2-3L	ROOM 2 WALL KITCHEN PLASTER	BROWN	6/15/2018
4	2716E46-R1-4L	ROOM 1 DOOR FROM LIVING ROOM WOOD	TAN/BROWN shelac	"
5	2716E46-R8-5L	ROOM 8 PLASTER Bed Room	BLUE	"
6	2716E46-EX-6L	EX WOOD	Light BROWN	"
7	2716E46-EX-7L	EX-SIDING Metal	Cream	"

Comments/Special Instructions:

BillTo: All-Phase Environmental Consultants, Inc, 721 West 9th Street, Pueblo, CO, 81003, US
Attention: Brandice Eslinger Phone: 719-240-4690 Email: brandice@allphaseenvironmental.com Purchase Order:

Page 2 of 2 pages

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 786-5974
http://www.EMSL.com cinnaminsonleadlab@emsl.com

EMSL Order:	201806930
CustomerID:	ALLP62
CustomerPO:	
ProjectID:	

Attn: **Richard Ralston**
All-Phase Environmental Consultants, Inc
721 West 9th Street
Pueblo, CO

Phone:	(719) 225-6953
Fax:	(719) 542-2807
Received:	06/26/18 10:30 AM
Collected:	6/15/2018

Project: **18-3066-C70-L-AP-72A**

Test Report: Toxicity Characteristic Leachate Procedure (1311/7000B)

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Lead* ***Concentration***
2716R-TC-1	*201806930-0001*	6/15/2018	6/28/2018	0.68 mg/L
	Site: TCLP- Throughout			

Phillip Worby, Lead Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

Initial report from 06/29/2018 10:47:18

OrderID: 201806930

TCLP

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Lead (Pb) Chain of Custody

EMSL Order ID *(Lab Use Only)*: 201806930

EMSL Analytical, Inc.
200 Route 130 North
Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
FAX: (856) 786-5974

Company : All-Phase Environmental Consultants, Inc	**EMSL-Bill to:** ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 721 West 9th Street	
City: Pueblo **State/Province:** CO	**Zip/Postal Code:** 81003 **Country:** US
Report To (Name): Richard Ralston	**Telephone #:** 7192256953
Email Address: rick@allphaseenvironmental.com	**Fax #:** 719-542-2807 **Purchase Order:**
Project Name/Number: 18-3066-C70-L-AP- 72A	**Please Provide Results:** ☐ Fax ☑ Email
U.S. State Samples Taken: CO	**CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hour | ☐ 6 Hour | ☐ 24 Hour | ☐ 48 Hour | ☒ 72 Hour | ☐ 96 Hour | ☐ 1 Week | ☐ 2 Week

**Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide*

Matrix	Method	Instrument	Reporting Limit	Check
Chips ☐ % by wt. ☐ mg/cm² ☐ ppm (mg/kg)	SW846-7000B	Flame Atomic Absorption	0.01%	☐
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	☐
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	☐
	NIOSH 7300M/NIOSH 7303	ICP-OES	0.5 µg/filter	☐
Wipe* ASTM ☐ non ASTM ☐ *if no box checked, non-ASTM Wipe assumed	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	☐
	SW846-6010B or C	ICP-OES	1.0 µg/wipe	☐
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☒
	SW846-1311/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
SPLP	SW846-1312/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW846-1312/SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
TTLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	40 mg/kg (ppm)	☐
	22 CCR App. II, SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	☐
STLC	22 CCR App. II, 7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	22 CCR App. II, SW846-6010B or C	ICP-OES	0.1 mg/L (ppm)	☐
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	☐
	SW846-6010B or C	ICP-OES	2 mg/kg (ppm)	☐
Wastewater Unpreserved ☐ Preserved with HNO_3 pH < 2 ☐	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
	EPA 200.7	ICP-OES	0.020 mg/L (ppm)	☐
Drinking Water Unpreserved ☐ Preserved with HNO_3 pH < 2 ☐	EPA 200.8	ICP-MS	0.001 mg/L (ppm)	☐
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
	EPA 200.5	ICP-OES	0.003 mg/L (ppm)	☐
TSP/SPM Filter	40 CFR Part 50	ICP-OES	12 µg/filter	☐
	40 CFR Part 50	Graphite Furnace AA	3.6 µg/filter	☐
Other:				☐

Name of Sampler: R Ralston (RALSTON) **Signature of Sampler:** R Ralston

Sample #	Location	Volume/Area	Date/Time Sampled
(1) 2716R-TC-1	TCLP - throughout	APPROX ½ lb	6/15/2018

Client Sample #s - **Total # of Samples:** 1

Relinquished (Client):	R Ralston	**Date:**	06/25/2018	**Time:**	1600
Received (Lab):	Courier	**Date:**	6/26/18	**Time:** 1030	EMSL

Comments:
BillTo: All-Phase Environmental Consultants, Inc, 721 West 9th Street, Pueblo, CO, 81003, US
Attention: Brandice Eslinger Phone: 719-240-4690 Email: brandice@allphaseenvironmental.com Purchase Order:

spoke to Rick, he is aware 96 HR is the quickest TAT, 6/26/18 - CC

6b. Asbestos Abatement Project Design

Foothills Environmental, Inc.

Industrial Hygiene, Safety & Environmental Services

(Version 1, 11/15/18)

ASBESTOS ABATEMENT PROJECT DESIGN

SINGLE FAMILY RESIDENCE ABATEMENT PROJECT

2716 E. 46TH AVENUE
DENVER, COLORADO 80216

PREPARED FOR:

JKS Industries, LLC
747 Sheridan Blvd., #9A
Lakewood, Colorado 80214

November 15, 2018

FEI Project Number: AS18207-18

Prepared By:
Nicolas D. Vasquez, CDPHE Cert #22566
Foothills Environmental

Foothills Environmental, Inc.
11099 W. 8th Ave.
Lakewood, Colorado 80215
Phone: 303-232-2660

Table of Contents

APPENDIX A – Drawings

APPENDIX B – Certificates

1.0 Scope of Work

1.1 Materials Identified for Removal

The General Abatement Contractor (GAC) will be performing the removal of asbestos containing material(s) as indicated in the table below. This information was gathered from the inspection report prepared by All-Phase Environmental Consultants (APEC) dated July 23, 2018. A copy of the Inspection and this Project Design will be available onsite during the course of the project. The total amount of actual asbestos containing material to be removed on this project is estimated to be greater than 160 sf/260 lf or the equivalent of a 55 gallon drum.

The following ACM was identified for removal prior to demolition:

Sample Name	Sample Location	Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification	Estimated Quantity (Sq. ft.)
2716-R1-6A	ROOM 1	VENT WRAP 70% CHRYSOTILE	PLM	Good	VENT WRAP	REGISTERS IN ROOMS 1, 2, 5 AND 6	RACM	5 REGISTERS
2716-R5-6B	ROOM 5	VENT WRAP 70% CHRYSOTILE	PLM	Good			RACM	
2716-R6-6C	ROOM 6	VENT WRAP 70% CHRYSOTILE	PLM	Good			RACM	
2716-R6-6Q	ROOM 6	VENT WRAP 35% CHRYSOTILE	PLM	Good			RACM	

ND=Non-Detect
PLM=Polarized Light Microscopy
NA=Not Applicable
RACM=Regulated Asbestos Containing Materials

Regulatory asbestos abatement notification and permit from the Colorado Department of Public Health and Environment (CDPHE) will be required for this project.

1.2 Schedule

The following schedule has been proposed for the project. Phasing and dates are included in Section 1.3, Sequence of Work.

Project Start Date: November 26, 2018
Project Completion Date: November 27, 2018

1.3 Sequence of Work

The following phasing plan has been developed for the abatement. This plan was submitted with the permit application which corresponds to the drawing attached in Appendix A.

- **Phase 1** Start: November 26, 2018
  Finish: November 27, 2018

Abatement of vent wrap in all designated areas will be completed in one secondary containment.

1.4 Discussion of Removal Methods

All friable asbestos-containing vent wrap, as well as asbestos contaminated materials that are located in the work area shall be removed from their installed locations via facility component removal inside a secondary containment and by utilizing wet removal methods and a combination of handheld tools.

Waste generated during removal will be gathered wrapped with 6ml thick polyethylene sheeting while wet. Work will be accomplished using CDPHE certified supervisors and workers.

Work completion includes preparation of the work area, pre-clean activities, removal and disposal of all specified ACM from the premises, final cleaning of the work area, final visual inspection, lockdown, and final clearance monitoring. The project will be considered complete when all containments and work areas have passed clearance criteria.

The following types of containments will be used during the project followed by procedures for setup and dismantling:

Secondary Containments

The GAC shall conduct abatement activities in accordance with CDPHE Regulation No. 8 in the following mandatory sequence for secondary containment:

1) Install critical barriers (pursuant to subsection III.I, Critical Barrier Installation)
2) Establish negative pressure (pursuant to Regulation No. 8 subsection III.J, Air Cleaning and Negative Pressure Requirements)

Note: *The removal of non-ACM building materials and components may only take place after negative air pressure is established in the containment work area(s).*

3) Construct the decontamination area (pursuant to subsection III.K, Decontamination Area)
4) Pre-clean surfaces (pursuant to subsection III.L, Pre-cleaning of Surfaces)
5) Cover fixed objects (pursuant to subsection III.M, Covering Fixed Objects)
6) Construct the containment (pursuant to subsection III.N.4, Secondary Containment)
7) Conduct abatement (pursuant to subsection III.V.2, Facility Component Removal)
8) Conduct final visual inspection (pursuant to paragraph III.P.1., Final Visual Inspection)
9) Conduct final clearance air monitoring (pursuant to paragraph III.P.3., Final Clearance Air Monitoring)
10) Conduct the tear-down (pursuant to subsection III.Q., Tear-down)

All waste from the project will be packaged in approved containers and transferred to an approved landfill for disposal. After successful air clearance of each containment the containment can be removed and all non-reusable containment materials will be packaged for disposal.

2.0 Special Conditions

2.1 Regulatory Notification and Variances

The General Abatement Contractor, (GAC) will make any required notifications to Federal and State entities regulating their work as required by applicable rules, regulations, and standards. This includes, but is not limited, to the National Emission Standards for Hazardous Air Pollutants (NESHAP) notification [notice provided to the Colorado Department of Public Health and Environment (CDPHE) with permit application]. ***The abatement contractor is responsible for quantifying amounts of ACM necessary to properly complete the project.***

2.2 Project Manager Requirement

Colorado Regulation No. 8 requires a Project Manager on all asbestos abatement projects in which the amount of friable ACM to be abated exceeds 1,000 linear feet on pipes, or 3,000 square feet on other surfaces. A Project Manager may be required for this project, unless a waiver is requested and granted by CDPHE.

2.3 Facility Occupancy Status

During abatement activities the building will not be occupied by the former tenants but may be visited by owner personnel as well as other tradesmen.

2.4 Site Security

Entry to the regulated asbestos work area is by permission only to authorized personnel. The perimeter of the work area may be monitored during abatement by a certified Air Monitoring Specialist (AMS). Only asbestos certified/licensed personnel employed by the GAC or federal or state regulatory agency personnel and the AMS will be allowed access to the work area. A logbook will be maintained at the entrance to the work area. Everyone who enters the work area must record name, affiliation, time in and time out for each entry.

2.5 Field Changes

Minor modifications to the project design are allowed. Minor changes include but are not limited to, relocation of negative air machines, decontamination facility and waste load-out. Any modifications to the project design must be approved by the Project Designer before the changes are made.

3.0 Project Design

3.1 Standards and Primacy of Rules

The following standards will be adopted as they pertain to asbestos abatement. In any instance where adopted standards are in conflict with each other, the most stringent shall apply.

1) Colorado Department of Public Health and Environment Regulation #8
2) 5CCR 1000-10 Part B asbestos handling, transportation, and storage
3) 29 CFR 1926.1101, the OSHA Construction Industry Asbestos Standard
4) 40 CFR 61 Subpart M, EPA's NESHAP Asbestos Standard
5) NIOSH/OSHA/EPA –"Occupational; Safety & Health Guidance Manual for Hazardous Waste Site Activities", Section 8-20; Heat Stress and Other Physiological Factors.

6) All other applicable laws, rules, and regulations, including but not limited to those relating to:
7 Workers' Compensation Insurance;
8 Liability Insurance
9 All contract specifications and documentation

3.2 Site Access

The GAC has access to the facility for the purpose of abatement from 6:30 AM to 5:00 PM until project completion which is projected to be 11/27/18.

3.3 Utilities Service

Access to electrical power, water and sanitary sewer is not available inside the facility. The contractor will provide utility services during the duration of the project. Any temporary utility lines running to the regulated asbestos work area shall be adequately protected from damage and abrasion from vehicle and foot traffic. All waste water shall be filtered to five (5) microns prior to discharge into a sanitary sewer.

GAC will have to provide temporary restrooms located close to the project site at approved locations for the duration of the project (to be placed in a protected area if possible).

3.4 Decontamination Facilities & Load-Out Facilities

Personnel decontamination facilities shall consist of an Equipment (Dirty) Room, Shower, and a clean room constructed in accordance with Regulation #8 III.K Decontamination Unit. If waste load out is by direct load out, it shall consist of a direct waste loadout configuration that is currently approved by CDPHE (Configuration diagram approved by CDPHE shall be attached to this Project Design if used).

All load-out and disposal procedures shall be in accordance with applicable federal, state, and local regulations and project specifications.

3.5 Critical Barriers

All critical barriers will consist of a minimum 1 layer of 6mil poly critical barrier on all, openings, and vents.

3.6 Negative Pressure Ventilation

The GAC shall maintain a negative pressure differential of -0.02 inches of water in the work areas in accordance with Regulation #8 III.J Air cleaning and Negative Pressure Requirements, until final visual and clearance air monitoring complete. The calculations in the next section take into account at least 1 backup Negative Air Machine (NAM) with HEPA filtration. The contractor will also be using generators for maintaining electrical supply. In the case of generator failure, all workers will leave the work area and seal the containment. A replacement generator will be available onsite or within an hour's time of the project for use in case of failure. Work will resume when negative pressure is restored. If negative pressure is not restored within an hour's time alternate means of electrical supply will be sought. If no supply is available, contractor will contact CDPHE and follow directions for spill response.

3.7 Air Exchange Calculations

AIR CHANGE CALCULATIONS ***for a 2000 cfm negative air machine (NAM)***

$$\textit{AIR CHANGES} = \frac{A}{B \times C}$$

Where: A = Work area volume in cubic feet (l x w x h)
B = 15 minutes
C = Estimated rated capacity of NAM (1,500 cfm)

Phase 1 – Vent Wrap Facility Component Removal (Secondary Containment)

A	=	25	x	28	x	9	=	6300 cubic feet
B	x	C	=	22,500				
6300		/		22,500		=	0.28	1 NAM required

3.8 Containment Construction

Containments for the asbestos removal shall be constructed in accordance with CDPHE Regulation 8 and this project design. Danger signs will be posted at ingress locations, and approaches to locations, where airborne concentrations of asbestos exceed or can reasonably be expected to exceed the PEL. Signs will be posted at a distance sufficiently far from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of workplace containment barriers.

Danger signs will include the following wording:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

3.9 Set up of work areas

Containment Components

2”x 4”s wood studding can be used as temporary framing to support any containment systems; this may include tie wires also where needed. 1 layer of 10 mil re-enforced poly sheeting will be utilized for any exterior critical barriers, negative air machines will be installed once the poly sheeting is installed. A full 3 stage decontamination unit equipped with hot and cold water, shampoo, disposable towels, and a 2 stage water filtration unit filter all water to 5 micron, prior to being discharged into the sanitary sewer system shall be used. View ports will be installed where appropriate with a minimum of 12” x 12” Plexi™ glass and or exterior windows.

Air flow testing utilizing smoke tubes will be performed to validate air flow direction and air exchanges.

Pre-Cleaning Activities

Pre-cleaning activities will be performed in accordance with CDPHE Regulation 8. All workers performing pre-cleaning must utilize HEPA equipped vacuums and wet methods. Any prepping activities that will contact non-friable ACM, or be within arms' reach of friable ACM must be accomplished by workers utilizing PPE.

3.10 Asbestos Removal

Removal of materials containing asbestos and contaminated with asbestos shall be performed in accordance with the Colorado Department of Public Health and Environment Regulation 8 III, Abatement, Renovation and Demolition Projects and this project design.

3.11 Asbestos Spill Response

In the event of a spill or a breach of the regulated work area containment, follow procedures in Section III.T. of Regulation No. 8, which includes cleaning the area outside the regulated work area. Visible debris shall be cleaned utilizing HEPA vacuuming and wet wiping plus an additional 10 horizontal feet beyond the visible debris. All filters, mop heads, and cloths utilized during clean-up activities shall disposed of as asbestos contaminated waste in leak tight containers.

The GAC shall have available, equipment and supplies (HEPA filtered vacuum, airless sprayer with amended water, mops, rags, polyethylene sheeting, duct tape, caution tape…) for spill response in the event of accidental spill of materials containing asbestos.

In the event of an asbestos spill outside the work area containment the GAC shall:

- Make appropriate notices based on size of spill.
- Immediately wet the spilled material and surrounding area with the airless sprayer.
- Restrict access to the spill area and post warning signs to prevent entry to the area by persons other than those necessary to respond to the incident.
- Seal all openings between the contaminated and uncontaminated areas as directed by the asbestos consultant. This is to be accomplished by using polyethylene sheeting and tape.
- HEPA vacuum and wet clean all surfaces in the contaminated area.

Following completion of the above, the on sight Air Monitoring Specialist shall conduct a visual assessment of the spill area to confirm adequate cleaning has been accomplished by the GAC.

3.12 Asbestos Waste Transportation, Storage, and Disposal

All ACM waste must be wrapped in two layers of 6 mil polyethylene sheeting or double-bagged in 6 mil polyethylene bags labeled with the appropriate OSHA label for asbestos and must also bear the generator label as required by EPA's 40 CFR 61 Subpart M NESHAP Standard. Containerizing and transport of asbestos wastes shall be in accordance with applicable federal and state regulations.

The existing installed building finishes, hardscaping and landscaping shall be protected from damage by the GAC, until completion of all works.

Safety scaffolding, rubbish skips, access ladders etc. shall be approved by the client and in accordance with the current Health and Safety regulations.

GAC workers will not drag or drop packaged waste. All waste equipment and materials will be hand carried, or transported in wheeled carts to waste transport vehicles.

All packaged asbestos waste shall be directly loaded from the work area onto a 6mil polyethylene lined enclosed truck or dumpster container for disposal. No waste material may be temporally stored in the building or the work area containment.

Waste Disposal:

All waste containers shall be transported from the permitted work areas to an approved disposal land fill by the GAC (Denver Aurora Disposal Site).

Waste Transporter:

By 5280 Waste Solutions.

3.13 Final Clean/ Final Visual Inspection Criteria

All interior surfaces of the work area will be free of visible dust and debris. The work area must pass a final visual inspection by a CDPHE Certified Air Monitoring Specialist (AMS) leaving only critical barriers in place.

3.14 Final Air Clearance Monitoring

Clearance criteria for this containment shall be in accordance with CDPHE Regulation #8, Section III.P

For each work area within the project where the amount of ACM is:	State-Permitted Project in Non-School Building	
	Minimum # of samples to clear each of the following:	
	Work Area	Project
Less than 3 square feet/3 linear feet	1	5
From 3 square feet/3 linear feet up to 32 square feet/50 linear feet/volume equivalent of a 55-gallon drum	2	5
Greater than 32 square feet/50 linear feet/volume equivalent of a 55-gallon drum up to 160 square feet/260 linear feet/volume equivalent of a 55-gallon drum	5	5
Greater than 160 square feet/260 linear feet/volume equivalent of a 55- gallon drum	5	5

Upon notification that clearance monitoring levels are acceptable, the GAC may remove critical barriers and demobilize from the work area. If any samples collected for the final air test exceeds (0.01 fibers per cubic centimeter, 0.01 f/cm^3 for PCM using the NIOSH Method 7400 or 70 structures per square millimeter (70 s/mm^2) as analyzed by the TEM method in 40 C.F.R. Part 763 Appendix A to Subpart E (EPA 1995) the entire work area shall be re-cleaned immediately upon receipt of air test results.

Any failed abatement work area shall be re-tested and the costs associated for additional Final Clearance Air Monitoring shall be borne by the GAC at no additional cost to the Owner.

3.15 Personal Exposure Air Monitoring

The GAC shall be responsible for conducting personal exposure air-monitoring as applicable in accordance with OSHA 29 CFR 1926.1101 Asbestos Construction Standard. Contractor to supply results to personnel and will post results onsite.

3.16 Electrical Hazards Control

All electrical power utilized during the project will be on ground fault circuit interrupters (GFCI) whose power source is located outside the work area.

3.17 Emergency Egress and Fire Protection

The abatement contractor shall abide by the emergency egress rules for the facility. All contractor personnel shall receive emergency procedure orientation specific to the facility prior to initiation of abatement activities.

3.18 Fire Protection Plan

1. No items capable of initiating or sustaining combustion (lighters, matches, torches, etc.) will be allowed in containment.
2. The use of flammable liquids is not permitted.
3. Any electricity utilized must be on Ground Fault Circuit Interrupters (GFCI).
4. A minimum of one, 2A: 20B: C rated fire extinguishers will be maintained on-site. There must be available at least one 2A: 20B: C rated fire extinguisher within a maximum travel distance of 10 feet from any point in the work area.
5. Workers will be trained in the use of fire extinguishers, emergency egress plans, basic fire safety, and emergency reporting procedures prior to work beginning.
6. All emergency exits will be labeled as such with tools available for breaching poly and keys in door locks where necessary.
7. The Contractor must implement an emergency action and fire prevention plan in accordance with 29 CFR 1910.38 Employee emergency plans and fire prevention plans.

3.19 Fall Protection

The GAC shall provide proper fall protection and training for their employees when working above 6 feet of height in accordance with Occupational Safety and Health Administration 29 CFR Part 1926 Subpart M Fall Protection.

3.20 Respiratory Protection / PPE

The GAC shall provide proper respiratory protection for their employees with NIOSH approved HEPA filters during all pre-clean, abatement removal, waste load out procedures and during waste lift operations for effected employees. The GAC shall provide proof of medical fitness to wear respiratory protection and current fit testing documentation for all employees.

3.21 Work Area Protection

The GAC shall repair or replace, to the Owner's satisfaction, any damage caused by the GAC or GAC subcontractors, to existing finishes, landscaping, or other building components.

3.22 Additional PPE

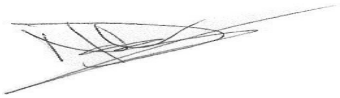
- Hooded Tyvek suits
- Safety Glasses with side shields (exception – not required when wearing a full face respirator).
- Leather Gloves
- Safety toe boots
- Fall Protection as required.
- PPE per MSDS / SDS requirements.

3.23 Pre-Abatement Document Submittal

The GAC shall provide the following submittals to the Owner's Asbestos Competent Person / Safety Department for approval prior to site mobilization.

- ✓ Copies of all worker AHERA / STATE certifications.
- ✓ Copies of all worker asbestos medical evaluations.
- ✓ Copies of all worker respirator fit tests.
- ✓ Copies of MSDS for all chemicals (spray-glue, encapsulant, surfactant etc.) that will be used
- ✓ Asbestos waste receipt / total.

Completed by:



Nicolas D. Vasquez CDPHE Asbestos Project Designer Certificate # 22566

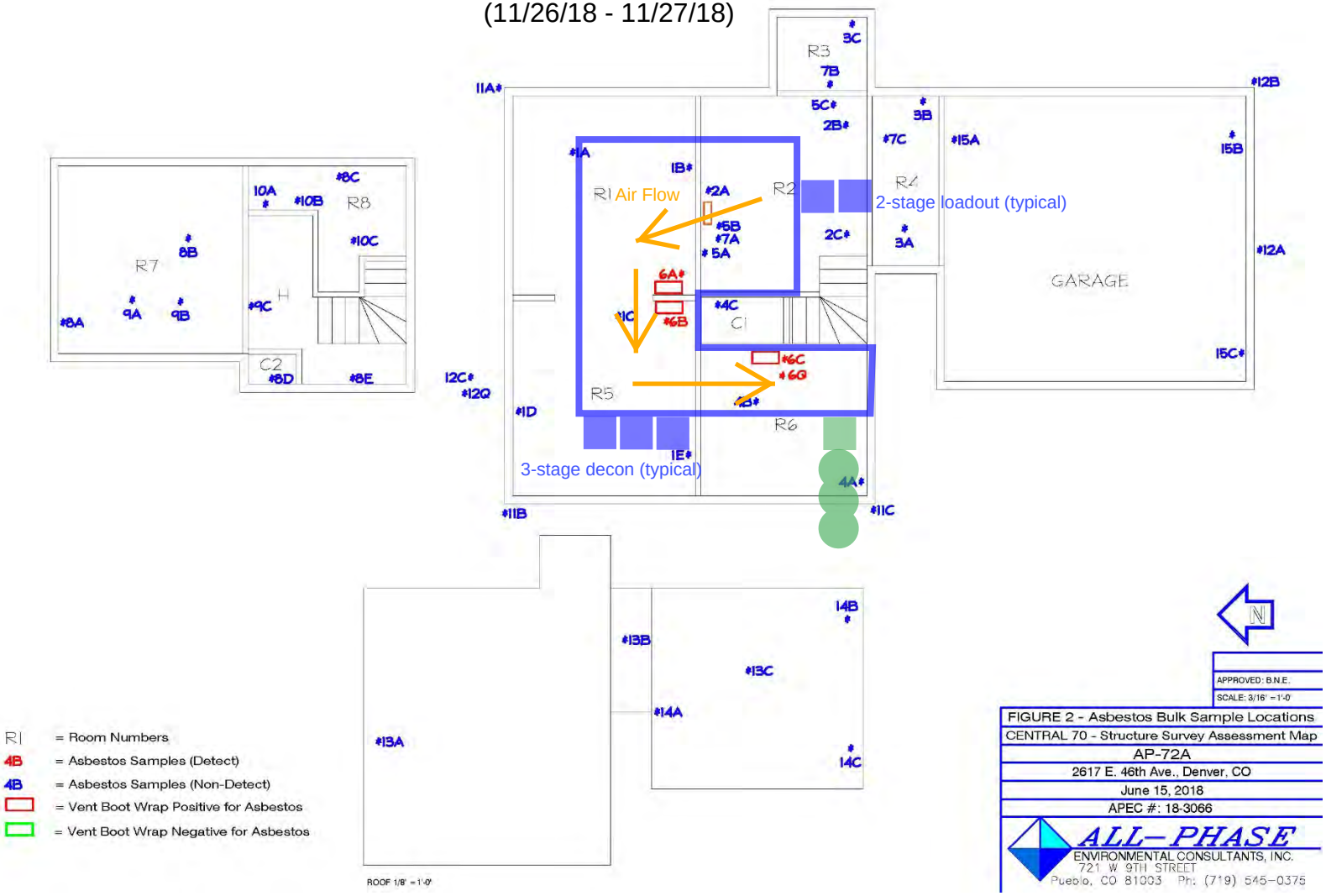
Foothills Environmental Asbestos Consulting Firm CDPHE Registration # 14925

Appendix A

Drawings

ABATEMENT IN SECONDARY CONTAINMENT

(11/26/18 - 11/27/18)



Drawing excerpted from All-Phase Inspection

2716 E. 46th AVENUE DENVER, CO (Not to Scale)	FEI Project #AS18207-18	Date: 11/14/18	Figure 1
	Approved by: DMB	Drawn By: NDV	
	Foothills Environmental, Inc. 11099 W 8th Avenue Lakewood, CO 80215	Signature:	CDPHE CERT #22566

Appendix B

Certificates

Colorado Department
of Public Health
and Environment

ASBESTOS CONSULTING FIRM

This certifies that

Foothills Environmental, Inc.

Registration No.: ACF - 14925

has met the registration requirements of 25-7-507, C.R.S. and the Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos consulting activities as required under Regulation No 8, Part B, in the state of Colorado.

Issued: January 30, 2018
Expires: January 30, 2019

Authorized APCD Representative

SEAL

Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Nicolas Vasquez

Certification No.: 22566

has met the requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby certified by the state of Colorado in the following discipline:

Project Designer*

Issued: **February 08, 2018**

Expires: **February 08, 2019**

**** This certificate is valid only with the possession of a current Division-approved training course certification in the discipline specified above.***

Authorized APCD Representative

SEAL

CHC Training
Nationwide Training & Certification Experts
www.trainingchc.com
303.412.6360
(855) 60.CERTIFY

1775 West 55th Avenue
Denver, CO 80221,
United States of America

CERTIFICATE OF ACHIEVEMENT

This certificate is awarded to:

NICOLAS VASQUEZ

In recognition of satisfactory completion of the EPA-approved annual asbestos refresher training course under section 206 of the Toxic Substance Control Act (TSCA) and Colorado Regulation No. 8 entitled

PROJECT DESIGNER

COURSE DATE:	DECEMBER 21, 2017
EXPIRATION DATE:	DECEMBER 21, 2018
COURSE HOURS:	8.0

Verify Credential

Danaya N. Benedetto
Co-Founder & CEO
Training Program Manager

Credential License ID: 11084750

CHC TRAINING® EST. 2007 ACCREDITED ALUMNI — SAFETY · QUALITY · INTEGRITY · COMPLIANCE

Frank Hulce
Instructor

CHC Training Certificate No.
R17-2200-APD-CO

Visit our Website

6c. Pre-Demolition Engineering Survey

ANCHOR
ENGINEERING, INC.
www.anchoreng.com

Pre-Demolition Survey
And General Demolition Plan
For
2716 East 46th Avenue
Denver, CO 80216

Engineers: Brian Lobmeyer, P.E., S.E.
Glen L. Wilson, E.I.

December 13, 2018
Project No: 180113

ANCHOR ENGINEERING, INC.
www.anchoreng.com

December 13, 2018

Stephen P. Di Nardo
JKS Industries, LLC
747 Sheridan Blvd #9A
Lakewood, CO 80214

Re: 2716 East 46th Avenue, Denver, CO 80216
Pre-Demolition Engineering Survey per OSHA 1926.850(a)
And General Demolition Plan

Date of Observation: 12/13/18

Dear Mr. Di Nardo:

At the request of JKS Industries (JKS), a representative from Anchor Engineering, Inc. (AEI) performed a site observation at the above-referenced structure on Thursday, December 13, 2018.

For the purpose of this report, there is one building on the property. The front elevation of the building faces north and is parallel to East 46th Avenue. At the time of our visit the building was vacant.

The purpose of our site visit was twofold:

1. To give an assessment of the current condition of the structure as it relates to structurally related hazards before the proposed demolition activities. OSHA 1926.850 is stated below, along with project specific applicability to the subject buildings.

    a. ***OSHA 1926.850(a):*** *Prior to permitting employees to start demolition operations, an engineering survey shall be made, by a competent person, of the structure to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure. Any adjacent structure where employees may be exposed shall also be similarly checked. The employer shall have in writing evidence that such a survey has been performed.*

    Project Specific Applicability: The information contained in this report satisfies the requirement of this guideline. The subcontractor shall review this report and make a copy available to all employees on the project at the pre-demolition meeting, and it shall also be included in the job site books.

    b. ***OSHA 1926.85(b):*** *When employees are required to work within a structure to be demolished which has been damaged by fire, flood, explosion, or other cause, the walls or floor shall be shored or braced.*

    Project Specific Applicability: The building at 2716 East 46th Avenue, Denver, CO 80216 has not been damaged by fire, flood, explosion, or other events. Therefore, no shoring is required.

    c. ***OSHA 1926.850(c):*** *All electric, gas, water, steam, sewer, and other service lines shall be shut off, capped, or otherwise controlled, outside the building line before demolition work is started. In each case, any utility company which is involved shall be notified in advance.*

    Project Specific Applicability: The contractor and subcontractor will ensure all electric, gas, water, steam, sewer, and other services are to be cut off prior to any work being performed. Contractor shall confirm with KMP through the pre-demolition check list and present the necessary information in the pre-demolition meetings.

d. ***OSHA 1926.850(d):*** *If it is necessary to maintain any power, water or other utilities during demolition, such lines shall be temporarily relocated, as necessary, and protected.*

Project Specific Applicability: The demolition of 2716 East 46th Avenue, Denver, CO 80216 does not require any power, water or other utilities.

e. ***OSHA 1926.850(e):*** *It shall also be determined if any type of hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in any pipes, tanks, or other equipment on the property. When the presence of any such substances is apparent or suspected, testing and purging shall be performed and the hazard eliminated before demolition is started.*

Project Specific Applicability: All types of hazardous chemicals, gases, explosives, flammable materials, or other dangerous substances shall be removed from the structure prior to demolition as part of the pre cleaning phase during the environmental remediation. All materials are to be documented, manifested, and included in the environmental close out documents.

f. ***OSHA 1926.850(f):*** *Where a hazard exists from fragmentation of glass, such hazards shall be removed.*

Project Specific Applicability: All hazards from fragmentation of glass shall be removed in the normal course of demolition.

g. ***OSHA 1926.850(g):*** *Where a hazard exists to employees falling through wall openings, the opening shall be protected to a height of approximately 42 inches.*

Project Specific Applicability: No employees are permitted to enter the structure once demolition begins. Rule applies to interior demolition.

h. ***OSHA 1926.850(h):*** *When debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped shall be completely enclosed with barricades not less than 42 inches high and not less than 6 feet back from the projected edge of the opening above. Signs, warning of the hazard of falling materials, shall be posted at each level. Removal shall not be permitted in this lower area until debris handling ceases above.*

Project Specific Applicability: No employees are permitted to enter the structure once demolition begins. Rule applies to interior demolition.

i. ***OSHA 1926.850(i):*** *All floor openings, not used as material drops, shall be covered over with material substantial enough to support the weight of any load which may be imposed. Such material shall be properly secured to prevent its accidental movement.*

Project Specific Applicability: The building is a single story structure. Refer to the demolition sequencing section of this report for further information.

OSHA 1926.850(j): *Except for the cutting of holes in floors for chutes, holes through which to drop materials, preparation of storage space, and similar necessary preparatory work, the demolition of exterior walls and floor construction shall begin at the top of the structure and proceed downward. Each story of exterior wall and floor construction shall be removed and dropped into the storage space before commencing the removal of exterior walls and floors in the story next below.*

Project Specific Applicability: The building is a single story structure. Refer to the demolition sequencing section of this report for further information.

j. ***1926.850(k):*** *Employee entrances to multistory structures being demolished shall be completely protected by sidewalk sheds or canopies, or both, providing protection from the face of the building for a minimum of 8 feet. All such canopies shall be at least 2 feet wider than the building entrances or openings (1 foot wider on each side thereof), and shall be capable of sustaining a load of 150 pounds per square foot.*

Project Specific Applicability: Not applicable. Building is a single story structure. No employees are permitted to enter the structure once demolition begins.

2. Provide a general outline of the demolition procedures and sequence that is proposed to be used in the demolition of the subject structure. These outlined procedures/sequences are subject to change by AEI and/or the demolition contractor based on the observed response of the structure overall and components thereof during actual demolition operations.

No architectural or structural drawings were provided for our review.

The building is a single-story residential structure and is assumed to be founded on multi-wythe masonry foundation walls. The residence appears to be approximately 24'x27' with the long direction oriented east to west. The structure is assumed to have a full basement with multi-wythe masonry foundation walls and concrete slab on grade floor. The exterior walls appear to be multi-wythe masonry construction. The roof framing is assumed to be composed of dimension lumber framing. Additionally, there is an attached garage on the south side of the residence that is approximately 16'x22' with the long direction oriented east to west. It appears to have multi-wythe masonry exterior walls with a wood-framed roof system and an assumed concrete slab-on-grade foundation.

Existing Condition Observation

During our site visit we made visual observations around the building perimeter only. The structure was partially exposed in some areas. All of the existing structural systems that were exposed to view appeared to be in good condition. We saw no evidence of noteworthy structural distress. It is our professional opinion that the possibility of un-planned collapse of any portion of the existing structure is very low. Workers may be allowed in the building to prepare them for demolition with such activities as removal of materials or other work that does not involve activities that affect existing structural systems.

Outline of Proposed Demolition Procedures, Equipment, and Sequence

Equipment

We anticipate demolition for this structure to be completed with heavy equipment including:

- "Track-hoe" excavators capable of reaching structural elements to be demolished. Excavators may be equipped at times with buckets/grapples, hydraulically actuated demolition hammers or shears, and other custom extensions for demolition and/or holding elements for temporary stability.
- Small skid steer loaders may also be utilized from time to time during demolition

Demolition Sequencing

General

After the commencement of demolition with heavy equipment, by necessity, structural systems from this point forth will be destroyed. Demolition should proceed as fast as practical until the structure is demolished in its entirety. The lateral stability of the buildings are provided by the perimeter masonry walls.

During demolition operations, care must be taken to protect and prevent damage to any active or live utilities both above and below ground.

During demolition, water will be used to wet down the area that is being demolished prior to starting the demolition. During the demolition process a water spray will be used to minimize the fugitive particulate matter emissions. The ground will be

sprayed with water either by water truck or some type of water spray to minimize fugitive particulate emissions from haul trucks and demolition equipment.

Sequence

The building superstructure may be collapsed into the basement starting at the north or south side of the building and proceeding thru the length of the building in the north-south direction. Do not drive equipment onto the footprint of the building until the structure has been collapsed. The property is bordered on the north by East 46th Avenue and on the west by 4550 Clayton Street which is also scheduled for demolition. The adjacent alley on the east may require temporary closure during demolition procedures to prevent public endangerment. The property is bordered on the south by a private multi-unit residence which was not scheduled for demolition at the time of this report. Once the roof, wall, and floor systems are demolished, the slab on grade and foundation can be removed in any sequence.

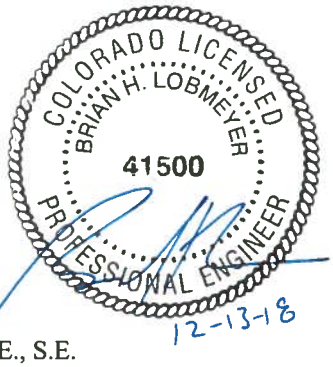
Closing

This report constitutes an engineering review and summary of the pre-demolition condition of the structural systems of the subject buildings as well as a general outline of demolition procedures and sequencing. Note that the conclusions drawn are based on visual observations and our expertise and experience with structural engineering of building structures. Unless noted otherwise, no non-destructive or destructive testing of any kind was performed, nor was any formal engineering analysis completed. These procedures/sequences outlined herein are subject to change by AEI and/or the demolition contractor based on the observed response of the structure overall and components thereof during actual demolition operations. Anchor Engineering, Inc. shall be held harmless for damage of any kind to surrounding structures or property or for injury of any kind to any person or persons. The demolition contractor is responsible for jobsite safety. The conclusions presented in this report are based on conditions noted at the time of the observation. Commentary or recommendations regarding environmental issues are beyond the scope of this report. Should questions arise, or if further information is required regarding the content of this report, please contact our office.

Sincerely,
Anchor Engineering, Inc.

Glen L. Wilson, E.I.
Design Engineer

Reviewed By:



Brian Lobmeyer, P.E., S.E.
Project Manager

7. Asbestos Clearance Report

ALL-PHASE
ENVIRONMENTAL CONSULTANTS, INC.

December 7, 2018

Interior Air Monitoring Clearance

Re: AP-72A
2716 E. 46th Ave.
Denver, Colorado 80216

To Whom It May Concern:

On, December 6, 2018, Logan Greenfield, Colorado Certified Asbestos Building Inspector and Colorado Air Monitoring Specialist with All-Phase Environmental Consultants, Inc. (APEC), conducted Air Monitoring clearances at the above referenced Subject Property. A visual inspection and air samples were collected inside the abatement containment to ensure that the asbestos fiber counts are below the regulated standard to guarantee this area is safe to re-occupy.

The Containment Air clearance consisted of five (5) 0.08um sampling cassettes, five (5) 1-16 liter per minute pumps, along with One (1) 20-inch box fans and a one-horse power leave blower used to perform an aggressive clearance of the containment. ***All-Phase Environmental is an approved and certified Colorado Department of Public Health and Environment asbestos laboratory.***

Microscopic inspection of the above mentioned five samples were conducted in the All Phase Environmental PCM laboratory. This inspection verified that ALL the samples taken were at or below 0.01 fiber per cubic centimeter as required by the Colorado Department of Public Health and Environmental standard for a safe room or area. See Lab analytical results attached to this document.

Based on the visual inspection and the analytical results, this area is considered safe to re-occupy.

APEC will not be held responsible for the mishandling of the information contained herein, and/or any items found after December 6, 2018
.

Please feel free to call with any questions and or concerns.

Sincerely,

Logan Greenfield
Colorado Certified Asbestos Inspector and AMS - 20715

ALL-PHASE
ENVIRONMENTAL CONSULTANTS, INC.
AllPhaseEnvironmental.com
719-545-0375

721 W. 9th Street
Pueblo, CO 81003
http://www.allphaseenvironmental.com
AIHA 214132/CDPHE AL-15979

APEC Project No.:
18-3256(14)
Customer ID:

Attn: JKS
Phone:
Email:
Received:
Analysis Date: 12/6/2018
Customer Project Ref.: 2716 E. 46th Ave. AP 72A
Sample Date: 12/6/2018

Sample ID	Location	Volume (Liters)	Fibers	Fields	Fibers/mm^2	Fibers/cc	Type of Sample
AP72A-1	Basement	1072	10	100	12.2	.004	air
AP72A-2	Basement	1104	13	100	15.9	.006	air
AP72A-3	Basement	1104	8	100	9.8	.003	air
AP72A-4	Basement	1104	6	100	7.3	.003	air
AP72A-5	Basement	1088	11	100	13.5	.005	air
AP72A-6	blank	blank	0	100	0	0	Blank
AP72A-7	blank	blank	0	100	0	0	Blank

The results reported have been blank corrected as applicable.

Fiber Count by Phase Contrast by Phase Contract Microscopy (PCM), NIOSH 7400 Method, Revision 3, Issue 2, 8/15/94

Analyst(s) Logan Greenfield

Richard Ralston

Richard Ralston, Laboratory Director
or other approved signatory

THIS IS THE LAST PAGE OF THE REPORT

Colorado Department
of Public Health
and Environment

ASBESTOS LABORATORY

This certifies that

All Phase Environmental Consultants, Inc.

Registration No.: AL - 24462

has met the registration requirements of 25-7-507, C.R.S. and the Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos laboratory testing activities, as required by Regulation No 8, Part B, in the state of Colorado.

Issued: April 20, 2018
Expires: April 20, 2019

Authorized APCD Representative

SEAL

8. Materials Summary

January 22, 2019

Megan Wood
Kiewit Infrastructure Co.
160 Inverness Drive West, Suite 110
Englewood, CO 80112

RE: AP-72A 2716 E 46th Ave. – Summary of Removed Materials

Dear Megan,

Below is a summary of the materials removed from 2716 E 46th Ave. For more details regarding the location of the Asbestos Containing Materials (ACM) and the asbestos content please refer to the Table 2 of the All-Phase Environmental SSAR (Page 15).

Material Removed	**Quantity**
Asbestos Containing Paper Duct Wrap	5 SF
Regulated Building Materials	2 Lightbulbs
Clean Demolition Debris	504,000 lbs

If you have any questions or require further information regarding these quantities, please contact me at 303-238-0207.

Sincerely,
JKS Industries, LLC

Jeffrey Knight
President

9. Waste Manifests

9a. Asbestos Waste Manifests

CWMI

WM ASBESTOS NESHAP WASTE SHIPMENT RECORD

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
N / A		800-424-9300	2234873

GENERATOR

5. Generator's Name and Mailing Address
COLORADO DEPARTMENT OF TRANSPORTATION
747 SHERIDAN BLVD UNIT 9A
LAKEWOOD CO 80214
Generator's Phone: (303) 512-5000

Generator's Project Address (if different than mailing address)
AP-72A
2716 E 46th Ave
Denver, CO 80216

6. Transporter 1: Complete Company Name and Address
5280 WASTE SOLUTION — Transporter Phone 719 884 0300

7. Transporter 2: Complete Company Name and Address — Transporter Phone

8. Designated Disposal Facility Name and Site Address
DENVER ARAPAHOE DISPOSAL
3500 S GUN CLUB RD
AURORA CO 80018
(720) 876-2620
Facility's Phone:

	9. Waste Shipping Name, Description, & Profile Number	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	RQ, NA 2212, Asbestos, 9,PG III 1267750			5yds		NONE
2.						

13. Regulatory Agency: Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80222-1530

Emergency Notification:
CHEMTREC (800) 424-9300
24-hour Toll Free Number

14. Bill to & Account Number:
Customer Acct #: D 14925 Customer Name: JKS INDUSTRIES

15. Contractor/Generator Certification:
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/ placarded, and are in all respects in proper condition for transportation and disposal according to applicable national and state governmental regulations.
I hereby certify that the above described waste is not a hazardous waste as defined by federal, state or local regulations and does not contain regulated quantities of PCB's or radioactive materials.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year
Mia Stenkamp on behalf of CDOT		11	27	2018

TRANSPORTER

16. Transporter Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
JOE UNOFRE		12	21	18
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Special Handling Instructions
Soil originating from the above site shall not be used as daily cover or sold as clean fill.

18. Discrepancy Indication Space:

19. Ticket # 328321

Initials of Person noting discrepancy _____ Signature _____ Date _____

20. Management Method/Location
Landfill _____ Monofill ✓ Location:

21. Designated Disposal Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 18

Printed/Typed Name	Signature	Month	Day	Year
Alex Maurer		12	20	18

169-BLC-O 6 10498 (Rev. 10/14)

DESIGNATED FACILITY TO GENERATOR

9b. Regulated Building Materials (RBMs) Waste Manifests

February 14, 2018

CDOT

RE: Regulated Building Materials Manifests in SSCRs

To whom it may concern;

This letter is to explain the "SSCR Tracking Sheet" JKS Industries prepared for the purpose of documenting the manifests for the Regulated Building Materials (RMBs) included in the SSCR's.

The attached table describes how we have batched the RBM manifests per property. Here is a brief description of each grouping:

- Group 1 Independent: Each of the properties in this group has/will have its own RBM manifest. These manifests will be included in the SSCR for each property.
- Group 2 Pilot: The RBMs were removed from these properties and taken to the Pilot Truck Stop (AP-86). The reason for this, is that the volume was so low it was more cost effective just to lump them in with the Pilot RBMs than to have a separate pickup. There is no way to separate the inventories of these properties from the Pilot. The manifest will be included in the SSCR for each property.
- Group 3 Independent: The RBMs for these properties were removed and taken to the JKS warehouse for a single pick-up. A detailed inventory for these properties will be included in the individual SSCRs as well as a copy of the bulk pick-up manifest.
- Group 4 Not Required: The RBMs for these properties were removed prior to Kiewit taking possession of the property. This will be clarified in each individual SSCR for these properties.
- Group 5 AP-122: The RBMs for these properties were taken to AP-122. The reason for this, is that the volume was so low it was more cost effective just to lump them in with the RBMs at AP-122 than to have a separate pickup. An inventory for these properties were taken and will be included in the SSCR along with the RBM manifest.

An indication as to whether or not RBMs were removed will be found in the "Closeout Letter" portion of each SSCR; any additional notes or details will be found in the "Materials Summary" portion. Please reach out to us if you need any further clarification.

Stephen P. DiNardo
Director of Quality Management, JKS Industries

Regulated Building Material Groupings and Aconex Close Out #

Revision Date 2/11/2019

##	Parcel #	Site Address	RBM Groupings					Close Out Documents
			Group 1 Independent	Group 2 Pilot	Group 3 JKS	Group 4 Not Required	Group 5 AP-122	SSCR Aconex #
1	AP-8	4618 High St.			Complete			C70-JKS-ENV-RPT-000014
2	AP-14	4617/4625 Race St.			Complete			Not Demo'd
3	AP-23	4639 Vine St.				Not Required		C70-JKS-PRM-RPT-000012
4	AP-28	4646 Vine St.			Complete			C70-JKS-ENV-RPT-000011
5	AP-33	4637 Claude Ct.		Complete				C70-JKS-ENV-RPT-000002
6	AP-34	4639 Claude Ct.		Complete				C70-JKS-ENV-RPT-000003
7	AP-42	4620 Claude St.				Not Required		C70-JKS-ENV-RPT-000004
8	AP-49	2381 E. 46th Ave.			Complete			C70-JKS-ENV-RPT-000023
9	AP-49A	2381 E. 46th Ave.			Complete			C70-JKS-ENV-RPT-000018
10	AP-53	4608 Josephine			Complete			C70-JKS-ENV-RPT-000015
11	AP-68	4601 Clayton					Complete	SSCR in Process; Due 2/18
12	AP-66	2615 E. 46th	Complete					C70-KIE-ENV-RPT-000004
13	AP-69	4611 Clayton			Complete			SSCR in Process; Due 2/18
14	AP-70	4621 Clayton			Complete			C70-JKS-ENV-RPT-000008
15	AP-72	4550 Clayton			Complete			C70-JKS-ENV-RPT-000021
	AP-72A	2716 E 46th Ave			Complete			C70-JKS-ENV-RPT-000019
16	AP-73	4600 Clayton				None Found		SSCR in Process; Due 2/18
17	AP-74	4610 Clayton				None Found		C70-JKS-ENV-RPT-000025
18	AP-75	4620 Clayton			Complete			C70-JKS-ENV-RPT-000009
19	AP-77	4615 Fillmore			Complete			C70-JKS-ENV-RPT-000012
20	AP-78	4625 Fillmore			Complete			C70-JKS-ENV-RPT-000016
21	AP-79	4605 Fillmore			Complete			C70-JKS-ENV-RPT-000017
22	AP-80	4610 Fillmore			Complete			C70-JKS-ENV-RPT-000024
23	AP-81	4620 Fillmore			Complete			C70-JKS-ENV-RPT-000020
24	AP-83	4625 Milwaukee			Complete			C70-JKS-ENV-RPT-000026
25	AP-86	3223 E. 46th Ave.	Complete					C70-JKS-ENV-RPT-000007
26	AP-86B	3455 E. 46th Ave.	Complete					C70-JKS-ENV-RPT-000005
27	AP-93	3538 E 46th Ave				No Survey		On Hold till 2020
28	AP-93A	3600 E 46th Ave Office				No Survey		On Hold till 2020
29	AP-102	4625 Colorado Blvd	Complete					Not Demo'd
30	AP-109E	5125 E. Stapleton N. Dr.	Complete					Demolition in Process
31	AP-109W	5175 E. Stapleton N. Dr.	Complete					Demolition in Process
32	AP-122	5601 E. Stapleton N. Dr.					Complete	On Hold till 2020
33	AP-185	4542 Filmore			Complete			C70-JKS-ENV-RPT-000010
34		Pump House						C70-JKS-ENV-RPT-000013

Group Details:

Group 1: Each property will have it's own individual RBM manifest

Group 2: RBMs from these properties went to the Pilot (AP-86) and will be on the Pilot Manifest

Group 3: RBMs for these properties were picked up in bulk. Refer to materials summary for detail on the actual RBMs removed for each property

Group 4: RBMs for these properties were either removed by Kiewit ("Not Required"), none were found ("None Found"), or the survey has not been released yet ("No Survey")

Group 5: RBMs from these properties went to AP-122 and will be on the manifest for AP-122

WASTE BILL OF LADING & CERTIFICATE OF RECYCLING

BOL#: 27201

Shipment Date: 11/6/18

P/U Fees: $25 $30 $40 $45 $55 $65 $75 $85 $95 $105 $115 $125 $135 $145 $155

Labor Charges: $ _____

Off Spec. Charge: $ _____

Emergency Contact (877) 331-2149 Extension 4

[X] Universal Waste
[ ] TSCA Waste
[ ] Special Waste

____4' Jumbo ____4' Box ____8' Jumbo ____8' Box
____ HID Box ____ Battery Box ____6.5 Gallon Pale
____ 14-G PD ____ 30-G PD ____55-G PD ____ CY Bx
____ 95-G PD ____ 55-G SD ____ 85-G SD ____ GL Box

Generator Of Waste:		Bill To: JKS Ins
Name:		Name: JKS Industries
Address:		Address: 747 Sheridan Blvd.
City, State, Zip:		City, State, Zip: Lakewood Co. 80214
Contact:		Contact: Jeff Knight
Phone:	Fax:	Phone: 720-402-4410 Fax:
PO#	Job#	PO# Job#

WASTE BROKERAGE FACILITY:

[X] R8E, LLC
4810 Newport Street
Commerce City Colorado 80033-2244
(p) 303-424-4887 (f) 303-424-9193
Email: Mike@R8Enviro.com
www.R8Enviro.com

EPA ID#: COR000231449
Destination Facility For Universal Waste
Large Quantity Handler of Universal Waste
Hazardous Waste Transporter/Transfer Facility
Used Oil Transporter/Transfer Facility
US DOT #: 050108 550 051Q HMP-20746
US DOT #1781660 CO TSCA - EPA Approved PCB Handler

Container Count	Container Type	Waste Common Name	DOT Description	Total Quantity	Unit / Wt. Volume
		4' & UNDER FLUORESCENT LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))		
2	CF	5' & OVER FLUORESCENT LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))	12	ea.
		UTUBE FLUORESCENT LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))		
		CIRCULAR FLUORESCENT LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))		
1	CF	COMPACT FLUORESCENT LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))	49	ea.
		HID MERCURY/HALIDE/SODIUM LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))	24	ea.
		SHIELD/COATED/GROOVED LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))		
		INCANDESCENT LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))	36	ea.
		UV/ARC/IGNITRON LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))		
		BROKEN LAMP/S RECYCLING	Non-DOT Regulated (per 49 CFR 173.164(e))		
		CRUSHED FLUORESCENT LAMP/S RECYCLING (processed)	Non-DOT Regulated (per 49 CFR 173.164(e))		
		PCB WASTE RECYCLE/INCINERATION/MICROENCAP	RQ, UN3432, Polychlorinated biphenyls, Solid, 9, PGIII, ERG#171		
		NON-PCB BALLAST RECYCLE/MICROENCAPSULATION	Non-RCRA / Non-DOT Regulated Waste		
		ESCRAP RECYCLING	Non-DOT Regulated	110	P
		MERCURY DEVICE RECYCLING	UN3506, Mercury Contained in Manufactured Articles, 8 (6.1), PGIII, ERG#172		
		LEAD ACID BATTERY RECYCLING	UN2794, Batteries, Wet Filled w/ Acid, 8, PGIII, ERG#154		
		ALKALINE BATTERY RECYCLING	Batteries, Dry, sealed, n.o.s. Specail Provision 130		
		NICKEL (Ni-Cad) BATTERY RECYCLING	Batteries, Dry, sealed, n.o.s. Specail Provision 130		
		LITHIUM METAL BATTERY RECYCLING - DOT 173.185(d)	UN3090, Lithium Batteries, 9, PGII, ERG#138		
		LITHIUM Ion BATTERY RECYCLING - DOT 173.185(d)	UN3480, Lithium Batteries, 9, PGII, ERG#138		
		WASTE OIL RECYCLING	Special Waste Liquid	1	GAL
		WASTE GLYCOL RECYCLING	Special Waste Liquid		
		WASTE AEROSOLS	UN1950,Aerosols,Flammable,2.1,ERG#126		
71	Gallons	WASTE LATEX PAINT	Special Waste Liquid	71	GAL
		LOW RADIATION CONTAINING SMOKE DETECTORS	Special Waste Solid, Nuclear Regulatory Law 10 CFR 32.37		
		FIRE EXTINGUISHER(S)	Special Waste Solid		
		METALS RECYCLING	Special Waste Solid		
		MISCELLANEOUS RECYCLING 3 Microwaves			
		MISCELLANEOUS RECYCLING 6 Lrg Fridges		6	ea.

Generator Certification: **This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transpotation.**

Unpaid invoices will be assigned to a licensed Collection Agency and subject to Collection Agency Fee's, Attroney's Fee's, Court Costs and Interest.

Signature: _____ Title: Operator Print Name: Jesus Cusado Date: 11-6-18

Transporter 1 Name: Jesus Cosado
Phone Number: 720-245-1685
Signature _____ Date 11-6

Transporter 2 Name: _____
Phone Number: _____
Signature _____ Date _____

Receiving, subject to the classification and regulations in effect on the date of issue of the Bill of Lading, the property described above is in apparent good order. Please retain a copy of this document as the ***"Certification of Recycling"*** for the items and quantities listed above.

Signature _____ Date 11/6/18

10. Weight Tickets

10a. Daily Load Trackers and Associated Truck Tickets

JKS INDUSTRIES
Environmental Abatement Services

Daily Load Tracker

Date: 12-22-18

Project: ~~AP~~ 72 A

Prepared By: Jesus Lasedo

Arrival Time		Departure Time		Load #	Truck #	Material Code	Description	Tons/Yards	Dump Site	Dump Site Ticket Number
1:35	am / pm	1:55	am / pm	1	CH337	trash	Demo debris	18 yds	Dads	
1:55	am / pm	2:15	am / pm	2	CH575	trash	Demo debris	18 yds	Dads	
7:30	am / pm	7:50	am / pm	3	CH 333	trash	Demo debris	18 yds	Dads	
7:50	am / pm	8:05	am / pm	4	CH 575	trash	Demo debris	18 yds	Dads	
9:20	am / pm	9:35	am / pm	5	CH 333	trash	Demo debris	18 yds	Dads	
9:35	am / pm	9:50	am / pm	6	CH575	trash	Demo debris	18 yds	Dads	
11:05	am / pm	11:20	am / pm	7	CH337	trash	Demo debris	18 yds	Dads	
11:35	am / pm	11:55	am / pm	8	CH575	trash	Demo debris	18 yds	Dads	
1:30	am / pm	1:45	am / pm	9	CH333	trash	Demo debris	18 yds	Dads	
1:45	am / pm	2:00	am / pm	10	CH525	Trash	Demo debris	18 yds	Dads	
4:30	am / pm	4:45	am / pm	11	CH 333	trash	Demo debris	18 yds	Dads	
4:45	am / pm	5:00	am / pm	12	CH15-75	trash	Demo debris	18 yds	Dads	
9:05	am / pm	9:25	am / pm	13	CH 01	trash	Demo debris	18 yds	Dads	
9:30	am / pm	9:45	am / pm	14	CH589	trash	Demo debris	18 yds	Dads	
9:45	am / pm	10:05	am / pm	15	CH 376	trash	Demo debris	18yds	Dads	
12:00	am / pm	12:15	am / pm	16	CH 01	trash	Demo debris	18yds	Dads	
12:15	am / pm	12:30	am / pm	17	CH589	trash	Demo debris	18 yds	Dads	
1235	am / pm	12:55	am / pm	18	CH376	trash	Demo debris	18yds	Dads	
1:25	am / pm	1:40	am / pm	19	CH333	trash	Demo debris	18yds	Dads	
2:00	am / pm	220	am / pm	20	CH 01	trash	Demo debris	18 yds	Dads.	
	am / pm		am / pm							
	am / pm		am / pm							
	am / pm		am / pm							
	am / pm		am / pm							
	am / pm		am / pm							

Legend:
Materials:
R = Recycle
T = Trash

Description:
Concrete, Asphalt, Asbestos, Lumber, Construction Debris, Trash, Metals,

CHACON'S
construction & transport

№ 50886

2920 W. 73rd Ave
Westminster, CO 80030
FAX 303-487-5731
PH 720-357-1448

BILL TO: JKS

DISPATCHED BY:

DATE 12/26/18

TRUCK # CH575

TANDEM ☐ TRAILER ☑

MATERIAL Demo

JOB DESCRIPTION: I-70

	LOADS	UNLOADS
JOB#	1 load	
LOAD AT 4625 Fillmore St	1 load	
	1 load	
UNLOAD AT DAD.S		U
RATE $		
HOURLY ☑ TONMILE ☐		
START TIME 7:30		
STOP TIME 3:30		
TOTAL HOURS		
8 hrs		

OWNER OF TRUCK:

DRIVER'S NAME	AUTHORIZED SIGNATURE
Manuel A.	Laura Ruiz

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

CHACONS
construction & transport

No. 8091

2920 W. 73rd Ave.
Westminster, CO 80030
Fax 303-331-8259
PH 720-357-1448

BILL TO: JKS Const

DISPATCHED BY: Chacons Const

DATE: 12-26-18

JOB DESCRIPTION:

TRUCK # CH333

TANDEM ☐ TRAILER ☑

MATERIAL Dirt

	LOADS	UNLOADS
JOB#	loads #	
LOAD AT I 70 & clayton st	8:00 dads	
	10:20 dads	
	1:00 dads	
UNLOAD AT Dads p+t		(4)
RATE $		
HOURLY ☐ TONMILE ☐		
START TIME 7:30		
STOP TIME 3:30pm		
TOTAL HOURS		
8 hrs		
	OWNER OF TRUCK:	

DRIVER'S NAME	AUTHORIZED SIGNATURE
Justin Castillo	

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

№ 50887

2920 W. 73rd Ave
Westminster, CO 80030
FAX 303-487-5731
PH 720-357-1448

BILL TO: JKS

DISPATCHED BY:

DATE 12/27/18

TRUCK # CH575

TANDEM ☐ TRAILER ☑

MATERIAL Demo

JOB DESCRIPTION: I-70

	LOADS	UNLOADS
JOB#	1 load	
LOAD AT 4625 Fillmore	1 load	
	1 load	
	1 load	
	1 load	
UNLOAD AT DADS		10
RATE $		
HOURLY ☒ TONMILE ☐		
START TIME 7:30		
STOP TIME 6:30		
TOTAL HOURS		
11 hrs		

OWNER OF TRUCK:

DRIVER'S NAME	AUTHORIZED SIGNATURE
Manuel A	

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

CHACONS
construction & transport

No. 8092

2920 W. 73rd Ave.
Westminster, CO 80030
Fax 303-331-8259
PH 720-357-1448

BILL TO: JLS Const

DISPATCHED BY: Chacons Const

DATE: 12-27-18

JOB DESCRIPTION:

TRUCK # CH 333

TANDEM ☐ TRAILER ☒

MATERIAL Demo

	LOADS	UNLOADS
JOB#	Loads #	
LOAD AT I 70 & clayton st	7:30 dads	Ap · 72 A
	9:30 dads	Ap · 72 A
	11:21 dads	Ap · 72 A
	1:55 dads	Ap · 72 A
UNLOAD AT Dada Pit		
		8
RATE $		
HOURLY ☐ TONMILE ☐		
START TIME 7:30		
STOP TIME 6:30 PM		
TOTAL HOURS		
[redacted] 11 hrs		

OWNER OF TRUCK:

DRIVER'S NAME	AUTHORIZED SIGNATURE
Juston Costello	[signature]

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

CHACONS
construction & transport

No. 11671

2920 W. 73rd Ave.
Westminster, CO 80030
Fax 303-331-8259
PH 720-357-1448

BILL TO: JKS industries

DISPATCHED BY:

DATE: 12-28-18

TRUCK # S-89

TANDEM ☐ TRAILER ☒

MATERIAL Demo

JOB DESCRIPTION: 46th / Fillmore C-70 / Chuy /

	LOADS	UNLOADS
JOB# 18603	9:26	
LOAD AT 46th / Fillmore	11:20	
	1:50	
		10
UNLOAD AT Dad's land Fill		
RATE $		
HOURLY ☐ TONMILE ☐		
START TIME 9:00		
STOP TIME 5:00 pm		
TOTAL HOURS		
8 hrs		

OWNER OF TRUCK: Scooby's Trucking

DRIVER'S NAME: Uriel Alvarez

AUTHORIZED SIGNATURE: Uriel Alvarez

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

CHACON'S
construction & transport

№ 43134

2920 W. 73rd Ave
Westminster, CO 80030
FAX 303-487-5731
PH 720-357-1448

BILL TO: JKS Industies Inc

DISPATCHED BY: CHacon Tronsport

DATE 12/28/18

TRUCK # 6F-01

TANDEM ☐ TRAILER ☒

MATERIAL Dirt

JOB DESCRIPTION: Demo Concrete Mix

	LOADS	UNLOADS
JOB# 18603	9:15 * 9:55	AP (1) 72 A
LOAD AT 46 And Fillmore		
	11:05 * 11:45	AP (2) 72 A
	2:30 * 4:00	AP (3) 72 A
UNLOAD AT Dads 3500 Eon Club		(2)
RATE $		
HOURLY ☑ TONMILE ☐		
START TIME 9:00		
STOP TIME 4:00 PM.		
TOTAL HOURS		
7hrs	OWNER OF TRUCK: Benito	

DRIVER'S NAME	AUTHORIZED SIGNATURE
Benito Castillo	Laura Chacon

Net due 30 days from date of this statement. Past due accounts bear interest @ 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

CHACONS
construction & transport

No. 8107

2920 W. 73rd Ave.
Westminster, CO 80030
Fax 303-331-8259
PH 720-357-1448

BILL TO:	JKS
DISPATCHED BY:	
DATE: 12/28/18	JOB DESCRIPTION: I-70 DEMOLITION
TRUCK # CH376	
TANDEM ☐ TRAILER ☒	
MATERIAL	

	LOADS	UNLOADS
JOB#	1 LOAD'S	AP 72-A
LOAD AT 45th & DAYTON ST	2 "	AP 72-A
UNLOAD AT D.A.D.S		✓
RATE $		
HOURLY ☐ TONMILE ☐		
START TIME 9:00 AM		
STOP TIME 5:00 PM		
TOTAL HOURS 8 hrs		
	OWNER OF TRUCK:	

DRIVER'S NAME	AUTHORIZED SIGNATURE
M. Ardt	

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

CHACONS
construction & transport

No. 8093

2920 W. 73rd Ave.
Westminster, CO 80030
Fax 303-331-8259
PH 720-357-1448

BILL TO: Jks Const

DISPATCHED BY: Chacons Const

DATE: 12-28-18

TRUCK # CH 333

TANDEM ☐ TRAILER ☒

MATERIAL Demo

JOB DESCRIPTION:

	LOADS	UNLOADS
JOB# 18603	loads ##	
LOAD AT 46th & York	8:45	501608
	10:05	501642
	1:30	
UNLOAD AT Henderson pit		4
Dads pit		
RATE $		
HOURLY ☐ TONMILE ☐		
START TIME 1:30		
STOP TIME 3:30		
TOTAL HOURS		
8 hrs		

OWNER OF TRUCK:

DRIVER'S NAME	AUTHORIZED SIGNATURE
Justin Castorena	Laura Ramos

Net due 30 days from date of this statement. Past due accounts bear interest at 1.5% per month. In the event collection of this account becomes necessary, client agrees to pay all costs and reasonable attorney fees.

10b. Waste Weight Tickets

WASTE MANAGEMENT

2470008

Denver Arapahoe Disposal
3500 S Gun Club , PO Box 460397
Aurora, CO. 80018
Ph: (720) 876-2620

Original
Ticket# 3285330

Customer Name	JKSINDUSTRIESLLC JKS Industri	Carrier	JKS INDUSTRIES JKS INDUSTRIES
Ticket Date	12/26/2018	Vehicle#	1
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Hauling Ticket#		Check#	
Route		Billing #	0014925
State Waste Code		Gen EPA ID	
Manifest		Grid	
Destination			
PO			
Profile	()		
Generator			

	Time	Scale	Operator	Inbound		
In	12/26/2018 08:15:51	MANUAL WT	aramirez		Gross	2 lb*
Out	12/26/2018 08:15:51		aramirez		Tare	1 lb*
			* Manual Weight		Net	1 lb
					Tons	

Comments 15 loads from central 70 project 12/26/18 = 270yds total

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

	Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	CDY-CONST DEBRIS -	100	270.00	Yards				

Total Fees
Total Ticket

402WM-N

Driver's Signature

Date: 12-26-18 Ticket#: Ap. 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature:_____

Date: 12-26-18 Ticket#: Ap 72A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: Tusty Castillo

WASTE MANAGEMENT

2470010

Denver Arapahoe Disposal
3500 S Gun Club , PO Box 460397
Aurora, CO, 80018
Ph: (720) 876-2620

Original
Ticket# 3286017

Customer Name JKSINDUSTRIESLLC JKS Industri
Ticket Date 12/27/2018
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest
Destination
PO
Profile ()
Generator

Carrier JKS INDUSTRIES JKS INDUSTRIES
Vehicle# 1
Container
Driver
Check#
Billing # 0014925
Gen EPA ID
Grid

Volume

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	12/27/2018 08:47:21	MANUAL WT	aramirez		Tare	1 lb*
Out	12/27/2018 08:47:21		aramirez		Net	1 lb
			* Manual Weight		Tons	

Comments 13 loads from 12/27/18 = 234yds total

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

	Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	CDY-CONST DEBRIS - 100		234.00	Yards				

Total Fees
Total Ticket

Driver's Signature

402WM-N

Date: 12-27-18 Ticket#: AP 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: 13 loads x 18 yds
234 (yds)
Total

Date: 12-27-18 Ticket#: AP 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: Justin Cobb

Date: 12-27-18 Ticket#: AP 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature:_____

Date: 12-27-18 Ticket#: AP 72A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: Justin Castillo

Date: 12-27-18 Ticket#: AP-72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: Justin Costello

Date: 12-27-18 Ticket#: AP-72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature:_____

Date: 12-27-18 Ticket#: Ap 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: Justin Caudle

Date: 12-27-18 Ticket#: Ap 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS / 25 YDS HIGHSIDES

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature:

Date: 12-27-18 Ticket#: AP 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS / 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER

Signature:_____

Date: 12-27-18 Ticket#: AP 72 A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS / 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER

Signature: Juston Caudill

WASTE MANAGEMENT

2470017

Denver Arapahoe Disposal
3500 S Gun Club , PO Box 460397
Aurora, CO 80018
Ph: (303) 376-8620

Original
Ticket# 3286852

Customer Name JKSINDUSTRIESLLC JKS Industri
Ticket Date 12/28/2018
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#

Carrier JKS INDUSTRIES JKS INDUSTRIES
Vehicle# 1
Container
Driver
Check#

Volume

Route
State Waste Code
Manifest
Destination
PO
Profile ()
Generator

Billing # 0014925
Gen EPA ID
Grid

	Time	Scale	Operator	Inbound	Gross	2 lb*
In	12/28/2018 07:16:11	MANUAL WT	aramirez		Tare	1 lb*
Out	12/28/2018 07:16:11		aramirez		Net	1 lb
			* Manual Weight		Tons	

Comments 8 loads x 18 = 144yds total central 70 project

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

	Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1	CDY-CONST DEBRIS -	100	144.00	Yards				

Total Fees
Total Ticket

Driver's Signature

402WM-N

Date: 12-28-18 Ticket#: Ap 72 A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

8 loads x 18 = 144

DRIVER

Signature: [signature]

Date: 12-28-18 Ticket#: Ap 72 A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature:_____

Date: 12-28-18 Ticket#: Ap 72 A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS / 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: M. A. C/

Date: 12-28-18 Ticket#: Ap 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS / 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature:_____

Date: 12-28-18 Ticket#: Ap 72 A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS ✓ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER

Signature:_____

Date: 12-28-18 Ticket#: Ap 72-A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS / 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER

Signature:_____

Date: 12-28-18 Ticket#: ~~AP-72-A~~

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS_____ 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: Justin Cass

Date: 12-28-18 Ticket#: AP 72 A

ACCT#:306-14925

JKS INDUSTRIES
CENTRAL 70 PROJECT

CDY 18 YDS / 25 YDS HIGHSIDES_____

DISPOSAL SITE: DADS
3500 S GUN CLUB RD
AURORA CO 80018

DRIVER:

Signature: Ramiro

11. Dump Diversion Summary

JKS Industries

AP-72A: 2716 E 46th Ave

Descriptions		Dump Diversion / Recycle %								
Phase	Activity	Unit of Measure	# of Yards per Container	# of Containers	Total Number of Yards	Pounds Per Yard **	Total Lbs	Recycled Yes/No	Pounds of Recycle or Dump Diversion	% of Recycle or Dump Diversion
Abatement	Trash Rolloff	Cubic Yard	-	-	-	450.00	-			
Abatement	Asbestos Containers	Cubic Yard	-	-	-	500.00	-			
					-		-			
Demolition	Demolition Construction Debris	Cubic Yard	18	20	360.00	1,400.00	504,000			
Demolition	Concrete Debris	Cubic Yard	12	-	-	4,050.00	-	x	-	0.00%
Demolition	Trees	Cubic Yard	-	-	-	500.00	-	x	-	0.00%
Demolition	Steel	Lbs	-	-	-	-	-	x	-	0.00%
Demolition	Copper	Lbs					-	x	-	0.00%
				20	360.00		504,000		-	0.00%

STUDY NOTES

1 The source material used for the Volume to Weight conversions came from Waste Management web site.
2 Conversions ratio's have been modified based on estimated compaction.

12. Containment Entry/Exit Log

***Environmental Projects Only*

JKS INDUSTRIES

CONTAINMENT SIGN-IN & SIGN-OUT SHEET Thursday

Job Name:

Job #:

Date: 12-06-18

NAME	SIGN-IN	SIGN-OUT	SIGN-IN	SIGN-OUT
1. Victor Lerma	7:30	11:00	12:00	3:30
2. LeRoy Armijo	7:30	11:00	12:00	3:30
3. Jessenia Balderas	7:30	11:00	12:00	3:30
4. Ayra De paz	7:30	11:00	12:00	3:30
5. PAUL W	7:30	11:00	12:00	3:30
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

13. Daily Logs

JKS IDUSTRIES LLC DAILY PROJECT LOG

Job # 18-333 Job Name: Kiewit AP-724 Report # ____

Date 12-05 Day Wednesday Month Dec Year 2018

Project Manager Steve Superintendent Andrew Williams

Work Performed Today Setup & Remove

7:00	Tool Box & Safety Meeting
7:30	Remove Trash and debris from down stairs area and setup Containment
10:00	Setup containment
11:00	lunch
12:00	Setup Containment
7:00	Containment complete ready for removal
3:30	End of the day

Completed task: 100% Setup
25% Removal

Weather: ____

Temp. Hi ____ Low ____

Safety Meeting

Topic:

Work Force	Number
Project Manager	
Project Supervisor	1
Operators	
Laborers	
Tradesmen	4
Other:	
Other:	
Other:	

Materials Used	Quantity

Material Purchased/Delivered

Problems - Delays, Safety Issues

Subcontractor Progress

Inspections

sup

Equipment Rented Today	Rented From	Insp Chklist Complete?	Equipment	Hours

Visitors (Incl. Subs, Clients, etc)	Time In/Time Out	Activity Onsite

JKS IDUSTRIES LLC DAILY PROJECT LOG

Job # 18-333 Job Name: Kiewit AP-72A Report # _____
Date 12-06 Day Thursday Month Dec Year 2018

Project Manager Steve Superintendent Andre Williams

Work Performed Today Remove Ducting & Boot Registers

7:00	Tool Box & Safety meeting
7:30	Continue removing duct work and Boot Register (ACM)
10:30	Double bag, label, seal all (ACM) Ducting
11:00	lunch
12:00	loadout Bags, Washdown containment and Prep for visual & Air clearance
2:00	change out ~~HEPA Filters~~ NAM Filters P.S.
3:30	End of day 100% Ready for Clearance

Weather: _____

Temp. Hi _____ Low _____

Safety Meeting

Topic:

Work Force	Number
Project Manager	
Project Supervisor	1
Operators	
Laborers	
Tradesmen	4
Other:	
Other:	
Other:	

Materials Used	Quantity

Material Purchased/Delivered

Problems - Delays, Safety Issues

None

Subcontractor Progress

Inspections

Sup

Equipment Rented Today	Rented From	Insp Chklist Complete?	Equipment	Hours

Visitors (Incl. Subs, Clients, etc)	Time In/Time Out	Activity Onsite

JKS Industries

ON-SITE DAILY SIGN- IN SHEET

Date : 12-26-18
Project Name: AP 72 A
Project NO: 18-333
Supervisor: Jesus Casado

NAME	Initial	EMPLOYER	TIME IN	TIME OUT	TIME IN	TIME OUT	TOTAL
Jesus Casado	JC	JKS	12:00 PM	5:00 PM			
Jamrob Ramirez	JR	JKS	12:00 PM	5:00 PM			
Manuel Alc	MA	Chacon	12:00 pm				
Justin Castillo	JC	Chacons	12:00 pm				

TOTAL

JKS Industries

ON-SITE DAILY SIGN- IN SHEET

Date : 12-27-18
Project Name: AP 72 A
Project NO: 18333
Supervisor: Jesus Casado

NAME	Initial	EMPLOYER	TIME IN	TIME OUT	TIME IN	TIME OUT	TOTAL
Jesus Casado	JC	JKS	7:00 AM	5:00 PM			
Jamrob Ramirez	JR	JKS	7:00 AM	500 PM			
Manuel A	MA	chacon	7:30 am				
Justin Costello	JC	Chacons	7:30am				
						TOTAL	

JKS Industries

ON-SITE DAILY SIGN- IN SHEET

Date : 12-28-18
Project Name: AV 72-A
Project NO: 18-333
Supervisor: Jesus Casado

NAME	Initial	EMPLOYER	TIME IN	TIME OUT	TIME IN	TIME OUT	TOTAL
Jesus Casado	JC	JKS	7:00 AM	5:00 PM			
Jamrob Ramirez	JR	JKS	7:00 AM	500 PM			
Benito Castillo	BC	Chacon	9:00				
Marcos A. Chacon	M.A.C	Chacon's	9:00.				
Uriel Alvarez	U.A	Chacon	9:00				
						TOTAL	