

Close Out Documents

<u>AP-28 – 4646 Vine St.</u>

Structural Demolition

Prepared for:

Kiewit Infrastructure Co. Attn: Jenn Bradtmueller 160 Inverness Drive West. Suite 110 Englewood CO 80112

JKS INDUSTRIES

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1. Closeout Letter



December 26, 2018

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

Re: SSCR AP-28 – 4646 Vine St.

Dear Kiewit Infrastructure Co.

This letter is confirm that all the work associated with the demolition of the structure located at 4646 Vine St. Denver CO 80216, also referred as parcel AP-28, is complete.

The scope of work included the removal of Regulated Building Materials (RMBs), demolition of a 1,600 square foot residential structure, demolition of a 543 square foot detached garage, 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 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 postdemolition 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 11/7/2018. The actual scheduled work dates are from 11/7/2018 through 12/7/2018.

Approval issued on: 11/15/2018

Record number: 143398 Fee Paid: \$60.00 Notice Number: 18DE7655D Check number: 5603

For the location specified below:

AP-28 Residential

4646 Vine St. Denver

Denver County

Asbestos Building Inspector:

Logan Greenfield

Cerification No.: 20715

Inspection Date:

06/07/2018

This notice has been issued to:

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



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)

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

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* Regulated asbestos-containing materials means (a) <u>friable asbestos-containing material</u>, (b) <u>Category I nonfriable ACM</u> that has become <u>friable</u>, (c) <u>Category I nonfriable ACM</u> that will be or has been subjected to sanding, <u>grinding</u>, <u>cutting</u>, or abrading or (d) <u>Category II</u> 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 <u>demolition</u> or <u>renovation</u> operations regulated by this regulation.

Note: Asbestos-containing sheet viryl and linoleum must be properly abated/removed prior to demolition.

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

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This demolition approval notice is valid beginning 11/7/2018. The actual scheduled work dates are from 11/7/2018 through 12/7/2018.

Approval issued on: 11/15/2018

Record number: 143397
Notice Number: 18DE7654D

For the location specified below:

AP-28 Garage

4646 Vine St. Denver

Denver County

This notice has been issued to:

JKS Industries, Inc. 747 Sheridan Blvd. Unit 9A Lakewood, CO 80214 Fee Paid: \$55.00

Check number: 5646

Asbestos Building Inspector:

Richard L. Ralston
Cerification No.: 4261

Inspection Date:

11/02/2018

Issued by: SK

Sam Har



Colorado Department of Public Health and Environment

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 = \$ 55.00 (See instruction #1 on reverse side)

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

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With my signature below, I certify that I possess current AHERA accreditation and state of Colorado certification an Asbestos Building Inspector. I also certify that I have thoroughly inspected the facility to be demolished, as line 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 ty 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:							ence of ere in the nat any ecify type(s)		
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* Regulated asbestos-containing materials means (a) <u>friable asbestos-containing material</u>, (b) <u>Category I nonfriable ACM</u> that has become <u>friable</u>, (c) <u>Category I nonfriable ACM</u> that will be or has been subjected to sanding, <u>grinding</u>, <u>cutting</u>, or abrading or (d) <u>Category II</u> 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 <u>demolition</u> or <u>renovation</u> operations regulated by this regulation.

Note: Asbestos-containing sheet vinyl and linoleum must be properly abated/removed prior to demolition.

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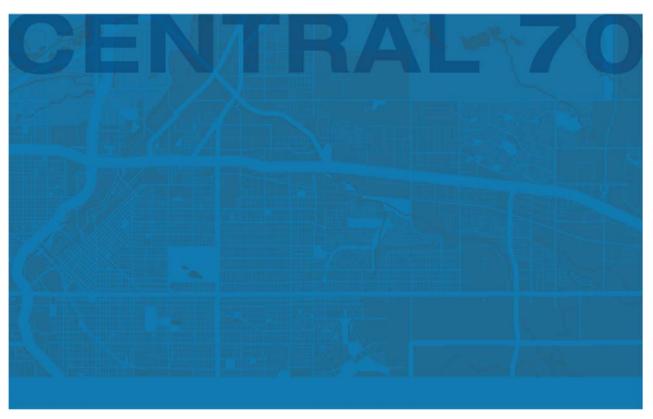
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3. Project Design



3a. SSAR



July 16, 2018



Structure Survey Assessment Report AP-28

4646 Vine Street

Denver, CO 80216

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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 InspectorCDOT 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

LIST OF SAMPLING ACRONYMS/ABBREVIATIONS

BM Brick/Mortar
CB Cove Base
CC Concrete

CER Ceramic Block

CM Ceramic Tile/Mortar

CMU Concrete Masonry Unit/Mortar

CP CarpetCT Ceiling Tile

D Drywall (no surfacing)DJ Drywall/Joint Compound

F Flooring
FT Floor Tile
IN Insulation
L Linoleum
M Mastic

MF Multiple layered Flooring

MT Mortar

PC Popcorn Ceiling

PL Plaster

PM Panel/Mastic
R Roofing

RF Roof Flashing

S Siding Stucco

T Texture (no substrate)TC Textured Composite Board

TD Textured Drywall

TSI Thermal System Insulation

VB Vapor Barrier

VP Vent Paste (heating/cooling systems)VW Vent Wrap (heating/cooling systems)

WC Window Caulk

WD Wallpapered Drywall

Tables

Table 1	Project Details
Table 2	Asbestos Containing Samples
Table 3	Non-Asbestos Containing Samples
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Table 5	Summary of Regulated Building Materials

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Appendix B	Positive Asbestos Sample Material Photographs
Appendix C	Laboratory Results & Chain of Custody – Asbestos
Appendix D	Laboratory Results & Chain of Custody – Lead & TCLP

APEC Project # 18-3066-021

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 material (ACM), lead-based paint (LBP), and regulated building material (RBM) at 4646 Vine Street, Denver, CO 80216. This survey will identify the materials that will need to be abated or removed prior to the future demolition activities.

Table 1 Project Details

Client Name:	Kiewit Meridiam Partners
Site Location:	4646 Vine Street, Denver, CO 80216
Building Type	Residential House
Building Size	Building is approximately 1,387 square feet
Construction Date:	2001 – Based on the City and County of Denver Assessor's Records
Building Uses:	Residential
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 7, 2018, APEC certified personnel Logan Greenfield conducted an asbestos survey for demolition at 4646 Vine Street, 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 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 are not 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 7, 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/cm²) as measured with an X-ray fluorescence (XRF) or 5,000 parts per million (ppm) when measured by weight, or 0.5 percent (%) by weight.

A total of 9 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 9 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 7, 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 suspect RBMS are 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", things 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. These materials should be handled with care until deemed safe.

3 Findings

3.1 ASBESTOS SURVEY

A total of 26 bulk samples, including 1 duplicate sample, were collected from 7 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%):

Non-regulated Asbestos Containing Materials

■ 4646V-EX-R7A, 4646V-EX-R7B, and 4646V-EX-R7C — Base layer of roofing mastic from roof.

Point Counts

Point count analysis occurs for samples with <1% of asbestos. Point count analysis was not performed due to the initial PLM analysis 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. One sample, 4646V-EX-6Q, was collected because a total of 25 samples were obtained.

3.2 LEAD-BASED PAINT SURVEY

A total of 9 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).

No samples were confirmed to be greater than 0.06% by weight and less than 0.5% by weight or greater than 0.5% by weight (Table 4). All 9 samples were less than the LCP and LBP thresholds, and is considered non-lead containing paint (NLC). The laboratory analytical report is included in Appendix D

3.2.1 TCLP LEAD ANALYTICAL RESULTS

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. The Toxicity Characteristic (TC) maximum concentration is 5 milligrams per liter (mg/L). The results of the TCLP analysis is <0.40 mg/L, which is below the regulated limit and therefore not considered hazardous. 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 1,300 square feet of roofing mastic, observed as the bottom layer on the roof of the house, was confirmed to be an ACM. This material is a Category II Non-friable ACM and exempt, per NESHAP and Regulation 8. The structure can be demolished without abatement of this material.

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.

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 not detected at concentrations above the LCP or LBP threshold in any of the 9 samples. 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.

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 regards to RBMs, if listed, it is likely that the ballasts in the fluorescent light fixtures do contain PCBs. Where a manufacture's 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

Γable 2	Asbestos Containing Samples
Table 3	Non-Asbestos Containing Samples
Table 4	Summary of Paint Chip Laboratory Analysis for Lead
Гable 5	Summary of Regulated Building Materials

Table 2 Positive Asbestos Containing Samples

Sample Name	•	Lab Results/ Asbestos Type	Detection Method(s)		Material Description	Material Location	NESHAP Classification	Estimated Quantity (Sq. ft.)	
4646V-EX-R7A	EXTERIOR	MASTIC 8% CHRYSOTILE	PLM	Good	BUULING HULKE I	ON THE HOUSE	CAT II	1300 Sq.ft	
4646V-EX-R7B		MASTIC 8% CHRYSOTILE	PLM	Good			CAT II		
4646V-EX-R7C		HOMOGENEOUS TO SAMPLES 4646V-EX-R7A & 4646V-EX-R7B							

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
4646V-R4-PC1A	ROOM 4	ND	PLM	Good			NA
4646V-R5-PC1B	ROOM 5	ND	PLM	Good		CEILINGS	NA
4646V-R7-PC1C	ROOM 7	ND	PLM	Good	POPCORN CEILING	THROUGHOUT STRUCTURE	NA
4646V-H-PC1D	HALLWAY	ND	PLM	Good		STRUCTURE	NA
4646V-R10-PC1E	ROOM 10	ND	PLM	Good			NA
4646V-R2-TD2A	ROOM 2	ND	PLM	Good			NA
4646V-R6-TD2B	ROOM 6	ND	PLM	Good		WALLS OF ROOMS 2, 5, 6 & 7	NA
4646V-R5-TD2C	ROOM 5	ND	PLM	Good	TEXTURE PATTERN DRYWALL PANELS		NA
4646V-R7-TD2D	ROOM 7	ND	PLM	Good			NA
4646V-R9-TD2E	ROOM 9	ND	PLM	Good			NA
4646V-R5-WD3A	ROOM 5	ND	PLM	Good		WALLS OF ROOMS 5, 8 AND 11	NA
4646V-R1-WD3B	ROOM 1	ND	PLM	Good	WALLPAPERED DRYWALL		NA
4646V-R8-WD3C	ROOM 8	ND	PLM	Good			NA
4646V-R3-D4A	ROOM 3	ND	PLM	Good			NA
4646V-C1-D4B	CLOSET 1	ND	PLM	Good	PLAIN DRYWALL		NA
4646V-C2-D4C	CLOSET 2	ND	PLM	Good]	2 &3	NA
4646V-R1-L5A	ROOM 1	ND	PLM	Good		EL 0.000.05	NA
4646V-R5-L5B	ROOM 5	ND	PLM	Good	WHITE/GREEN LINOLEUM	FLOORS OF ROOMS 1, 3, 4, 5, 8 & CLOSET 1	NA
4646V-R8-L5C	ROOM 8	ND	PLM	Good]	G OLOOLI I	NA

Sample Name		Lab Results/ Asbestos Type	Detection Method(s)	Condition	Material Description	Material Location	NESHAP Classification
4646V-EX-R6A		ND	PLM	Good	-ROOFING-SHED	SHED ROOF	NA
4646V-EX-R6Q	EXTERIOR	ND	PLM	Good			NA
4646V-EX-R6B	SHED	ND	PLM	Good			NA
4646V-EX-R6C		ND	PLM	Good			NA

ND=Non-Detect PLM=Polarized Light Microscopy NA=Not Applicable Table 4 Summary of Paint Chip Analysis for Lead

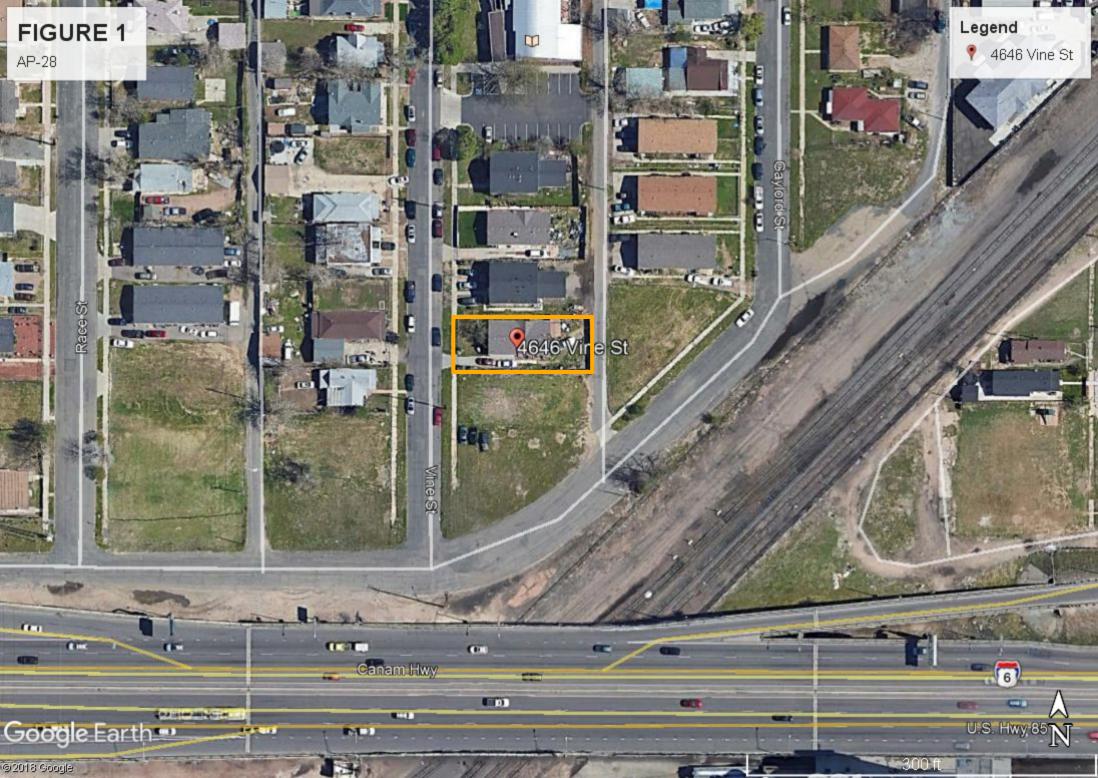
Sample Number	Sample Location	Lead Concentration (% wt.)	Component	Paint Description	Classification
4646V-R6-1L	Room 6	<0.0080	Drywall	Green Mint	NLC
4646V-R6-2L	Room 6	<0.0080	Wood	White	NLC
4646V-R3-L3	Room 3	<0.0080	Drywall	Tan	NLC
4646V-R4-L4	Room 4	<0.0080	Drywall	White	NLC
4646V-H-L5	Hallway	0.018	Drywall	Gray	NLC
4646V-R9-L6	Room 9	<0.0080	Drywall	Purple	NLC
4646V-R9-L7	Room 9	<0.0080	Drywall	Pink	NLC
4646V-R10-L8	Room 10	<0.0080	Drywall	Black	NLC
4646V-S-L9	Shed	<0.0080	Wood	Gray	NLC

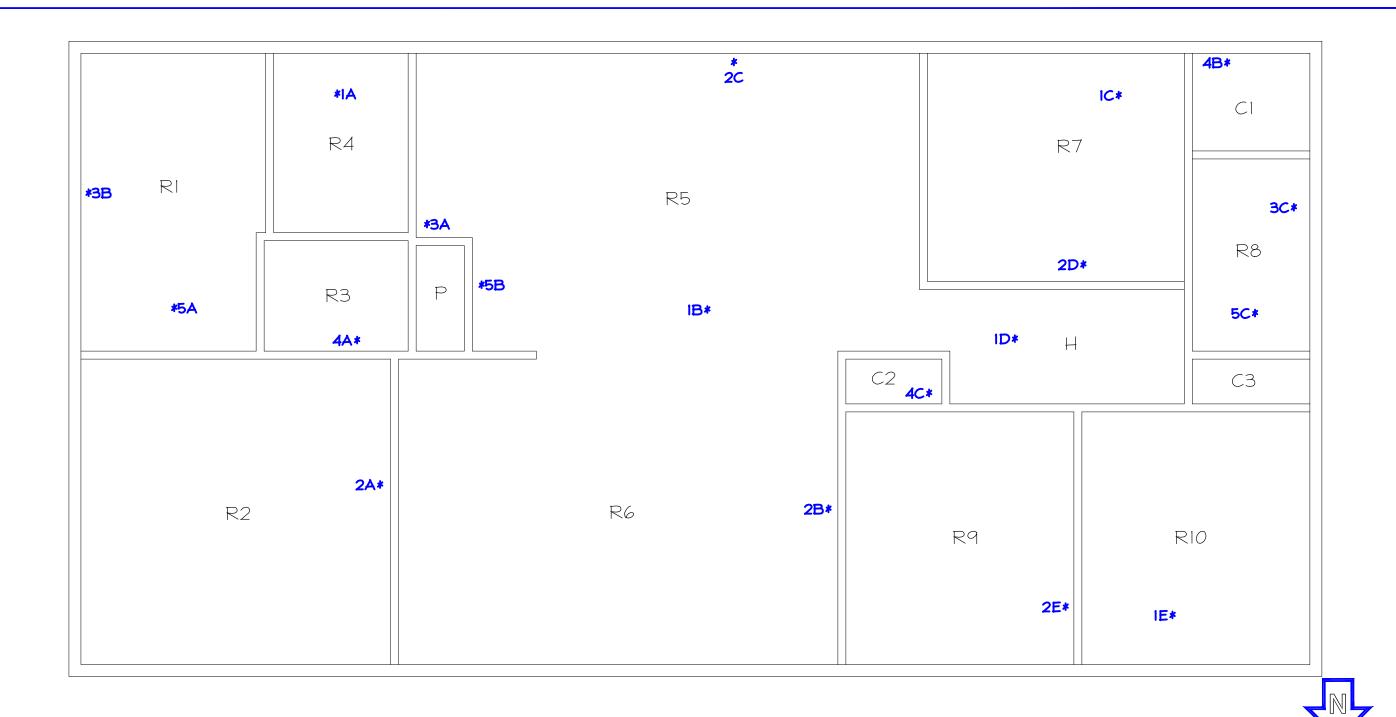
Table 5 Summary of Regulated Building Materials

Room	Material	Location	Quantity Fixture/Bulbs each
Hallway	Thermostat-Digital	Hallway S wall	1
Room 4	Furance	North Side of Room	I
Exterior	Gas Meter	North Side of House	1
Exterior	Electrical Meter	East Side of House	I
Exterior	Breaker Box	East Side of House	1
Room 3	Water Heater	South Side of Room	1

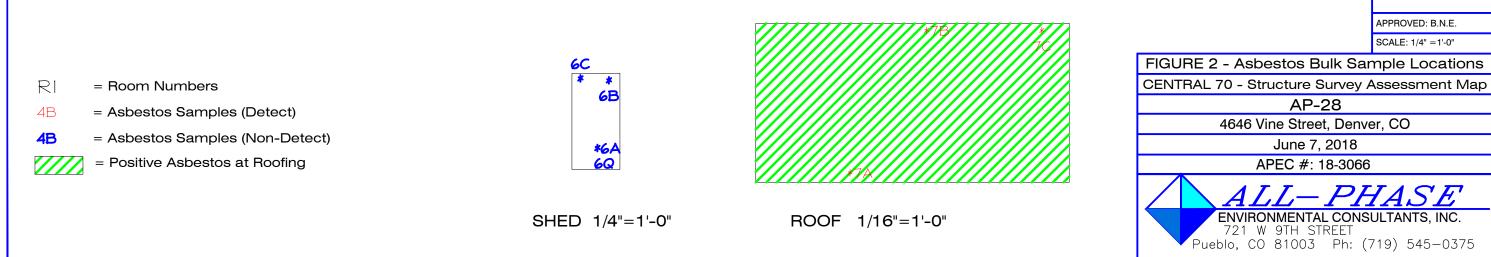
Figures

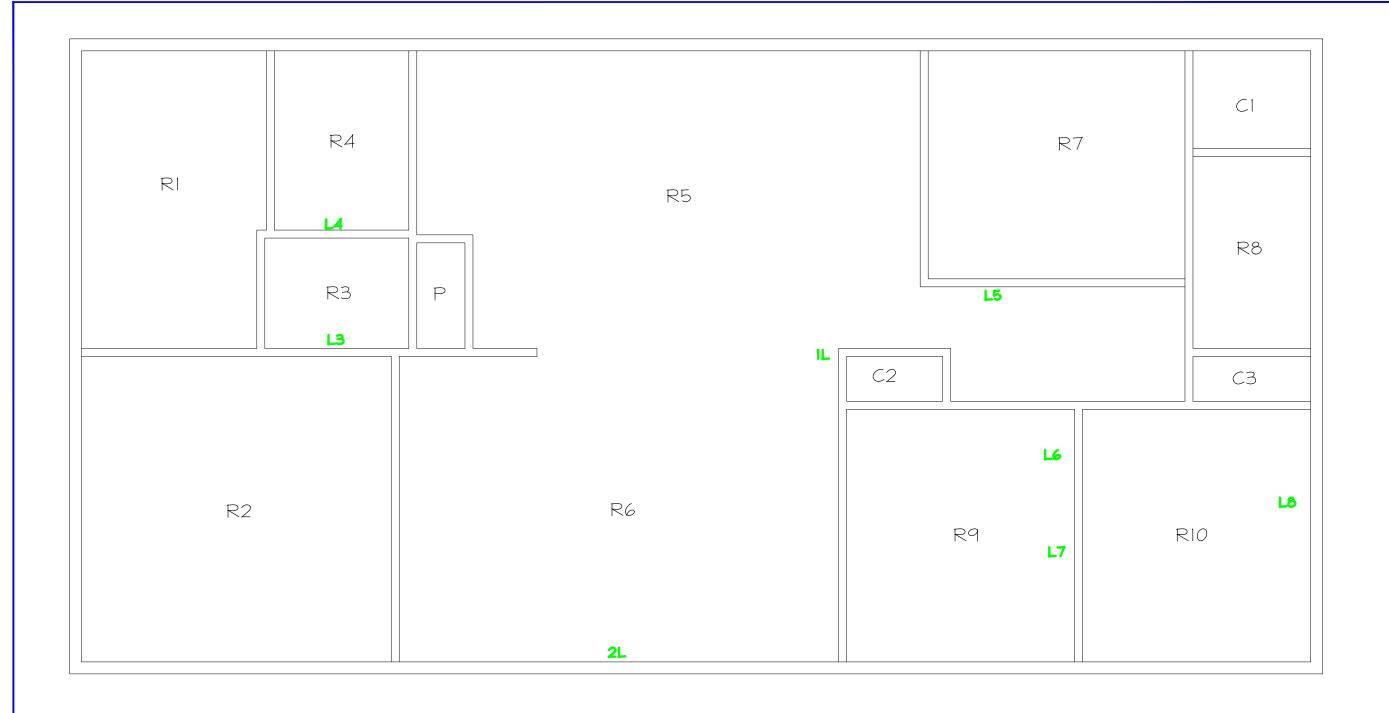
Figure 1	Site Location
Figure 2	Asbestos Bulk Sample Locations
Figure 3	Lead-Based Paint Sample Locations
Figure 4	Regulated Building Materials





APPROVED: B.N.E. SCALE: 1/4" = 1'-0"





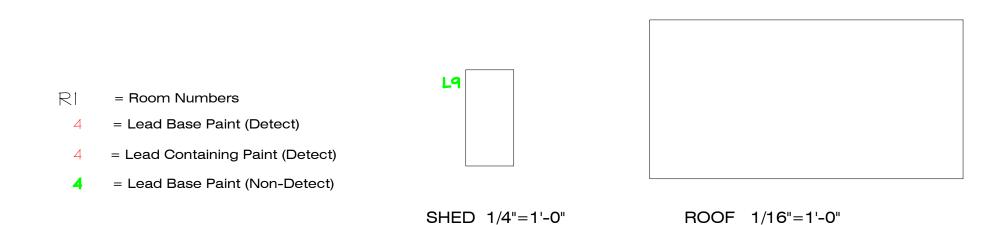


FIGURE 3 - Lead Based Paint Sample Location
CENTRAL 70 - Structure Survey Assessment Map

NTRAL 70 - Structure Survey Assessment Mar AP-28

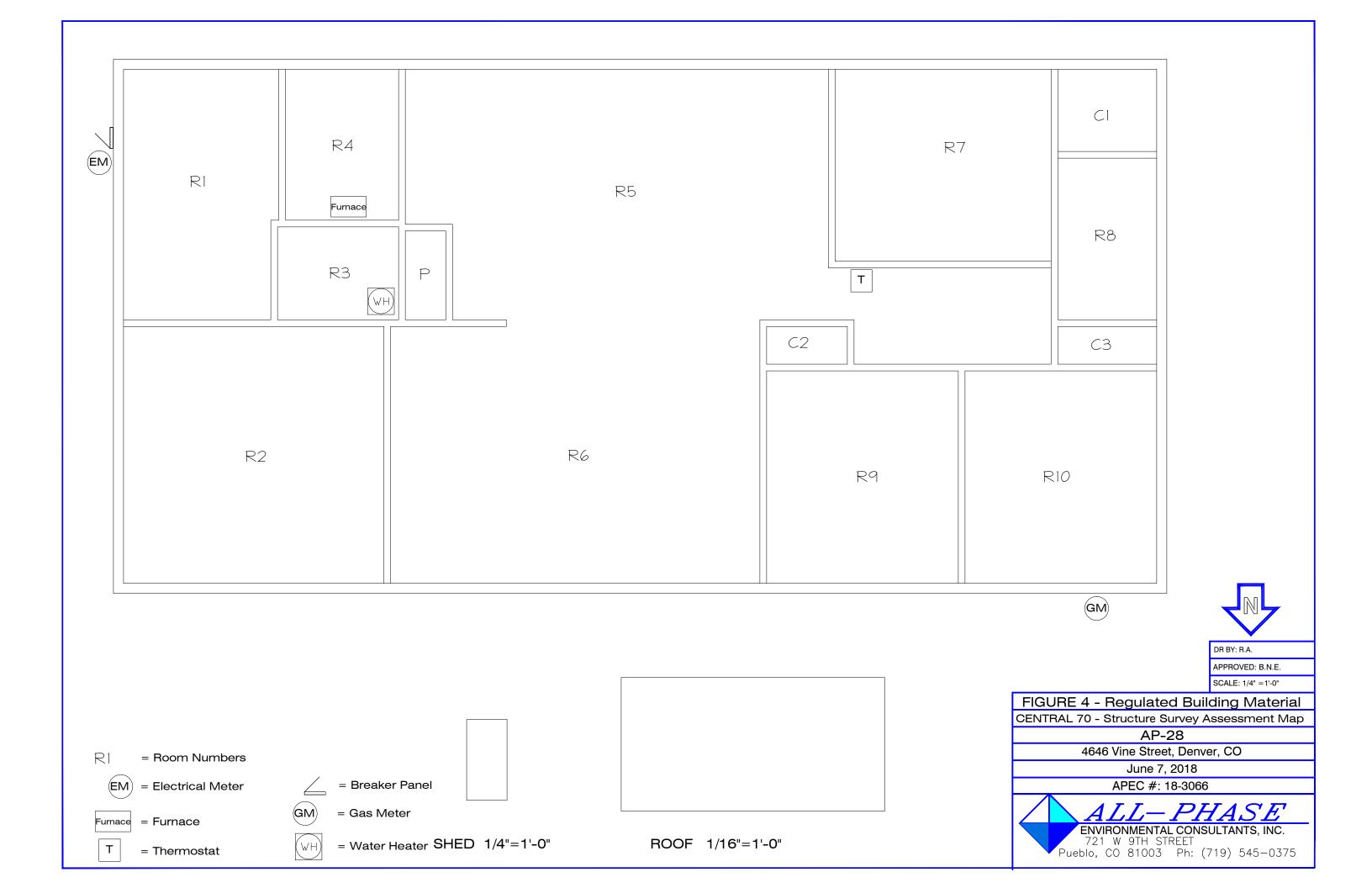
DR BY: R.A.

APPROVED: B.N.E.

4646 Vine Street, Denver, CO June 7, 2018

APEC #: 18-3066







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

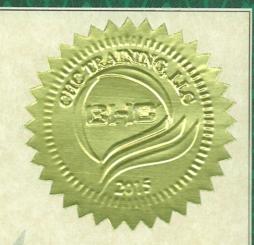
* This certificate is valid only with the possession of a current Division-approved training course certification in the discipline specified above.

Authorized APCD Representative

SEAL



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



Frenk Hulce

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

September 20, 2017

Certificate No.: R17-1661-AI-CO

No. of Hours:

Expiration Date: September 20, 2018

Certification not valid without watermark

Frank Hulce - Instructor

- Aanaya Boneditts

Danaya Benedetto- Training Program Manager



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



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 Peon - Instructor

- Hamaya Baneditts

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



For the 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

<u>Code</u> <u>Description</u>

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.

Um mall

William Walsh, CIH
Chairperson, Analytical Accreditation Board

Revision 15: 03/30/2016

Cheryl O. Morton

Managing Director, AIHA Laboratory Accreditation Programs, LLC

Date Issued: 08/31/2016



AIHA Laboratory Accreditation Programs, LLC SCOPE OF ACCREDITATION

Laboratory ID: **100194**

EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

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	
Pami		EPA SW-846 7000B	
Soil		EPA SW-846 3050B	
5011		EPA SW-846 7000B	
Cottled Duct by Wine		EPA SW-846 3050B	
Settled Dust by Wipe		EPA SW-846 7000B	
Airborne Dust		NIOSH 7082	
Composited Wines		EPA SW-846 3050B	
Composited Wipes		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

Effective: 05/04/2015

100194_Scope_ELLAP_2016_08_31

Page 1 of 1



POSITIVE ASBESTOS SAMPLE MATERIAL PHOTOGRAPHS



Samples Represented – 4646V-EX-R7A 4646V-EX-R7B 4646V-EX-R7C

Roofing Mastic



LABORATORY RESULTS & CHAIN OF CUSTODY-ASBESTOS



Customer PO: Project ID:

Attention: Logan Greenfield Phone: (719) 250-0036

All-Phase Environmental Consultants, Inc Fax: (719) 542-2807
721 West 9th Street Received Date: 06/12/2018 10:05 AM

Pueblo, CO 81003 Analysis Date: 06/15/2018 Collected Date: 06/07/2018

Project: 18-3066-CDOT-A-AP28

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

			Non-As	<u>sbestos</u>	<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
4646V-R4-PC1A-Te	Popcorn Ceiling	White		15% Ca Carbonate	None Detected
xture		Non-Fibrous		85% Non-fibrous (Other)	
221804256-0001		Heterogeneous			
		I	nseparable paint / coating layer includ	ed in analysis	
4646V-R4-PC1A-Dr	Popcorn Ceiling	Brown/Beige	15% Cellulose	70% Gypsum	None Detected
ywall		Fibrous	2% Glass	13% Non-fibrous (Other)	
221804256-0001A		Homogeneous			
4646V-R5-PC1B-Te	Popcorn Ceiling	White		15% Ca Carbonate	None Detected
xture		Non-Fibrous		85% Non-fibrous (Other)	
221804256-0002		Heterogeneous			
		lı	nseparable paint / coating layer includ	ed in analysis	
4646V-R5-PC1B-Dr	Popcorn Ceiling	Brown/Beige	15% Cellulose	70% Gypsum	None Detected
ywall		Fibrous	2% Glass	13% Non-fibrous (Other)	
221804256-0002A		Homogeneous			
4646V-R7-PC1C-Te	Popcorn Ceiling	White		15% Ca Carbonate	None Detected
xture		Non-Fibrous		85% Non-fibrous (Other)	
221804256-0003		Heterogeneous			
		li	nseparable paint / coating layer includ	ed in analysis	
4646V-R7-PC1C-Dr	Popcorn Ceiling	Brown/Beige	15% Cellulose	70% Gypsum	None Detected
ywall		Fibrous	2% Glass	13% Non-fibrous (Other)	
221804256-0003A		Homogeneous			
4646V-H-PC1D-Text	Popcorn Ceiling	White		15% Ca Carbonate	None Detected
ure		Non-Fibrous		85% Non-fibrous (Other)	
221804256-0004		Heterogeneous			
4646V-H-PC1D-Dry	Popcorn Ceiling	Tan	15% Cellulose	65% Gypsum	None Detected
wall		Fibrous	<1% Glass	20% Non-fibrous (Other)	
221804256-0004A		Homogeneous			
4646V-R10-PC1E-T	Popcorn Ceiling	White		15% Ca Carbonate	None Detected
		Non-Fibrous		85% Non-fibrous (Other)	
exture		NOII-FIDIOUS		0070110111101000 (011101)	

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

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



Customer PO: Project ID:

Attention: Logan Greenfield Phone: (719) 250-0036

All-Phase Environmental Consultants, Inc Fax: (719) 542-2807
721 West 9th Street Received Date: 06/12/2018 10:05 AM

Pueblo, CO 81003 Analysis Date: 06/15/2018 Collected Date: 06/07/2018

Project: 18-3066-CDOT-A-AP28

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

			Non-As	bestos	<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
4646V-R10-PC1E-D	Popcorn Ceiling	Tan	15% Cellulose	65% Gypsum	None Detected
rywall		Fibrous	<1% Glass	20% Non-fibrous (Other)	
221804256-0005A		Homogeneous			
4646V-R2-TD2A-Dr	Texture Pattern	Purple	15% Cellulose	70% Gypsum	None Detected
ywall	Drywall Panels	Fibrous		15% Non-fibrous (Other)	
221804256-0006		Heterogeneous			
			Inseparable paint / coating layer include	ed in analysis	
4646V-R6-TD2B-Dr	Texture Pattern	Brown/White	15% Cellulose	70% Gypsum	None Detected
ywall	Drywall Panels	Fibrous		15% Non-fibrous (Other)	
221804256-0007		Heterogeneous			
			Inseparable paint / coating layer include	ed in analysis	
4646V-R5-TD2C-Dr	Texture Pattern	Brown/White	15% Cellulose	70% Gypsum	None Detected
ywall	Drywall Panels	Fibrous		15% Non-fibrous (Other)	
221804256-0008		Homogeneous			
			Inseparable paint / coating layer include	ed in analysis	
4646V-R7-TD2D-Dr	Texture Pattern	Tan/White	15% Cellulose	70% Gypsum	None Detected
ywall	Drywall Panels	Fibrous		15% Non-fibrous (Other)	
221804256-0009		Heterogeneous			
			Inseparable paint / coating layer include	ed in analysis	
4646V-R9-TD2E	Texture Pattern	Tan/Green	15% Cellulose	70% Gypsum	None Detected
221804256-0010	Drywall Panels	Fibrous		15% Non-fibrous (Other)	
		Homogeneous			
4646V-R5-WD3A-W	Wallpapered Drywall	Various	80% Cellulose	20% Non-fibrous (Other)	None Detected
allpaper		Fibrous		,	
221804256-0011		Homogeneous			
4646V-R5-WD3A-D	Wallpapered Drywall	Brown/Beige	15% Cellulose	70% Gypsum	None Detected
	paporoa Dryman	Fibrous	2% Glass	13% Non-fibrous (Other)	50.00104
rywall		Homogeneous	2,0 01433	1070110111101000 (001101)	
221804256-0011A		-			
4646V-R1-WD3B-W	Wallpapered Drywall	Various	80% Cellulose	20% Non-fibrous (Other)	None Detected
allpaper		Fibrous			
221804256-0012		Homogeneous			

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



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Attention: Logan Greenfield Phone: (719) 250-0036

All-Phase Environmental Consultants, Inc Fax: (719) 542-2807
721 West 9th Street Received Date: 06/12/2018 10:05 AM

Pueblo, CO 81003 Analysis Date: 06/15/2018 Collected Date: 06/07/2018

Project: 18-3066-CDOT-A-AP28

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

			Non-Asbestos		
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
4646V-R1-WD3B-Dr	Wallpapered Drywall	Brown/Beige	15% Cellulose	70% Gypsum	None Detected
ywall		Fibrous	2% Glass	13% Non-fibrous (Other)	
221804256-0012A		Homogeneous			
4646V-R8-WD3C-W	Wallpapered Drywall	Various	80% Cellulose	20% Non-fibrous (Other)	None Detected
allpaper		Fibrous			
221804256-0013		Homogeneous			
4646V-R8-WD3C-Dr	Wallpapered Drywall	Brown/Beige	15% Cellulose	70% Gypsum	None Detected
ywall		Fibrous	2% Glass	13% Non-fibrous (Other)	
221804256-0013A		Homogeneous			
4646V-R3-D4A-Dry	Plain Drywall	Brown/Beige	15% Cellulose	70% Gypsum	None Detected
wall		Fibrous	<1% Glass	15% Non-fibrous (Other)	
221804256-0014		Homogeneous			
4646V-C1-D4B-Dry	Plain Drywall	Brown/Beige	15% Cellulose	70% Gypsum	None Detected
wall		Fibrous		15% Non-fibrous (Other)	
221804256-0015		Homogeneous			
4646V-C2-D4C	Plain Drywall	Gray/Tan	15% Cellulose	70% Gypsum	None Detected
221804256-0016		Fibrous		15% Non-fibrous (Other)	
		Homogeneous			
4646V-R1-L5A	White/Green Linoleum	Beige	45% Cellulose	50% Non-fibrous (Other)	None Detected
221804256-0017		Fibrous	5% Glass		
		Homogeneous			
4646V-R5-L5B	White/Green Linoleum	Beige	45% Cellulose	50% Non-fibrous (Other)	None Detected
221804256-0018		Fibrous	5% Glass		
		Homogeneous			
4646V-R8-L5C	White/Green Linoleum	Gray/Beige	30% Cellulose	65% Non-fibrous (Other)	None Detected
221804256-0019		Fibrous	5% Glass		
		Homogeneous			
4646V-EX-R6A-Shi	Roofing-Shed	Brown/Black	10% Glass	90% Non-fibrous (Other)	None Detected
ngle		Fibrous			
221804256-0020		Homogeneous			

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

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



Customer PO: Project ID:

Attention: Logan Greenfield

All-Phase Environmental Consultants, Inc

721 West 9th Street Pueblo, CO 81003 **Received Date:** 06/12/2018 10:05 AM **Analysis Date:** 06/15/2018

Phone: (719) 250-0036

Fax: (719) 542-2807

Collected Date: 06/07/2018

Project: 18-3066-CDOT-A-AP28

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

			Non-As	sbestos	<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
4646V-EX-R6A-Tar	Roofing-Shed		45% Cellulose	55% Non-fibrous (Other)	None Detected
Paper		Fibrous			
221804256-0020A		Homogeneous			
4646V-EX-R6Q-Shi	Roofing-Shed	Brown/Black	10% Glass	90% Non-fibrous (Other)	None Detected
ngle		Fibrous			
221804256-0021		Homogeneous			
4646V-EX-R6Q-Tar	Roofing-Shed	Black	45% Cellulose	55% Non-fibrous (Other)	None Detected
Paper		Fibrous			
221804256-0021A		Homogeneous			
4646V-EX-R6B-Shin	Roofing-Shed	Brown/Black	10% Glass	90% Non-fibrous (Other)	None Detected
gle		Fibrous			
221804256-0022		Homogeneous			
4646V-EX-R6B-Tar	Roofing-Shed	Black	45% Cellulose	55% Non-fibrous (Other)	None Detected
Paper		Fibrous			
221804256-0022A		Homogeneous			
4646V-EX-R6C-Shin	Roofing-Shed	Brown/Black	8% Glass	92% Non-fibrous (Other)	None Detected
gle		Non-Fibrous			
221804256-0023		Homogeneous			
4646V-EX-R6C-Tar	Roofing-Shed	Brown/Black	65% Cellulose	35% Non-fibrous (Other)	None Detected
Paper		Non-Fibrous			
221804256-0023A		Homogeneous			
4646V-EX-R7A-Shi	Roofing House	Black	15% Glass	85% Non-fibrous (Other)	None Detected
ngle		Fibrous			
221804256-0024		Homogeneous			
4646V-EX-R7A-Mas	Roofing House	Black		92% Non-fibrous (Other)	8% Chrysotile
tic		Non-Fibrous			
221804256-0024A		Homogeneous			
4646V-EX-R7B-Shin	Roofing House	Black	15% Glass	85% Non-fibrous (Other)	None Detected
gle		Fibrous			
221804256-0025		Homogeneous			

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



Customer PO: Project ID:

Attention: Logan Greenfield Phone: (719) 250-0036

All-Phase Environmental Consultants, Inc Fax: (719) 542-2807
721 West 9th Street Received Date: 06/12/2018 10:05 AM

Pueblo, CO 81003 Analysis Date: 06/15/2018 Collected Date: 06/07/2018

Project: 18-3066-CDOT-A-AP28

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

			Non-A	<u>sbestos</u>	<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
4646V-EX-R7B-Mas tic 221804256-0025A	Roofing House	Black Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
4646V-EX-R7C-Shin gle 221804256-0026	Roofing House	Black Fibrous Homogeneous	8% Glass	92% Non-fibrous (Other)	None Detected
4646V-EX-R7C-Mas tic 221804256-0026A	Roofing House	Black Non-Fibrous Homogeneous		5% Quartz 95% Non-fibrous (Other)	None Detected

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

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



Collected Date: 06/07/2018

Customer PO: Project ID:

Attention: Logan Greenfield Phone: (719) 250-0036

All-Phase Environmental Consultants, Inc Fax: (719) 542-2807

721 West 9th Street Received Date: 06/12/2018 10:05 AM Pueblo, CO 81003 Analysis Date: 06/15/2018

Project: 18-3066-CDOT-A-AP28

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.

Catcett

Report Comments:

Sample Receipt Date: 06/12/2018 Sample Receipt Time: 10:05 AM

Analysis Completed Date: 06/15/2018 Analysis Completed Time: 5:12 PM

Analyst(s):

Gentry Catlett PLM (29)

Timothy Kleehammer PLM (12)

Samples Reviewed and approved by:

Amanda Lang, Asbestos Laboratory Manager or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

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

OrderID: 221804256



Client Sample # (s):

Received (Lab):

Relinquished (Client):

Comments/Special Instructions:

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

221864256

EMSL Analytical, Inc. 1010 Yuma Street

Denver, CO 80204 PHONE: (303) 740-57

EMSL ANALYTICAL INC.	L		4180	420	0					(303) 740 (303) 741	
Company : All-Phase Environmental Consultants, Inc.					EMSL-Bill to: Different Same If Bill to is Different note instructions in Comments**						
Street: 721 W. 9th St						Third Party Bi					artv
City: Pueblo		State/P	rovince: CC	,	Zip/Pe	ostal Code: 8			Country: Ur		
Report To (Name): Lo	gan Greenfi				_ •	hone #: 719-				-	
Email Address: loga			ntal.com		Fax#	t.			Purchase C	rder:	
Project Name/Number						e Provide Re	esults:	 -			Mail
U.S. State Samples Ta	ken: CO					ecticut Sam			rcial 🗌 Res	idential	
						ons* - Pleas					
3 Hour 6 l	Hour [24 Hour	edule *There is			72 Hour	l	6 Hour FRA or FPA	1 Week		Week
an authorization fo	rm for this servi	ce. Analysis									
PCM - Air Check if	samples are	from NY				AT (AHERA or	ıly)	TEM- Du	_		
☐ NIOSH 7400			│		R, Pa	rt 763			vac - ASTM		
W OSHA 8hr. TWA			☐ NIOSH					☐ Wipe	- ASTM D64	80]
PLM - Bulk (reporting			EPA Le						t Sonication		J-93/167)
PLM EPA 600/R-93			☐ ISO 10						k/Vermiculi	_	
☐ PLM EPA NOB (<19	%)		TEM - Bull	-				☐ PLM CARB 435 - A (0.25% sensitivity)			
Point Count			☐ TEM EPA NOB			☐ PLM CARB 435 - B (0.1% sensitivity)					
☐ 400 (<0.25%) ☐ 10	• •		NYS NOB 198.4 (non-friable-NY)			TEM CARB 435 - B (0.1% sensitivity)			1		
Point Count w/Gravime			Chatfield SOP			TEM CARB 435 - C (0.01% sensitivity)			• •		
☐ 400 (<0.25%) ☐ 10	•		TEM Mass Analysis-EPA 600 sec. 2.5			TEM Qual. via Filtration Technique			·		
NYS 198.1 (friable		_	TEM - Water: EPA 100.2			TEM Qual. via Drop-Mount Technique			echnique		
☐ NYS 198.6 NOB (n		')	Fibers >10µm ☐ Waste ☐ Drinking All Fiber Sizes ☐ Waste ☐ Drinking			Other:			f		
☐ NIOSH 9002 (<1%))		All Fiber Si	zes L] Was	te U Drinki	ng				
☐ Check For Positive	Stop – Clea	irly Identify	/ Homogeno	ous Gro	up	Filter Pore	Size (A	ir Sample	s): 🗌 0.8	um 🔲 0.4	45µm
Samplers Name: LO	gan Gre	enfield			Sar	mplers Signa	ature:	7	— A	LLI	
Sample #			Sample Des	criptio	n				Area (Air) (Bulk)	Date/ Sam	Time pled
1646V-R4-PC1A		Р	opcorn (Ceilir	ng				1	6-7	'-18
4646V-R5-PC1B								-		1	(
4646V-R7-PC1C											
4646V-H-PC1D											
1646V-R10-PC1E		_	1								
1646V-R2-TD2A	7	exture I	Pattern [Drywa	all Pa	anels					_
4646V-R6-TD2B										_	
4646V-R5-TD2C	-		$\overline{}$			_			1		

Page 1 of 2 pages

Date:

Date:

214

7955 0259 48D

6-11-18

6/12/18

Total # of Samples:

520

Time:



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

221864256

EMSL Analytical, Inc. 1010 Yuma Street

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

FAX: (303) 741-1400

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
4646V-R7-TD2D	Texture Pattern Drywall Panels		6-7-18
4646V-R9-TD2E			
4646V-R5-WD3A	Walipapered Drywali		
4646V-R1-WD3B	1		
4646V-R8-WD3C	- V		
4646V-R3-D4A	Plain Drywall		
4646V-C1-D4B			
4646V-C2-D4C	<i>√</i> .		
4646V-R1-L5A	White/Green Linoleum		
4646V-R5-L5B			
4646V-R8-L5C	V		-
4646V-EX-R6A	Roofing - Shed		
4646V-EX-R6Q			
4646V-EX-R6B			
4646V-EX-R6C			
4646V-EX-R7A	Roofing - House		
4646V-EX-R7B			
4646V-EX-R7C			
		•	
		1	-
			-
*Comments/Special li	nstructions:		

Page 2 of 2 pages

2

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:
CustomerID:

201806328 ALLP62

CustomerPO: ProjectID:

Richard Ralston All-Phase Environmental Consultants, Inc 721 West 9th Street Pueblo, CO Phone: (719) 225-6953 Fax: (719) 542-2807 Received: 06/13/18 9:00 AM Collected: 6/7/2018

Project: 18-3066-C70-L-AP-28

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

Client Sample Descrip	ption Lab ID Collected Analyzed	Weight	Lead Concentration
4646V-R6-1L	201806328-0001 6/7/2018 6/14/2018	0.2751 g	<0.0080 % wt
	Site: Green Mint - Hallway - Drywall		
4646V-R6-2L	201806328-0002 6/7/2018 6/14/2018	0.2662 g	<0.0080 % wt
	Site: Room 6 - Wood - White		
4646V-R3-L3	201806328-0003 6/7/2018 6/14/2018	0.2702 g	<0.0080 % wt
	Site: Room 3 - Dining Room - Drywall - Tan		
4646V-R4-L4	201806328-0004 6/7/2018 6/14/2018	0.2709 g	<0.0080 % wt
	Site: Room 4 - Laundry - Drywall - White		
4646V-H-L5	201806328-0005 6/7/2018 6/14/2018	0.2720 g	0.018 % wt
	Site: Room Hallway - Drywall - Gray		
4646V-R9-L6	201806328-0006 6/7/2018 6/14/2018	0.2616 g	<0.0080 % wt
	Site: Room 9 Bedroom - Drywall - Purple		
4646V-R9-L7	201806328-0007 6/7/2018 6/14/2018	0.2589 g	<0.0080 % wt
	Site: Room 9 Bedroom - Drywall - Pink		
4646V-R10-L8	201806328-0008 6/7/2018 6/14/2018	0.2715 g	<0.0080 % wt
	Site: Room 10 Bedroom - Drywall - Black		
4646V-S-L9	201806328-0009 6/7/2018 6/14/2018	0.2906 g	<0.0080 % wt
	Site: Shed - Wood - Gray		

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

OrderID: 201806328



Lead (Pb) Chain of Custody EMSL Order ID (Lab Use Only):

201806328

EMSL Analytical, Inc. 200 Route 130 North

Cinnaminson, NJ 08077
PHONE: 1-800-220-3675
FAX: (856) 786-5974

Company : All-Phase Environme	ompany : All-Phase Environmental Consultants, Inc					EMSL-Bill to: ☑ Same ☐ Different If Bill to is Different note instructions in Comments**				
Street: 721 West 9th Street			Th			n authorization fro		erty		
	State/F	Province: CO		al Code: 810		Country:	-	arty		
Report To (Name): Richard Rals				ne #: 71922						
Email Address: rick@allphaseer		mental.com		9-542-2807		Purchase	Order			
Project Name/Number: 18-3066-				rovide Resu		Email	, Oluc.			
U.S. State Samples Taken: CO		7 20				ole 🗌 Residen	tiol/Tax	Evami		
U.S. State Campies Fancin.	T	urnaround Time (TA)le 🗆 Keside	itidi/ i an	Exemp	οι	
☐ 3 Hour ☐ 6 Hour		Hour 48 Hour		2 Hour	96 Hour	1 Week	I	2 Weel	k	
*Analysis o		ed in accordance with EMS				The state of the s				
Matrix		Method		Inst	rument	Reporting I	Limit	Chec	k	
Chips % by wt. mg/cm² ppm	(mg/kg)	SW846-7000E	3	Flame Ator	mic Absorption	0.01%		Ø		
Air		NIOSH 7082		Flame Ator	mic Absorption	4 μg/filte				
		NIOSH 7105			Furnace AA	0.03 µg/fil				
		NIOSH 7300M/NIOS			P-OES	0.5 µg/filt				
Wipe* ASTM non ASTM		SW846-7000E	3	Flame Ator	mic Absorption	10 µg/wip	oe			
*if no box checked, non-ASTM Wipe assumed		SW846-6010B o	r C	ICF	P-OES	1.0 µg/wi	ре			
TCLP		SW846-1311/7000B/S	M 3111B	Flame Ator	mic Absorption	0.4 mg/L (p	opm)			
		SW846-1311/SW846-6			P-OES	0.1 mg/L (p	ppm)			
SPLP		SW846-1312/7000B/S		Flame Atomic Absorption		0.4 mg/L (p				
		SW846-1312/SW846-60			P-OES	0.1 mg/L (p		4		
TTLC		22 CCR App. II, 7000			mic Absorption P-OES	40 mg/kg (p		무		
		22 CCR App. II, SW846-6 22 CCR App. II, 7000			P-OES mic Absorption	2 mg/kg (p 0.4 mg/L (p	the same of	H		
STLC		22 CCR App. II, 7000 22 CCR App. II, SW846-6			P-OES	0.4 mg/L (p 0.1 mg/L (p		H		
Soil		SW846-7000B			mic Absorption	40 mg/kg (p		-		
		SW846-6010B o			P-OES	2 mg/kg (p		=		
Wastewater Unpreserved	_	SM3111B/SW846-7	7000B	Flame Ator	mic Absorption	0.4 mg/L (p	pm)			
	8	EPA 200.9		Graphite Furnace AA		0.003 mg/L ((ppm)			
Preserved Wild Fire 5		EPA 200.7	SAFE LA LA		P-OES	0.020 mg/L (
Drinking Water Unpreserved		EPA 200.8		ICP-MS		0.001 mg/L (
	ō	EPA 200.9 EPA 200.5			Furnace AA	0.003 mg/L (무		
		40 CFR Part 50	2	ICP-OES ICP-OES		0.003 mg/L (무		
TSP/SPM Filter		40 CFR Part 50			Furnace AA	12 µg/filte 3.6 µg/filte		븜		
Other:		T			1 011.20	0.0 F3	Ci			
Name of Sampler: Rick	Asc	724	Signa	ture of Sar	mpler: 12	Ralstn				
	Location			Volume	Area	Date/	Time S	ample	d	
VIUNI - 04-14						San Land State of the State of	12018			
GREED MILY		sliway Daywol		GREEN		and the little state				
Client Sample #2	(000	10 -	white		T-4-1# of Co	umples.	0			
Client Sample #s	- 0 1				Total # of Sa	mples:	4		V.	
Relinquished (Client):	elstr	Date:	gun !	6-2018	Time:	16.00				
Received (Lab):	2	Date:	6/1	2/18	Time:	60	Sm			
Comments: BillTo: All-Phase Environmental Consultants, Inc, 7	721 West 9	th Street, Pueblo, CO, 81003, US	1	1			1			
Attention: Brandice Eslinger Phone: 719-240-4690			Purchase Order							

OrderID: 201806328



LEAD (Pb) CHAIN OF CUSTODY EMSL ORDER ID (Lab Use Only):

201806328

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
4646V-Rz-L3	Room3 - Diving Room - Drywsy	TAN	
C4611 - R4- 184	Roomy lounday paywork	While	
ucv - H- L5	Room HANWAY DRY WOY	GRAY	
46V- R9. L6	noom 9 bedroom DRy asy	numb	
46V- R9-L7	Non 9 Bed Non Dayuny	PINK	
UGV-RIOL8	Room 10 - Bedroom - Begwist	Black	23.4
C464- \$-15	shed - wood	GRAW	
-			
Comments/Spe	cial Instructions:		

Page _____ of ____ pages



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077 (856) 303-2500 / (856) 786-5974

http://www.EMSL.com

cinnaminsonleadlab@emsl.com

CustomerID: CustomerPO:

EMSL Order:

201806334 ALLP62

ProjectID:

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

Phone: (719) 225-6953 Fax: (719) 542-2807 Received: 06/13/18 9:00 AM Collected: 6/7/2018

Project: 18-3066-C70-L-AP-28

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

Client Sample Description	n Lab ID	Collected	Analyzed	Lead Concentration
4646V-AP28-TCLP-1	201806334-0001	6/7/2018	6/15/2018	<0.40 mg/L
	Site: TCLP- Bld	AP-28		

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 06/18/2018 13:10:46

OrderID: 201806334



Lead (Pb) Chain of Custody EMSL Order ID (Lab Use Only):

201806334

EMSL Analytical, Inc. 200 Route 130 North

Cinnaminson, NJ 08077 PHONE: 1-800-220-3675

(856) 786-5974

Company : All-Phase Environmental Consultants, Inc				EMSL-Bill to: ☑ Same ☐ Different If Bill to is Different note instructions in Comments**				
Street: 721 West 9th Street								
City: Pueblo State/Province: CO				Third Party Billing requires written authorization from third party Zip/Postal Code: 81003 Country: US				
Report To (Name): Richard Ralston				Telephone #: 7192256953				
Email Address: rick@allphaseenvironmental.com				710 710 0007				
Project Name/Number: 18-3066	-C/U-L-	AF-20				✓Email	N_CARCULATE	
U.S. State Samples Taken: CO						ole 🗌 Residential/Tax	Exempt	
Пашан Пашан		rnaround Time (TAT) Option						
3 Hour 6 Hour		Hour 48 Hour				The second secon	2 Week	
Matrix	complete	ed in accordance with EMSL's Terms at Method		Instrument		Reporting Limit Check		
Chips % by wt. mg/cm² ppr	n (mg/kg)	SW846-7000B		Flame Atomic Absorption		0.01%		
Air	0	NIOSH 7082		Flame Atomic Absorption		4 µg/filter		
		NIOSH 7105		Graphite Furnace AA		0.03 µg/filter		
4.46		NIOSH 7300M/NIOSH 7303		ICP-OES		0.5 µg/filter		
Wipe* ASTM non ASTM	8	SW846-7000B		Flame Atomic Absorption		10 μg/wipe		
*if no box checked, non-ASTM Wipe assumed		SW846-6010B or C		ICP-OES		1.0 µg/wipe		
TCLP	17.	SW846-1311/7000B/SM 3111B		Flame Atomic Absorption		0.4 mg/L (ppm)	A	
		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 22 CCR App. II, SW846-6010B or C		Flame Atomic Absorption ICP-OES		40 mg/kg (ppm) 2 mg/kg (ppm)	H	
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		SM3111B/SW846-7000B		Flame Atomic Absorption		0.4 mg/L (ppm)		
Preserved with HNO ₃ pH < 2		EPA 200.9		Graphite Furnace AA		0.003 mg/L (ppm)		
31		EPA 200.7		ICP-OES		0.020 mg/L (ppm)		
Drinking Water Unpreserved		EPA 200.8 EPA 200.9		ICP-MS Graphite Furnace AA		0.001 mg/L (ppm) 0.003 mg/L (ppm)		
Preserved with HNO ₃ pH < 2		EPA 200.5		ICP-OES		0.003 mg/L (ppm) 0.003 mg/L (ppm)		
	40 CFR Par		0			12 µg/filter	H	
TSP/SPM Filter		40 CFR Part 50		Graphite Furnace	e AA	3.6 µg/filter	<u> </u>	
Other:								
Name of Sampler: Rich	c Rise	72 V	Signa	ture of Sampler:	PR	elsto		
Sample # Location			Volume/Area Date/Time Sampled					
4646V-AP28- +CLP-B	AP-28 1/2		el of MAZENIAL		June 7-2014			
tap. 1 10 cp - 5	Ka	1	72	seo 9 WINTS	enite	- grene 1-2	OIY	
Client Sample #s - Total # of Samples: /								
Relinquished (Client): Plasta Date: 6/7/9v/8 Time: 16'00								
Received (Lab):	7/1	Date:	101		Time:	605pm		
Comments:			1 4	10		The state of		
Bill To: 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 1 of __/_ pages





3b. Pre-Demolition Engineering Survey



Pre-Demolition Survey And General Demolition Plan For 4646 Vine Street Denver, CO 80216



Engineers: David A. Poe, P.E., S.E. Glen L. Wilson, E.I.

July 2, 2018 Project No: 180113



July 2, 2018

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

Re: 4646 Vine Street, Denver, CO 80216

Pre-Demolition Engineering Survey per OSHA 1926.850(a)

And General Demolition Plan

Date of Observation:

06/27/18

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 Wednesday, June 27, 2018.

For the purpose of this report, there are two buildings on the property. The front elevation of the residence faces south and is perpendicular to Vine Street. An unattached storage shed is located on the east side of the residence. At the time of our visit the buildings were vacant.

The purpose of our site visit was twofold:

- To give an assessment of the current condition of the structures 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 building.
 - 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.
 - <u>Project Specific Applicability:</u> 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-project meeting, and it shall also be included in the job site books.
 - b. <u>OSHA 1926.85(b):</u> 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.
 - <u>Project Specific Applicability:</u> 4646 Vine Street, Denver, CO 80216 has not been damaged by any fire, flood, explosion, or any other event. Therefore, no shoring or bracing is required.
 - c. <u>OSHA 1926.850(c)</u>: 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.

<u>Project Specific Applicability:</u> 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. <u>OSHA 1926.850(d):</u> If it is necessary to maintain any power, water or other utilities during demolition, such lines shall be temporarily relocated, as necessary, and protected.

<u>Project Specific Applicability:</u> The demolition of 4646 Vine Street, 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.

<u>Project Specific Applicability:</u> 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.

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

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

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

h. <u>OSHA 1926.850(h):</u> 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.

<u>Project Specific Applicability:</u> 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.

<u>Project Specific Applicability:</u> 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.

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



j. <u>1926.850(k)</u>: 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.

<u>Project Specific Applicability:</u> 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 residence is a single-story residential structure and is assumed to be founded on a spread footings. The structure has a crawlspace with concrete foundation walls. The residence is approximately 27'x52' with the long direction oriented east to west. The wall and roof framing is assumed to be composed of dimension lumber framing. The residence appears to be a modular home constructed approximately in 2001. The storage shed is a wood-framed structure approximately 8'x10' and does not appear to be on a foundation.

Existing Condition Observation

During our site visit we made visual observations around the building perimeters only. The structures were 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 structures is very low. Workers may be allowed in the buildings 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 wood-framed 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.

* 2535 17TH STREET, DENVER, CO 80211 * 303-783-4797 * 303-830-9133 FAX *



Sequence

The building superstructure may be collapsed into the crawlspace starting at either the east or west sides of the building and proceeding thru the length of the building in the east/west direction. The north side of the building is in close proximity to the north property line. The property located to the north was not scheduled for demolition at the time of our observation. Once the roof, wall, and floor systems are demolished, 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

Principal

David A. Poe, P.E., S.E.



4. Materials Summary



December 26, 2018

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

RE: AP-28 4646 Vine St. - Summary of Removed Materials

Dear Jenn,

Below is a summary of the materials removed from 4646 Vine St.

Material Removed	Quantity
Regulated Building Materials	16 Lightbulbs and 1 gal Latex Paint
Clean Demolition Debris	302,400 lbs
Recycled Metals (Steel and Copper, Unsegregated)	4,900 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



5. Waste Manifests



5a. Regulated Building Materials (RBMs) Waste Manifests

WASTE	BILL OF I	ADING &	CERTIFICATE OF RECYCL	NG			P/U Fees: \$25_\$30_\$40_\$45_\$55_	DOL#	27201
WASTE BILL OF LADING & CERTIFICATE OF RECYCLING Universal Waste 4' Jumbo 4' Box 8' Jumbo 8' Box					\$65\$75\$85\$95\$105	BOL#:	2/201		
TSCA Waste		ite	HID Box Battery Box6.5				\$115\$125\$135\$145\$155		
Special Waste 14-G PD 30-G PD 55-G PD CY Bx		CY Bx		Labor Charges: \$		Shipment	Date:		
	r Of Waste:		95-G PD 55-G SD 85-G SD _	GL Box		Bill To: 165 In S Off Spec. Charge: \$. 1.0
Name:			-	Name: TKS Industries			11/6/18		
Address:					Address:	47 Shevel	an Rld		
City, State	, Zip:				City, State	e, Zip:	od (0. 802141	-	
Contact:					Contact:	Lakewo		- 1	cy Contact
Phone:			Fax:		Phone:	Jett Kni	IFax:		31-2149 sion 4
PO# Job#			770 PO#	0-407-4410	Job#	LAICH	31011 4		
							300#		
	ROKERAGI R8E, LLC				EPA ID	t: COR000231449	/ For Universal Waste		
		wport Stre	et			,	ndler of Universal Waste		
	Commerce		Colorado 80033-2244				Transporter/Transfer Facility		
			f) 303-424-9193			Used Oil Transpor	ter/Transfer Facility		
	Email: Mi	ke@R8Er	nviro.com			#: 050108 550 051Q			
Conta		VIIO.COIII			03 001	11781660 CO	TSCA - EPA Approved PCB Handler	Total	Unit / Wt.
Count	Туре	Was	te Common Name		- 1	DOT Description		Quantity	Volume
2	O.F		R FLUORESCENT LAMP/S RECYC			Regulated (per 49 CF		10	
5' & OVER FLUORESCENT LAM UTUBE FLUORESCENT LAMP/S RE			ING		Regulated (per 49 CF		12	00.	
			FLUORESCENT LAMP/S RECYCLING FLUORESCENT LAMP/S RECYCLING			Regulated (per 49 CF			
1	CE					Regulated (per 49 CF Regulated (per 49 CF		110	12:00
	COMPACT FLUORESCENT LAMP/S RECYCLING HID MERCURY/HALIDE/SODIUM LAMP/S RECYCLING		ING		Regulated (per 49 CF		21	ea	
			ATED/GROOVED LAMP/S RECYCLING			Regulated (per 49 CF		1	-60
		INCANDES	CENT LAMP/S RECYCLING			Regulated (per 49 CF		3/1	00
		UV/ARC/IGI	NITRON LAMP/S RECYCLING		Non-DOT	Non-DOT Regulated (per 49 CFR 173.164(e))			
		BROKEN LAMP/S RECYCLING			Non-DO	Non-DOT Regulated (per 49 CFR 173.164(e))			
	CRUSHED FLUORESCENT LAMP/S RECYCLING (processed) PCB WASTE RECYCLE/INCINERATION/MICROENCAP				Non-DOT Regulated (per 49 CFR 173.164(e))				
				RQ, UN3432, Polychlorinated biphenyls, Solid, 9, PGIII, ERG#171					
		NON-PCB BALLAST RECYCLE/MICROENCAPSULATION ESCRAP RECYCLING			Non-RCRA / Non-DOT Regulated Waste Non-DOT Regulated UN3506, Mercury Contained in Manufactured Articles, 8 (6.1), PGIII, ERG#172				
		MERCURY DEVICE RECYCLING							
		LEAD ACID BATTERY RECYCLING			UN2794, Batteries, Wet Filled w/ Acid, 8, PGIII, ERG#154				
		ALKALINE BATTERY RECYCLING		The second second second second	Batteries, Dry, sealed, n.o.s. Specail Provision 130				
		NICKEL (Ni-	Cad) BATTERY RECYCLING		Batteries, Dry, sealed, n.o.s. Specail Provision 130				
			ETAL BATTERY RECYCLING - DOT 17		A received the control of the contro	UN3090, Lithium Batteries, 9, PGII, ERG#138			
		LITHIUM Ion BATTERY RECYCLING - DOT 173.185(d)			UN3480, Lithium Batteries, 9, PGII, ERG#138 Special Waste Liquid Special Waste Liquid				000
	WASTE OIL RECYCLING			HAL					
			GLYCOL RECYCLING AEROSOLS						
71	GALLOW	WASTE AEROSOLS WASTE LATEX PAINT			11	UN1950,Aerosols,Flammable,2.1,ERG#126 Special Waste Liquid			GAI
			ATION CONTAINING SMOKE DETECTO	DRS		Special Waste Solid, Nuclear Regulatory Law 10 CFR 32.37			
		FIRE EXTIN	GUISHER(S)			Vaste Solid			
	-	METALS RE	2 4	1 1 100	Special V	Vaste Solid			
			IEOUS RECYCLING	Duaves	00			1	0
Generato	or Certifica		This is to certify that the above named ma	terials are properly	sified describ	ad nackaged most at an i		10	100
Gonorale	or Cortinou		labeled and are in proper condition for tra				ent of Transpotation.		
-11	1		Unpaid invoices will be assigned to a lice						
Cianotur	-				Opera	tor	Jesus Cusudo	11-6-	18
Signature	e:				Title:		Print Name:	Date:	
Transport	er 1 Name:	Jesus	S Casado			Transporter 2 Name:			
Dhamai		712 -	7115-1100						
Phone Nu	imber:/_	0-	45-1602			Phone Number:			
M	6			11-6					
Signature		4		Date		Signature		Date	
Receiving	g, subject	to the clas	sification and regulations in ef	fect on the date	of issue of	the Bill of Lading, the	property described above is in		
apparent	good orde	er.	Please retain a copy of this do	ocument as the "	Certification	on of Recycling" fo	r the items and quantities listed above.		
	1	-				-//	16/18		
Signature	9		7			Date	1.0		



6. Weight Tickets



6a. Daily Load Trackers and Associated Truck Tickets



Daily Load Tracker

Date:

11-8-18

Project: 18-309 - Ap28

Prepared By: Ass

Date:		11-8-18		Project: 18 - 00 / 19 pag				Dump Site Ticket			
						T ala #	<u>Material</u> <u>Code</u>	<u>Description</u>	Tons/Yards	Dump Site	<u>Number</u>
-	<u>Arrival Time</u>		Departure Time	TOT	Load #	Truck #	tresh	Demo debris	18 yds	Deds	
1-8	11:00	am/ pm	11:30	am pm	5	CH 333	A CONTRACTOR OF THE PARTY OF	Deno clebris	18428	Deds	
	1:20	am / pm	1:50	am pm	2		trash	1	18498	Dads.	
	3:15	am / pm	3:50	am (pm)	3	CH333	trash	. 1	18493	Dads	一个一个人
1-9	8:00	am) pm	8:75	am) pm	4	CH 575		1 /	18423	Dados	
	8:25	am pm	8:50	am/ pm	5	CH 333	trash	DIMO CLOSIS	18 4018	Dede	
	10:00	am / pm	10:20	am pm	(CH 575		Deno allyris		Dad &	
	10:20	am) pm	10:45	am/ pm	7	CH 333		Demo elebris	18449	Dads	
	12:25	am / pm	12:50	am /pm	8	CH575		Demo debris	18 128	Dodg	
	12:50	am / m	1:15	am (pm)	9	cH333	trugh	Devio dlibris	18/25	D298	
	2:50	am /pm	3:15	am / pm	10	cH575	trash	Demodebris	18498		
	3:15	am /pm	3:40	am /pm	11	CH 332	trash		18/13	Days	
111		am pm	7.25	arp / pm	12	CH333		ROCKY Mounta	1.0 10	10	
	7:50	am) pm	8:15	am/ pm	13	CH 575	trash	Demo debris	18423	Dads	
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		am / pm									
		am / pm		am / pm							

Legend: Materials:

Concrete, Asphalt, Asbestos, Lumber, R = Recycle Construction Debris, Trash, Metals, T = Trash



Ap 28

No. 8016

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

BILL TO:	TIM	7		
DISPATCHED BY:	Chi	2000	'(
DATE: 1/19/18	JOB DESCRIP	TION:	0 - 1	
TRUCK#	Contr	017	6 Prospet	
TANDEM TRAILER	CFII	~		
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Britishton Bu	1		DADS	
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Homean				
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HOURLY TONMILE				
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TOTAL HOURS				
7				
9 his	OWNER OF T	RUCK:		
DRIVER'S NAI	ME	AUTHORIZED SIGNATURE		
T65	0	Laurobius		
			rest at 1.5% per month. In the event	

AP-28

CHACONS construction & transport

No. 8578

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

BILL TO: JIS	Const				
DISPATCHED BY:	racons	Const			
DATE: 11 . 9 - 18	JOB DESCRI	PTION:			
TRUCK # (1 3 3 3	,	11	hlud.		
TANDEM TRAILER	price	shilon.	Olva		
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bridghten blud					
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RATE \$					
HOURLY TONMILE					
START TIME					
STOP TIME 5:30					
TOTAL HOURS					
91/2	OWNER OF	TRUCK:			
DRIVER'S NA	ME	AUTHORIZED SIGNATURE			
Justin Casto	16	Aunkous			
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.					



No. 8579

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

BILL TO: JNS	Gast				
DISPATCHED BY:	Nacons Const				
DATE: 1 - 9-18	JOB DESCRIPTION:				
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STOP TIME 5:00					
TOTAL HOURS					
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DRIVER'S NA	ME AUTH	IORIZED SIGNATURE			
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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.



Nº 50341

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

BILL TO:)·F	1-0	
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TOTAL HOURS	AF		
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3 95f	2	1 /a	mokaez
Net due 30 days from date of this collection of this account become	tatement. Past due es necessary, client	accounts bear in agrees to pay all	terest at 1.5% per month. In the event costs and reasonable attorney fees.



No. 8583

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

BILL TO: JKS	Const			*	
DISPATCHED BY:	vacons	Const		- 1	
DATE: 11-14-18	JOB DESC	RIPTION:			
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TANDEM TRAILER				wo.	
MATERIAL Dirt					
	LO	ADS	UNL	OADS	
JOB#	1000	S#			
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Hwy D	10'eo	dads	AP-8	3	
1	3:00	clouds	Ap	8	
bridge on bord	5200	dads	Ap-	8	
UNLOAD AT	*				
Dulis pr			9	21	
RATE \$					
HOURLY_TONMILE_		*			
START TIME 7:00					
STOP TIME 7:00pr	1		8		
TOTAL HOURS	1				
V	MP				
12 hrs	OWNER (OF TRUCK:			
DRIVER'S NA	ME	АИТЬ	IORIZED SIC	NATURE	
JUSTIN CAS	tollo	1 1 a	mesjays		
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.					



6b. Recycling Weight Tickets

AP-28 MIGIL

Rocky Mountain Recycling, Inc.

6510 Brighton Blvd. Phone 303 288-6868 Fax 303 288-0250

Colorado Certified Scale #2

57144

JKS INDUSTRIES 414 14TH STREET DENVER, CO 80202

Ticket# 5122836 Total \$ \$0.00

Total Lbs 4,900

November 14, 2018

Weighmaster: JMADERA

Driver:

Tag No:

Notes: 70TH & BRIGHTON

Driver: Outside Carriers,

Truck#:

Description: Container In:

Container Out:

Commercial Ticket - Number: 5122836

Commodity	Gross	Tare	Tare2 Deduct	Net UM	Price	Total
Iron #2 HMS Unprepared	40,760	35,860		4,900 N	0.0000	.00
	40,760	35,860		4,900		.00
					ATM Fee	.00
				Ticke	t Total	.00

ACCEPTED BY_

I DECLARE THAT I AM THE SOLE AND RIGHTFUL OWNER OF THIS MATERIAL, AND/OR HAVE THE AUTHORITY TO SELL IT.



6c. Waste Weight Tickets

2 1b*

1 1b*

1 15



Denver Arapahoe Disposal 3500 S Gun Club , PO Box 460397 Aurora, CO, 80018 Ph: (720) 876-2620 Original Ticket# 3268287

Customer Name JKSINDUSTRIESLLC JKS Industri Carrier JKS INDUSTRIES JKS INDUSTRIES Ticket Date 11/08/2018 Vehicle# 1 Volume

Payment Type Credit Account

Manual Ticket# Hauling Ticket# Route

State Waste Code Manifest

Destination

Profile

Generator

ator

Time
In 11/08/2018 07:51:06
Out 11/08/2018 07:51:06

Scale MANUAL WT

Operator WT SLA SLA

SLA * Manual Weight

Container

Gen EPA ID

Billing # 0014925

Driver Check#

Grid

Inbound Gross

Net Tons

* Manual Weight Tons

Comments 3 loads central -70 = 54cyds total from 11/8/18 REPLACEMENT TICKET FOR TICKET

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

Prod	luct	LD%	Qty	MON	Rate	Fee	Amount	Origin
mines enven cerebs were	DE SOLICE VOLUM MERCY ADMIN STORM STORM STORM GOMEN BOOKS STORM OUTS STORM ADDIES AND A PROST ASSESS	seria resta eseri Salar viura presi frose purte es				Acres sent come com com com come part sent sent sent to	DES ANNE BOURS FIRST ENGLE ENGLE PRINT, TODOS DESER ELDE: STÊTE PRINT FRANCE	THE ROOM THE SIDE STORY LONG ASING DATES ASING STORY THOSE STORY LANDS
1	CDY-CONST DEBRIS	- 100	54.00	Yards				

Total Fees Total Ticket

Date: 11-8-18	Ticket#: 47-28	
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	
Signature:	3 loads	x 1804ds= 5404ds
		TOTAL
	4	
Date: 11-8-18	Ticket#: AP28	
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	
DR	RIVER	
Signature:		

Date: 11-8-18	Ticket#: Ap2
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: Justin (Tag felle

4,



Denver Arapahoe Disposal 3500 S Gun Club , PO Box 460397 Aurora, CO, 80018 Ph: (720) 876-2620 Original Ticket# 3268288

Customer Name JKSINDUSTRIESLLC JKS Industri Carrier JKS INDUSTRIES JKS INDUSTRIES
Ticket Date 11/09/2018 Vehicle# 1 Volume

Ticket Date 11/09/2018 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

Profile ()

Generator

Gross 2 1b* Operator Inbound Time Scale Tare 1 1b* In 11/09/2018 07:38:23 MANUAL WT SLA SLA Net i lb Out 11/09/2018 07:38:23 * Manual Weight Tons

Comments 8 loads in drop box from 11/9/18 REPLACEMENT TICKET FOR TICKET # 3258163

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

Pro	duct	LD%	Qty	MON	Rate	Fee	Amount	Origin
WINE COLUMNS	maken might brink might bound times broke to the property of the state	1000 EVEN BOOK 5000 1/40 (100 8000	Marrie Strat. Logar Rosen absent Commit Annels Steller Andre.	salty times option array below separately to the			and advant their service service where helped really utilize expans expans delice of the service service.	de ferror sales bogos puedo terror deraid bring salest placer road direc-
- American	CDY-CONST DEBRIS -	100	144.00	Yards				

Total Fees Total Ticket

Date: 11-9-18	Ticket#: 4 28
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
Signature: DRIVER:	Carlolle
	18×8= 1440y 18 FOTAL LOADS
Date: 11-9-18	Ticket#: 428
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
DR Signature:	RIVER

Date: 11-9-18	Ticket#: AP28
ACCT#:306-14925	JKS INDUSTRIES CENTRAL 70 PROJECT
CDY 18 YDS	25 YDS HIGHSIDES DISPOSAL SITE: DADS 3500 S GUN CLUB RD
DRIVER: Signature:	AURORA CO 80018
Date: 11-9-18	Ticket#: Ap-28
ACCT#:306-14925	JKS INDUSTRIES CENTRAL 70 PROJECT
CDY 18 YDS	25 YDS HIGHSIDES DISPOSAL SITE: DADS
DRIVER:	3500 S GUN CLUB RD AURORA CO 80018
Signature: Joshm	C=>/3/10

Date: 11-9-18	Ticket#: AP 28
ACCT#:306-14925	JKS INDUSTRIES CENTRAL 70 PROJECT
CDY 18 YDS	25 YDS HIGHSIDES DISPOSAL SITE: DADS 3500 S GUN CLUB RD
DRIVER: Signature: Joseph	AURORA CO 80018
Date: 11-9-18	Ticket#: 428
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
DR Signature:	IVER O

Date: 11-9-18	Ticket#: AP28
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
Signature: Jucky	Castalo
Date: 11-9-18	Ticket#: AP28
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
DR Signature:	RIVER



PO

Denver Arapahoe Disposal 3500 S Gun Club , PO Box 460397 Aurora, CO, 80018 Ph: (720) 876-2620 Original Ticket# 3268290

Customer Name JKSINDUSTRIESLLC JKS Industri Carrier JKS INDUSTRIES JKS INDUSTRIES

Ticket Date 11/14/2018 Vehicle# 1 Volume
Payment Type Credit Account Container

Manual Ticket# Driver
Hauling Ticket# Check#

Route Billing # 0014925

State Waste Code Gen EPA ID
Manifest Grid

Destination C

Profile ()
Generator

Time Scale Operator Inbound Gross 2 1b*
In 11/14/2018 09:07:46 MANUAL WT SLA Tare 1 1b*
Out 11/14/2018 09:07:46 SLA Net 1 1b

* Manual Weight Tons

Comments 18 loads on drop box tickets 11/14/18 REPLACEMENT TICKET FOR TICKET # 3260190

PLEASE MAKE SURE YOUR TICKET IS CORRECT BEFORE SIGNING.

Proc	luct		LD%	Qty	LIOM	Rate	Fee	Amount	Origin
	ne cocan como segue popula como como carro como acado como prid	De PERFE PERFE SALAR SALAR ALLES (SASA SALAR SALAR SALAR	design problem proper restrict and an every magnification	make provident today volga story construction		de tamp agent, mand made derive miles from them	IS MINE YOUR KINDS ARRY THEIR STEEL CARRY THEIR STEEL CARRY AND	\$-000, 1000F CHEEK STORE \$1000 FINES ADDRESS THE STORE THE PARTY AND ADDRESS A	01-01-01-10-10-10-10-10-01-01-01-01-01-0
1	CDY-CONST	DEBRIS -	100	198.00	Yards				

Total Fees Total Ticket

Date: 11-14-8	Ticket#: AP-28
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
DF Signature:	RIVER ///



7. Dump Diversion Summary

JKS Industries AP-28 4646 Vine St.

	Descriptions		Dump Diversion / Recycle %							
Phase	Activity	<u>Unit of</u>	# of Yards	<u># of</u>	<u>Total</u>	<u>Pounds</u>	<u>Total</u>	Recycled	<u>Pounds</u>	<u>% of</u>
		<u>Measure</u>	<u>per</u>	Containers	Number of	<u>Per</u>	<u>Lbs</u>	Yes/No	of Recycle or Dump	Recycle or Dump
			<u>Container</u>		<u>Yards</u>	Yard **			<u>Diversion</u>	Diversion
Abatement	Trash Rolloff	Cubic Yard	-	-	-	450.00	-			
Abatement	Asbestos Containers	Cubic Yard	-	-	-	500.00	-			
					-		-			
Demolition	Demolition Construction Debris	Cubic Yard	18	12	216.00	1,400.00	302,400			
Demolition	Concrete Debris	Cubic Yard	12	-	-	4,050.00	-	X	-	0.00%
Demolition	Trees	Cubic Yard	-	-	-	500.00	-	Х	-	0.00%
Demolition	Steel	Lbs	-	-	-	-	4,900	Х	4,900	1.59%
Demolition	Copper	Lbs					-	X	-	0.00%
				12	216.00		307,300		4,900	1.59%

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.



8. Daily Logs

JKS Industries ON-SITE DAILY SIGN- IN SHEET

Project No: 18-309
Project NO: Ap-98
Supervisor: Jesus

Jesus Casado

	NAME	Initial	EMPLOYER	TIME IN	TIME OUT	TIME IN	TIME OUT	TOTAL
11-7	Jesus Casado	JC	JKS	7:00 AM	3:30PM	*		
	Jamob Ramirez	JR	JKS	7:00 AM	3:80 PM			
11-8	Jesus Casado		JKS	7:00 AM	5:00 pg			
	Jamrob Ramirez	JR	JKS	7:00 AM				
	Justin Casollo	TC	Chalon	8:00 AM				
11-0)	Jesus Casasto	JC	JKS	7.00 AM	4:00 pm			
	James Kamille	JR	JKS	7:00 AM				62
	5058 Souch	chacin	Chucon	8:00pm	, ,			
	Jush Cashik	50	Chron	8100gm				
			<u> </u>					
			,					
								-
							TOTAL	

Job # APA

JKS IDUSTRIES LLC DAILY PROJECT LOG

Job Name: 18 721

Day TYUVS JOU Month

Month NOV

Report # Year 7018

Project Manager

Superintendent _____

Work Performed Today			Weather:	
			Temp. HiLow_	
			Safety Meeting	
wading trucks	2. With to	rash	Topic:	
J				Number
			Project Manage	r
			Project Superviso	r 1
			Operators	s 1
			Laborers	3 1
			Tradesmer	1
			Other:	
			Other:	
			Other:	
			Materials Used	Quantity
*				
			Material Purchased/[Delivered
•			material - di cita	Jenvorou
Problems - Delays, Safety Issue	es			
Down time becau	le machine	duesht how	se any fir	0
and were waiting	na Car Tilel	from Taim-	il and	21
	TO THE	TLONAL LOUVI	llawi	
	1			
Subcontractor Progress				
V				
Inspections				
Equipment Rented Today	Rented From	Insp Chklist Complete?	Equipment	Hours
EX-230	united	mop official complete.	Ечиртын	Hours
0. 03-	OUT. I CA			
Visitors (Incl. Subs, Clients, etc)	Time In/Time Out	Activity Onsite		
Visitors (irioi. oubs, olioitts, etc)	Tillie III/Tillie Out	Activity Offsite		

JKS IDUSTRIES LLC DAILY PROJECT LOG

Job # <u>AP-78</u> Date <u>11-9-18</u>

	Job Name:	18-	37	1
2011	7-1-1			

Month NOU

Report #
Year ZOIS

Project Manager

Superintendent

World Donformed Today			1			
Work Performed Today			Weather:			
1 == 1 == 1 == 101 ==						
loading trucks			Temp. HiLow			
			Safety Meeting			
			Topic:			
				lumber		
			Project Manager			
			Project Supervisor			
			Operators			
			Laborers			
			Tradesmen			
			Other:			
			Other:			
			Other:	1.		
			Materials Used	Quantity		
			materials seed	Quartity		
			Material Purchased/D	elivered		
Problems - Delays, Safety Issue Wachwel Weds w	es .					
Machine meds w	edina dou	m time from	m 3pm-4pm			
Subcontractor Progress						
Inspections						
Equipment Rented Today	Rented From	Inon Ohlding O	I Canada and a control of			
270 CV		Insp Chklist Complete?	Equipment	Hours		
370 EX	united					
Visitors (Incl. Subs, Clients, etc)	Time In/Time Out	Activity Onsite				