

**PHASE II ENVIRONMENTAL SITE ASSESSMENT  
FOR  
CRST PROPERTIES  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
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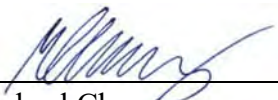
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Date: 7/19/2018

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## LIST OF ACRONYMS

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ACM	asbestos-containing material
AHERA	Asbestos Hazard Emergency Response Act
ASTM	ASTM International
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	contaminant of concern
CRST	Cheyenne River Sioux Tribe
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
HA	homogeneous area
HUD	United States Department of Housing and Urban Development
LBP	lead-based paint
LF	linear feet
mg/cm <sup>2</sup>	milligrams per square centimeter
mg/kg	milligrams per kilogram
PCB	polychlorinated biphenyl
P.E.	Professional Engineer
PLM	Polarized Light Microscopy
QA	Quality Assurance
QC	Quality Control
RACM	regulated asbestos-containing material
RSL	Regional Screening Level
SAP	Sampling and Analysis Plan
sq. ft.	square feet
START	Superfund Technical Assessment and Response Team
SOO	Statement of Objectives
TBA	Targeted Brownfields Assessment
TCLP	Toxicity Characteristic Leaching Procedure
TDD	Technical Direction Document
WESTON	Weston Solutions, Inc.
XRF	X-ray fluorescence

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Properties located in Eagle Butte, South Dakota (SD) (Site).

## SCOPE OF WORK

This Phase II ESA was conducted in accordance with Technical Direction Document (TDD) 0003/1711-09 and ASTM International (ASTM) E1903-11 – Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process. The purpose of a Phase II ESA is to achieve the objectives set forth in the Statement of Objectives (SOO) developed by the EPA, user(s), and the Phase II Assessor. Goals for this Phase II ESA were to acquire and evaluate sufficient information to determine the location and concentration of potential environmental contamination at the Site, if present. The specific SOO for this Phase II ESA were as follows:

- Assess and evaluate on-site structures and debris for hazardous building materials: asbestos-containing material (ACM), lead-based paint (LBP), or polychlorinated biphenyl (PCB) in window caulking;
- Assess and evaluate potential asbestos and LBP impacts to site surface soils;
- Conduct visual inspections of on-site structures to determine presence/absence of PCB-containing equipment or building materials, mercury-containing equipment, and mold;
- Develop sufficient information to render a reasonable professional opinion whether hazardous substances either are or are not present at the Site with respect to the potential concerns assessed. If present, include concentrations of hazardous substances based on field screening and/or laboratory analysis of samples;
- Gather and provide sufficient data to assist the TBA recipient in making informed decisions with regard to cleanup analyses and the future use of the properties; and
- Obtain sufficient data to support cleanup options, conceptual cost estimating for building demolition, and construction debris disposal at each of the properties.

## SITE BACKGROUND

The Site is located in Eagle Butte, SD and features eleven (11) buildings. Historically these buildings were utilized for residential purposes until being abandoned.

CRST plans to demolish the buildings and redevelop the properties for residential use. The Phase II ESA was performed due to the age of the buildings.

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 8<sup>th</sup> and 9<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary

of the results and conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos-Containing Material**

Of the 124 bulk samples submitted for laboratory analysis, a total of 45 samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in buildings at the Site. See Sections 5.1 and 6.1 of this report for a more detailed breakdown.

ACM	Location	Estimated Volume / Extent
<b>Property #1</b>		
Debris	Throughout	850 sq. ft.
Drywall	Throughout	800 sq. ft.
Floor Tile	Throughout	410 sq. ft.
<b>Property #2</b>		
Drywall	Throughout	700 sq. ft.
Linoleum	Rear Entry	40 sq. ft.
<b>Property #3</b>		
Drywall	Throughout Main Level	1,800 sq. ft.
Vibration Dampener	Basement	1 Unit
<b>Property #4</b>		
Linoleum	Kitchen	130 sq. ft.
<b>Property #5</b>		
Drywall	Throughout	1,100 sq. ft.
Linoleum	Northwest Room	420 sq. ft.
Vermiculite	Throughout	1,600 sq. ft.
<b>Property #6</b>		
None	None	None
<b>Property #7</b>		
Drywall	Throughout	1,400 sq. ft.
Floor Tile	Rear Entry	40 sq. ft.
<b>Property #8</b>		
Drywall – Ceilings	Throughout	400 sq. ft.
Drywall – Walls		1,400 sq. ft.

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ACM	Location	Estimated Volume / Extent
<b>Property #9</b>		
Drywall	West Room	520 sq. ft.
Floor Tile	Throughout	430 sq. ft.
Transite	On Chimney	10 sq. ft.
Window Glazing	Exterior	10 LF
<b>Property #10</b>		
Drywall	Throughout	1,400 sq. ft.
Floor Tile	Rear Entry	40 sq. ft.
Linoleum	Throughout	330 sq. ft.
Stair Tread	Rear Entry	15 sq. ft.
<b>Property #11</b>		
None	None	None

Notes:  
LF = linear feet  
sq. ft. = square feet

### **Lead-Based Paint**

**Limited XRF Survey:** Based on the XRF results, elevated lead concentrations are present on the ceilings, trim, and/or walls on the interior and/or exterior of the buildings at Properties #2, #7, #9, and #10. The following table lists the location, current surface paint color, and estimated extent of LBP present at the Site. If there were positive readings ( $\geq 1$  milligram per square centimeter [mg/cm<sup>2</sup>]) on the exterior and paint chips were visible in the soil or paint was chipping, lead impacts to surface soil were evaluated. LBP is considered a COC for these buildings in relation to the Site.

Location	Current Surface Paint Color	Estimated Extent
<b>Property #2 - Exterior</b>		
Trim	Yellow	30 LF
<b>Property #7 - Interior</b>		
Ceiling	White	80 sq. ft.
Wall	White	200 sq. ft.
<b>Property #9 - Interior</b>		
Wall	Cream	400 sq. ft.

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Location	Current Surface Paint Color	Estimated Extent
<b>Property #9 – Exterior</b>		
Trim	Green	50 LF
Wall	White	700 sq. ft.
<b>Property #10 - Interior</b>		
Wall	White	200 sq. ft.

Notes:  
LF = linear feet  
sq. ft. = square feet

**Lead-in-Soils:** While there were positive readings on the exterior of two of the buildings, bare soils and chipping paint were only present around the building at Property #9. One composite sample and duplicate were collected to evaluate potential lead impacts to surface soils. Based on the laboratory results, lead concentrations did not exceed the EPA Regional Screening Level (RSL) for residential soil in either sample. Lead impacts to surface soils are not considered a COC in relation to the Site.

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- Only fluorescent light fixtures or ballasts with a “No PCBs” label were observed in the buildings. No PCBs were detected in the glazing collected from Property #9. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the buildings. Mercury is not considered a COC in relation to the Site.
- Mold was observed inside of the building at Property #7. Mold is considered a COC for that building in relation to the Site.

## **RECOMMENDATIONS**

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Abatement of friable ACM (i.e., drywall, linoleum, and window glazing) is recommended prior to any demolition activities at the Site. The non-friable ACM identified is classified as Category I or II non-friable; therefore, ACM remediation may not be required prior to demolition as the non-friable ACM may be disposed with

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construction debris, if acceptable by the landfill. Buildings with severe fire damage (Properties #1, #2, #3, and #5) and ACM will need to be disposed of as ACM. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris. Though non-friable ACM may be able to be disposed of as construction waste, construction worker need to be made aware of the ACM present and appropriate protective measures will need to be implemented.

- START recommends contracting an accredited lead remediation company to assess disposal requirements for LBP at the Site if the buildings are to be demolished. Dust control methods should be implemented for the debris and all work performed should be done so by an EPA Lead-Safe certified firm. It is recommended that a construction debris disposal facility be contacted to determine if Toxicity Characteristic Leaching Procedure (TCLP) samples will be required.
- Mold should be controlled during demolition (e.g., dust control, ventilation, etc.).

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

## **1.0 INTRODUCTION**

### **1.1 SCOPE OF WORK AND PURPOSE**

The Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) conducted a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Properties located in Eagle Butte, South Dakota (SD) (Site - Figure 1). The ESA was conducted in accordance with Technical Direction Document (TDD) 0003/1711-09 and ASTM International (ASTM) E1903-11 – Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process. The purpose of a Phase II ESA is to acquire and evaluate information sufficient to achieve the objectives set forth in the Statement of Objectives (SOO) developed by the user(s) and the Phase II Assessor. The scope of work for a Phase II ESA is related to the activities agreed upon to meet the objectives of the investigation as defined in the SOO that are subject to ongoing evaluation and refinement as the assessment progresses. The SOO developed for this Site is presented in Section 1.2.

This Phase II ESA report contains the results of the data collection activities and associated quality assurance (QA)/quality control (QC) measures conducted specific to the Site. Information used to conduct this Phase II ESA was based upon reasonably ascertainable, visually and physically observable conditions, and included testing or sampling of materials. The structure of this report is based on the ASTM E1903-11 standard.

### **1.2 STATEMENT OF OBJECTIVES**

The objectives were developed by CRST (User), START (Phase II Assessor), and the United States Environmental Protection Agency (EPA). The objectives were developed to obtain sound, scientifically valid data concerning actual property conditions at the Site with respect to the presence or the likely presence of target analytes/substances including, but not limited to, those within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The SOO for the Site were determined during the project-scoping meeting held on November 29<sup>th</sup>, 2017. The Phase II ESA objectives determined for the Site were as follows:

- Assess and evaluate on-site structures and debris for hazardous building materials: asbestos-containing material (ACM), lead-based paint (LBP), or polychlorinated biphenyl (PCB) in window caulking;
- Assess and evaluate potential asbestos and LBP impacts to site surface soils;
- Conduct visual inspections of on-site structures to determine presence/absence of polychlorinated biphenyl (PCB)-containing equipment or building materials, mercury-containing equipment, and mold;
- Develop sufficient information to render a reasonable professional opinion whether hazardous substances either are or are not present at the Site with respect to the potential

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concerns assessed. If present, include concentrations of hazardous substances based on field screening and/or laboratory analysis of samples;

- Gather and provide sufficient data to assist the TBA recipient in making informed decisions with regard to cleanup analyses and the future use of the properties; and
- Obtain sufficient data to support cleanup options, conceptual cost estimating for building demolition, and construction debris disposal at each of the properties.

## 2.0 SUMMARY OF BACKGROUND INFORMATION

### 2.1 PROPERTY DESCRIPTION, LOCATION, AND HISTORY

The Site is comprised of eleven (11) buildings located in Eagle Butte, SD. The locations and descriptions of the buildings are provided in the table below:

Property	Description	Latitude	Longitude
#1	Single-story structure with fire damage	45.006272°N	-101.229795°W
#2	Single-story structure with fire damage	45.004961°N	-101.234094°W
#3	Single-story structure with basement and fire damage	45.002114°N	-101.228606°W
#4	Mobile home	45.001932°N	-101.229035°W
#5	Single-story structure with basement and fire damage	45.0062936°N	-101.2327953°W
#6	Mobile home	45.005935°N	-101.23311°W
#7	Single-story structure	45.005329°N	-101.232390°W
#8	Single-story structure	45.005267°N	-101.231618°W
#9	Single-story structure	45.002705°N	-101.227261°W
#10	Single-story structure	45.005066°N	-101.233668°W
#11	Mobile home	45.000823°N	-101.232200°W

The buildings at these properties are slated for demolition by CRST. Due to the age of the buildings, there is the possibility of asbestos containing material (ACM), lead-based paint (LBP), and other environmental hazards potentially being present. A building inspection is needed prior to demolition proceedings.

### 2.2 PREVIOUS ENVIRONMENTAL REPORTS AND RECORDS

Previous environmental reports and/or records, if available, were obtained by START from various sources, including local agencies, and reviewed for information relating to the Site. A summary of records obtained is provided in the following table.

<b>Document:</b> TBA Application <b>Prepared for:</b> EPA <b>Prepared by:</b> CRST <b>Date:</b> Unknown <b>Report Source:</b> EPA	<b>Document Summary:</b> The application gives brief summary of subject property background information and environmental conditions at the subject property (including potential contaminants). The application also provides contact names(s) and phone numbers for stakeholders, and potential redevelopment foundation.  <b>Information Relating to the Subject Property:</b> There are several residential properties which are burned or are in damaged condition. The buildings at these properties will be demolished to make way for new housing.
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### **3.0 DESCRIPTION OF WORK PERFORMED AND RATIONALE**

This section summarizes the work performed and rationale for the work conducted to meet the SOO developed for the investigation as documented in the approved Sampling and Analysis Plan (SAP) for the Site (WESTON, 2018). Deviations from the approved SAP for this Phase II ESA are presented in Section 3.4.

Based upon the SOO developed for the Site, a building inspection was conducted as part of this Phase II ESA. The assessment included visual inspections, field screening, and/or sample collection for laboratory analysis. Details of the individual media investigations along with rationale are presented below. Photographs of field activities are included in the Photograph Log presented in Appendix A. The Phase II fieldwork was conducted on May 8<sup>th</sup> and 9<sup>th</sup>, 2018.

#### **3.1 ASBESTOS-CONTAINING MATERIAL SURVEY**

This Phase II ESA involved an ACM survey, including the collection of bulk asbestos samples in order to establish the extent and presence of ACM. The survey was conducted by Asbestos Hazard Emergency Response Act (AHERA) Certified Building Inspector: Mr. Michael Cherny. Visual inspections were conducted on areas of the structure where an individual performing demolition or renovation operations may encounter regulated asbestos-containing material (RACM). Sample locations and the total number of samples were based on AHERA standards (EPA, 1985) and/or the best professional judgment of the inspector. Each potential RACM location was touched to determine if it was friable. Though previous ACM survey results were taken into consideration, bulk samples were collected of suspect friable and non-friable RACM and submitted to an asbestos-certified laboratory for analysis.

#### **3.2 LEAD-BASED PAINT SURVEY**

##### **3.2.1 Limited XRF Survey**

Due to the age of the buildings at the Site, this Phase II ESA involved a LBP survey by EPA Certified LBP Inspector: Mr. Elliott Petri. To conduct the LBP survey, an X-ray fluorescence (XRF) instrument was used on painted surface locations to determine if materials were “positive” for lead ( $\geq 1$  milligram per square centimeter [ $\text{mg}/\text{cm}^2$ ]). Visual inspections were conducted on interior and exterior areas of the building to identify painted surfaces and XRF readings were collected based upon the best professional judgment of the inspector.

##### **3.2.2 Lead-in-Soil**

Due to the potential for lead contamination in the surface soils adjacent to the exterior walls of buildings with LBP, soil samples were collected at locations where potential lead contamination would most likely be found. Lead in soil samples were collected as composite samples with aliquots from each side of the building that had soil present. Once composited the sample was

homogenized and field screened with the XRF. If XRF screening of the sample collected exceeded 400 mg/kg, then interval sampling was conducted until XRF readings no longer exceeded the 400 mg/kg criteria or until refusal was met.

### **3.3 VISUAL INSPECTIONS AND GLAZING SAMPLING**

Visual inspections were conducted to identify the presence or absence of PCB-containing equipment (e.g., fluorescent light ballasts, electrical transformers, etc.), mercury-containing equipment (e.g., thermostat switches), and mold. The extent of visual inspections was limited to areas visually observable, easily accessible, and deemed safe to enter by the field team. Quantity and location information was documented where possible, but no samples were collected.

In addition to visual inspections, if window glazing was observed on the buildings it is possible the glazing could be PCB-containing. Grab samples were collected of any window glazing encountered.

### **3.4 DEVIATIONS FROM THE SAMPLING AND ANALYSIS PLAN**

Due to the ongoing evaluation and refinement of the SOO, changes can occur to the approved SAP based upon site conditions encountered. No deviations from the approved SAP were identified during this Phase II ESA.

## 4.0 DESCRIPTION OF METHODS USED

### 4.1 ASBESTOS-CONTAINING MATERIAL

#### Asbestos Bulk Sampling

Personnel performing the sampling wore personal protective equipment appropriate to the hazard(s) presented and included gloves, Tyvek, booties, hard hats, and/or high-efficiency particulate air respiratory protection. Asbestos bulk samples were randomly collected using the grid system described in the EPA publication “*Asbestos in Buildings – Simplified Sampling Scheme for Friable Surfacing Materials*” (EPA, 1985). The following general sampling guidelines were followed during the inspection, as applicable:

- In areas where homogeneous suspected RACM (surfacing) was less than 1,000 square feet (sq. ft.), three randomly collected bulk samples were collected from each area;
- In areas where homogeneous suspected RACM (surfacing) was at least 1,000 sq. ft. but less than 5,000 sq. ft., five randomly collected bulk samples were collected from each area;
- In areas where homogeneous suspect RACM (surfacing) was at least 5,000 sq. ft., seven randomly selected bulk samples were collected from each area;
- At least one sample was taken from pipe fittings;
- Three samples were taken from thermal systems insulation (TSI); and
- For miscellaneous materials, a minimum of one bulk sample was collected for each type.

#### Quality Assurance (QA)/Quality Control (QC) Activities

The following QA/QC activities were conducted as part of this investigation:

- Field Duplicate Samples – Field duplicate samples were collected at the frequency of one per 20 bulk samples. The following table indicates the original sample and duplicate samples collected.

Original Sample	QA/QC Duplicate Sample
CRST-09-WP01-020	CRST-09-WP01-021
CRST-03-LN01-042	CRST-03-LN01-043
CRST-05-WF01-061	CRST-05-WF01-062
CRST-02-DW01-080	CRST-02-DW01-081
CRST-08-CD01-103	CRST-08-CD01-104
CRST-07-FT01-120	CRST-07-FT01-121

Based on the laboratory results, no discrepancies were reported and all results are considered acceptable. Results for the original and QA/QC samples are included in Tables 1 and 2.

### **Laboratory Analytical Methods**

Samples collected were sent to Reservoirs Environmental Inc. in Denver, CO for polarized light microscopy (PLM) analysis by Method EPA 600/R-93/116 to determine a visual estimation of asbestos content and, if applicable, Method EPA 600/R-93/116 (400 Point Count).

## **4.2 LEAD-BASED PAINT**

### **4.2.1 Limited XRF Survey**

#### **XRF Readings**

XRF in-situ readings were collected using an Innov-X Alpha Series™ handheld XRF instrument to analyze painted and coated surfaces (interior and exterior) for lead during this Phase II ESA. XRF readings of walls, windows, and other painted surfaces in each room equivalent were collected. Room equivalents include painted or coated surfaces that are not considered separate rooms such as hallways and closets. A representative number of sample readings were collected from a subset of rooms considered by the certified LBP inspector to be of like coated surfaces.

In general, locations where the paint appeared to be thickest were selected for XRF analysis. Locations where paint was worn away or scraped off were avoided. Areas over pipes, electrical surfaces, nails, and other possible interferences were also avoided. The XRF probe faceplate was allowed to lie flat against the surface of the test location to obtain a quality reading.

#### **QA/QC Activities**

The following QA/QC activities were conducted as part of this investigation:

- XRF Standardization Readings – XRF standardization readings were collected prior to use, every four hours during use (as applicable), and following use to verify accuracy.

No other QA/QC activities or sample types were required based upon the assessment techniques and sample collection methods. Based on the results of the standardization readings, all results reported are considered acceptable. XRF standardization readings are presented in Table 4.

### **Laboratory Analytical Methods**

Due to no “inconclusive” readings by the XRF instrument, paint chip samples were not collected for laboratory analysis.

### **4.2.2 Lead-in-Soil**

#### **Sample Collection**

Due to the potential for lead contamination in the surface soils adjacent to the exterior walls of buildings with LBP, soil samples were collected at locations where potential lead contamination

would most likely be found. Lead in soil samples were collected as composite samples from 0 - 1 inch with aliquots from each side of the building based upon visual screening (if paint chips are visible in soil or paint is chipping). Samples were collected from the drip line of the building (12 in. – 30 in. from the exterior). Samples were placed into Ziploc baggies and homogenized. Once composited the sample was field screened with the XRF. If XRF screening of the composite soil sample collected from 0 - 1 in. was near or exceeding 400 mg/kg, then interval sampling was conducted from 1 - 6 in., 6 - 12 in., 12 - 18 in., and 18 - 24 in. bgs, until XRF readings were no longer near or exceeding the 400 mg/kg criteria or until refusal was met. The soil samples were labeled and stored until shipment for laboratory analysis accompanied by chain-of-custody documentation.

#### **QA/QC Samples**

The following QA/QC activities were conducted as part of this investigation:

- Sample Duplicates – One duplicate composite sample (CRST-09-PB-SS01A [duplicate of CRST-09-PB-SS01] was collected and submitted for laboratory analysis.

#### **Laboratory Analytical Methods**

Samples collected were delivered to Reservoirs in Denver, Colorado for lead analysis by EPA Method SW846 3050B / AA (7420).

### **4.3 PCBs, MERCURY, AND MOLD**

#### **Visual Inspections**

Visual inspections were conducted for presence/non-presence of mercury thermostat switches, PCB ballasts, and mold. Suspect hazards encountered, if any, were documented in field notes and/or photographed.

#### **Sample Collection**

Any glazing material observed on the windows of the buildings was considered suspect for PCBs. Samples were placed into Ziploc baggies, labeled, and stored until shipment for laboratory analysis accompanied by chain-of-custody documentation.

#### **QA/QC Samples**

The following QA/QC activities were conducted as part of this investigation:

- Sample Duplicates – One duplicate grab sample (CRST-09-PCB-001A [duplicate of CRST-09-PCB-001] was collected and submitted for laboratory analysis.

#### **Laboratory Analytical Methods**

Samples collected were shipped to Pace Analytical in Billings, Montana for PCB analysis by EPA Method 8082A.

## 5.0 PRESENTATION OF INFORMATION AND DATA ACQUIRED

### 5.1 ASBESTOS-CONTAINING MATERIAL

A total of 124 bulk samples were collected and submitted for PLM analysis. Of the samples collected, the following number of samples were collected of each bulk material.

Property	Bulk Material	Number of Samples Collected
#1	Debris	1
	Drywall	5
	Floor Tile	4
	Roofing Material	1
#2	Debris	1
	Drywall	6
	Floor Tile	1
	Linoleum	2
	Roofing Material	1
	Wall Felt	1
#3	Chimney Insulation	3
	Drywall	8
	Linoleum	2
	Roofing Material	1
	Sink Coating	1
	Stair Tread	1
	Vibration Dampener	2
#4	Ceiling Tile	1
	Drywall	1
	Floor Tile	1
	Linoleum	1
#5	Debris	1
	Drywall	5
	Linoleum	3
	Roofing Material	1
	Vermiculite	1

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	Wall Felt	2
#6	Debris	1
	Floor Tile	1
	Linoleum	1
	Wall Foil	1
#7	Drywall	8
	Floor Tile	3
	Roofing Material	1
	Wall Felt	1
#8	Drywall	9
	Linoleum	1
	Roofing Material	1
	Wall Felt	1
#9	Chimney Materials	3
	Drywall	6
	Floor Tile	3
	Roofing Material	2
	Wall Paper	3
	Window Glazing	2
#10	Drywall	8
	Floor Tile	3
	Linoleum	1
	Roofing Material	1
	Stair Tread	1
	Stove Liner	1
	Wall Felt	1
#11	Ceiling Tile	1
	Linoleum	1

In addition, the following assumptions and items of note were observed during the ACM survey:

**Property #1**

- Interior walls and ceilings, when present, were finished drywall. Much of the drywall was fire-damaged.

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- Fiberglass insulation was present in the walls and ceiling.
- Most of the rooms had floor tiles present. Fire debris was also over the flooring and some of the floor was burnt away. A wooden subfloor was present below all flooring types.
- No suspect ceiling tiles, cove base, window glazing, or caulking were observed.
- The roof was comprised of asphalt shingles.

#### **Properties #2, #7, #8, #10**

- These four units had the same floorplans. Only Property #2 had fire damage.
- The walls and ceilings throughout were finished drywall.
- Flooring was linoleum or floor tile. A wooden subfloor was present below all flooring types. Stair tread was present in the rear entry of Property #10.
- No suspect ceiling tiles, cove base, window glazing, or caulking were observed. A stove liner material was present at Property #10.
- The roofs were comprised of asphalt shingles. Exterior siding was wood with a felt paper material.

#### **Property #3**

- Walls and ceilings, when present, throughout the main floor were drywall. Much of the drywall was fire-damaged. Some drywall was also present in a room in the basement.
- Most of the rooms had linoleum present. A wooden subfloor was present below all flooring types. Stair treads were present on the staircase leading to the basement.
- No suspect ceiling tiles, cove base, window glazing, or caulking were observed. A sink undercoating was present in the kitchen.
- Two types of vibration dampeners were present on ducting for a furnace in the basement.
- A suspect flue lining insulation was sampled.
- The roof was comprised of asphalt shingles. Exterior siding was metal with a foam board backing.

#### **Property #4**

- Walls were wood or unfinished drywall throughout.
- Flooring was wood, linoleum, or floor tile. A wooden subfloor was present below all flooring types.
- No suspect cove base, window glazing, or caulking were observed. Ceiling tiles were present throughout the unit.
- The roof was metal.

#### **Property #5**

- Access to the basement was structurally unsound so the basement could not be inspected. No suspect materials were observed in the basement from the stairway.
- Interior walls and ceilings, when present, were finished drywall. Much of the drywall was fire-damaged.
- Most of the rooms had linoleum present. Fire debris with vermiculite was also over the flooring. A wooden subfloor was present below all flooring types.
- No suspect ceiling tiles, cove base, window glazing, or caulking were observed.
- The roof was comprised of asphalt shingles. Exterior siding was wood with a felt paper material.

#### **Property #6**

- Unit was fire damaged and no walls remained. A residual foil paper was present on the walls.
- Flooring was linoleum or floor tile. A wooden subfloor was present below all flooring types.
- No suspect ceiling tiles, cove base, window glazing, or caulking were observed.
- The roof was metal.

#### **Property #9**

- Walls and ceilings throughout the building were drywall or wood.
- Most of the rooms had floor tiles present. A wooden subfloor was present below all flooring types.
- Suspect window glazing was encountered.
- No suspect ceiling tiles, cove base, or caulking were observed.
- A chimney was present with a transite backing.
- The roof was comprised of two different types of asphalt shingles. Exterior siding was wood with a paper backing material.

#### **Property #11**

- Walls were wood throughout.
- Flooring was linoleum. A wooden subfloor was present below all flooring types.
- No suspect cove base, window glazing, or caulking were observed. Ceiling tiles were present throughout the unit.

- The roof was metal.

## 5.2 LEAD-BASED PAINT

### 5.2.1 Limited XRF Survey

A total of 105 XRF readings were taken at the Site. The following number of readings were collected from each area of the buildings:

Property	Area of Building	Readings Count
#1	Interior	3
	Exterior	3
#2	Interior	1
	Exterior	4
#3	Interior	7
	Exterior	3
#5	Interior	2
	Exterior	3
#6	Exterior	4
#7	Interior	15
	Exterior	2
#8	Interior	13
	Exterior	3
#9	Interior	5
	Exterior	7
#10	Interior	16
	Exterior	4
#11	Interior	7
	Exterior	3

In addition, the following assumptions and items of note were observed during the LBP survey:

- Minimal interior paint was left in the fire-damaged buildings.
- The tin downspouts on the buildings are lead-containing.

### 5.2.2 Lead-in-Soils

Two composite surface soil samples (including one duplicate) were collected from the soils surrounding the building at Property #9. The following table presents the sample information, the laboratory results are summarized in Table 6.

Location	Depth (inches bgs)	Soil Sample ID
Property #9	0 – 1	CRST-09-PB-SS01
		CRST-09-PB-SS01A

### 5.3 PCBS, MERCURY, AND MOLD

The following observations were made during the visual inspections:

- When fluorescent light fixtures or ballasts were present, they had a “No PCBs” label on them.
- No mercury thermostat switches were observed in the buildings.
- Mold was only observed in the building at Property #7.

Two grab glazing samples (including one duplicate) were collected at Property #9. The following table presents the sample information, the laboratory results are summarized in Table 3.

Location	Soil Sample ID
Property #9	CRST-09-PCB-001
	CRST-09-PCB-001A

## 6.0 EVALUATION AND INTERPRETATION OF INFORMATION, DATA, AND RESULTS

This section summarizes the evaluation and interpretation of field screening data and laboratory results obtained to identify the location and extent of contamination. Benchmarks used for comparison are listed below:

### ACM

- **Asbestos-Containing Materials in Schools Rule (40 Code of Federal Regulations [CFR] Part 763, Subpart E)** - ACM is defined as any material containing more than one percent ( $>1\%$ ) asbestos.

### LBP

- **U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (2012 Edition)** - The HUD benchmark for lead-based paint is greater than or equal to 1.0 milligrams per square centimeter ( $\geq 1.0 \text{ mg/cm}^2$ ).

### Lead-in-Soil

- **EPA Regional Screening Levels (RSLs)** - Generic Tables (May 2018): Target Cancer Risk (TR) =  $1\text{E-}6$  and Target Hazard Quotient (THQ) = 1.0 (EPA, 2018).

The locations of samples and extent of hazardous building materials exceeding benchmarks are depicted on Figures 3 through 14. Field readings and laboratory results for the samples collected are summarized in Tables 1 through 6. Photographs of the field activities conducted are presented in Appendix A. Copies of the laboratory reports are presented in Appendix B. Copies of the hazardous material survey field sample location maps are presented in Appendix C.

## 6.1 ASBESTOS-CONTAINING MATERIAL

Of the 124 bulk samples submitted for laboratory analysis, 45 samples were reported as “positive” ( $>1\%$  asbestos) or trace ( $<1\%$  asbestos) for asbestos. Asbestos results ranged from trace to 50% total asbestos. No samples were reanalyzed by point count analysis. In all, 45 confirmed ACM samples were collected at the Site. The following table indicates the type, condition, and number of samples identified as ACM.

Identified ACM	Condition	Number of ACM Samples
Debris	Friable	1
Drywall	Friable	26
Floor Tile	Non-Friable	9
Linoleum	Friable	4

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Identified ACM	Condition	Number of ACM Samples
Stair Tread	Non-Friable	1
Transite	Non-Friable	1
Vermiculite	Friable	1
Vibration Dampener	Non-Friable	1
Window Glazing	Friable	1

ACM sample collection locations and approximate extent of ACM are presented on Figures 3 – 9 and 11 – 13. The confirmed ACM sample(s), the asbestos-containing layer(s), and the estimated volume of ACM is presented in Table 1. A list of the samples collected that were reported as non-detect for asbestos is presented in Table 2.

### **Interpretation of Results**

ACM was identified in the buildings at Properties #1, #2, #3, #4, #5, #7, #8, #9, and #10. Drywall present throughout the buildings was confirmed to be ACM. Floor tiles throughout or in the rear entry ways of Properties #1, #7, #9, and #10 is ACM. Linoleum throughout or in rooms of Properties #2, #4, #5, and #10 was confirmed to be ACM. General debris throughout Property #1 had trace ACM and friable floor tiles present. Likewise, vermiculite was spread throughout the debris at Property #5. Property #3 had an asbestos vibration dampener on the furnace in the basement. At Property # 9, there was a transite sheet on the chimney and some ACM window glazing. Lastly, property #10 had some ACM stair tread present.

The drywall and flooring at Properties #1, #2, #3, and #5 were severely fire damaged and the extents are estimated. Due to the fire damage and friable nature of the asbestos in these four buildings, the entire buildings are assumed to be ACM.

ACM is considered a contaminant of concern (COC) in relation to the Site. The following table indicates estimated extent and location of ACM identified by START to be present in the buildings.

ACM	Location	Estimated Volume / Extent
<b>Property #1</b>		
Debris	Throughout	850 sq. ft.
Drywall	Throughout	800 sq. ft.
Floor Tile	Throughout	410 sq. ft.
<b>Property #2</b>		
Drywall	Throughout	700 sq. ft.

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ACM	Location	Estimated Volume / Extent
Linoleum	Rear Entry	40 sq. ft.
Property #3		
Drywall	Throughout Main Level	1,800 sq. ft.
Vibration Dampener	Basement	1 Unit
Property #4		
Linoleum	Kitchen	130 sq. ft.
Property #5		
Drywall	Throughout	1,100 sq. ft.
Linoleum	Northwest Room	420 sq. ft.
Vermiculite	Throughout	1,600 sq. ft.
Property #7		
Drywall	Throughout	1,400 sq. ft.
Floor Tile	Rear Entry	40 sq. ft.
Property #8		
Drywall – Ceilings	Throughout	400 sq. ft.
Drywall – Walls		1,400 sq. ft.
Property #9		
Drywall	West Room	520 sq. ft.
Floor Tile	Throughout	430 sq. ft.
Transite	On Chimney	10 sq. ft.
Window Glazing	Exterior	10 LF
Property #10		
Drywall	Throughout	1,400 sq. ft.
Floor Tile	Rear Entry	40 sq. ft.
Linoleum	Throughout	330 sq. ft.
Stair Tread	Rear Entry	15 sq. ft.

Notes:  
LF = linear feet  
sq. ft. = square feet



## 6.2 LEAD-BASED PAINT

### 6.2.1 Limited XRF Survey

Of the 105 XRF readings taken from the buildings, nine (9) readings were positive for LBP contamination ( $\geq 1$  mg/cm<sup>2</sup>). The following table indicates the location, current surface paint color, and area concentration for LBP identified at the Site.

Location (# of Positive Readings)	Current Surface Paint Color	Area Concentration of LBP ( $\pm$ Error)
<b>Property #2 - Exterior</b>		
Trim (1)	Yellow	1.6 mg/cm <sup>2</sup> ( $\pm$ 0.16)
<b>Property #7 - Interior</b>		
Ceiling (2)	White	1 mg/cm <sup>2</sup> ( $\pm$ 0.08 to 0.09)
Wall (1)	White	1 mg/cm <sup>2</sup> ( $\pm$ 0.16)
<b>Property #9 - Interior</b>		
Wall (1)	Cream	3.98 mg/cm <sup>2</sup> ( $\pm$ 0.36)
<b>Property #9 – Exterior</b>		
Trim (1)	Green	1.12 mg/cm <sup>2</sup> ( $\pm$ 0.07)
Wall (1)	White	4.86 mg/cm <sup>2</sup> ( $\pm$ 0.44)
<b>Property #10 - Interior</b>		
Wall (2)	White	1 mg/cm <sup>2</sup> ( $\pm$ 0.02 to 0.03)

A complete list of XRF readings is presented in Table 4. The location and approximate extent of LBP identified is presented on Figures 4, 10, 12, and 14.

### Interpretation of Results

Based on the XRF results, elevated lead concentrations are present on the ceilings, trim, and/or walls on the interior and/or exterior of the buildings at Properties #2, #7, #9, and #10. The following table lists the location, current surface paint color, and estimated extent of LBP present at the Site. LBP is considered a COC for these buildings in relation to the Site.

Location	Current Surface Paint Color	Estimated Extent
<b>Property #2 - Exterior</b>		
Trim	Yellow	30 LF
<b>Property #7 - Interior</b>		

Location	Current Surface Paint Color	Estimated Extent
Ceiling	White	80 sq. ft.
Wall	White	200 sq. ft.
<b>Property #9 - Interior</b>		
Wall	Cream	400 sq. ft.
<b>Property #9 – Exterior</b>		
Trim	Green	50 LF
Wall	White	700 sq. ft.
<b>Property #10 - Interior</b>		
Wall	White	200 sq. ft.

Notes:  
LF = linear feet  
sq. ft. = square feet

## 6.2.2 Lead-in-Soils

### Evaluation of Laboratory Sample Results

Of the two lead-in-soil surface soils samples collected in the dripline of the building at Property #9, lead was detected above the reporting limits but not above applicable benchmarks. The following table summarizes the lead results for both lead-in-soil samples collected.

Soil Sample ID	Location	EPA RSL – Residential Soil (mg/kg)	EPA RSL – Industrial Soil (mg/kg)	Lead Results (mg/kg)
CRST-09-PB-SS01	Property #9	400	800	98.7
CRST-09-PB-SS01A				101

The location of the lead-in-soil surface soil samples are presented in Figure 12. Summaries of the screening and analytical results are presented in Tables 5 and 6.

### Interpretation of Results

Based on the laboratory results, lead concentrations did not exceed comparison standards within the bare soil in the dripline around the perimeter the building at Property #9. Lead is not considered a COC to surface soils at the Site.

## 6.3 PCBs, MERCURY, AND MOLD

**PCBs:** Only ballasts with a “No PCBs” label were observed. No PCBs were detected in the glazing collected from Property #9. PCBs are not considered a COC at the Site.

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**Mercury:** No mercury-containing thermostats were observed in the buildings. Mercury is not considered a COC at the Site.

**Mold:** Mold was observed in the building at Property #7. Mold is considered a COC in relation to this building at the Site.

## 6.4 CONCEPTUAL SITE MODEL

Per ASTM E1903-11 (Section 6.4.6), validation of the conceptual site model is conducted by evaluating testing results and other investigation findings to determine whether available information is sufficient to support sound conclusions regarding the presence of the target analytes. The presence of the target analytes investigated as part of this Phase II ESA along with the current exposure pathways, as applicable, for the Site is presented in the following table.

Target Analytes	Media	Contaminants Present Above Screening Benchmarks	Exposure Pathway	Exposure Route	Human Receptors	
					Residential	Workers
ACM	Building Materials	Yes	Potentially Complete	Dermal	--	X
				Ingestion	--	X
				Inhalation	--	X
LBP	Building Materials	Yes	Potentially Complete	Dermal	--	X
				Ingestion	--	X
				Inhalation	--	X
Lead	Soil	No	Potentially Complete	Dermal	--	--
				Ingestion	--	--
				Inhalation	--	--
PCBs, Mercury, and Mold	Building Materials	Yes (Mold)	Potentially Complete	Dermal	--	X
				Ingestion	--	X
				Inhalation	--	X

Notes: -- = Receptor not at risk (Currently) X = Receptor at risk to exposure (Currently or Potentially)

**Explanation:** Evaluation of exposure pathway completeness is based upon the existing site use as vacant and assumes that no people are currently accessing the Site or will be accessing the Site other than workers during future assessment/redevelopment or maintenance workers. Once future site-specific activities are determined or if a change in current use occurs, exposure pathways should be re-assessed as they may alter the pathway completeness presented in this report and require further evaluation prior to conducting subsequent activities or changes at the Site.

## 6.5 DISCLOSURE OF AVAILABLE DATA INSUFFICIENT TO MEET OBJECTIVES

Per ASTM E1903-11 (Section 1.3.2), all Phase II ESA reports must disclose any respect in which available data are insufficient to meet the objectives of the assessment. Listed below are the disclosures in which the available data set for this investigation were insufficient to meet the objectives of this Phase II ESA, if any.

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- Based upon the objectives for this Phase II ESA, no insufficiencies were encountered.

## 7.0 CONCLUSIONS OF THE PHASE II ESA

START performed a Phase II ESA in conformance with the scope and limitations of ASTM Practice E1903-11 for the CRST Properties located at in Eagle Butte, SD. The following list is a summary of the conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos-Containing Material**

- Based on the results of the ACM survey, asbestos is present in the buildings at Properties #1, #2, #3, #4, #5, #7, #8, #9, and #10. ACM is considered to be a COC for these buildings in relation to the Site.

### **Lead-Based Paint**

- **Limited XRF Survey:** Based on the results of the LBP screening, LBP is present in the buildings at Properties #2, #7, #9, and #10. LBP is considered to be a COC for these buildings in relation to the Site.
- **Lead-in-Soil:** Based on the results of the lead-in-soil samples, lead-in-soil is present but not above screening benchmarks. Lead-in-soil is not considered to be a COC in relation to the Site.

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections conducted are presented below:

- Only fluorescent light fixtures or ballasts with a “No PCBs” label were observed in the buildings. No PCBs were detected in the glazing collected from Property #9. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the buildings. Mercury is not considered a COC in relation to the Site.
- Mold was observed inside of the building at Property #7. Mold is considered a COC for that building in relation to the Site.

## RECOMMENDATIONS

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Abatement of friable ACM (i.e., drywall, linoleum, and window glazing) is recommended prior to any demolition activities at the Site. The non-friable ACM identified is classified as Category I or II non-friable; therefore, ACM remediation may not be required prior to demolition as the non-friable ACM may be disposed with

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construction debris, if acceptable by the landfill. Buildings with severe fire damage (Properties #1, #2, #3, and #5) and ACM will need to be disposed of as ACM. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris. Though non-friable ACM may be able to be disposed of as construction waste, construction worker need to be made aware of the ACM present and appropriate protective measures will need to be implemented.

- START recommends contracting an accredited lead remediation company to assess disposal requirements for LBP at the Site if the buildings are to be demolished. Dust control methods should be implemented for the debris and all work performed should be done so by an EPA Lead-Safe certified firm. It is recommended that a construction debris disposal facility be contacted to determine if Toxicity Characteristic Leaching Procedure (TCLP) samples will be required.
- Mold should be controlled during demolition (e.g., dust control, ventilation, etc.).

## 8.0 SIGNATURE OF PHASE II ASSESSOR AND SEAL

This Phase II ESA was completed by the following START personnel and subcontractor(s), if applicable. Qualifications are provided at the end of the report:

- Mr. Elliott Petri, P.E. – Engineer, Environmental Professional, AHERA Certified Asbestos Building Inspector, and EPA Lead-Based Paint Inspector; and
- Mr. Michael Cherny, Scientist – AHERA Certified Asbestos Building Inspector and EPA Lead-Based Paint Inspector.

Mr. Elliott Petri, P.E. has undertaken the role of Phase II Assessor for this assessment. The following is the certification statement as defined in ASTM Practice E1903-11 (Section 9.2.1):

*We have performed a Phase II environmental site assessment at the CRST properties located in Eagle Butte, SD in conformance with the scope and limitations of ASTM Practice E1903-11 and for the following objectives:*

- *Assess and evaluate on-site structures and debris for hazardous building materials: ACM and LBP;*
- *Assess and evaluate potential asbestos and LBP impacts to site surface soils;*
- *Conduct visual inspections of on-site structures to determine presence/absence of PCB-containing equipment or building materials, mercury-containing equipment, and mold;*
- *Develop sufficient information to render a reasonable professional opinion whether hazardous substances either are or are not present at the Site with respect to the potential concerns assessed. If present, include concentrations of hazardous substances based on field screening and/or laboratory analysis of samples;*
- *Gather and provide sufficient data to assist the TBA recipient in making informed decisions with regard to cleanup analyses and the future use of the properties; and*
- *Obtain sufficient data to support cleanup options, conceptual cost estimating for building demolition, and construction debris disposal at each of the properties.*

Elliott Petri, P.E.

Certifying Environmental Professional (Print)

Project Manager

Title

Signature

7/19/2018

Date

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## **9.0 SPECIFICATIONS FOR ASTM E1903-11 REPORT USE AND RELIANCE**

### **9.1 SPECIAL TERMS AND CONDITIONS**

This document has been prepared by the WESTON START-IV team as tasked by the EPA solely for the use and benefit of the EPA and CRST. Any use of this document or information herein by persons or entities other than the EPA or CRST without the express written consent of START, will be at the sole risk and liability of said person or entity. START will not be liable to the EPA, CRST, or such persons or entities, for any damages resulting therefrom. It is understood that this document may not include all information pertaining to the described site.

### **9.2 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT**

ASTM E1903-11 (Section 4.2.1) acknowledges, “No Phase II ESA can eliminate all uncertainty. Furthermore, any sample, either surface or subsurface, taken for chemical testing may or may not be representative of a larger population. Professional judgment and interpretation are inherent in the process, and even when exercised in accordance with objective scientific principles, uncertainty is inevitable. Additional assessment beyond that which was reasonably undertaken may reduce the uncertainty”. ASTM E1903-11 (Section 4.2.1.2) acknowledges, “The effectiveness of a Phase II ESA may be compromised by limitations or defects in the information used to define the objectives and scope of the investigation, including inability to obtain information concerning historic site uses or prior site assessment activities despite the efforts of the user and Phase II Assessor to obtain such information in accordance with 5.1.3”. Furthermore, the ASTM E1903-11 (Section 4.2.2) states, “Phase II ESAs do not generally require an exhaustive assessment of environmental conditions on a property. There is a point at which the cost of information obtained and the time required to obtain it outweigh the benefit of the information and, in the context of private transactions and contractual responsibilities, may become a material detriment to the orderly conduct of business. If the presence of target analytes is confirmed on a property, the extent of further assessment is a function of the degree of confidence required and the degree of uncertainty acceptable in relation to the objectives of the assessment”.

### **9.3 DISCLAIMERS**

START has performed this Phase II ESA in general conformance with the scope and limitations of ASTM E1903-11 standards and TDD 0003/1711-09. The Phase II ESA findings and conclusions presented herein are professional opinions based solely on data collected during the assessment and/or interpretation of information and past data provided for review. The information and data collected from the Site by START is based on the conditions existing on the date(s) of START’s assessment activities at the property. START does not warrant or guarantee information obtained from third parties used for this assessment are correct, complete, and/or current.

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Though START did collect samples and/or perform testing during this assessment, it is possible that contamination remains undiscovered or that property conditions will change in the future. START does not warrant or guarantee the property suitable for any particular purpose or certify the property as “clean.”

ASTM E1903-11 (Section 1.5) states, “This practice is not intended to supersede applicable requirements imposed by regulatory authorities. This practice does not attempt to define a legal standard of care either for the performance of professional services with respect to matters within its scope, or for the performance of any individual *Phase II Environmental Site Assessment*”.

Information, limitations, and disclaimers provided in this general section apply to all of the sections included in this report.

## 10.0 REFERENCES

ASTM, International (ASTM), 2011. E1903-11, *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*. West Conshohocken, Pennsylvania.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
ASTM, 2011	Guidance	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

EPA, 2017. *Technical Direction Document (TDD) 0003/1711-09*.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
EPA, 2017	Guidance	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

EPA, October 1985. EPA's "Pink Book", *Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials*. (EPA 560/5-85-030a).

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
EPA, 1985	Guidance	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

WESTON, 2018. *Sampling and Analysis Plan, Cheyenne River Sioux Tribe, Eagle Butte, Dewey County, South Dakota*. April 2018.

Citation	Reference Type	Assessment Factor				
		Soundness	Applicability and Utility	Clarity and Completeness	Uncertainty and Variability	Evaluation and Review
WESTON, 2018	Document	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable

## 11.0 QUALIFICATIONS

START utilized qualified, professional staff, trained in performing the scope of work required for this Phase II ESA. The START team personnel included a project manager and technical specialist(s). Their roles are described in more detail as follows:

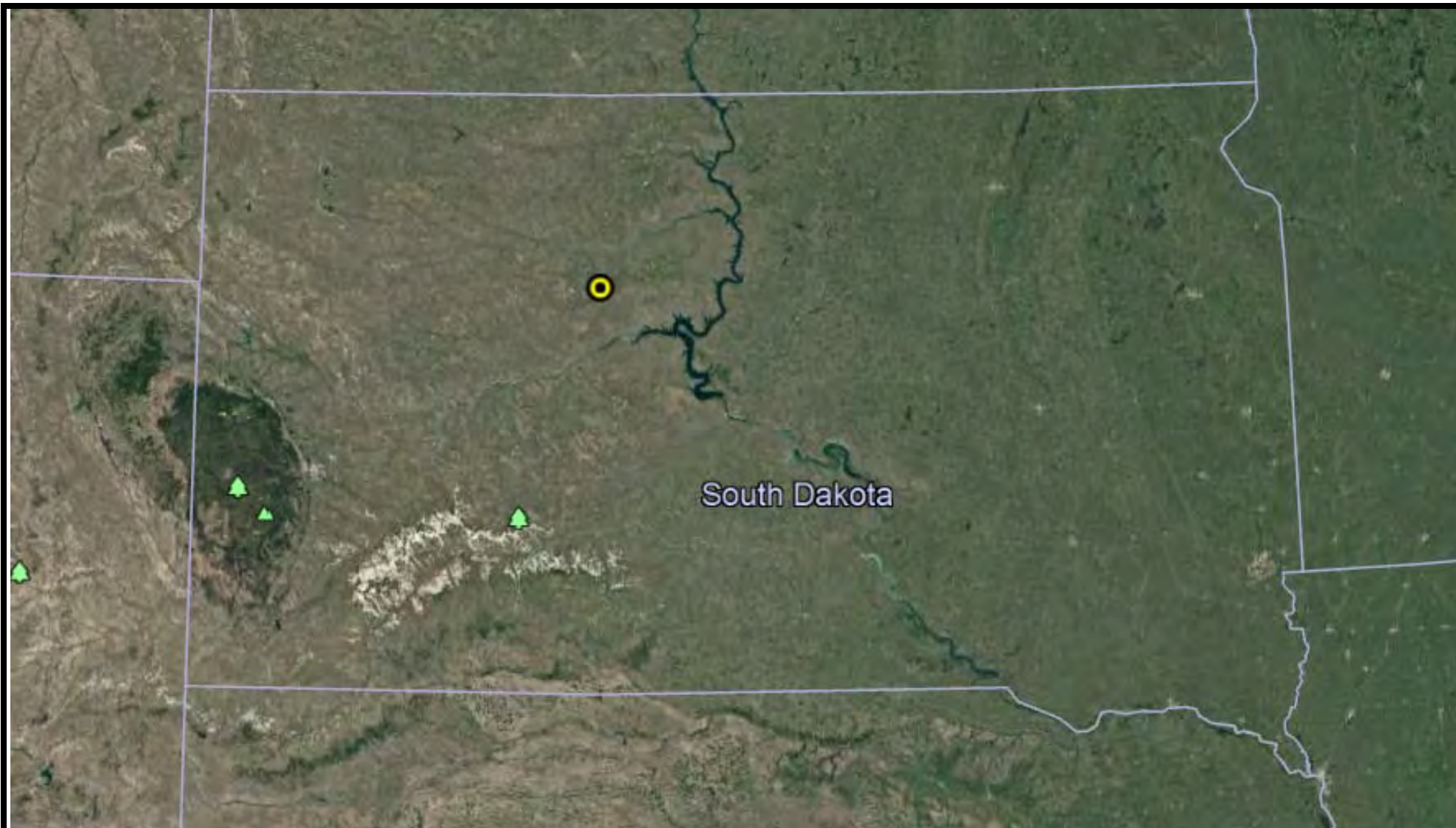
- Project Manager and Environmental Professional – Mr. Elliott Petri, P.E. has a M.S. in Environmental Science and Engineering with 8+ years of experience in the field of environmental sciences including Phase I/II ESAs, site investigations, assessments and remediation; Mr. Petri has managed/conducted quality control on projects from \$20,000 to 4 million dollars for the United States Air Force and the EPA.
- Scientist – Mr. Michael Cherny has 5+ years of project experience collecting soil, groundwater, surface water, and air samples, and conducting air monitoring. His experience includes conducting site assessments, removals, technical report documentation, and field instrument proficiency. Mr. Cherny is a certified asbestos and LBP inspector in Colorado, Montana, and EPA Region 8 administered states.

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## FIGURES

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## Legend

 Site Location



Prepared for:  
U.S. EPA Region 8



Contract No.:  
EP-S8-13-01

TDD:  
1711-09

TO:  
0003



Prepared By:  
Weston Solutions, Inc  
START IV

Suite 100  
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Lakewood, CO 80215

## FIGURE 1

### SITE LOCATION MAP

CHEYENNE RIVER SIOUX TRIBE  
13 PROPERTIES  
EAGLE BUTTE, DEWEY COUNTY,  
SOUTH DAKOTA

DATE: 12/20/2017





## Legend

 Property Location

0 150 300 Feet



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FIGURE 2

## PROPERTY LOCATION MAP

Cheyenne River Sioux Tribe  
13 Properties  
Eagle Butte, Dewey County,  
South Dakota

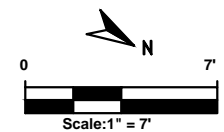
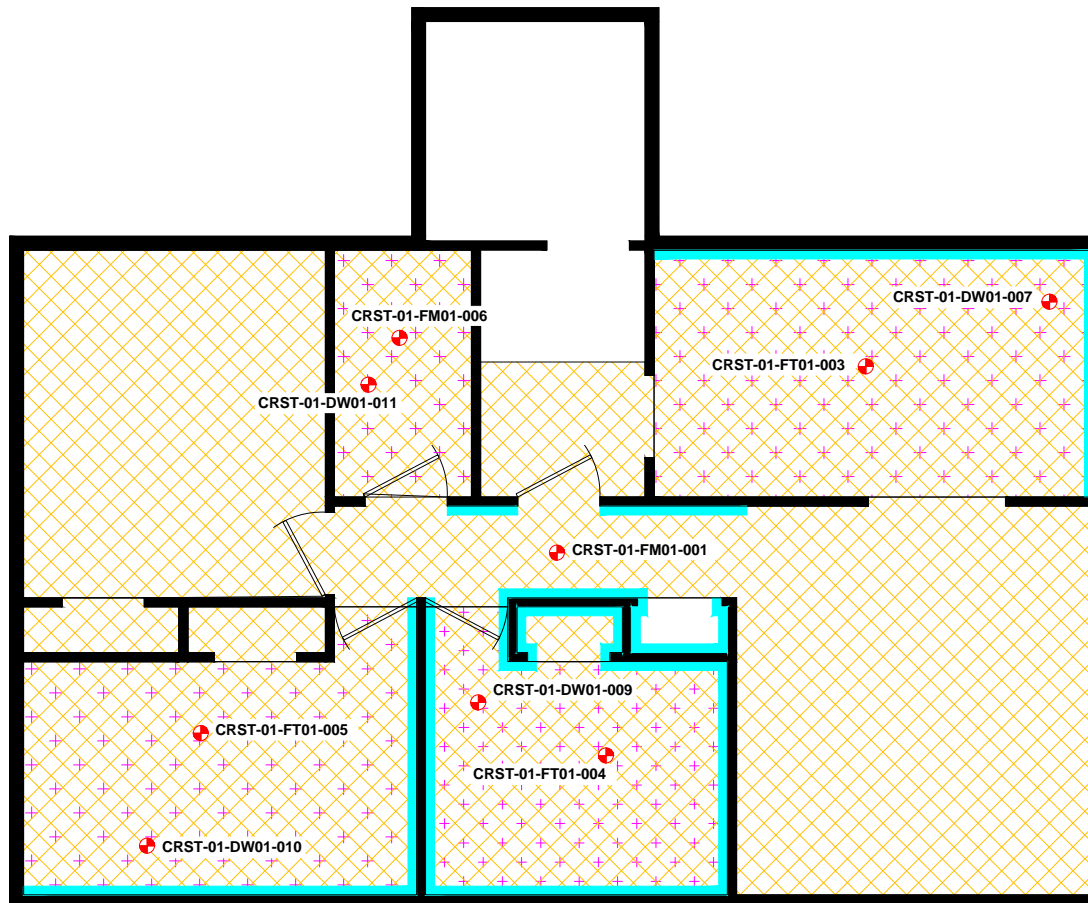
DATE: 6/6/2018

## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM FLOOR TILE EXTENT
- ACM DEBRIS EXTENT
- ACM DRYWALL COMPOUND (APPROXIMATE)

## NOTE:

1. BURNED STRUCTURE: ENTIRE BUILDING ASSUMED TO BE ACM



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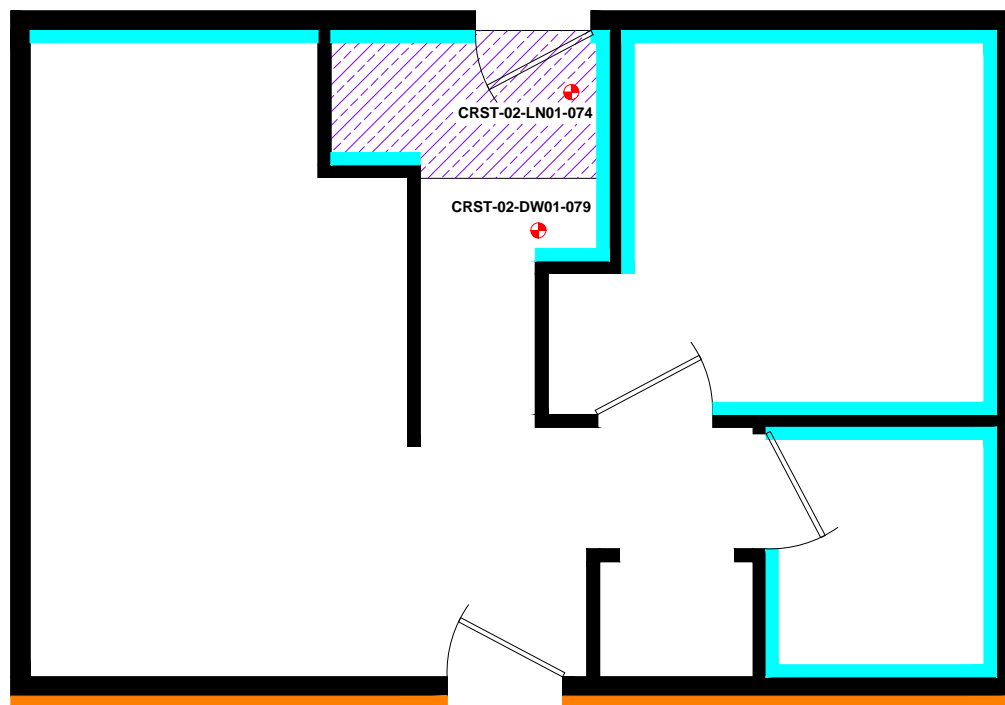
### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #1 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 7'

Figure

3

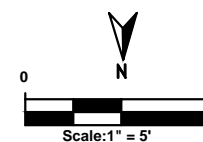


### LEGEND:

ACM	ASBESTOS CONTAINING MATERIAL
LBP	LEAD BASED PAINT
	ACM SAMPLE LOCATION (APPROXIMATE)
	ACM LINOLEUM EXTENT
	ACM DRYWALL COMPOUND (APPROXIMATE)
	LEAD BASED PAINT ON GUTTERS

### NOTE:

1. BURNED STRUCTURE: ENTIRE BUILDING ASSUMED TO BE ACM



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## ACM AND LBP SAMPLE LOCATION AND EXTENT MAP PROPERTY #2 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

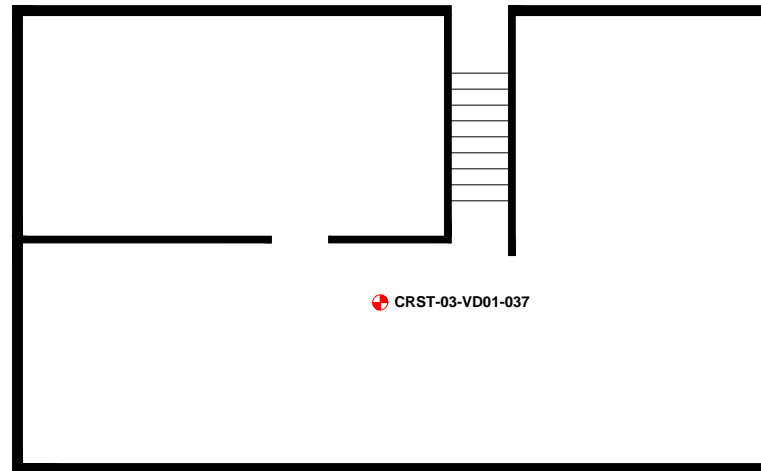
SCALE:  
1" = 5'

Figure  
4

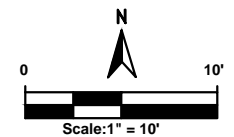


### LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL  
ACM SAMPLE LOCATION (APPROXIMATE)



CRST-03-VD01-037



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



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ACM SAMPLE LOCATION AND EXTENT MAP  
PROPERTY #3 - BASEMENT  
CRST  
HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 10'

Figure

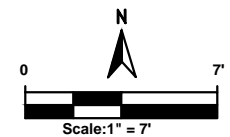
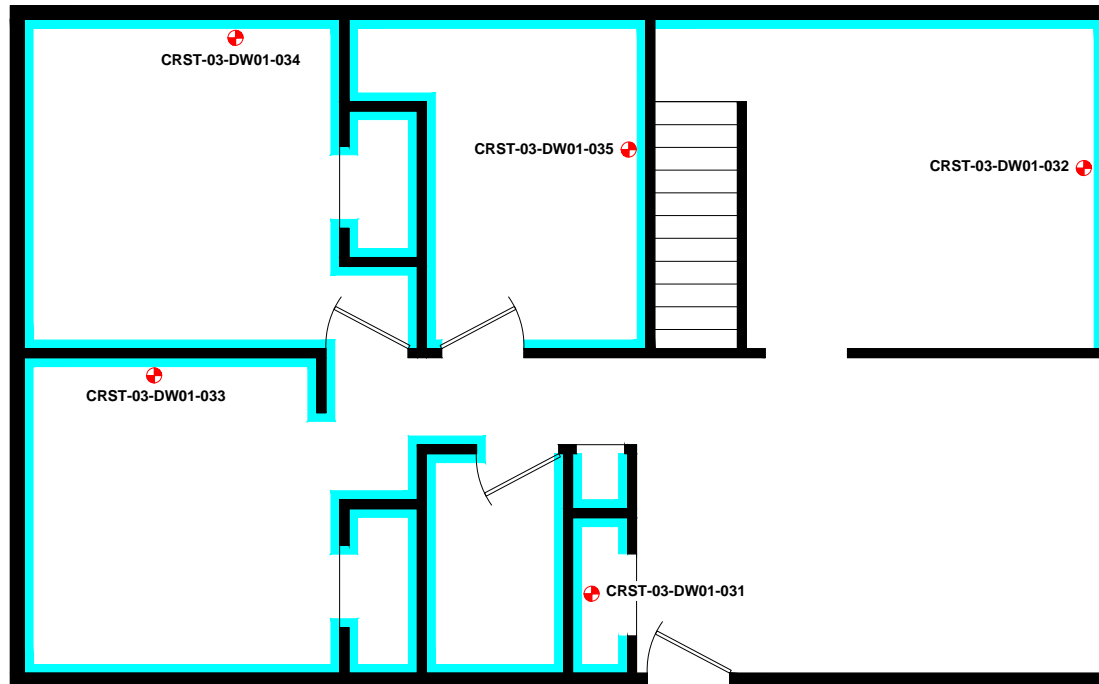
5

### LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL  
ACM SAMPLE LOCATION (APPROXIMATE)  
ACM DRYWALL COMPOUND (APPROXIMATE)

### NOTE:

1. BURNED STRUCTURE: ENTIRE BUILDING ASSUMED TO BE ACM



Contract No.:  
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ACM SAMPLE LOCATION AND EXTENT MAP  
PROPERTY #3 - MAIN FLOOR  
CRST  
HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

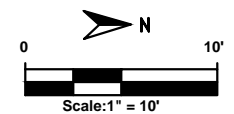
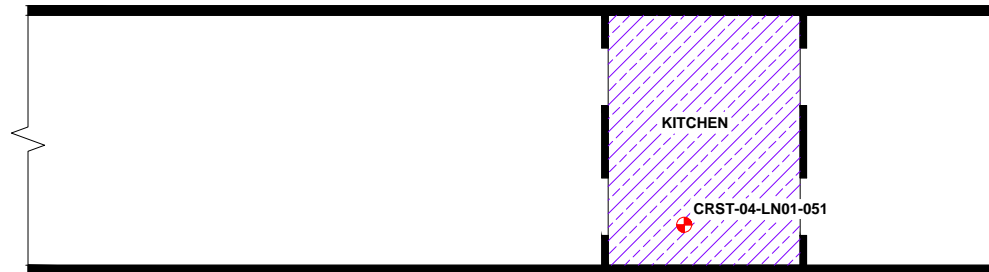
SCALE:  
1" = 7'

Figure

6

## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL  
ACM SAMPLE LOCATION (APPROXIMATE)  
ACM LINOLEUM EXTENT



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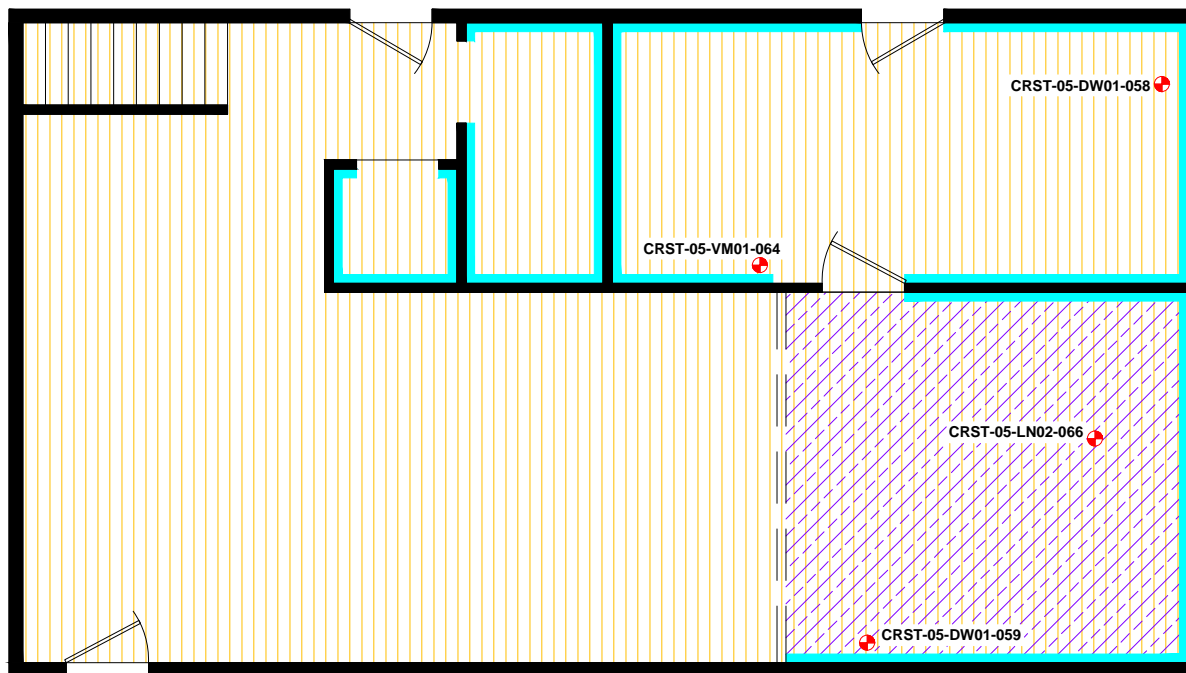
### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #4 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 10'

Figure

7

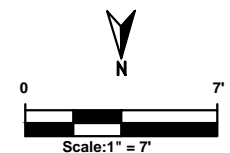


## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ▨ ACM LINOLEUM EXTENT
- ▨ ACM VERMICULITE DEBRIS EXTENT
- ▨ ACM DRYWALL COMPOUND (APPROXIMATE)

## NOTE:

1. BURNED STRUCTURE: ENTIRE BUILDING ASSUMED TO BE ACM



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TDD: 1711-09  
TO: 0003



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Lakewood, CO 80215

## ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #5 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

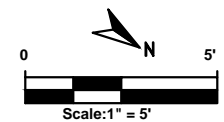
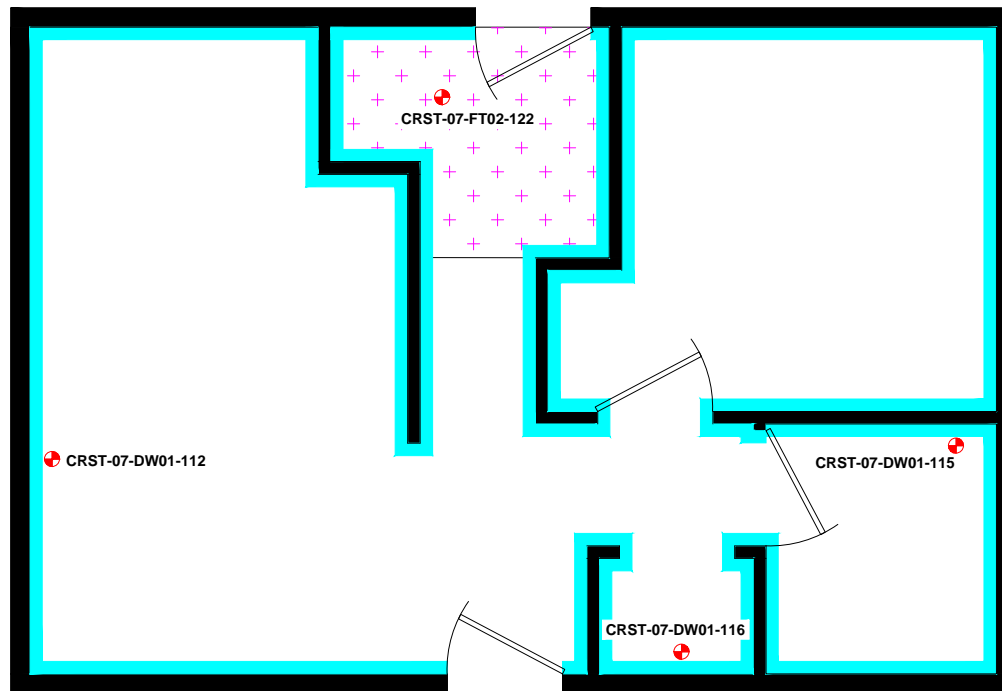
SCALE:  
1" = 7'

Figure

8

# **LEGEND:**

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM FLOOR TILE EXTENT
- ACM DRYWALL COMPOUND (APPROXIMATE)



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
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## **ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #7 CRST HAZARDOUS BUILDING MATERIALS SURVEY**

DATE:  
6/07/18

SCALE:  
1"= 5'

Figure

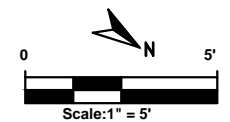
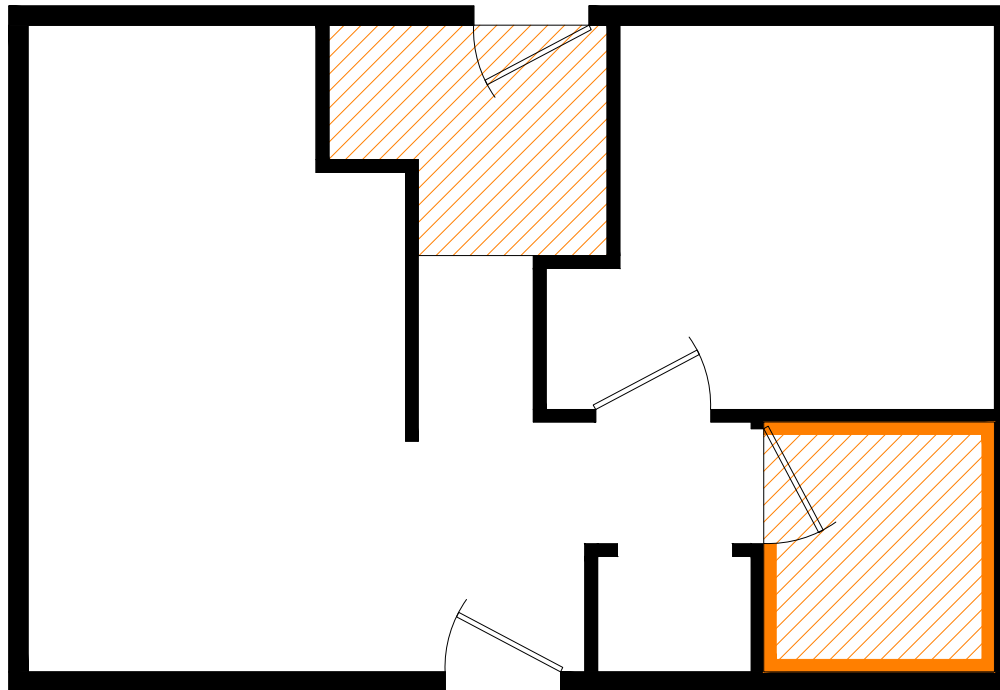
9

### LEGEND:

LBP LEAD BASED PAINT

 LEAD BASED PAINT EXTENT

 LEAD BASED PAINT EXTENT



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



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LBP LOCATION AND EXTENT MAP  
PROPERTY #7  
CRST  
HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

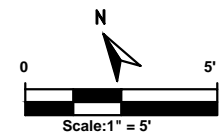
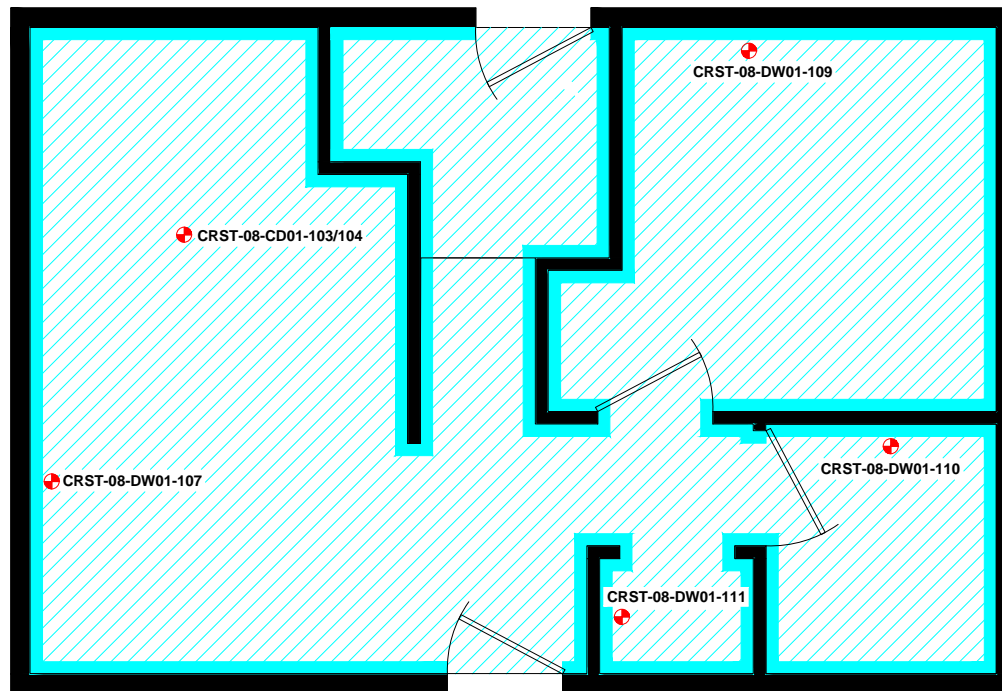
SCALE:  
1" = 5'

Figure

10

## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM DRYWALL COMPOUND EXTENT
- ACM DRYWALL COMPOUND EXTENT



Contract No.:  
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TDD: 1711-09  
TO: 0003



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### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #8 CRST HAZARDOUS BUILDING MATERIALS SURVEY







DATE:  
6/07/18

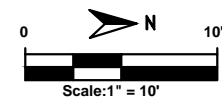
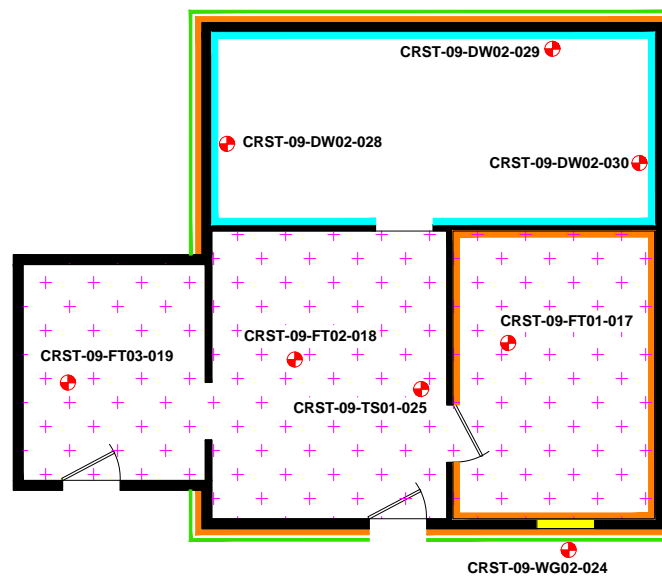
SCALE:  
1" = 5'

Figure

11

## LEGEND:

ACM	ASBESTOS CONTAINING MATERIAL
LBP	LEAD BASE PAINT
	ACM SAMPLE LOCATION (APPROXIMATE)
	ACM FLOOR TILE EXTENT
	ACM DRYWALL COMPOUND
	ACM WINDOW GLAZING
	LBP
	LEAD IN SOIL DRIPLINE SAMPLES
CRST-09-PB-SS01	98.7 mg/kg
CRST-09-PB-SS01A	101mg/kg



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



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### ACM, LBP AND LEAD IN SOIL SAMPLE LOCATION AND EXTENT MAP PROPERTY #9 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 10'

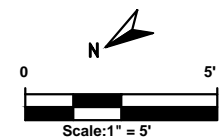
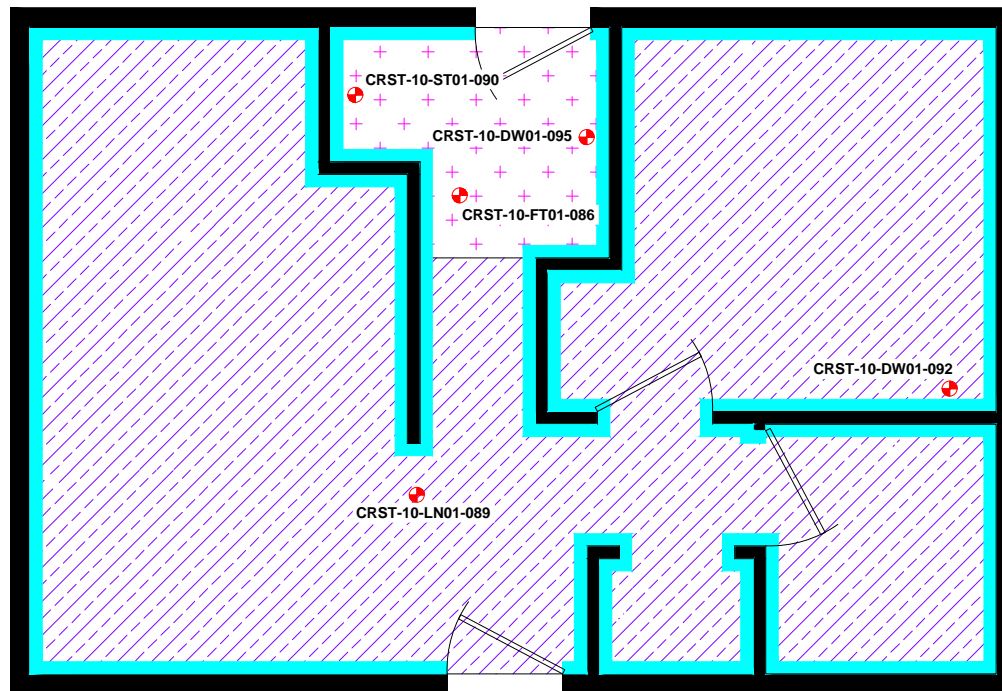
Figure

12



## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM FLOOR TILE EXTENT
- ACM LINOLEUM EXTENT
- ACM DRYWALL COMPOUND (APPROXIMATE)



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TDD: 1711-09  
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### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #10 CRST HAZARDOUS BUILDING MATERIALS SURVEY


DATE:  
6/07/18

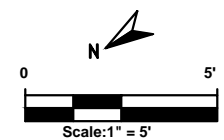
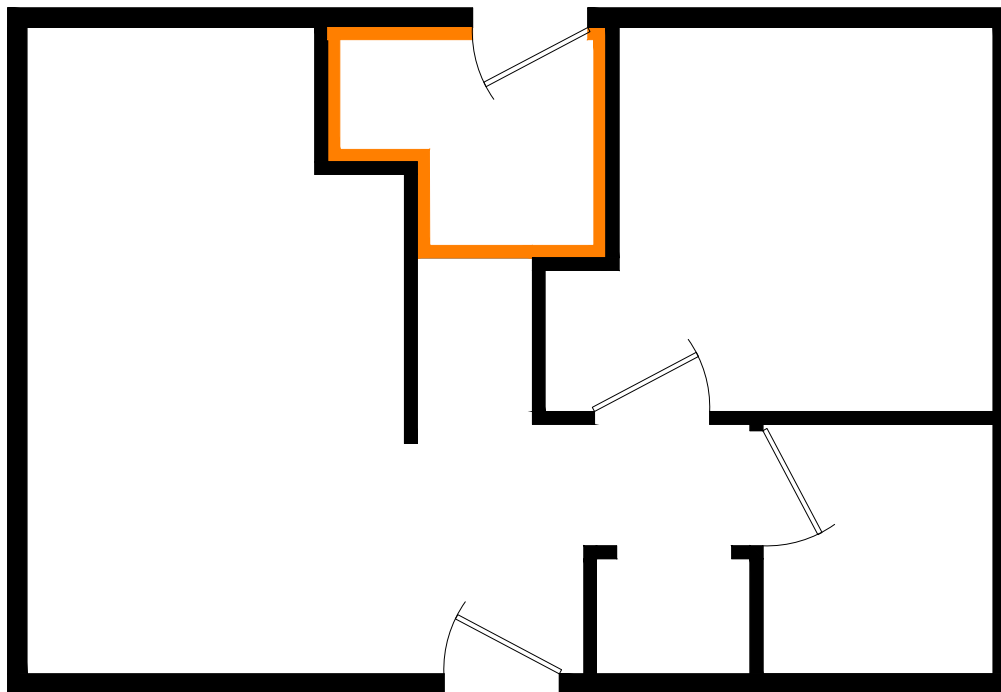
SCALE:  
1" = 5'

Figure

13

### LEGEND:

LBP LEAD BASED PAINT  
 LEAD BASED PAINT



Contract No.:  
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TDD: 1711-09  
TO: 0003



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**LBP LOCATION AND EXTENT MAP  
PROPERTY #10  
CRST  
HAZARDOUS BUILDING MATERIALS SURVEY**

DATE:  
6/07/18

SCALE:  
1" = 5'

Figure

14

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## TABLES

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Table 1  
ACM Sample Results and Estimated Volumes

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
Property #1					
CRST-01-DB01-001	Debris	A - Brown tile	Chrysotile 12%	--	850 sq. ft.
		B - Black debris	Chrysotile Trace	--	
CRST-01-FT01-003	Floor Tile	B - Beige tile	Chrysotile 5%	--	140 sq. ft.
CRST-01-FT01-004	Floor Tile	B - Beige tile	Chrysotile 5%	--	110 sq. ft.
CRST-01-FT01-005	Floor Tile	B - Beige tile	Chrysotile 5%	--	120 sq. ft.
CRST-01-FM01-006	Floor Tile	B - Brown tile	Chrysotile 8%	--	40 sq. ft.
CRST-01-DW01-007	Drywall	C - White joint compound	Chrysotile 2%	--	800 sq. ft.
		D - Tan charred compound w/ gray charred paint	Chrysotile 5%	--	
CRST-01-DW01-009	Drywall	A - Brown charred compound w/ gray charred paint	Chrysotile 6%	--	
CRST-01-DW01-010	Drywall	A - White compound	Chrysotile Trace	--	
		B - Brown charred compound w/ gray charred paint	Chrysotile 6%	--	
CRST-01-DW01-011	Drywall	A - Brown charred compound w/ white paint	Chrysotile 6%	--	
Property #2					
CRST-02-LN01-074	Linoleum	A - Gray/multi-colored sheet vinyl w/ off white fibrous backing material	Chrysotile 6%	--	40 sq. ft.
CRST-02-DW01-079	Drywall	A - Brown charred compound w/ black charred paint	Chrysotile 5%	--	700 sq. ft.
Property #3					
CRST-03-DW01-031	Drywall	B - White compound	Chrysotile Trace	--	1,800 sq. ft.
		D - White joint compound	Chrysotile Trace	--	
CRST-03-DW01-032	Drywall	B - White compound	Chrysotile Trace	--	
		D - White joint compound	Chrysotile Trace	--	
CRST-03-DW01-033	Drywall	B - White compound	Chrysotile 3%	--	
		D - White joint compound	Chrysotile 3%	--	
CRST-03-DW01-034	Drywall	B - White compound	Chrysotile Trace	--	
CRST-03-DW01-035	Drywall	B - White compound	Chrysotile 2%	--	
		D - White joint compound	Chrysotile 2%	--	
CRST-03-VD01-037	Vibration Dampener	A - White fibrous woven material w/ silver paint	Chrysotile 50%	--	1 unit
Property #4					
CRST-04-LN01-051	Linoleum	A - Brown adhesive w/ tan wood	Chrysotile Trace	--	130 sq. ft.
		B - Tan/multi-colored sheet vinyl w/ white fibrous backing	Chrysotile 15%	--	
Property #5					
CRST-05-DW01-058	Drywall	B - Tan/white compound	Chrysotile 3%	--	1,100 sq. ft.
		C - Off white joint compound	Chrysotile 4%	--	
CRST-05-DW01-059	Drywall	C - Brown/black charred joint compound	Chrysotile 4%	--	
CRST-05-VM01-064	Vermiculite	A - Brown vermiculite	Tremolite/Actinolite Trace	--	1,600 sq. ft.
CRST-05-LN02-066	Linoleum	C - Tan tile	Chrysotile 6%	--	420 sq. ft.
Property #7					
CRST-07-DW01-112	Drywall	D - Off white joint compound	Chrysotile 3%	--	1,400 sq. ft.
		E - Off white compound	Chrysotile 3%	--	
CRST-07-DW01-115	Drywall	B - Off white compound w/ tan multi-layered paint	Chrysotile 2%	--	
		C - White joint compound	Chrysotile 3%	--	
CRST-07-DW01-116	Drywall	A - White compound w/ white/blue paint	Chrysotile 4%	--	
CRST-07-FT02-122	Floor Tile	B - Red tile	Chrysotile 2%	--	40 sq. ft.
Property #8					
CRST-08-CD01-103	Ceiling Drywall	D - Off white compound	Chrysotile 3%	--	400 sq. ft.
		E - Off white joint compound	Chrysotile 3%	--	
CRST-08-CD01-104	Ceiling Drywall	D - Off white compound	Chrysotile 3%	--	
		E - Off white joint compound	Chrysotile 3%	--	
CRST-08-DW01-107	Drywall	C - Off white compound	Chrysotile 3%	--	1,400 sq. ft.
		D - Off white joint compound	Chrysotile 3%	--	
CRST-08-DW01-109	Drywall	C - Off white joint compound	Chrysotile 3%	--	
		D - Off white compound	Chrysotile 3%	--	
CRST-08-DW01-110	Drywall	D - Off white compound	Chrysotile 3%	--	
		E - Off white joint compound	Chrysotile 3%	--	
CRST-08-DW01-111	Drywall	B - Off white compound	Chrysotile 3%	--	
Property #9					
CRST-09-FT01-017	Floor Tile	B - Brown tile	Chrysotile 12%	--	150 sq. ft
CRST-09-FT02-018	Floor Tile	B - Green tile	Chrysotile 10%	--	180 sq. ft.
CRST-09-FT03-019	Floor Tile	B - Brown tile	Chrysotile 12%	--	100 sq. ft.
CRST-09-WG02-024	Window Glazing	A - Gray glazing	Chrysotile 8%	--	10 LF
CRST-09-TS01-025	Transite	A - Gray fibrous cementitious material	Chrysotile 14%	--	10 sq. ft.
CRST-09-DW02-028	Drywall	A - White compound w/ blue paint	Chrysotile 8%	--	520 sq. ft.
CRST-09-DW02-029	Drywall	A - Tan compound w/ beige paint	Chrysotile 7%	--	
CRST-09-DW02-030	Drywall	B - Tan joint compound	Chrysotile 7%	--	
		C - Tan compound w/ blue paint	Chrysotile 8%	--	
Property #10					
CRST-10-FT01-086	Floor Tile	B - Gray tile	Chrysotile 10%	--	40 sq. ft.
CRST-10-LN01-089	Linoleum	B - Beige sheet vinyl w/ off white fibrous backing material	Chrysotile 20%	--	330 sq. ft.
CRST-10-ST01-090	Stair Tread	B - Brown stair tread	Chrysotile 2%	--	15 sq. ft.
CRST-10-DW01-092	Drywall	C - Off white compound	Chrysotile 3%	--	1,400 sq. ft.
		D - Off white joint compound	Chrysotile 3%	--	
CRST-10-DW01-095	Drywall	C - Off white compound	Chrysotile 3%	--	
		D - Off white joint compound	Chrysotile 3%	--	

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
Property #1		
CRST-01-RM01-002	Roofing Material	A - Black felt
		B - Black granular tar
		C - Black fibrous tar
CRST-01-DW01-008	Drywall	A - Gray compound w/ white paint
		B - White/tan/black charred drywall
Property #2		
CRST-02-DB01-072	Debris	A - Black charred debris
CRST-02-WP01-073	Felt	A - Silver foil
		B - Brown paper
		C - Black felt
CRST-02-LN02-075	Linoleum	A - Tan/brown adhesive B - Tan/gray sheet vinyl w/ off white fibrous backing material
CRST-02-FT01-076	Floor Tile	A - Colorless adhesive
		B - Cream/black charred tile
		C - Brown/black charred tile
CRST-02-RM01-077	Roofing Material	A - Black tar
		B - Black fibrous tar
CRST-02-DW01-078	Drywall	A - Green/gray charred paint
		B - White compound
		C - White/brown drywall
CRST-02-DW01-080	Drywall	A - White/tan/black charred drywall
CRST-02-DW01-081	Drywall	A - White/tan/black charred drywall
CRST-02-DW01-082	Drywall	A - White/gray/tan charred drywall
CRST-02-DW01-083	Drywall	A - White/tan/gray charred drywall
Property #3		
CRST-03-RM01-036	Roofing Material	A - Black felt
		B - Tan/multi-colored shingle
		C - Red/multi-colored shingle
CRST-03-VD02-038	Vibration Dampener	A - Black resinous material
		B - White fibrous woven material
CRST-03-DW02-039	Drywall	A - Blue paint
		B - White compound
		C - White tape
		D - White joint compound
		E - White/brown drywall
CRST-03-DW02-040	Drywall	A - Blue paint
		B - White compound
		C - White/brown drywall
CRST-03-DW02-041	Drywall	A - Blue paint
		B - White compound
		C - White tape
		D - White joint compound
		E - White/brown drywall
CRST-03-LN01-042	Linoleum	A - Black mastic
		B - Yellow adhesive
		C - Gray/multi-colored sheet vinyl w/ gray fibrous backing material
CRST-03-LN01-043	Linoleum	A - Off white adhesive
		B - Gray/multi-colored sheet vinyl w/ gray fibrous backing material
CRST-03-ST01-044	Stair Tread	A - Black mastic
		B - Tan stair tread
CRST-03-SC01-045	Sink Coating	A - Tan caulk
CRST-03-CI01-046	Chimney Insulation	A - Gray fibrous plaster
CRST-03-CI01-047	Chimney Insulation	A - Gray fibrous plaster
CRST-03-CI01-048	Chimney Insulation	A - Gray fibrous plaster
Property #4		
CRST-04-CT01-049	Ceiling Tile	A - Brown/gray/white ceiling tile
CRST-04-DW01-050	Drywall	A - White/multi-colored wall covering
		B - Tan/white drywall
CRST-04-FT01-052	Floor Tile	A - Brown/multi-colored tile w/ colorless adhesive

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #5</b>		
CRST-05-DB01-055	Debris	A - Black/multi-colored charred debris
CRST-05-DW01-056	Drywall	A - Off white fibrous woven material
		B - White compound w/ black charred paint
		C - White/tan drywall
CRST-05-DW01-057	Drywall	A - Tan compound
		B - Tan/black charred drywall
CRST-05-DW01-060	Drywall	A - White fibrous woven material
		B - Tan paper w/ black tar
		C - Black charred paint w/ white compound
		D - Pink insulation
		E - White/brown drywall
CRST-05-WF01-061	Felt	A - Black/brown felt
CRST-05-WF01-062	Felt	A - Black/brown felt
CRST-05-RM01-063	Roofing Material	A - Brown/black fibrous felt
		B - Red/white/black shingle
CRST-05-LN01-065	Linoleum	A - Tan adhesive
		B - Off white sheet vinyl w/ off white fibrous backing material
CRST-05-WL01-067	Wall Linoleum	A - Black/gray charred fibrous material
<b>Property #6</b>		
CRST-06-DB01-068	Debris	A - Black charred debris
CRST-06-LN01-069	Linoleum	A - Brown adhesive
		B - Yellow/multi-colored sheet vinyl w/ gray fibrous backing material
CRST-06-FT01-070	Floor Tile	A - Gray tile w/ colorless adhesive
CRST-06-WF01-071	Felt	A - Tan paper w/ silver foil
<b>Property #7</b>		
CRST-07-DW01-113	Drywall	A - White compound w/ white paint
		B - White/tan drywall
CRST-07-DW01-114	Drywall	A - Tan/white drywall
		B - White joint compound
		C - White tape
		D - White compound w/ white & tan multi-layered paint
CRST-07-CD01-117	Ceiling Drywall	A - White texture w/ white paint
		B - White/tan drywall
CRST-07-CD01-118	Ceiling Drywall	A - White micaceous compound w/ white paint
		B - White/tan drywall
CRST-07-CD01-119	Ceiling Drywall	A - White micaceous compound w/ white paint
		B - White/tan drywall
CRST-07-FT01-120	Floor Tile	A - Yellow adhesive
		B - White tile
CRST-07-FT01-121	Floor Tile	A - Yellow adhesive
		B - White tile
CRST-07-WF01-123	Felt	A - Black felt
CRST-07-RM01-124	Roofing Material	A - Black/white shingle
<b>Property #8</b>		
CRST-08-RM01-100	Roofing Material	A - Black felt
		B - Black/gray shingle
CRST-08-WF01-101	Felt	A - Black felt
CRST-08-LN01-102	Linoleum	A - Yellow adhesive
		B - Cream/off white sheet vinyl w/ off white fibrous backing material
CRST-08-CD01-105	Ceiling Drywall	A - White micaceous compound w/ white paint
		B - White/tan drywall w/ blue/white paint
CRST-08-CD01-106	Ceiling Drywall	A - White micaceous compound w/ white paint
		B - White/tan drywall w/ white paint
CRST-08-DW01-108	Drywall	A - White compound w/ blue paint
		B - White joint compound
		C - Off white tape
		D - White/tan drywall w/ blue/green paint

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
Property #9		
CRST-09-DW01-012	Drywall	A - White tape
		B - White joint compound
		C - White/tan drywall
CRST-09-DW01-013	Drywall	A - White tape
		B - White joint compound
		C - White/tan drywall
CRST-09-DW01-014	Drywall	A - Tan tape
		B - White joint compound
		C - White/gray compound
		D - White/tan drywall
CRST-09-RM01-015	Roofing Material	A - Black/white shingle
CRST-09-RM02-016	Roofing Material	A - White/black shingle
CRST-09-WP01-020	Wall Paper	A - Brown paper
CRST-09-WP01-021	Wall Paper	A - Brown paper
CRST-09-WM01-022	Wall Material	A - Brown felt
		B - Tan multi-colored shingle
CRST-09-WG01-023	Window Glazing	A - White glazing
CRST-09-FM01-026	Flue Material	A - Red ceramic tile
CRST-09-CM01-027	Chimney Material	A - Green/multi-colored paint
		B - Gray/white granular perlitic material
Property #10		
CRST-10-RM01-084	Roofing Material	A - Black/gray shingle
CRST-10-WF01-085	Felt	A - Black felt
CRST-10-FT02-087	Floor Tile	A - Brown/black tile w/ colorless adhesive
CRST-10-FT03-088	Floor Tile	A - Green/black tile w/ colorless adhesive
		B - Off white/gray/black tile w/ colorless adhesive
CRST-10-DW01-091	Drywall	A - Off white tape
		B - Tan/white drywall
		C - White compound w/ white/multi-colored paint
		D - White joint compound
CRST-10-DW01-093	Drywall	A - White compound w/ off white paint
		B - White/tan drywall
CRST-10-DW01-094	Drywall	A - White compound w/ white paint
		B - White/tan drywall w/ white/green paint
CRST-10-CD01-096	Ceiling Drywall	A - Off white compound w/ white paint
		B - White/tan drywall w/ green/white paint
CRST-10-CD01-097	Ceiling Drywall	A - Off white tape
		B - Tan/white drywall w/ blue paint
		C - White micaceous compound w/ white paint
		D -White joint compound
CRST-10-CD01-098	Ceiling Drywall	A - Off white compound w/ green/white paint
		B - White/tan drywall
		C - Off white tape
		D - White micaceous compound w/ white paint
		E - White joint compound
CRST-10-SL01-099	Stove Liner	A - Brown adhesive
		B - Brown/red fibrous resinous material w/ colorless/yellow adhesive
Property #11		
CRST-11-LN01-053	Linoleum	A - Yellow/multi-colored sheet vinyl w/ black fibrous backing material
CRST-11-CT01-054	Ceiling Tile	A - Brown fibrous material w/ white paint

**Table 3**  
**PCB Glazing Sample Results**

Analyte	Cas No.	Area:	Property #9			
		Sample ID:	CRST-09-PCB-001		CRST-09-PCB-001A	
		Date:	5/8/2018		5/8/2018	
		Type:	Glazing		Glazing	
		Units	µg/kg		µg/kg	
PCBs (8082A)						
PCB-1016 (Aroclor 1016)	12674-11-2	--	30.7	U	32.6	U
PCB-1221 (Aroclor 1221)	11104-28-2	--	55.8	U	59.2	U
PCB-1232 (Aroclor 1232)	11141-16-5	--	36.9	U	39.2	U
PCB-1242 (Aroclor 1242)	53469-21-9	--	62	U	65.8	U
PCB-1248 (Aroclor 1248)	12672-29-6	--	45.7	U	48.5	U
PCB-1254 (Aroclor 1254)	11097-69-1	--	91.8	U	97.4	U
PCB-1260 (Aroclor 1260)	11096-82-5	--	25.2	U	26.8	U
PCB-1262 (Aroclor 1262)	37324-23-5	--	90.3	U	95.9	U
PCB-1268 (Aroclor 1268)	11100-14-4	--	32	U	34	U

Notes:

µg/kg

= micrograms per kilogram

U

= Analyte not detected above method detection limit



**Table 4**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/8/2018	9:29:49	CRST	--	--	--	SRM2570	WHITE	0	0
5/8/2018	9:30:13	CRST	--	--	--	SRM2571	YELLOW	3.1	0.3
5/8/2018	9:30:49	CRST	--	--	--	SRM2572	ORANGE	1.75	0.18
5/8/2018	9:31:16	CRST	--	--	--	SRM2573	RED	1.08	0.05
5/8/2018	9:32:10	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	9:32:36	CRST	--	--	--	SRM2575	GREEN	0.35	0.06
5/8/2018	14:59:58	CRST	--	--	--	SRM2571	WHITE	0	0
5/8/2018	15:00:23	CRST	--	--	--	SRM2571	YELLOW	3.99	0.39
5/8/2018	15:00:45	CRST	--	--	--	SRM2572	ORANGE	1.7	0.17
5/8/2018	15:01:15	CRST	--	--	--	SRM2573	RED	0.84	0.07
5/8/2018	15:01:52	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	15:02:21	CRST	--	--	--	SRM2575	GREEN	0.34	0.06
5/9/2018	9:11:27	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	9:11:58	CRST	--	--	--	SRM2571	YELLOW	4.2	0.4
5/9/2018	9:13:41	CRST	--	--	--	SRM2571	YELLOW	3.63	0.35
5/9/2018	9:14:05	CRST	--	--	--	SRM2572	ORANGE	1.7	0.15
5/9/2018	9:14:28	CRST	--	--	--	SRM2573	RED	1.19	0.1
5/9/2018	9:14:57	CRST	--	--	--	SRM2574	GOLD	0.57	0.07
5/9/2018	9:15:21	CRST	--	--	--	SRM2575	GREEN	0.35	0.07
5/9/2018	14:15:58	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	14:16:20	CRST	--	--	--	SRM2571	YELLOW	3.48	0.34
5/9/2018	14:16:42	CRST	--	--	--	SRM2572	ORANGE	1.56	0.14
5/9/2018	14:17:04	CRST	--	--	--	SRM2573	RED	1.12	0.06
5/9/2018	14:17:52	CRST	--	--	--	SRM2574	GOLD	0.71	0.09
5/9/2018	14:18:17	CRST	--	--	--	SRM2575	GREEN	0.27	0.06
<i>Readings</i>									
5/8/2018	9:34:49	Property 1	Exterior	--	WALL	WOOD	YELLOW	0.24	0.04
5/8/2018	9:35:24	Property 1	Exterior	--	WALL	WOOD	YELLOW	0.21	0.06
5/8/2018	9:36:00	Property 1	Exterior	--	TRIM	WOOD	WHITE	0.05	0.04
5/8/2018	9:42:42	Property 1	Interior	--	TRIM	WOOD	WHITE	0	0
5/8/2018	9:43:24	Property 1	Interior	--	TRIM	WOOD	WHITE	0.01	0.02
5/8/2018	9:43:47	Property 1	Interior	--	TRIM	WOOD	WHITE	0	0
5/8/2018	10:27:46	Property 9	Exterior	--	WALL	WOOD	WHITE	0.01	0.02
5/8/2018	10:29:22	Property 9	Exterior	--	TRIM	WOOD	GREEN	0.66	0.08
5/8/2018	10:29:56	Property 9	Exterior	--	WALL	WOOD	WHITE	4.86	0.44
5/8/2018	10:30:46	Property 9	Exterior	--	TRIM	WOOD	GREEN	1.12	0.07
5/8/2018	10:33:10	Property 9	Interior	room A	WALL	DRYWALL	CREAM	0	0
5/8/2018	10:33:55	Property 9	Interior	room A	WALL	DRYWALL	GREEN	0.01	0.03
5/8/2018	10:35:06	Property 9	Interior	room B	WALL	WOOD	CREAM	3.98	0.36
5/8/2018	10:36:15	Property 9	Interior	room C	WALL	WOOD	GREEN	0.09	0.07
5/8/2018	12:49:28	Property 3	Exterior	--	WALL	METAL	BROWN	0	0
5/8/2018	12:49:58	Property 3	Exterior	--	WALL	CONCRETE	WHITE	0	0
5/8/2018	12:50:28	Property 3	Exterior	--	TRIM	WOOD	WHITE	0	0
5/8/2018	12:52:32	Property 3	Interior	room A	WALL	DRYWALL	PURPLE	0	0
5/8/2018	12:53:25	Property 3	Interior	room B	WALL	DRYWALL	WHITE	0	0
5/8/2018	12:55:17	Property 3	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/8/2018	12:56:22	Property 3	Interior	room E	WALL	DRYWALL	LT BLUE	0	0

**Table 4**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
5/8/2018	12:57:09	Property 3	Interior	room F	WALL	DRYWALL	LT BLUE	0	0
5/8/2018	13:00:10	Property 3	Interior	room F	WALL	DRYWALL	LT BLUE	0	0
5/8/2018	13:01:00	Property 3	Interior	room G	WALL	DRYWALL	WHITE	0	0
5/8/2018	13:50:17	Property 9	Exterior	--	WALL	METAL	LT BLUE	0	0
5/8/2018	13:52:31	Property 9	Exterior	--	TRIM	METAL	LT BLUE	0	0
5/8/2018	13:53:12	Property 9	Exterior	--	TRIM	METAL	WHITE	0	0
5/8/2018	13:54:09	Property 9	Interior	--	CEILING	WOOD	GRAY	0	0
5/8/2018	14:27:03	Property 11	Exterior	--	WALL	METAL	WHITE	0	0
5/8/2018	14:27:45	Property 11	Exterior	--	TRIM	METAL	BROWN	0.09	0.03
5/8/2018	14:28:21	Property 11	Exterior	--	TRIM	WOOD	WHITE	0	0
5/8/2018	14:29:45	Property 11	Interior	room A	CEILING	WOOD	WHITE	0	0
5/8/2018	14:30:27	Property 11	Interior	room B	WALL	WOOD	WHITE	0.01	0.03
5/8/2018	14:30:52	Property 11	Interior	room B	CEILING	WOOD	WHITE	0	0
5/8/2018	14:31:24	Property 11	Interior	room B	WALL	WOOD	CREAM	0.02	0.03
5/8/2018	14:32:22	Property 11	Interior	room C	CEILING	WOOD	WHITE	0	0
5/8/2018	14:33:04	Property 11	Interior	room D	WALL	WOOD	LT BLUE	0	0
5/8/2018	14:33:48	Property 11	Interior	room D	WALL	WOOD	WHITE	0	0.02
5/9/2018	9:17:22	Property 5	Exterior	--	WALL	WOOD	WHITE	0	0.01
5/9/2018	9:17:49	Property 5	Exterior	--	WALL	WOOD	BLUE	0	0
5/9/2018	9:18:42	Property 5	Exterior	--	WALL	WOOD	YELLOW	0	0
5/9/2018	9:20:11	Property 5	Interior	--	WALL	DRYWALL	RED	0	0
5/9/2018	9:21:00	Property 5	Interior	--	WALL	DRYWALL	WHITE	0	0
5/9/2018	9:53:59	Property 6	Exterior	--	WALL	METAL	CREAM	0	0
5/9/2018	9:54:27	Property 6	Exterior	--	WALL	METAL	WHITE	0	0
5/9/2018	9:55:03	Property 6	Exterior	--	DOOR FRAME	METAL	WHITE	0	0
5/9/2018	9:55:38	Property 6	Exterior	--	TRIM	METAL	DK BLUE	0	0
5/9/2018	10:38:40	Property 2	Exterior	--	WALL	WOOD	BROWN	0	0
5/9/2018	10:39:23	Property 2	Exterior	--	WALL	WOOD	WHITE	0	0
5/9/2018	10:40:07	Property 2	Exterior	--	TRIM	METAL	YELLOW	1.6	0.16
5/9/2018	10:40:31	Property 2	Exterior	--	TRIM	WOOD	YELLOW	0	0
5/9/2018	10:46:05	Property 2	Interior	--	WALL	DRYWALL	LT BLUE	0	0
5/9/2018	11:44:49	Property 10	Exterior	--	WALL	WOOD	WHITE	0.07	0.05
5/9/2018	11:45:20	Property 10	Exterior	--	WALL	WOOD	GRAY	0	0
5/9/2018	11:45:47	Property 10	Exterior	--	TRIM	WOOD	RED	0	0
5/9/2018	11:46:13	Property 10	Exterior	--	TRIM	METAL	RED	0.51	0.1
5/9/2018	11:49:36	Property 10	Interior	room A	WALL	DRYWALL	WHITE	0	0
5/9/2018	11:50:03	Property 10	Interior	room A	CEILING	DRYWALL	WHITE	0	0
5/9/2018	11:50:44	Property 10	Interior	room B	CEILING	DRYWALL	WHITE	0.05	0.07
5/9/2018	11:51:14	Property 10	Interior	room B	WALL	DRYWALL	WHITE	0	0
5/9/2018	11:51:45	Property 10	Interior	room B	DOOR	WOOD	WHITE	0.01	0.02
5/9/2018	11:52:43	Property 10	Interior	room C	DOOR	METAL	WHITE	0	0
5/9/2018	11:53:10	Property 10	Interior	room C	DOOR	WOOD	WHITE	0.04	0.04
5/9/2018	11:53:45	Property 10	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/9/2018	11:54:05	Property 10	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/9/2018	11:54:30	Property 10	Interior	room C	CEILING	DRYWALL	WHITE	0	0
5/9/2018	11:55:21	Property 10	Interior	room C	WALL	DRYWALL	RED	0.25	0.04
5/9/2018	11:55:52	Property 10	Interior	room C	WALL	DRYWALL	YELLOW	0	0
5/9/2018	11:56:08	Property 10	Interior	room C	WALL	DRYWALL	YELLOW	0	0

**Table 4**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
5/9/2018	11:56:42	Property 10	Interior	room D	WALL	DRYWALL	WHITE	1	0.02
5/9/2018	11:57:05	Property 10	Interior	room D	WALL	DRYWALL	WHITE	1	0.03
5/9/2018	11:57:43	Property 10	Interior	room D	CEILING	DRYWALL	WHITE	0.01	0.02
5/9/2018	13:28:19	Property 8	Exterior	--	TRIM	WOOD	YELLOW	0	0
5/9/2018	13:28:42	Property 8	Exterior	--	TRIM	WOOD	YELLOW	0	0
5/9/2018	13:29:14	Property 8	Exterior	--	TRIM	WOOD	BROWN	0.58	0.07
5/9/2018	13:30:48	Property 8	Interior	room A	WALL	DRYWALL	WHITE	0	0
5/9/2018	13:31:17	Property 8	Interior	room A	CEILING	DRYWALL	WHITE	0	0
5/9/2018	13:31:41	Property 8	Interior	room A	DOOR	WOOD	WHITE	0	0
5/9/2018	13:32:09	Property 8	Interior	room B	DOOR	WOOD	WHITE	0.04	0.05
5/9/2018	13:33:11	Property 8	Interior	room B	WALL	DRYWALL	LT BLUE	0	0
5/9/2018	13:34:38	Property 8	Interior	room B	CEILING	DRYWALL	WHITE	0	0
5/9/2018	13:35:07	Property 8	Interior	room C	CEILING	DRYWALL	WHITE	0	0
5/9/2018	13:35:33	Property 8	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/9/2018	13:35:59	Property 8	Interior	room C	WALL	DRYWALL	YELLOW	0.01	0.02
5/9/2018	13:36:51	Property 8	Interior	room C	DOOR	WOOD	YELLOW	0	0.01
5/9/2018	13:37:25	Property 8	Interior	room D	DOOR	WOOD	YELLOW	0	0
5/9/2018	13:37:52	Property 8	Interior	room D	WALL	DRYWALL	YELLOW	0.08	0.1
5/9/2018	13:38:31	Property 8	Interior	room D	CEILING	DRYWALL	WHITE	0	0
5/9/2018	13:59:26	Property 7	Exterior	--	WALL	WOOD	WHITE	0	0
5/9/2018	13:59:51	Property 7	Exterior	--	TRIM	WOOD	RED	0.55	0.13
5/9/2018	14:01:30	Property 7	Interior	room A	CEILING	DRYWALL	WHITE	0	0
5/9/2018	14:01:59	Property 7	Interior	room A	WALL	DRYWALL	CREAM	0	0
5/9/2018	14:02:27	Property 7	Interior	room A	DOOR	WOOD	BLACK	0	0
5/9/2018	14:03:38	Property 7	Interior	room A	WALL	DRYWALL	WHITE	0	0
5/9/2018	14:04:24	Property 7	Interior	room B	WALL	DRYWALL	WHITE	1	0.16
5/9/2018	14:05:11	Property 7	Interior	room B	CEILING	DRYWALL	WHITE	1	0.08
5/9/2018	14:05:36	Property 7	Interior	room B	CEILING	DRYWALL	WHITE	0	0
5/9/2018	14:06:06	Property 7	Interior	room B	DOOR	WOOD	WHITE	0	0
5/9/2018	14:06:44	Property 7	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/9/2018	14:07:15	Property 7	Interior	room C	CEILING	DRYWALL	WHITE	0	0
5/9/2018	14:07:39	Property 7	Interior	room C	WALL	DRYWALL	WHITE	0.01	0.01
5/9/2018	14:08:24	Property 7	Interior	room C	DOOR	WOOD	WHITE	0	0
5/9/2018	14:08:50	Property 7	Interior	room D	DOOR	METAL	WHITE	0	0
5/9/2018	14:09:39	Property 7	Interior	room D	WALL	DRYWALL	WHITE	0.06	0.03
5/9/2018	14:10:13	Property 7	Interior	room D	CEILING	DRYWALL	WHITE	1	0.09

**Table 5**  
**Lead-in-Soil Screening Results**

Screening ID	Location	Date	Time	Lead (mg/kg)	(+/-) Error
<b><i>XRF Standard Check STD2711 (Lead = 1162 +/- 31 mg/kg)</i></b>					
CRST-STD2711	N/A	5/8/2018	10:51:04	923	25
CRST-STD2711	N/A	5/8/2018	10:51:54	1180	31
CRST-STD2711	N/A	5/8/2018	10:52:31	1188	31
CRST-STD2711	N/A	5/8/2018	10:53:13	1062	29
CRST-STD2711	N/A	5/8/2018	10:58:28	1085	31
CRST-STD2711	N/A	5/8/2018	10:59:05	1042	30
CRST-STD2711	N/A	5/8/2018	10:59:47	1045	31
CRST-STD2711	N/A	5/8/2018	11:00:33	1102	32
<b><i>XRF Screening of Drip Line Composite Samples</i></b>					
CRST-09-PB-SS01	Building #9	5/8/2018	10:54:35	94	7
CRST-09-PB-SS01	Building #9	5/8/2018	10:55:29	139	8
CRST-09-PB-SS01	Building #9	5/8/2018	10:56:12	180	9

**Table 6**  
**Lead-in-Soil Analytical Results**

Soil Sample ID	Location	Lead Results (mg/kg)	EPA RSL – Residential Soil (mg/kg)	EPA RSL – Industrial Soil (mg/kg)
CRST-09-PB-SS01	Property #9	<b>98.7</b>	400	800
CRST-09-PB-SS01A		<b>101</b>		

Notes:

**Bold** = Analyte detected above detection limit  
 EPA = Environmental Protection Agency  
 mg/kg = milligrams per kilogram  
 RSL = Regional Screening Level

---

**APPENDIX A**  
**PHOTOGRAPH LOG**

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<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>1</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.006294
<b>Long</b>	-101.229622
<b>Direction Photo Taken:</b> 197.003215434084	
<b>Description:</b>  Exterior of Property #1.	



<b>Photo No.</b> <b>2</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.006267
<b>Long</b>	-101.229644
<b>Direction Photo Taken:</b> 208.964601769911	
<b>Description:</b>  Interior of Property #1 with ACM drywall compound and floor tiles and fire damage.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>3</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.006128
<b>Long</b>	-101.229592
<b>Direction Photo Taken:</b> 342.334470989761	
<b>Description:</b>  Interior of Property #1 with ACM drywall compound and floor tiles and fire damage.	



<b>Photo No.</b> <b>4</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.00615
<b>Long</b>	-101.229569
<b>Direction Photo Taken:</b> 314.83367983368	
<b>Description:</b>  Interior of Property #1 with ACM drywall compound and floor tiles and fire damage.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>5</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.006217
<b>Long</b>	-101.229675
<b>Direction Photo Taken:</b> 141.518248175182	
<b>Description:</b>  Interior of Property #1 with ACM drywall compound and floor tiles and fire damage.	



<b>Photo No.</b> <b>6</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002633
<b>Long</b>	-101.227181
<b>Direction Photo Taken:</b> 291.414364640884	
<b>Description:</b>  Exterior of Property #9 with LBP.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>7</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.00275
<b>Long</b>	-101.227272
<b>Direction Photo Taken:</b> 184.532507739938	
<b>Description:</b>  Interior of Property #9 with ACM drywall compound.	



<b>Photo No.</b> <b>8</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002658
<b>Long</b>	-101.227233
<b>Direction Photo Taken:</b> 261.533742331288	
<b>Description:</b>  Interior of Property #9 with ACM floor tiles.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>9</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002675
<b>Long</b>	-101.227242
<b>Direction Photo Taken:</b> 244.564393939394	
<b>Description:</b>  Interior of Property #9 with ACM floor tiles.	



<b>Photo No.</b> <b>10</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002675
<b>Long</b>	-101.227347
<b>Direction Photo Taken:</b> 31.2966915688367	
<b>Description:</b>  Attic of Property #9 with no suspect materials present.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>11</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002756
<b>Long</b>	-101.227403
<b>Direction Photo Taken:</b> 7.33840947546531	
<b>Description:</b>  Interior of Property #9 with ACM transite chimney backing.	



<b>Photo No.</b> <b>12</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002003
<b>Long</b>	-101.228522
<b>Direction Photo Taken:</b> 357.812182741117	
<b>Description:</b>  Exterior of Property #3.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>13</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002186
<b>Long</b>	-101.228578
<b>Direction Photo Taken:</b> 179.311023622047	
<b>Description:</b>  Interior of Property #3 with ACM drywall compound and fire damage.	



<b>Photo No.</b> <b>14</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002128
<b>Long</b>	-101.228622
<b>Direction Photo Taken:</b> 359.764705882353	
<b>Description:</b>  Basement of Property #3 with ACM vibration dampener.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>15</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.002136
<b>Long</b>	-101.228639
<b>Direction Photo Taken:</b> 43.5734265734266	
<b>Description:</b>  Basement of Property #3.	



<b>Photo No.</b> <b>16</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.001531
<b>Long</b>	-101.229111
<b>Direction Photo Taken:</b> 337.298295454545	
<b>Description:</b>  Property #4 damage.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>17</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.001747
<b>Long</b>	-101.229094
<b>Direction Photo Taken:</b> 224.297335203366	
<b>Description:</b> Exterior of Property #4.	



<b>Photo No.</b> <b>18</b>	<b>Date:</b> 05/08/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.001731
<b>Long</b>	-101.22915
<b>Direction Photo Taken:</b> 225.538653366584	
<b>Description:</b> Interior of Property #4.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<table> <tr> <td><b>Photo No.</b> <b>19</b></td><td><b>Date:</b> 05/08/2018</td></tr> <tr> <td colspan="2"><b>Photo Coordinates</b></td></tr> <tr> <td><b>Lat</b></td><td>45.000767</td></tr> <tr> <td><b>Long</b></td><td>-101.232169</td></tr> <tr> <td colspan="2"><b>Direction Photo Taken:</b> 322.528169014084</td></tr> <tr> <td colspan="2"><b>Description:</b>  Exterior of Property #11.</td></tr> </table>	<b>Photo No.</b> <b>19</b>	<b>Date:</b> 05/08/2018	<b>Photo Coordinates</b>		<b>Lat</b>	45.000767	<b>Long</b>	-101.232169	<b>Direction Photo Taken:</b> 322.528169014084		<b>Description:</b>  Exterior of Property #11.		
<b>Photo No.</b> <b>19</b>	<b>Date:</b> 05/08/2018												
<b>Photo Coordinates</b>													
<b>Lat</b>	45.000767												
<b>Long</b>	-101.232169												
<b>Direction Photo Taken:</b> 322.528169014084													
<b>Description:</b>  Exterior of Property #11.													
<table> <tr> <td><b>Photo No.</b> <b>20</b></td><td><b>Date:</b> 05/08/2018</td></tr> <tr> <td colspan="2"><b>Description:</b>  Interior of Property #11.</td></tr> </table>	<b>Photo No.</b> <b>20</b>	<b>Date:</b> 05/08/2018	<b>Description:</b>  Interior of Property #11.										
<b>Photo No.</b> <b>20</b>	<b>Date:</b> 05/08/2018												
<b>Description:</b>  Interior of Property #11.													



<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>21</b>	<b>Date:</b> 05/09/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.006367
<b>Long</b>	-101.232675
<b>Direction Photo Taken:</b> 204.707182320442	
<b>Description:</b>  Exterior of Property #5.	



<b>Photo No.</b> <b>22</b>	<b>Date:</b> 05/09/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.006272
<b>Long</b>	-101.232864
<b>Direction Photo Taken:</b> 120.323547400612	
<b>Description:</b>  Interior of Property #5 with ACM linoleum.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<table border="1"> <tr> <td><b>Photo No.</b> <b>23</b></td> <td><b>Date:</b> 05/09/2018</td> </tr> <tr> <td colspan="2"><b>Description:</b>  Interior of Property #5 with ACM drywall compound and fire damage.</td> </tr> </table>	<b>Photo No.</b> <b>23</b>	<b>Date:</b> 05/09/2018	<b>Description:</b>  Interior of Property #5 with ACM drywall compound and fire damage.										
<b>Photo No.</b> <b>23</b>	<b>Date:</b> 05/09/2018												
<b>Description:</b>  Interior of Property #5 with ACM drywall compound and fire damage.													
<table border="1"> <tr> <td><b>Photo No.</b> <b>24</b></td> <td><b>Date:</b> 05/09/2018</td> </tr> <tr> <td colspan="2"><b>Photo Coordinates</b></td> </tr> <tr> <td><b>Lat</b></td> <td>45.006333</td> </tr> <tr> <td><b>Long</b></td> <td>-101.232886</td> </tr> <tr> <td colspan="2"><b>Direction Photo Taken:</b> 280.906040268456</td> </tr> <tr> <td colspan="2"><b>Description:</b>  Interior of Property #5 with ACM vermiculite debris and fire damage.</td> </tr> </table>	<b>Photo No.</b> <b>24</b>	<b>Date:</b> 05/09/2018	<b>Photo Coordinates</b>		<b>Lat</b>	45.006333	<b>Long</b>	-101.232886	<b>Direction Photo Taken:</b> 280.906040268456		<b>Description:</b>  Interior of Property #5 with ACM vermiculite debris and fire damage.		
<b>Photo No.</b> <b>24</b>	<b>Date:</b> 05/09/2018												
<b>Photo Coordinates</b>													
<b>Lat</b>	45.006333												
<b>Long</b>	-101.232886												
<b>Direction Photo Taken:</b> 280.906040268456													
<b>Description:</b>  Interior of Property #5 with ACM vermiculite debris and fire damage.													



<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>25</b>	<b>Date:</b> 05/09/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.006231
<b>Long</b>	-101.232803
<b>Direction Photo Taken:</b> 12.4110718492344	
<b>Description:</b>  Basement of Property #5 with no suspect materials observed.	




<b>Photo No.</b> <b>26</b>	<b>Date:</b> 05/09/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.005853
<b>Long</b>	-101.233047
<b>Direction Photo Taken:</b> 296.932773109244	
<b>Description:</b>  Exterior of Property #6.	







<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>27</b>	<b>Date:</b> 05/09/2018	
<b>Description:</b>  Property #6 damages.		

<b>Photo No.</b> <b>28</b>	<b>Date:</b> 05/09/2018	
<b>Photo Coordinates</b>		
<b>Lat</b>	45.005139	
<b>Long</b>	-101.233872	
<b>Direction Photo Taken:</b> 134.981132075472		
<b>Description:</b>  Exterior of Property #2.		



<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>29</b>	<b>Date:</b> 05/09/2018	
<b>Description:</b>  Interior of Property #2 with ACM drywall compound and fire damage.		
<b>Photo No.</b> <b>30</b>	<b>Date:</b> 05/09/2018	
<b>Description:</b>  Interior of Property #2 with ACM drywall compound and fire damage.		



<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>31</b>	<b>Date:</b> 05/09/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.005286
<b>Long</b>	-101.233719
<b>Direction Photo Taken:</b> 307.703389830508	
<b>Description:</b>  Exterior of Property #10.	



<b>Photo No.</b> <b>32</b>	<b>Date:</b> 05/09/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.005031
<b>Long</b>	-101.233628
<b>Direction Photo Taken:</b> 225.974874371859	
<b>Description:</b>  Interior of Property #10 with ACM linoleum and drywall compound.	





<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>33</b>	<b>Date:</b> 05/09/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.005047
<b>Long</b>	-101.233575
<b>Direction Photo Taken:</b> 93.4949698189135	
<b>Description:</b>  Ballast with "No PCB's" designation observed at Property #10.	



<b>Photo No.</b> <b>34</b>	<b>Date:</b> 05/09/2018
<b>Photo Coordinates</b>	
<b>Lat</b>	45.005036
<b>Long</b>	-101.233658
<b>Direction Photo Taken:</b> 128.049275362319	
<b>Description:</b>  Attic of Property #10 with no suspect materials.	



<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<table border="1"> <tr> <td><b>Photo No.</b> <b>35</b></td> <td><b>Date:</b> 05/09/2018</td> </tr> <tr> <td colspan="2"><b>Description:</b>  Exterior of Property #8.</td> </tr> </table>	<b>Photo No.</b> <b>35</b>	<b>Date:</b> 05/09/2018	<b>Description:</b>  Exterior of Property #8.		
<b>Photo No.</b> <b>35</b>	<b>Date:</b> 05/09/2018				
<b>Description:</b>  Exterior of Property #8.					
<table border="1"> <tr> <td><b>Photo No.</b> <b>36</b></td> <td><b>Date:</b> 05/09/2018</td> </tr> <tr> <td colspan="2"><b>Description:</b>  Interior of Property #8 with ACM drywall compound.</td> </tr> </table>	<b>Photo No.</b> <b>36</b>	<b>Date:</b> 05/09/2018	<b>Description:</b>  Interior of Property #8 with ACM drywall compound.		
<b>Photo No.</b> <b>36</b>	<b>Date:</b> 05/09/2018				
<b>Description:</b>  Interior of Property #8 with ACM drywall compound.					



<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<p><b>Photo No.</b> <b>37</b></p> <p><b>Date:</b> 05/09/2018</p> <p><b>Description:</b>  Ballast with "No PCB's" designation observed at Property #8.</p>	
<p><b>Photo No.</b> <b>38</b></p> <p><b>Date:</b> 05/09/2018</p> <p><b>Description:</b>  Exterior of Property #7.</p>	

<b>Project Name:</b> CRST Properties	<b>Site Location:</b> Eagle Butte, SD	<b>Project No.</b> 0003/1711-09
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<b>Photo No.</b> <b>39</b>	<b>Date:</b> 05/09/2018	
<b>Description:</b>  Interior of Property #7 with ACM drywall compound.		
<b>Photo No.</b> <b>40</b>	<b>Date:</b> 05/09/2018	
<b>Description:</b>  Interior of Property #7 with white mold observed throughout.		

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**APPENDIX B**  
**LABORATORY REPORTS**

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May 23, 2018

**Subcontract Number:** NA  
**Laboratory Report:** RES 408214-1  
**Project # / P.O. #** 20408.016.003.0551.100  
**Project Description:** CRST Properties

Elliott Petri  
Weston Solutions, Inc. (CO)  
1435 Garrison St. Ste. 100  
Lakewood CO 80215

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

**RES 408214-1** is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,



Cherele Marie for

Jeanne Spencer  
President

## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

**TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME**

RES Job Number: **RES 408214-1**  
 Client: **Weston Solutions, Inc. (CO)**  
 Client Project Number / P.O.: **20408.016.003.0551.100**  
 Client Project Description: **CRST Properties**  
 Date Samples Received: **May 11, 2018**  
 Method: **EPA 600/R-93/116 - Short Report, Bulk**  
 Turnaround: **3-5 Day**  
 Date Samples Analyzed: **May 23, 2018**

ND=None Detected  
 TR=Trace, <1% Visual Estimate  
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-01-DB01-001	EM 2085092	A	Brown tile	5	Chrysotile	12	0	88
		B	Black debris	95	Chrysotile	TR	15	85
CRST-01-RM01-002	EM 2085093	A	Black felt	15		ND	60	40
		B	Black granular tar	20		ND	15	85
		C	Black fibrous tar	65		ND	40	60
CRST-01-FT01-003	EM 2085094	A	Black mastic	5		ND	0	100
		B	Beige tile	95	Chrysotile	5	0	95
CRST-01-FT01-004	EM 2085095	A	Black mastic	5		ND	0	100
		B	Beige tile	95	Chrysotile	5	0	95
CRST-01-FT01-005	EM 2085096	A	Black mastic	5		ND	0	100
		B	Beige tile	95	Chrysotile	5	0	95
CRST-01-FM01-006	EM 2085097	A	Black mastic	10		ND	0	100
		B	Brown tile	90	Chrysotile	8	0	92

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

**TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME**

RES Job Number: **RES 408214-1**  
 Client: **Weston Solutions, Inc. (CO)**  
 Client Project Number / P.O.: **20408.016.003.0551.100**  
 Client Project Description: **CRST Properties**  
 Date Samples Received: **May 11, 2018**  
 Method: **EPA 600/R-93/116 - Short Report, Bulk**  
 Turnaround: **3-5 Day**  
 Date Samples Analyzed: **May 23, 2018**

ND=None Detected  
 TR=Trace, <1% Visual Estimate  
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-01-DW01-007	EM 2085098	A	Pink insulation	7		ND	95	5
		B	Tan paper w/ black tar	8		ND	60	40
		C	White joint compound	10	Chrysotile	2	0	98
		D	Tan charred compound w/ gray charred paint	25	Chrysotile	5	0	95
		E	White/brown drywall	50		ND	20	80
CRST-01-DW01-008	EM 2085099	A	Gray compound w/ white paint	15		ND	0	100
		B	White/tan/black charred drywall	85		ND	20	80
CRST-01-DW01-009	EM 2085100	A	Brown charred compound w/ gray charred paint	30	Chrysotile	6	0	94
		B	Tan/white/black charred drywall	70		ND	25	75
CRST-01-DW01-010	EM 2085101	A	White compound	5	Chrysotile	TR	0	100
		B	Brown charred compound w/ gray charred paint	25	Chrysotile	6	0	94
		C	White/tan/black charred drywall	70		ND	35	65

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

**TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME**

RES Job Number: **RES 408214-1**  
 Client: **Weston Solutions, Inc. (CO)**  
 Client Project Number / P.O.: **20408.016.003.0551.100**  
 Client Project Description: **CRST Properties**  
 Date Samples Received: **May 11, 2018**  
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 Turnaround: **3-5 Day**  
 Date Samples Analyzed: **May 23, 2018**

ND=None Detected  
 TR=Trace, <1% Visual Estimate  
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-01-DW01-011	EM 2085102	A	Brown charred compound w/ white paint	15	<b>Chrysotile</b>	<b>6</b>	0	94
		B	White/tan drywall	85		<b>ND</b>	35	65
CRST-09-DW01-012	EM 2085103	A	White tape	5		<b>ND</b>	95	5
		B	White joint compound	20		<b>ND</b>	0	100
		C	White/tan drywall	75		<b>ND</b>	15	85
CRST-09-DW01-013	EM 2085104	A	White tape	10		<b>ND</b>	95	5
		B	White joint compound	20		<b>ND</b>	0	100
		C	White/tan drywall	70		<b>ND</b>	20	80
CRST-09-DW01-014	EM 2085105	A	Tan tape	10		<b>ND</b>	95	5
		B	White joint compound	12		<b>ND</b>	0	100
		C	White/gray compound	14		<b>ND</b>	0	100
		D	White/tan drywall	64		<b>ND</b>	25	75
CRST-09-RM01-015	EM 2085106	A	Black/white shingle	100		<b>ND</b>	40	60

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## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

**TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME**

RES Job Number: **RES 408214-1**  
 Client: **Weston Solutions, Inc. (CO)**  
 Client Project Number / P.O.: **20408.016.003.0551.100**  
 Client Project Description: **CRST Properties**  
 Date Samples Received: **May 11, 2018**  
 Method: **EPA 600/R-93/116 - Short Report, Bulk**  
 Turnaround: **3-5 Day**  
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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-09-RM02-016	EM 2085107	A	White/black shingle	100		ND	40	60
CRST-09-FT01-017	EM 2085108	A	Yellow adhesive	8		ND	0	100
		B	Brown tile	92	Chrysotile	12	0	88
CRST-09-FT02-018	EM 2085109	A	Black mastic	10		ND	0	100
		B	Green tile	90	Chrysotile	10	0	90
CRST-09-FT03-019	EM 2085110	A	Black mastic	10		ND	0	100
		B	Brown tile	90	Chrysotile	12	0	88
CRST-09-WP01-020	EM 2085111	A	Brown paper	100		ND	90	10
CRST-09-WP01-021	EM 2085112	A	Brown paper	100		ND	90	10
CRST-09-WM01-022	EM 2085113	A	Brown felt	15		ND	85	15
		B	Tan multi-colored shingle	85		ND	45	55
CRST-09-WG01-023	EM 2085114	A	White glazing	100		ND	0	100
CRST-09-WG02-024	EM 2085115	A	Gray glazing	100	Chrysotile	8	0	92
CRST-09-TS01-025	EM 2085116	A	Gray fibrous cementitious material	100	Chrysotile	14	0	86

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					Mineral	Visual Estimate (%)		
CRST-09-FM01-026	EM 2085117	A	Red ceramic tile	100		ND	0	100
CRST-09-CM01-027	EM 2085118	A	Green/multi-colored paint	15		ND	0	100
		B	Gray/white granular perlitic material	85		ND	0	100
CRST-09-DW02-028	EM 2085119	A	White compound w/ blue paint	30	Chrysotile	8	0	92
		B	White/tan drywall	70		ND	20	80
CRST-09-DW02-029	EM 2085120	A	Tan compound w/ beige paint	25	Chrysotile	7	0	93
		B	White/tan drywall	75		ND	25	75
CRST-09-DW02-030	EM 2085121	A	White tape	10		ND	85	15
		B	Tan joint compound	10	Chrysotile	7	0	93
		C	Tan compound w/ blue paint	15	Chrysotile	8	0	92
		D	White/tan drywall	65		ND	25	75

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-03-DW01-031	EM 2085122	A	Gray charred paint	5		ND	0	100
		B	White compound	5	Chrysotile	TR	0	100
		C	Brown tape	5		ND	90	10
		D	White joint compound	5	Chrysotile	TR	0	100
		E	White/brown drywall	80		ND	15	85
CRST-03-DW01-032	EM 2085123	A	Brown charred paint	5		ND	0	100
		B	White compound	5	Chrysotile	TR	0	100
		C	White tape	5		ND	90	10
		D	White joint compound	5	Chrysotile	TR	0	100
		E	White/brown drywall	80		ND	0	100

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					Mineral	Visual Estimate (%)		
CRST-03-DW01-033	EM 2085124	A	Gray charred paint	5		ND	0	100
		B	White compound	5	Chrysotile	3	0	97
		C	White tape	5		ND	90	10
		D	White joint compound	5	Chrysotile	3	0	97
		E	White/brown joint compound	80		ND	15	85
CRST-03-DW01-034	EM 2085125	A	Gray charred paint	10		ND	0	100
		B	White compound	10	Chrysotile	TR	0	100
		C	White/brown drywall	80		ND	15	85
CRST-03-DW01-035	EM 2085126	A	Gray charred paint	5		ND	0	100
		B	White compound	5	Chrysotile	2	0	98
		C	White tape	5		ND	90	10
		D	White joint compound	5	Chrysotile	2	0	98
		E	White/brown drywall	80		ND	15	85

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					Mineral	Visual Estimate (%)		
CRST-03-RM01-036	EM 2085127	A	Black felt	20		ND	80	20
		B	Tan/multi-colored shingle	40		ND	40	60
		C	Red/multi-colored shingle	40		ND	40	60
CRST-03-VD01-037	EM 2085128	A	White fibrous woven material w/ silver paint	100	Chrysotile	50	40	10
CRST-03-VD02-038	EM 2085129	A	Black resinous material	30		ND	0	100
		B	White fibrous woven material	70		ND	95	5
CRST-03-DW02-039	EM 2085130	A	Blue paint	5		ND	0	100
		B	White compound	5		ND	0	100
		C	White tape	5		ND	95	5
		D	White joint compound	5		ND	0	100
		E	White/brown drywall	80		ND	20	80
CRST-03-DW02-040	EM 2085131	A	Blue paint	10		ND	0	100
		B	White compound	10		ND	0	100
		C	White/brown drywall	80		ND	15	85

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-03-DW02-041	EM 2085132	A	Blue paint	5		ND	0	100
		B	White compound	5		ND	0	100
		C	White tape	5		ND	95	5
		D	White joint compound	5		ND	0	100
		E	White/brown drywall	80		ND	20	80
CRST-03-LN01-042	EM 2085133	A	Black mastic	1		ND	0	100
		B	Yellow adhesive	9		ND	0	100
		C	Gray/multi-colored sheet vinyl w/ gray fibrous backing material	90		ND	20	80
CRST-03-LN01-043	EM 2085134	A	Off white adhesive	10		ND	0	100
		B	Gray/multi-colored sheet vinyl w/ gray fibrous backing material	90		ND	15	85
CRST-03-ST01-044	EM 2085135	A	Black mastic	5		ND	0	100
		B	Tan stair tread	95		ND	0	100

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					Mineral	Visual Estimate (%)		
CRST-03-SC01-045	EM 2085136	A	Tan caulk	100		ND	10	90
CRST-03-CI01-046	EM 2085137	A	Gray fibrous plaster	100		ND	30	70
CRST-03-CI01-047	EM 2085138	A	Gray fibrous plaster	100		ND	40	60
CRST-03-CI01-048	EM 2085139	A	Gray fibrous plaster	100		ND	40	60
CRST-04-CT01-049	EM 2085140	A	Brown/gray/white ceiling tile	100		ND	85	15
CRST-04-DW01-050	EM 2085141	A	White/multi-colored wall covering	35		ND	0	100
		B	Tan/white drywall	65		ND	20	80
CRST-04-LN01-051	EM 2085142	A	Brown adhesive w/ tan wood	10	Chrysotile	TR	40	60
		B	Tan/multi-colored sheet vinyl w/ white fibrous backing material	90	Chrysotile	15	TR	85
CRST-04-FT01-052	EM 2085143	A	Brown/multi-colored tile w/ colorless adhesive	100		ND	0	100
CRST-11-LN01-053	EM 2085144	A	Yellow/multi-colored sheet vinyl w/ black fibrous backing material	100		ND	45	55
CRST-11-CT01-054	EM 2085145	A	Brown fibrous material w/ white paint	100		ND	70	30

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					Mineral	Visual Estimate (%)		
CRST-05-DB01-055	EM 2085146	A	Black/multi-colored charred debris	100		ND	30	70
CRST-05-DW01-056	EM 2085147	A	Off white fibrous woven material	10		ND	90	10
		B	White compound w/ black charred paint	25		ND	TR	100
		C	White/tan drywall	65		ND	35	65
CRST-05-DW01-057	EM 2085148	A	Tan compound	15		ND	0	100
		B	Tan/black charred drywall	85		ND	30	70
CRST-05-DW01-058	EM 2085149	A	White tape	5		ND	95	5
		B	Tan/white compound	15	Chrysotile	3	4	93
		C	Off white joint compound	15	Chrysotile	4	3	93
		D	White/brown drywall	65		ND	25	75
CRST-05-DW01-059	EM 2085150	A	Black/multi-colored charred paint w/ tan compound	10		ND	5	95
		B	White/black charred tape	15		ND	90	10
		C	Brown/black charred joint compound	15	Chrysotile	4	TR	96
		D	Tan/white drywall	60		ND	30	70

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-05-DW01-060	EM 2085151	A	White fibrous woven material	5		ND	90	10
		B	Tan paper w/ black tar	5		ND	80	20
		C	Black charred paint w/ white compound	10		ND	TR	100
		D	Pink insulation	10		ND	90	10
		E	White/brown drywall	70		ND	20	80
CRST-05-WP01-061	EM 2085152	A	Black/brown felt	100		ND	80	20
CRST-05-WP01-062	EM 2085153	A	Black/brown felt	100		ND	80	20
CRST-05-RM01-063	EM 2085154	A	Brown/black fibrous felt	20		ND	80	20
		B	Red/white/black shingle	80		ND	40	60
CRST-05-VM01-064	EM 2085155	A	Brown vermiculite	100	Trem/Act	TR	0	100
CRST-05-LN01-065	EM 2085156	A	Tan adhesive	10		ND	0	100
		B	Off white sheet vinyl w/ off white fibrous backing material	90		ND	25	75

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					Mineral	Visual Estimate (%)		
CRST-05-LN02-066	EM 2085157	A	Black mastic	5	<b>Chrysotile</b>	<b>ND</b>	TR	100
		B	Gray/multi-colored tile w/ colorless adhesive	45		<b>ND</b>	2	98
		C	Tan tile	50		<b>6</b>	0	94
CRST-05-WL01-067	EM 2085158	A	Black/gray charred fibrous material	100		<b>ND</b>	60	40
CRST-06-DB01-068	EM 2085159	A	Black charred debris	100		<b>ND</b>	15	85
CRST-06-LN01-069	EM 2085160	A	Brown adhesive	10		<b>ND</b>	0	100
		B	Yellow/multi-colored sheet vinyl w/ gray fibrous backing material	90		<b>ND</b>	40	60
CRST-06-FT01-070	EM 2085161	A	Gray tile w/ colorless adhesive	100		<b>ND</b>	0	100
CRST-06-WF01-071	EM 2085162	A	Tan paper w/ silver foil	100		<b>ND</b>	80	20
CRST-02-DB01-072	EM 2085163	A	Black charred debris	100		<b>ND</b>	20	80

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					Mineral	Visual Estimate (%)		
CRST-02-WP01-073	EM 2085164	A	Silver foil	25		ND	0	100
		B	Brown paper	25		ND	90	10
		C	Black felt	50		ND	80	20
CRST-02-LN01-074	EM 2085165	A	Gray/multi-colored sheet vinyl w/ off white fibrous backing material	100	Chrysotile	6	20	74
CRST-02-LB02-075	EM 2085166	A	Tan/brown adhesive	10		ND	0	100
		B	Tan/gray sheet vinyl w/ off white fibrous backing material	90		ND	30	70
CRST-02-FT01-076	EM 2085167	A	Colorless adhesive	10		ND	0	100
		B	Cream/black charred tile	25		ND	0	100
		C	Brown/black charred tile	65		ND	0	100
CRST-02-RM01-077	EM 2085168	A	Black tar	20		ND	0	100
		B	Black fibrous tar	80		ND	50	50

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					Mineral	Visual Estimate (%)		
CRST-02-DW01-078	EM 2085169	A	Green/gray charred paint	10		ND	0	100
		B	White compound	10		ND	0	100
		C	White/brown drywall	80		ND	15	85
CRST-02-DW01-079	EM 2085170	A	Brown charred compound w/ black charred paint	40	Chrysotile	5	0	95
		B	White/black charred drywall	60		ND	10	90
CRST-02-DW01-080	EM 2085171	A	White/tan/black charred drywall	100		ND	10	90
CRST-02-DW01-081	EM 2085172	A	White/tan/black charred drywall	100		ND	10	90
CRST-02-DW01-082	EM 2085173	A	White/gray/tan charred drywall	100		ND	15	85
CRST-02-DW01-083	EM 2085174	A	White/tan/gray charred drywall	100		ND	10	90
CRST-10-RM01-084	EM 2085175	A	Black/gray shingle	100		ND	40	60
CRST-10-WF01-085	EM 2085176	A	Black felt	100		ND	75	25
CRST-10-FT01-086	EM 2085177	A	Black mastic	5		ND	0	100
		B	Gray tile	95	Chrysotile	10	0	90
CRST-10-FT02-087	EM 2085178	A	Brown/black tile w/ colorless adhesive	100		ND	0	100

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 Client: **Weston Solutions, Inc. (CO)**  
 Client Project Number / P.O.: **20408.016.003.0551.100**  
 Client Project Description: **CRST Properties**  
 Date Samples Received: **May 11, 2018**  
 Method: **EPA 600/R-93/116 - Short Report, Bulk**  
 Turnaround: **3-5 Day**  
 Date Samples Analyzed: **May 23, 2018**

ND=None Detected  
 TR=Trace, <1% Visual Estimate  
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-10-FT03-088	EM 2085179	A	Green/black tile w/ colorless adhesive	30		ND	0	100
		B	Off white/gray/black tile w/ colorless adhesive	70		ND	0	100
CRST-10-LN01-089	EM 2085180	A	Tan adhesive	10		ND	0	100
		B	Beige sheet vinyl w/ off white fibrous backing material	90	Chrysotile	20	3	77
CRST-10-ST01-090	EM 2085181	A	Tan adhesive w/ brown wood	10		ND	0	100
		B	Brown stair tread	90	Chrysotile	2	0	98
CRST-10-DW01-091	EM 2085182	A	Off white tape	10		ND	95	5
		B	Tan/white drywall	15		ND	75	25
		C	White compound w/ white/multi-colored paint	20		ND	0	100
		D	White joint compound	55		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

## RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-10-DW01-092	EM 2085183	A	White/multi-colored paint	10		ND	0	100
		B	Off white tape	10		ND	95	5
		C	Off white compound	20	Chrysotile	3	0	97
		D	Off white joint compound	20	Chrysotile	3	0	97
		E	White/tan drywall	40		ND	20	80
CRST-10-DW01-093	EM 2085184	A	White compound w/ off white paint	10		ND	0	100
		B	White/tan drywall	90		ND	15	85
CRST-10-DW01-094	EM 2085185	A	White compound w/ white paint	10		ND	0	100
		B	White/tan drywall w/ white/green paint	90		ND	15	85

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-10-DW01-095	EM 2085186	A	White/multi-colored paint	10		ND	0	100
		B	Off white tape	10		ND	95	5
		C	Off white compound	10	Chrysotile	3	0	97
		D	Off white joint compound	15	Chrysotile	3	0	97
		E	Tan/white drywall	55		ND	70	30
CRST-10-CD01-096	EM 2085187	A	Off white compound w/ white paint	10		ND	0	100
		B	White/tan drywall w/ green/white paint	90		ND	25	75
CRST-10-CD01-097	EM 2085188	A	Off white tape	10		ND	95	5
		B	Tan/white drywall w/ blue paint	15		ND	75	25
		C	White micaceous compound w/ white paint	15		ND	0	100
		D	White joint compound	60		ND	0	100

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-10-CD01-098	EM 2085189	A	Off white compound w/ green/white paint	2		ND	0	100
		B	White/tan drywall	8		ND	55	45
		C	Off white tape	15		ND	95	5
		D	White micaceous compound w/ white paint	25		ND	0	100
		E	White joint compound	50		ND	0	100
CRST-10-SL01-099	EM 2085190	A	Brown adhesive	5		ND	0	100
		B	Brown/red fibrous resinous material w/ colorless/yellow adhesive	95		ND	60	40
CRST-08-RM01-100	EM 2085191	A	Black felt	15		ND	80	20
		B	Black/gray shingle	85		ND	40	60
CRST-08-WF01-101	EM 2085192	A	Black felt	100		ND	80	20

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-08-LN01-102	EM 2085193	A	Yellow adhesive	10		ND	0	100
		B	Cream/off white sheet vinyl w/ off white fibrous backing material	90		ND	25	75
CRST-08-CD01-103	EM 2085194	A	Off white tape	5		ND	95	5
		B	White paint	5		ND	0	100
		C	White micaceous compound w/ white paint	10		ND	0	100
		D	Off white compound	20	Chrysotile	3	0	97
		E	Off white joint compound	20	Chrysotile	3	0	97
		F	White/tan drywall	40		ND	15	85

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-08-CD01-104	EM 2085195	A	Off white tape	5		ND	95	5
		B	White paint	5		ND	0	100
		C	White micaceous compound w/ white paint	10		ND	0	100
		D	Off white compound	20	Chrysotile	3	0	97
		E	Off white joint compound	20	Chrysotile	3	0	97
		F	White/tan drywall	40		ND	15	85
CRST-08-CD01-105	EM 2085196	A	White micaceous compound w/ white paint	15		ND	0	100
		B	White/tan drywall w/ blue/white paint	85		ND	20	80
CRST-08-CD01-106	EM 2085197	A	White micaceous compound w/ white paint	15		ND	0	100
		B	White/tan drywall w/ white paint	85		ND	15	85

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-08-DW01-107	EM 2085198	A	Off white tape	5		ND	95	5
		B	White paint	5		ND	0	100
		C	Off white compound	20	Chrysotile	3	0	97
		D	Off white joint compound	20	Chrysotile	3	0	97
		E	White/tan drywall	50		ND	20	80
CRST-08-DW01-108	EM 2085199	A	White compound w/ blue paint	15		ND	0	100
		B	White joint compound	15		ND	0	100
		C	Off white tape	30		ND	95	5
		D	White/tan drywall w/ blue/green paint	40		ND	20	80

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-08-DW01-109	EM 2085200	A	Off white tape	5		ND	0	100
		B	White paint	10		ND	0	100
		C	Off white joint compound	15	Chrysotile	3	0	97
		D	Off white compound	30	Chrysotile	3	0	97
		E	White/tan drywall	40		ND	50	50
CRST-08-DW01-110	EM 2085201	A	Tan paint	3		ND	0	100
		B	Off white tape	5		ND	95	5
		C	White compound w/ white paint	7		ND	0	100
		D	Off white compound	10	Chrysotile	3	0	97
		E	Off white joint compound	10	Chrysotile	3	0	97
		F	White/tan drywall	65		ND	20	80

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Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
CRST-08-DW01-111	EM 2085202	A	Green/tan paint	3	<b>Chrysotile</b>	<b>ND</b>	0	100
		B	Off white compound	7		<b>3</b>	0	97
		C	White compound w/ white paint	15		<b>ND</b>	0	100
		D	White/tan drywall	75		<b>ND</b>	15	85
CRST-07-DW01-112	EM 2085203	A	Off white tape	5	<b>Chrysotile</b> <b>Chrysotile</b>	<b>ND</b>	95	5
		B	White compound w/ off white paint	10		<b>ND</b>	0	100
		C	Red/green paint	10		<b>ND</b>	0	100
		D	Off white joint compound	10		<b>3</b>	0	97
		E	Off white compound	25		<b>3</b>	0	97
		F	White/tan drywall	40		<b>ND</b>	45	55
CRST-07-DW01-113	EM 2085204	A	White compound w/ white paint	25		<b>ND</b>	0	100
		B	White/tan drywall	75		<b>ND</b>	25	75

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					Mineral	Visual Estimate (%)		
CRST-07-DW01-114	EM 2085205	A	Tan/white drywall	5		ND	70	30
		B	White joint compound	6		ND	0	100
		C	White tape	12		ND	95	5
		D	White compound w/ white & tan multi-layered paint	77		ND	0	100
CRST-07-DW01-115	EM 2085206	A	White tape	10		ND	95	5
		B	Off white compound w/ tan multi-layered paint	15	Chrysotile	2	0	98
		C	White joint compound	20	Chrysotile	3	0	97
		D	White/tan drywall	55		ND	35	65
CRST-07-DW01-116	EM 2085207	A	White compound w/ white/blue paint	25	Chrysotile	4	0	96
		B	White/tan drywall	75		ND	25	75
CRST-07-CD01-117	EM 2085208	A	White texture w/ white paint	20		ND	0	100
		B	White/tan drywall	80		ND	25	75

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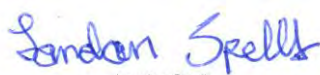
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					Mineral	Visual Estimate (%)		
CRST-07-CD01-118	EM 2085209	A	White micaceous compound w/ white paint	20		ND	0	100
		B	White/tan drywall	80		ND	25	75
CRST-07-CD01-119	EM 2085210	A	White micaceous compound w/ white paint	20		ND	0	100
		B	White/tan drywall	80		ND	25	75
CRST-07-FT01-120	EM 2085211	A	Yellow adhesive	5		ND	0	100
		B	White tile	95		ND	0	100
CRST-07-FT01-121	EM 2085212	A	Yellow adhesive	3		ND	0	100
		B	White tile	97		ND	0	100
CRST-07-FT02-122	EM 2085213	A	Black mastic	20		ND	0	100
		B	Red tile	80	Chrysotile	2	0	98
CRST-07-WF01-123	EM 2085214	A	Black felt	100		ND	80	20
CRST-07-RM01-124	EM 2085215	A	Black/white shingle	100		ND	40	60

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Landon Spells

Analyst



Piper-Lenore O. Murphy

Analyst



John C. McIntyre

Analyst



Andrew Roberts

Analyst



Paul D. LoScalzo

Analyst / Data QA



Due Date: 5/18/18  
Due Time: 10:30



# Reservoirs Environmental, Inc.

5801 Logan St. Denver, CO 80216 • Ph. 303 964-1986 • Fax 303-477-4275 • Toll Free 866 RES-ENV

After Hours Cell Phone: 720-339-9228

RES 408214

-1 PM - 2 mm

## INVOICE TO: (IF DIFFERENT)

Company:	Weston Solutions, Inc	Company:	Weston Solutions, Inc	Contact:	Elliott Petri	Contact:	
Address:	1435 Garrison St Suite 100 Lakewood, CO 80215	Address:		Phone:	303-729-6156	Phone:	
				Fax:		Fax:	
				Cell pager:	719-216-2754	Cell pager:	
Project Number and/or P.O. #:	20408.016.003.0551.00	Final Data Deliverable Email Address:	elliott.petri@westonsolutions.com				
Project Description/Location:	CRST Properties						

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm		REQUESTED ANALYSIS		VALID MATRIX CODES		LAB NOTES:	
PLM / PCM / TEM	___ RUSH (Same Day) ___ PRIORITY (Next Day) <input checked="" type="checkbox"/> STANDARD (Rush PCM = 2hr, TEM = 6hr.)			Air = A	Bulk = B		
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm				Dust = D	Paint = P		
Metals / Dust	___ RUSH ___ 24 hr. <input checked="" type="checkbox"/> 3-5 Day			Soil = S	Wipe = W		
RCRA 8 / Metals & Welding	___ RUSH ___ 5 day ___ 10 day			Swab = SW	F = Food		
Fume Scan / TCLP	___ 24 hr. ___ 3 day ___ 5 Day			Drinking Water = DW	Waste Water = WW		
Organics	___ 24 hr. ___ 3 day ___ 5 Day			O = Other			
MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm				**ASTM E1792 approved wipe media only**			
E.coli O157:H7, Coliforms, S aureus	___ 24 hr. ___ 2 Day ___ 3-5 Day						
Salmonella, Listeria, E.coli, APC, Y & M	___ 48 Hr. ___ 3-5 Day						
Mold	___ RUSH ___ 24 Hr ___ 48 Hr ___ 3 Day ___ 5 Day						
**Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.**							
Special Instructions: Most bulk samples from fire damaged properties							
Client sample ID number	(Sample ID's must be unique)						
1	CRST-01-DB01-001						
2	CRST-01-RM01-002						
3	CRST-01-FT01-003						
4	CRST-01-FT01-004						
5	CRST-01-FT01-005						
6	CRST-01-FM01-006						
7	CRST-01-DW01-007						
8	CRST-01-DW01-008						
9	CRST-01-DW01-009						
10	CRST-01-DW01-010						

Number of samples received: \_\_\_\_\_

(Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: <u>[Signature]</u>	Date/Time: 5/10/18 11:00	Sample Condition:	On Ice	Sealed	Intact
Laboratory Use Only	Carrier: 5/11/18	Temp (F°)	Yes / No	Yes / No	Yes / No
Received By: <u>[Signature]</u>	Date/Time: 10:30				
Results:	Contact	Phone	Email	Fax	Date
	Contact	Phone	Email	Fax	Date



Submitted by: \_\_\_\_\_

REILAB

Reservoirs Environmental Inc.

3801 Logan St. Denver, CO 80210 • PH: 303-694-1065 • FAX: 303-677-4275 • 1011 Pkwy 1000 RESERVE

RES Job # 408214

Page 2 of 5

Submitted by: \_\_\_\_\_

REQUESTED ANALYSIS										VALID MATRIX CODES				LAB NOTES:				
Client sample ID number (Sample ID's must be unique)	PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) <i>Lead</i>	ORGANICS - METH	MICROBIOLOGY						Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
							Salmonella +/-	E.coli O157:H7 +/-	Listeria +/-	Aerobic Plate Count +/- or Quantification	E.coli +/- or Quantification	Coliforms +/- or Quantification	S.aureus +/- or Quantification	Y & M +/- or Quantification	Mold +/- or Quantification			
11 CRST-01-DW01-011	X													B	1	5/8/2018		2085102
12 CRST-09-DW01-012	X													B	1	5/8/2018		35th 9th 05
13 CRST-09-DW01-013	X													B	1	5/8/2018		10-NMTH 9th 05
14 CRST-09-DW01-014	X													B	1	5/8/2018		29-NMTH 9th 05
15 CRST-09-RM01-015	X													B	1	5/8/2018		
16 CRST-09-RM02-016	X													B	1	5/8/2018		
17 CRST-09-FT01-017	X													B	1	5/8/2018		
18 CRST-09-FT02-018	X													B	1	5/8/2018		
19 CRST-09-FT03-019	X													B	1	5/8/2018		
20 CRST-09-WP01-020	X													B	1	5/8/2018		
21 CRST-09-WP01-021	X													B	1	5/8/2018		
22 CRST-09-WM01-022	X													B	1	5/8/2018		
23 CRST-09-WG01-023	X													B	1	5/8/2018		
24 CRST-09-WG02-024	X													B	1	5/8/2018		
25 CRST-09-TS01-025	X													B	1	5/8/2018		
26 CRST-09-FM01-026	X													B	1	5/8/2018		
27 CRST-09-CM01-027	X													B	1	5/8/2018		
28 CRST-09-DW02-028	X													B	1	5/8/2018		
29 CRST-09-DW02-029	X													B	1	5/8/2018		
30 CRST-09-DW02-030	X													B	1	5/8/2018		
31 CRST-03-DW01-031	X													B	1	5/8/2018		
32 CRST-03-DW01-032	X													B	1	5/8/2018		
33 CRST-03-DW01-033	X													B	1	5/8/2018		
34 CRST-03-DW01-034	X													B	1	5/8/2018		
35 CRST-03-DW01-035	X													B	1	5/8/2018		
36 CRST-03-RM01-036	X													B	1	5/8/2018		
37 CRST-03-VD01-037	X													B	1	5/8/2018		
38 CRST-03-VD02-038	X													B	1	5/8/2018		
39 CRST-03-DW02-039	X													B	1	5/8/2018		
40 CRST-03-DW02-040	X													B	1	5/8/2018		
41 CRST-03-DW02-041	X													B	1	5/8/2018		



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Client sample ID number (Sample ID's must be unique)		PL	TEM	SEM	PCA	DUS	ME	RCF	OR	MICROBIOLOGY			OTH	San	Mat	# C
42	CRST-03-LN01-042	X												B	1	5/8/2018
43	CRST-03-LN01-043	X												B	1	5/8/2018
44	CRST-03-ST01-044	X												B	1	5/8/2018
45	CRST-03-SC01-045	X												B	1	5/8/2018
46	CRST-03-CI01-046	X												B	1	5/8/2018
47	CRST-03-CI01-047	X												B	1	5/8/2018
48	CRST-03-CI01-048	X												B	1	5/8/2018
49	CRST-04-CT01-049	X												B	1	5/8/2018
50	CRST-04-DW01-050	X												B	1	5/8/2018
51	CRST-04-LN01-051	X												B	1	5/8/2018
52	CRST-04-FT01-052	X												B	1	5/8/2018
53	CRST-11-LN01-053	X												B	1	5/8/2018
54	CRST-11-CT01-054	X												B	1	5/8/2018
55	CRST-05-DB01-055	X												B	1	5/9/2018
56	CRST-05-DW01-056	X												B	1	5/9/2018
57	CRST-05-DW01-057	X												B	1	5/9/2018
58	CRST-05-DW01-058	X												B	1	5/9/2018
59	CRST-05-DW01-059	X												B	1	5/9/2018
60	CRST-05-DW01-060	X												B	1	5/9/2018
61	CRST-05-WP01-061	X												B	1	5/9/2018
62	CRST-05-WP01-062	X												B	1	5/9/2018
63	CRST-05-RM01-063	X												B	1	5/9/2018
64	CRST-05-VM01-064	X												B	1	5/9/2018
65	CRST-05-LN01-065	X												B	1	5/9/2018
66	CRST-05-LN02-066	X												B	1	5/9/2018
67	CRST-05-WL01-067	X												B	1	5/9/2018
68	CRST-06-DB01-068	X												B	1	5/9/2018
69	CRST-06-LN01-069	X												B	1	5/9/2018
70	CRST-06-FT01-070	X												B	1	5/9/2018
71	CRST-06-WF01-071	X												B	1	5/9/2018
72	CRST-02-DB01-072	X												B	1	5/9/2018



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DENVER CO 80216

5801 LOGAN ST



May 24, 2018

Laboratory Code: RES  
Subcontract Number: NA  
Laboratory Report: RES 408214-2  
Project # / PO #: 20408.016.003.0551.00  
Project Description: CRST Properties

Elliott Petri  
Weston Solutions, Inc. (CO)  
1435 Garrison St. Ste. 100  
Lakewood CO 80215

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the American Industrial Hygiene Association, Lab ID 101533 - Accreditation Certificate #480. The laboratory is currently proficient in both IHPAT & ELPAT programs respectively.

Reservoirs has analyzed the following sample(s) using Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy - Mass Spectrometry (ICP-MS) per your request. Reported sample results were not blank corrected. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Results have been sent to your office.

**RES 408214-2** is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those authorized by the client. The results described in this report only apply to the samples analyzed. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you should have any questions about this report, please feel free to call me at 303-964-1986.

Sincerely,

Jeanne Spencer  
President

## RESERVOIRS ENVIRONMENTAL, INC.

5801 Logan St., Suite 100  
Denver CO 80216

### TABLE ANALYSIS: LEAD IN SOIL

RES Job Number: **RES 408214-2**  
Client: **Weston Solutions, Inc. (CO)**  
Client Project Number / P.O.: **20408.016.003.0551.00**  
Client Project Description: **CRST Properties**  
Date Samples Received: **May 11, 2018**  
Analysis Type: **USEPA SW846 3050B / AA (7420)**  
Turnaround: **3-5 Day**  
Date Samples Analyzed: **May 17, 2018**

Client ID Number	Lab ID Number	Reporting Limit (mg/kg)	LEAD CONCENTRATION (mg/kg)
CRST-09-PB-SS01	EM 2085216	8.0	98.7
CRST-09-PB-SS01A	EM 2085217	9.0	101

\* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

Analyst / Data QA

  
Renee A. Cortez



Due Date: 5/18/18  
Due Time: 10:30



# Reservoirs Environmental, Inc.

5801 Logan St. Denver, CO 80216 • Ph. 303 964-1986 • Fax 303-477-4275 • Toll Free 866 RES-ENV

After Hours Cell Phone: 720-339-9228

RES 408214

-1 PM - 2 mm

## INVOICE TO: (IF DIFFERENT)

Company:	Weston Solutions, Inc	Company:	Weston Solutions, Inc	Contact:	Elliott Petri	Contact:	
Address:	1435 Garrison St Suite 100 Lakewood, CO 80215	Address:		Phone:	303-729-6156	Phone:	
				Fax:		Fax:	
				Cell pager:	719-216-2754	Cell pager:	
Project Number and/or P.O. #:	20408.016.003.0551.00	Final Data Deliverable Email Address:	elliott.petri@westonsolutions.com				
Project Description/Location:	CRST Properties						

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm PLM / PCM / TEM RUSH (Same Day) PRIORITY (Next Day) STANDARD (Rush PCM = 2hr, TEM = 6hr.)		REQUESTED ANALYSIS		VALID MATRIX CODES		LAB NOTES:	
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm Metals / Dust RUSH 24 hr. 3-5 Day RCRA 8 / Metals & Welding RUSH 5 day 10 day Fume Scan / TCLP RUSH 24 hr. 3 day 5 Day Organics 24 hr. 3 day 5 Day		MICROBIOLOGY E.coli O157:H7, +/- Salmonella, +/- Listeria, +/- Aerobic Plate Count, +/- or Quantification E.coli, +/- or Quantification Coliforms, +/- or Quantification S.aureus, +/- or Quantification Y & M, +/- or Quantification Mold: +/- Identification, Quantification		SAMPLER'S INITIALS OR OTHER NOTES		Bulk = B Paint = P Wipe = W F = Food Drinking Water = DW Waste Water = WW O = Other **ASTM E1792 approved wipe media only**	
MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm E.coli O157:H7, Coliforms, S.aureus 24 hr. 2 Day 3-5 Day Salmonella, Listeria, E.coli, APC, Y & M 48 Hr. 3-5 Day Mold RUSH 24 Hr. 48 Hr. 3 Day 5 Day		METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan DUST - Total, Respirable PCM - 7400A, 7400B, OSHA TEM - AHERA, Level II, 7402, ISO +/- Quant, Semi-quant, Micro-vac, ISO-Indirect Preps		Sample Volume (L) / Area		Time Collected h/m a/p	
Special Instructions: Most bulk samples from fire damaged properties		PLM - Short report, Long report, Point Count		Matrix Code		EM Number (Laboratory Use Only)	
Client sample ID number (Sample ID's must be unique)		X		B 1		2085092	
1 CRST-01-DB01-001		X		B 1		3	
2 CRST-01-RM01-002		X		B 1		4	
3 CRST-01-FT01-003		X		B 1		5	
4 CRST-01-FT01-004		X		B 1		6	
5 CRST-01-FT01-005		X		B 1		7	
6 CRST-01-FM01-006		X		B 1		8	
7 CRST-01-DW01-007		X		B 1		9	
8 CRST-01-DW01-008		X		B 1		100	
9 CRST-01-DW01-009		X		B 1		1	
10 CRST-01-DW01-010		X		B 1			

Number of samples received: (Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: [Signature]	Date/Time: 5/10/18 11:00	Sample Condition:	On Ice	Sealed	Intact
Laboratory Use Only	Carrier: 5/11/18	Temp (F°)	Yes / No	Yes / No	Yes / No
Received By: [Signature]	Date/Time: 5/18/18 10:30	Phone	Email	Fax	Initials
Results:	Contact	Phone	Email	Fax	Initials



Submitted by: \_\_\_\_\_

REILAB 3801 Logan St., Denver, CO 80210 • PH: 303-694-1065 • FAX: 303-477-4275 • 1 call free 866 RESERVE		RES Job # 458214		Page 2 of 5																		
Submitted by: _____																						
Client sample ID number (Sample ID's must be unique)		REQUESTED ANALYSIS										VALID MATRIX CODES				LAB NOTES:						
		PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) <i>Lead</i>	RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - METH	MICROBIOLOGY					OTHER -		Sample Volume (L) / Area		Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
									Salmonella +/-	E.coli O157:H7 +/-	Listeria +/-	Aerobic Plate Count +/- or Quantification	E.coli +/- or Quantification	Coliforms +/- or Quantification	S.aureus +/- or Quantification	Y & M +/- or Quantification	Mold +/- or Quantification					
11	CRST-01-DW01-011	X																B 1	5/8/2018		2085/02	
12	CRST-09-DW01-012	X																B 1	5/8/2018		35th 9th 05	
13	CRST-09-DW01-013	X																B 1	5/8/2018		10-NMTH 9th 05	
14	CRST-09-DW01-014	X																B 1	5/8/2018		29-NMTH 9th 05	
15	CRST-09-RM01-015	X																B 1	5/8/2018			
16	CRST-09-RM02-016	X																B 1	5/8/2018			
17	CRST-09-FT01-017	X																B 1	5/8/2018			
18	CRST-09-FT02-018	X																B 1	5/8/2018			
19	CRST-09-FT03-019	X																B 1	5/8/2018			
20	CRST-09-WP01-020	X																B 1	5/8/2018			
21	CRST-09-WP01-021	X																B 1	5/8/2018			
22	CRST-09-WM01-022	X																B 1	5/8/2018			
23	CRST-09-WG01-023	X																B 1	5/8/2018			
24	CRST-09-WG02-024	X																B 1	5/8/2018			
25	CRST-09-TS01-025	X																B 1	5/8/2018			
26	CRST-09-FM01-026	X																B 1	5/8/2018			
27	CRST-09-CM01-027	X																B 1	5/8/2018			
28	CRST-09-DW02-028	X																B 1	5/8/2018			
29	CRST-09-DW02-029	X																B 1	5/8/2018			
30	CRST-09-DW02-030	X																B 1	5/8/2018			
31	CRST-03-DW01-031	X																B 1	5/8/2018			
32	CRST-03-DW01-032	X																B 1	5/8/2018			
33	CRST-03-DW01-033	X																B 1	5/8/2018			
34	CRST-03-DW01-034	X																B 1	5/8/2018			
35	CRST-03-DW01-035	X																B 1	5/8/2018			
36	CRST-03-RM01-036	X																B 1	5/8/2018			
37	CRST-03-VD01-037	X																B 1	5/8/2018			
38	CRST-03-VD02-038	X																B 1	5/8/2018			
39	CRST-03-DW02-039	X																B 1	5/8/2018			
40	CRST-03-DW02-040	X																B 1	5/8/2018			
41	CRST-03-DW02-041	X																B 1	5/8/2018			



408214

RES Job # \_\_\_\_\_ Page 3 of 5

Submitted by: \_\_\_\_\_

Client sample ID number (Sample ID's must be unique)	PLM	TEM	Sam	PCA	DUS	MET	RCF	ORG	MICROBIOLOGY				OTH	San	Mat	# C	5/8/2018	
42	CRST-03-LN01-042	X												B	1	5/8/2018		2085-133
43	CRST-03-LN01-043	X												B	1	5/8/2018		4
44	CRST-03-ST01-044	X												B	1	5/8/2018		5
45	CRST-03-SC01-045	X												B	1	5/8/2018		6
46	CRST-03-CI01-046	X												B	1	5/8/2018		7
47	CRST-03-CI01-047	X												B	1	5/8/2018		8
48	CRST-03-CI01-048	X												B	1	5/8/2018		9
49	CRST-04-CT01-049	X												B	1	5/8/2018		40
50	CRST-04-DW01-050	X												B	1	5/8/2018		1
51	CRST-04-LN01-051	X												B	1	5/8/2018		2
52	CRST-04-FT01-052	X												B	1	5/8/2018		3
53	CRST-11-LN01-053	X												B	1	5/8/2018		4
54	CRST-11-CT01-054	X												B	1	5/8/2018		5
55	CRST-05-DB01-055	X												B	1	5/9/2018		6
56	CRST-05-DW01-056	X												B	1	5/9/2018		7
57	CRST-05-DW01-057	X												B	1	5/9/2018		8
58	CRST-05-DW01-058	X												B	1	5/9/2018		9
59	CRST-05-DW01-059	X												B	1	5/9/2018		50
60	CRST-05-DW01-060	X												B	1	5/9/2018		1
61	CRST-05-WP01-061	X												B	1	5/9/2018		2
62	CRST-05-WP01-062	X												B	1	5/9/2018		3
63	CRST-05-RM01-063	X												B	1	5/9/2018		4
64	CRST-05-VM01-064	X												B	1	5/9/2018		5
65	CRST-05-LN01-065	X												B	1	5/9/2018		6
66	CRST-05-LN02-066	X												B	1	5/9/2018		7
67	CRST-05-WL01-067	X												B	1	5/9/2018		8
68	CRST-06-DB01-068	X												B	1	5/9/2018		9
69	CRST-06-LN01-069	X												B	1	5/9/2018		40
70	CRST-06-FT01-070	X												B	1	5/9/2018		1
71	CRST-06-WF01-071	X												B	1	5/9/2018		2
72	CRST-02-DB01-072	X												B	1	5/9/2018		3

Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yyyy	Time Collected hh:mm a/p	EM Number (Laboratory Use Only)
	B	1	5/8/2018		2085 / 33
	B	1	5/8/2018		45
	B	1	5/8/2018		46
	B	1	5/8/2018		47
	B	1	5/8/2018		48
	B	1	5/8/2018		49
	B	1	5/8/2018		40
	B	1	5/8/2018		2
	B	1	5/8/2018		3
	B	1	5/8/2018		4
	B	1	5/9/2018		5
	B	1	5/9/2018		6
	B	1	5/9/2018		7
	B	1	5/9/2018		8
	B	1	5/9/2018		9
	B	1	5/9/2018		50
	B	1	5/9/2018		1
	B	1	5/9/2018		2
	B	1	5/9/2018		3
	B	1	5/9/2018		4
	B	1	5/9/2018		5
	B	1	5/9/2018		6
	B	1	5/9/2018		7
	B	1	5/9/2018		8
	B	1	5/9/2018		9
	B	1	5/9/2018		40
	B	1	5/9/2018		1-2
	B	1	5/9/2018		3



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Submitted by:

[illegible]

May 23, 2018

Elliott Petri  
Weston Solutions  
1435 Garrison St.  
Suite 100  
Denver, CO 80215

RE: Project: 20408.0163.003.0551.00 CRST 13  
Pace Project No.: 10431488

Dear Elliott Petri:

Enclosed are the analytical results for sample(s) received by the laboratory on May 16, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kang Khang  
kang.khang@pacelabs.com  
(406)254-7226  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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## CERTIFICATIONS

Project: 20408.0163.003.0551.00 CRST 13

Pace Project No.: 10431488

---

### Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414-2485

A2LA Certification #: 2926.01

Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064

Arizona Certification #: AZ0014

Arkansas Certification #: 88-0680

California Certification #: 2929

CNMI Saipan Certification #: MP0003

Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-053-137

Florida Certification #: E87605

Georgia Certification #: 959

Guam EPA Certification #: MN00064

Hawaii Certification #: MN00064

Idaho Certification #: MN00064

Illinois Certification #: 200011

Indiana Certification #: C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky DW Certification #: 90062

Kentucky WW Certification #: 90062

Louisiana DEQ Certification #: 03086

Louisiana DW Certification #: MN00064

Maine Certification #: MN00064

Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: MN00064

Montana Certification #: CERT0092

Nebraska Certification #: NE-OS-18-06

Nevada Certification #: MN00064

New Hampshire Certification #: 2081

New Jersey Certification #: MN002

New York Certification #: 11647

North Carolina DW Certification #: 27700

North Carolina WW Certification #: 530

North Dakota Certification #: R-036

Ohio DW Certification #: 41244

Ohio VAP Certification #: CL101

Oklahoma Certification #: 9507

Oregon NwTPH Certification #: MN300001

Oregon Secondary Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification #: MN00064

South Carolina Certification #: 74003001

Tennessee Certification #: TN02818

Texas Certification #: T104704192

Utah Certification #: MN00064

Virginia Certification #: 460163

Washington Certification #: C486

West Virginia DW Certification #: 9952 C

West Virginia DEP Certification #: 382

Wisconsin Certification #: 999407970

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 20408.0163.003.0551.00 CRST 13

Pace Project No.: 10431488

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10431488001	CRST-09-PCB-001	Solid	05/08/18 10:45	05/16/18 10:00
10431488002	CRST-09-PCB-001a	Solid	05/08/18 10:45	05/16/18 10:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE ANALYTE COUNT

Project: 20408.0163.003.0551.00 CRST 13

Pace Project No.: 10431488

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10431488001	CRST-09-PCB-001	EPA 8082A	RAG	11	PASI-M
10431488002	CRST-09-PCB-001a	EPA 8082A	RAG	11	PASI-M

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 20408.0163.003.0551.00 CRST 13

Pace Project No.: 10431488

**Sample: CRST-09-PCB-001**      **Lab ID: 10431488001**      Collected: 05/08/18 10:45      Received: 05/16/18 10:00      Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082A GCS PCB</b> Analytical Method: EPA 8082A      Preparation Method: EPA 3546								
PCB-1016 (Aroclor 1016)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/kg	192	1	05/17/18 15:02	05/22/18 09:23	11100-14-4	
<b>Surrogates</b>								
Tetrachloro-m-xylene (S)	98	%.	42-125	1	05/17/18 15:02	05/22/18 09:23	877-09-8	
Decachlorobiphenyl (S)	74	%.	46-141	1	05/17/18 15:02	05/22/18 09:23	2051-24-3	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 20408.0163.003.0551.00 CRST 13

Pace Project No.: 10431488

**Sample: CRST-09-PCB-001a**      **Lab ID: 10431488002**      Collected: 05/08/18 10:45      Received: 05/16/18 10:00      Matrix: Solid

**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082A GCS PCB</b> Analytical Method: EPA 8082A      Preparation Method: EPA 3546								
PCB-1016 (Aroclor 1016)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/kg	204	1	05/17/18 15:02	05/22/18 09:39	11100-14-4	
<b>Surrogates</b>								
Tetrachloro-m-xylene (S)	92	%.	42-125	1	05/17/18 15:02	05/22/18 09:39	877-09-8	
Decachlorobiphenyl (S)	83	%.	46-141	1	05/17/18 15:02	05/22/18 09:39	2051-24-3	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 20408.0163.003.0551.00 CRST 13

Project No.: 10431488

QC Batch: 539088

Analysis Method: EPA 8082A

QC Batch Method: EPA 3546

Analysis Description: 8082A GCS PCB

Associated Lab Samples: 10431488001, 10431488002

METHOD BLANK: 2931288

Matrix: Solid

Associated Lab Samples: 10431488001, 10431488002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.3	05/22/18 08:36	
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.3	05/22/18 08:36	
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.3	05/22/18 08:36	
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.3	05/22/18 08:36	
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.3	05/22/18 08:36	
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.3	05/22/18 08:36	
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.3	05/22/18 08:36	
PCB-1262 (Aroclor 1262)	ug/kg	ND	33.3	05/22/18 08:36	
PCB-1268 (Aroclor 1268)	ug/kg	ND	33.3	05/22/18 08:36	
Decachlorobiphenyl (S)	%.	93	46-141	05/22/18 08:36	
Tetrachloro-m-xylene (S)	%.	91	42-125	05/22/18 08:36	

LABORATORY CONTROL SAMPLE & LCSD: 2931289

2931290

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	667	613	603	92	90	63-125	2	20	
PCB-1260 (Aroclor 1260)	ug/kg	667	631	617	95	93	63-125	2	20	
Decachlorobiphenyl (S)	%.				99	95	46-141			
Tetrachloro-m-xylene (S)	%.				95	95	42-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: 20408.0163.003.0551.00 CRST 13

Pace Project No.: 10431488

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

### BATCH QUALIFIERS

Batch: 539805

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20408.0163.003.0551.00 CRST 13

Pace Project No.: 10431488

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10431488001	CRST-09-PCB-001	EPA 3546	539088	EPA 8082A	539805
10431488002	CRST-09-PCB-001a	EPA 3546	539088	EPA 8082A	539805

## REPORT OF LABORATORY ANALYSIS


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<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company:	Weston Solutions	Report To:	Elliott Petri	Attention:	Elliott Petri
Address:	1435 Garrison St #100 Lakewood, CO 80215	Copy To:	NA	Company Name:	Weston Solutions
Email To:	elliott.petri@westonsolutions.com	Purchase Order No.:	NA	Address:	Section A
Phone:	719-216-2754	Project Name:	CRST 13	Pace Quote:	00045734
Requested Due Date/TAT:	Standard	Project Number:	20408.016.003.0551.00	Reference:	Pace Project Manager
				Pace Profile #:	

ITEM #	Valid Matrix Codes MATRIX CODE DW DRINKING WATER WT WASTE WATER WW WASTE WATER P PRODUCT SL SOILSOLID OIL WI WIPE AIR OT OTHER TS TISSUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives Unpreserved H <sub>2</sub> SO <sub>4</sub> HNO <sub>3</sub> HCl NaOH Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Methanol Other	Y/N	Requested Analysis Filtered (Y/N)	Pace Project No./ Lab I.D.
				COMPOSITE START	COMPOSITE END/GRAB						
1	CRST-09-PCB-001	SL G	G	DATE	TIME	DATE	TIME				
2	CRST-09-PCB-001a	SL G	G	5/8/18	10:45	5/8/18	10:45				
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
							Temp in °C	Received on	Cooler (Y/N)	Samples Intact	
	Elliott Petri/ Weston	5/15/18	8:00	Fedex	5/16/18	5:00	SD				
				Enn Pace	5/16/18	9:30	22.9	N	N		
						1700					

	Document Name:	Document Revised: 02May2018
	Sample Condition Upon Receipt Form	Page 1 of 2
	Document No.: F-MN-L-213-rev.23	Issuing Authority: Pace Minnesota Quality Office

**Sample Condition Upon Receipt**

Client Name:

Project #:

**WO#: 10431488**

PM: KSK1

Due Date: 05/25/18

CLIENT: 11 Weston

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client

☐ Commercial ☐ Pace ☐ Speedee ☐ Other:

Tracking Number: 772231712635

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☒ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other:

Temp Blank? ☐ Yes ☒ No

Thermometer ☐ G87A9170600254

Used: ☒ G87A9155100842

Type of Ice: ☐ Wet ☐ Blue ☒ None ☐ Dry ☐ Melted

Cooler Temp Read (°C): 23.0

Cooler Temp Corrected (°C): 22.9

Biological Tissue Frozen? ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C

Correction Factor: 0.1

Date and Initials of Person Examining Contents: ERL 5/16/18

USDA Regulated Soil ( ☒ N/A, water sample) *Caulk*

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

	COMMENTS:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name and/or Signature on COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72 hr)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered Volume Received for Dissolved Tests? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container
Is sufficient information available to reconcile the samples to the COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Matrix: <i>OT</i>	12.
All containers needing acid/base preservation have been checked? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH Positive for Res. Chlorine? Y N
All containers needing preservation are found to be in compliance with EPA recommendation? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
(HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , <2pH, NaOH >9 Sulfide, NaOH >12 Cyanide)	
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	

**CLIENT NOTIFICATION/RESOLUTION**

Field Data Required? ☐ Yes ☐ No

Person Contacted:

Date/Time:

Comments/Resolution:

Project Manager Review:

Date: 5/16/18

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).



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**APPENDIX C**  
**SUPPLEMENTARY INFORMATION**

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# Targeted Brownfields Assessment (TBA) Application



EPA Region 8 accepts applications for environmental assessment assistance at brownfields properties on an ongoing basis. To request Region 8's technical assistance, please complete this application. The information provided will be evaluated to determine if the applicant and site meet the selection criteria for the TBA program. EPA will also evaluate whether funding is available to perform the requested assessment within the desired schedule. Applicants will be contacted promptly after this review. For more information on TBAs, please visit: <http://www.epa.gov/region8/brownfields/tba.html>

## 1. Applicant Information

Applicant Organization	Cheyenne River Sioux Tribe
Contact Person and Title	Robert Smith Brownfields coordinator
Street Address	South willow and Airport Road box 590
City, State ZIP Code	Eagle Butte, SD 57625
Phone	605-964-6559
Fax	605-964-1072
E-Mail Address	rsmith@crstepd.org

## 2. Site Description and History

Site Name	Burnt Abandone homes
Address	Eagle Butte SD 57625
Acreage	
Lat/Long Coordinates	
Current Owner's Name	Cheyenne river Sioux Tribe
Current Owner's Address	box 590 South Willow and Airport rd Eagle Butte, SD

- A. Please provide a brief description of the property and the specific assessment(s) you wish to have performed (e.g., Phase I, II and/or cleanup planning): There is 13 abandoned burnt homes with possible hazardous waste in them. A phase II and clean up of these homes is what we are needing at this time.
- B. When you would like the assessment(s) to be conducted? What is the project timeline? ASAP !!
- C. Why would you like the assessment(s) conducted? (TBAs can be used to facilitate property acquisitions, meet EPA grant application requirements, characterize contamination for environmental cleanup, among other reasons.) to determine the hazardous waste in each home and to cleanup each site for reuse for home sites . We are in dire need of clean home sites for Elderly tribal members and there families.
- D. Describe the environmental conditions at the site, including potential contaminants and a summary of any known past environmental investigations. Describe the past uses of the site. The homes are abandoned and partially burnt. Asbestos and lead are two of the hazardous waste concerns at each home site. There was a EPA investigation done on some of the homes that were built right next to the ones that we are looking at

assessing. They had been determined to have asbestos in them in the past investigation. The past uses was home sites.

- E. Is the applicant the property owner? **(Yes/No)** **yes**
- F. If not, does the applicant have legal permission to enter the property to conduct the site assessment activities? **(Yes/No)** Note, applicant will be required to secure access.
- G. Do you know how and when the contamination occurred? **(Yes/No)** If yes, describe. Note, applicants who are responsible for causing contamination are not eligible for assistance under this program. They were built of hazardous material.
- H. Describe any state or federal regulatory involvement at the site related to its environmental condition.
- I. Is there an ongoing or planned state or federal enforcement action or order at the site? **(Yes/No)**  
If yes, please explain. no
  - a. Is the site on any state or federal environmental lists, such as the National Priorities Lists (NPL) or the Leaking Underground Storage Tanks (LUST) list? **(Yes/No)** If yes, please explain. no
  - b. If petroleum contamination is suspected, has the applicant worked with the State or EPA to determine eligibility\*? **(Yes/No/NA)** If yes, please explain. no

### 3. Property Reuse and Redevelopment

- A. Describe the anticipated reuse or redevelopment of the property. Reuse for home sites.
- B. Describe any commitments in place to show this brownfields site will be cleaned up and redeveloped or reused. Please indicate potential or secured funding sources for cleanup and redevelopment. The infer structure is already in place for redevelopment and new homes can be reestablished there.
- C. Describe how site reuse/redevelopment will benefit the community (e.g., creation of jobs, greenspace, parks, sustainable/green redevelopment, a catalyst for further redevelopment in the area, etc). Privately owned sites must provide a substantial public benefit. The reuse for family home at these sites will help families establish a good clean environment for there families and there neighbors.
- D. Will the property be sold or transferred to a different entity? If so, please describe. no
- E. Describe the roles of stakeholders in the project, e.g., community organizations, local government involvement, etc. the tribal property Director will be involved in the maintenance of each home site after redevelopment. The tribal landfill will be accepting the construction debris to our landfill.
- F. Describe efforts directed towards involving the community in site reuse planning activities.

### 4. Additional Information

Please email any supporting documentation such as regional and site location maps, photographs, prior site assessment reports and historical environmental information, if available, to the email address provided below.

## 5. Contact Information

To submit your application or for questions, please contact Bill Rothenmeyer, TBA Program Manager:

Email: [rothenmeyer.william@epa.gov](mailto:rothenmeyer.william@epa.gov)

Phone: (303) 312-6045

Fax: (303) 312-6065

\*The Brownfields Law outlines specific criteria by which petroleum sites may be eligible for brownfields funding. Briefly, these criteria are that the site must be of "relatively low risk," there can be no viable responsible party, the applicant cannot be potentially liable for cleaning up the site, and the site must not be subject to a Resource Conservation and Recovery Act (RCRA) corrective action order. If a party is identified as being responsible for the site and that party is financially viable, then the site is not eligible for brownfields grant funds. For more information, visit [www.epa.gov/oswer/docs/grants/epa-oswer-oblr-11-05.pdf](http://www.epa.gov/oswer/docs/grants/epa-oswer-oblr-11-05.pdf)



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**APPENDIX D**  
**PROPERTY SUMMARY PACKETS**

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**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #1  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #1 located at 45.006272°N, -101.229795°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 8<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### Asbestos-Containing Material

Of the 11 bulk samples submitted for laboratory analysis, a total of nine (9) samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #1</b>		
Debris	Throughout	850 sq. ft.
Drywall	Throughout	800 sq. ft.
Floor Tile	Throughout	410 sq. ft.

Notes:  
sq. ft. = square feet

### Lead-Based Paint

Based on the XRF results, no elevated lead concentrations were present. LBP is not considered a COC in relation to the Site.

### PCBs, Mercury, and Mold

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.

0003/1711-09

- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

## RECOMMENDATIONS

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Due to severe fire damage and ACM presence, this building will need to be disposed of as ACM. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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## FIGURES

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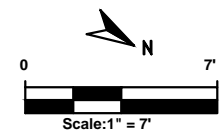
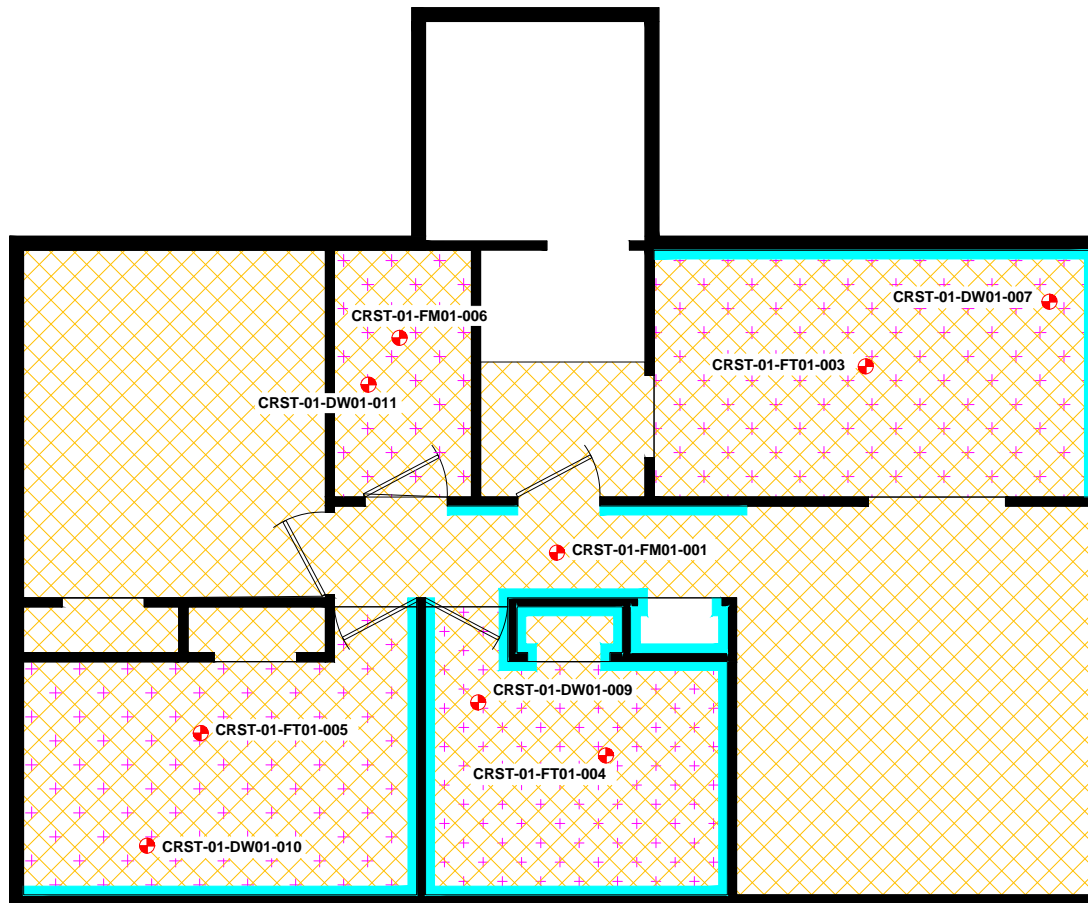


## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM FLOOR TILE EXTENT
- ACM DEBRIS EXTENT
- ACM DRYWALL COMPOUND (APPROXIMATE)

## NOTE:

1. BURNED STRUCTURE: ENTIRE BUILDING ASSUMED TO BE ACM



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #1 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 7'

Figure

3

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## TABLES

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**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
<b>Property #1</b>					
CRST-01-DB01-001	Debris	A - Brown tile	Chrysotile 12%	--	850 sq. ft.
		B - Black debris	Chrysotile Trace	--	
CRST-01-FT01-003	Floor Tile	B - Beige tile	Chrysotile 5%	--	140 sq. ft.
CRST-01-FT01-004	Floor Tile	B - Beige tile	Chrysotile 5%	--	110 sq. ft.
CRST-01-FT01-005	Floor Tile	B - Beige tile	Chrysotile 5%	--	120 sq. ft.
CRST-01-FM01-006	Floor Tile	B - Brown tile	Chrysotile 8%	--	40 sq. ft.
CRST-01-DW01-007	Drywall	C - White joint compound	Chrysotile 2%	--	800 sq. ft.
		D - Tan charred compound w/ gray charred paint	Chrysotile 5%	--	
CRST-01-DW01-009	Drywall	A - Brown charred compound w/ gray charred paint	Chrysotile 6%	--	
CRST-01-DW01-010	Drywall	A - White compound	Chrysotile Trace	--	
		B - Brown charred compound w/ gray charred paint	Chrysotile 6%	--	
CRST-01-DW01-011	Drywall	A - Brown charred compound w/ white paint	Chrysotile 6%	--	

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
Property #1		
CRST-01-RM01-002	Roofing Material	A - Black felt
		B - Black granular tar
		C - Black fibrous tar
CRST-01-DW01-008	Drywall	A - Gray compound w/ white paint
		B - White/tan/black charred drywall

**Table 3**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/8/2018	9:29:49	CRST	--	--	--	SRM2570	WHITE	0	0
5/8/2018	9:30:13	CRST	--	--	--	SRM2571	YELLOW	3.1	0.3
5/8/2018	9:30:49	CRST	--	--	--	SRM2572	ORANGE	1.75	0.18
5/8/2018	9:31:16	CRST	--	--	--	SRM2573	RED	1.08	0.05
5/8/2018	9:32:10	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	9:32:36	CRST	--	--	--	SRM2575	GREEN	0.35	0.06
5/8/2018	14:59:58	CRST	--	--	--	SRM2571	WHITE	0	0
5/8/2018	15:00:23	CRST	--	--	--	SRM2571	YELLOW	3.99	0.39
5/8/2018	15:00:45	CRST	--	--	--	SRM2572	ORANGE	1.7	0.17
5/8/2018	15:01:15	CRST	--	--	--	SRM2573	RED	0.84	0.07
5/8/2018	15:01:52	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	15:02:21	CRST	--	--	--	SRM2575	GREEN	0.34	0.06
<i>Readings</i>									
5/8/2018	9:34:49	Property 1	Exterior	--	WALL	WOOD	YELLOW	0.24	0.04
5/8/2018	9:35:24	Property 1	Exterior	--	WALL	WOOD	YELLOW	0.21	0.06
5/8/2018	9:36:00	Property 1	Exterior	--	TRIM	WOOD	WHITE	0.05	0.04
5/8/2018	9:42:42	Property 1	Interior	--	TRIM	WOOD	WHITE	0	0
5/8/2018	9:43:24	Property 1	Interior	--	TRIM	WOOD	WHITE	0.01	0.02
5/8/2018	9:43:47	Property 1	Interior	--	TRIM	WOOD	WHITE	0	0



**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #2  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #2 located at 45.004961°N, -101.234094°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 9<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### Asbestos-Containing Material

Of the 12 bulk samples submitted for laboratory analysis, a total of two (2) samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #2</b>		
Drywall	Throughout	700 sq. ft.
Linoleum	Rear Entry	40 sq. ft.

Notes:  
sq. ft. = square feet

### Lead-Based Paint

Based on the XRF results, elevated lead concentrations are present on the trim of the exterior of the building. The following table lists the location, current surface paint color, and estimated extent of LBP present at the Site. LBP is considered a COC in relation to the Site.

Location	Current Surface Paint Color	Estimated Extent
<b>Property #2 - Exterior</b>		
Trim	Yellow	30 LF

Notes:  
LF = linear feet

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No PCB-containing fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.
- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

### **RECOMMENDATIONS**

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Due to severe fire damage and ACM presence, this building will need to be disposed of as ACM. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris.
- START recommends contracting an accredited lead remediation company to assess disposal requirements for LBP at the Site if the building is to be demolished. Dust control methods should be implemented for the debris and all work performed should be done so by an EPA Lead-Safe certified firm. It is recommended that a construction debris disposal facility be contacted to determine if Toxicity Characteristic Leaching Procedure (TCLP) samples will be required.

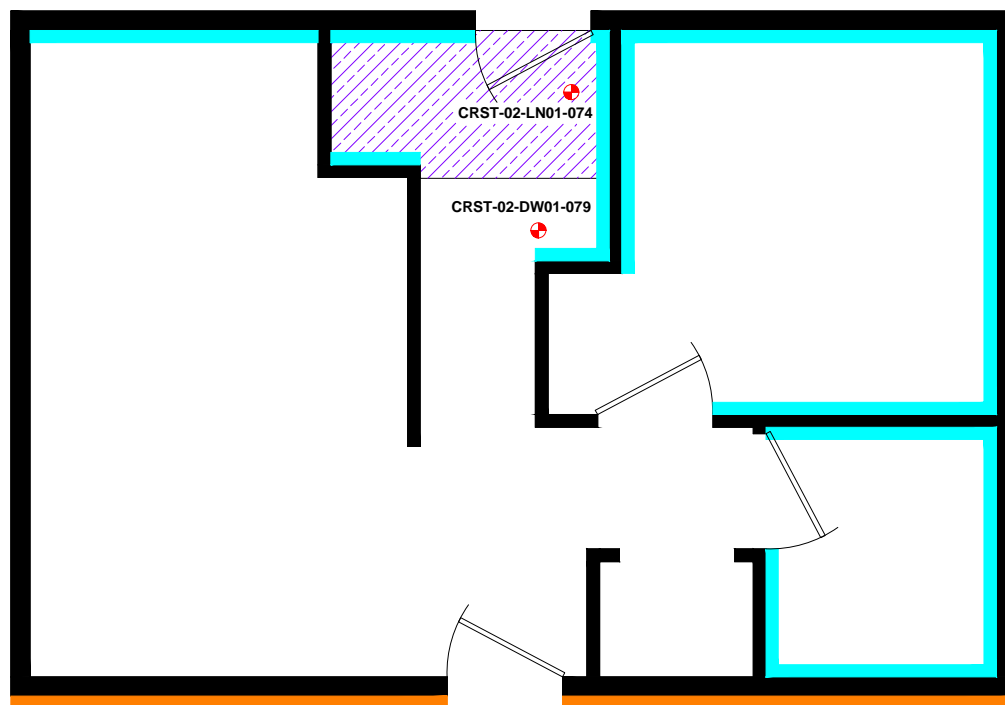
This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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## FIGURES

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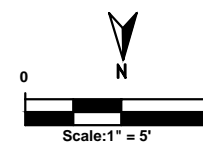


## LEGEND:

ACM	ASBESTOS CONTAINING MATERIAL
LBP	LEAD BASED PAINT
	ACM SAMPLE LOCATION (APPROXIMATE)
	ACM LINOLEUM EXTENT
	ACM DRYWALL COMPOUND (APPROXIMATE)
	LEAD BASED PAINT ON GUTTERS

## NOTE:

1. BURNED STRUCTURE: ENTIRE BUILDING ASSUMED TO BE ACM



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM AND LBP SAMPLE LOCATION AND EXTENT MAP PROPERTY #2 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 5'

Figure  
4



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## TABLES

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**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
Property #2					
CRST-02-LN01-074	Linoleum	A - Gray/multi-colored sheet vinyl w/ off white fibrous backing material	Chrysotile 6%	--	40 sq. ft.
CRST-02-DW01-079	Drywall	A - Brown charred compound w/ black charred paint	Chrysotile 5%	--	700 sq. ft.

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #2</b>		
CRST-02-DB01-072	Debris	A - Black charred debris
CRST-02-WP01-073	Felt	A - Silver foil
		B - Brown paper
		C - Black felt
CRST-02-LN02-075	Linoleum	A - Tan/brown adhesive
		B - Tan/gray sheet vinyl w/ off white fibrous backing material
CRST-02-FT01-076	Floor Tile	A - Colorless adhesive
		B - Cream/black charred tile
		C - Brown/black charred tile
CRST-02-RM01-077	Roofing Material	A - Black tar
		B - Black fibrous tar
CRST-02-DW01-078	Drywall	A - Green/gray charred paint
		B - White compound
		C - White/brown drywall
CRST-02-DW01-080	Drywall	A - White/tan/black charred drywall
CRST-02-DW01-081	Drywall	A - White/tan/black charred drywall
CRST-02-DW01-082	Drywall	A - White/gray/tan charred drywall
CRST-02-DW01-083	Drywall	A - White/tan/gray charred drywall

**Table 3**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/9/2018	9:11:27	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	9:11:58	CRST	--	--	--	SRM2571	YELLOW	4.2	0.4
5/9/2018	9:13:41	CRST	--	--	--	SRM2571	YELLOW	3.63	0.35
5/9/2018	9:14:05	CRST	--	--	--	SRM2572	ORANGE	1.7	0.15
5/9/2018	9:14:28	CRST	--	--	--	SRM2573	RED	1.19	0.1
5/9/2018	9:14:57	CRST	--	--	--	SRM2574	GOLD	0.57	0.07
5/9/2018	9:15:21	CRST	--	--	--	SRM2575	GREEN	0.35	0.07
5/9/2018	14:15:58	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	14:16:20	CRST	--	--	--	SRM2571	YELLOW	3.48	0.34
5/9/2018	14:16:42	CRST	--	--	--	SRM2572	ORANGE	1.56	0.14
5/9/2018	14:17:04	CRST	--	--	--	SRM2573	RED	1.12	0.06
5/9/2018	14:17:52	CRST	--	--	--	SRM2574	GOLD	0.71	0.09
5/9/2018	14:18:17	CRST	--	--	--	SRM2575	GREEN	0.27	0.06
<i>Readings</i>									
5/9/2018	10:38:40	Property 2	Exterior	--	WALL	WOOD	BROWN	0	0
5/9/2018	10:39:23	Property 2	Exterior	--	WALL	WOOD	WHITE	0	0
<b>5/9/2018</b>	<b>10:40:07</b>	<b>Property 2</b>	<b>Exterior</b>	<b>--</b>	<b>TRIM</b>	<b>METAL</b>	<b>YELLOW</b>	<b>1.6</b>	<b>0.16</b>
5/9/2018	10:40:31	Property 2	Exterior	--	TRIM	WOOD	YELLOW	0	0
5/9/2018	10:46:05	Property 2	Interior	--	WALL	DRYWALL	LT BLUE	0	0

**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #3  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi



## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #3 located at 45.002114°N, -101.228606°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 8<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos-Containing Material**

Of the 18 bulk samples submitted for laboratory analysis, a total of six (6) samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #3</b>		
Drywall	Throughout Main Level	1,800 sq. ft.
Vibration Dampener	Basement	1 Unit

Notes:  
sq. ft. = square feet

### **Lead-Based Paint**

Based on the XRF results, no elevated lead concentrations were present. LBP is not considered a COC in relation to the Site.

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No PCB-containing fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.

0003/1711-09

- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

## RECOMMENDATIONS

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Due to severe fire damage and ACM presence, this building will need to be disposed of as ACM. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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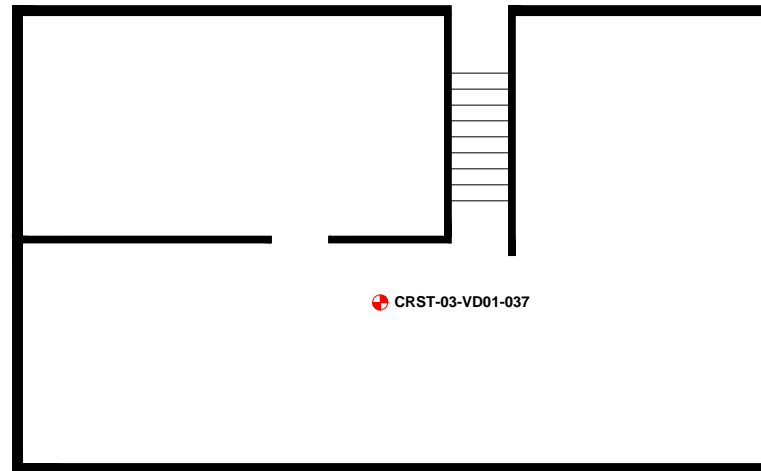
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## FIGURES

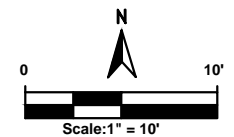
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### **LEGEND:**

- ACM ASBESTOS CONTAINING MATERIAL  
● ACM SAMPLE LOCATION (APPROXIMATE)



● CRST-03-VD01-037



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

ACM SAMPLE LOCATION AND EXTENT MAP  
PROPERTY #3 - BASEMENT  
CRST  
HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 10'

Figure

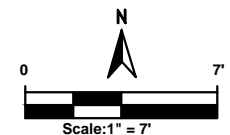
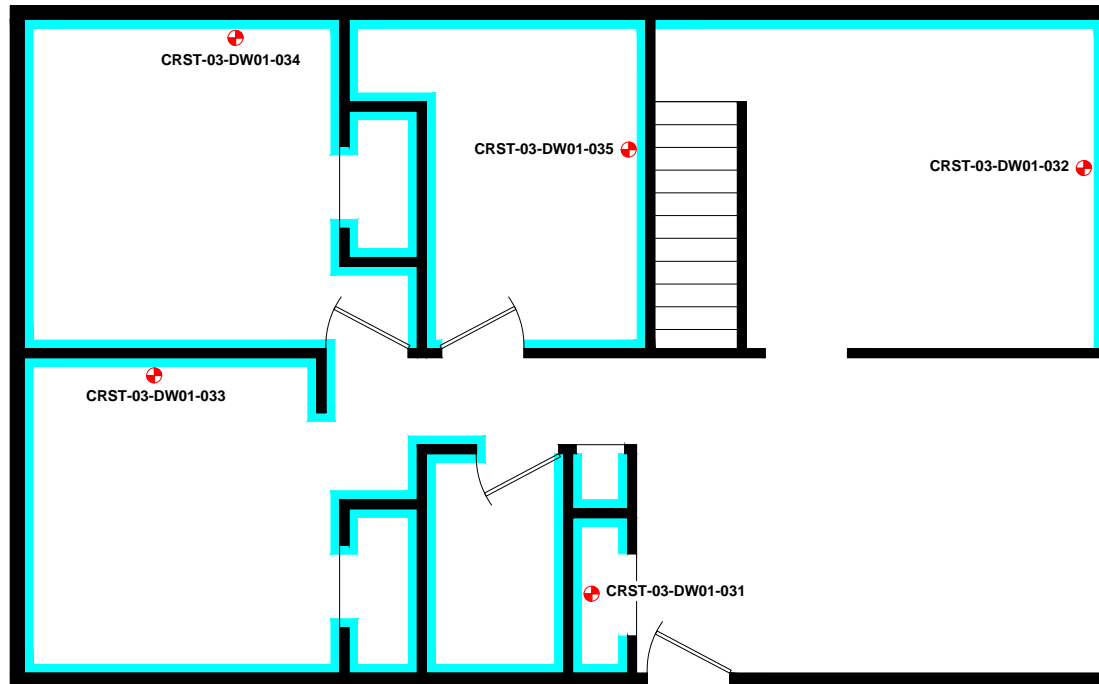
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### LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL  
ACM SAMPLE LOCATION (APPROXIMATE)  
ACM DRYWALL COMPOUND (APPROXIMATE)

### NOTE:

1. BURNED STRUCTURE: ENTIRE BUILDING ASSUMED TO BE ACM



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

ACM SAMPLE LOCATION AND EXTENT MAP  
PROPERTY #3 - MAIN FLOOR  
CRST  
HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 7'

Figure

6



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## TABLES

---

**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
<b>Property #3</b>					
CRST-03-DW01-031	Drywall	B - White compound	Chrysotile Trace	--	1,800 sq. ft.
		D - White joint compound	Chrysotile Trace	--	
CRST-03-DW01-032	Drywall	B - White compound	Chrysotile Trace	--	
		D - White joint compound	Chrysotile Trace	--	
CRST-03-DW01-033	Drywall	B - White compound	Chrysotile 3%	--	
		D - White joint compound	Chrysotile 3%	--	
CRST-03-DW01-034	Drywall	B - White compound	Chrysotile Trace	--	
CRST-03-DW01-035	Drywall	B - White compound	Chrysotile 2%	--	
		D - White joint compound	Chrysotile 2%	--	
CRST-03-VD01-037	Vibration Dampener	A - White fibrous woven material w/ silver paint	Chrysotile 50%	--	1 unit

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #3</b>		
CRST-03-RM01-036	Roofing Material	A - Black felt
		B - Tan/multi-colored shingle
		C - Red/multi-colored shingle
CRST-03-VD02-038	Vibration Dampener	A - Black resinous material
		B - White fibrous woven material
CRST-03-DW02-039	Drywall	A - Blue paint
		B - White compound
		C - White tape
		D - White joint compound
		E - White/brown drywall
CRST-03-DW02-040	Drywall	A - Blue paint
		B - White compound
		C - White/brown drywall
CRST-03-DW02-041	Drywall	A - Blue paint
		B - White compound
		C - White tape
		D - White joint compound
		E - White/brown drywall
CRST-03-LN01-042	Linoleum	A - Black mastic
		B - Yellow adhesive
		C - Gray/multi-colored sheet vinyl w/ gray fibrous backing material
CRST-03-LN01-043	Linoleum	A - Off white adhesive
		B - Gray/multi-colored sheet vinyl w/ gray fibrous backing material
CRST-03-ST01-044	Stair Tread	A - Black mastic
		B - Tan stair tread
CRST-03-SC01-045	Sink Coating	A - Tan caulk
CRST-03-CI01-046	Chimney Insulation	A - Gray fibrous plaster
CRST-03-CI01-047	Chimney Insulation	A - Gray fibrous plaster
CRST-03-CI01-048	Chimney Insulation	A - Gray fibrous plaster

**Table 3**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/8/2018	9:29:49	CRST	--	--	--	SRM2570	WHITE	0	0
5/8/2018	9:30:13	CRST	--	--	--	SRM2571	YELLOW	3.1	0.3
5/8/2018	9:30:49	CRST	--	--	--	SRM2572	ORANGE	1.75	0.18
5/8/2018	9:31:16	CRST	--	--	--	SRM2573	RED	1.08	0.05
5/8/2018	9:32:10	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	9:32:36	CRST	--	--	--	SRM2575	GREEN	0.35	0.06
5/8/2018	14:59:58	CRST	--	--	--	SRM2571	WHITE	0	0
5/8/2018	15:00:23	CRST	--	--	--	SRM2571	YELLOW	3.99	0.39
5/8/2018	15:00:45	CRST	--	--	--	SRM2572	ORANGE	1.7	0.17
5/8/2018	15:01:15	CRST	--	--	--	SRM2573	RED	0.84	0.07
5/8/2018	15:01:52	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	15:02:21	CRST	--	--	--	SRM2575	GREEN	0.34	0.06
<i>Readings</i>									
5/8/2018	12:49:28	Property 3	Exterior	--	WALL	METAL	BROWN	0	0
5/8/2018	12:49:58	Property 3	Exterior	--	WALL	CONCRETE	WHITE	0	0
5/8/2018	12:50:28	Property 3	Exterior	--	TRIM	WOOD	WHITE	0	0
5/8/2018	12:52:32	Property 3	Interior	room A	WALL	DRYWALL	PURPLE	0	0
5/8/2018	12:53:25	Property 3	Interior	room B	WALL	DRYWALL	WHITE	0	0
5/8/2018	12:55:17	Property 3	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/8/2018	12:56:22	Property 3	Interior	room E	WALL	DRYWALL	LT BLUE	0	0
5/8/2018	12:57:09	Property 3	Interior	room F	WALL	DRYWALL	LT BLUE	0	0
5/8/2018	13:00:10	Property 3	Interior	room F	WALL	DRYWALL	LT BLUE	0	0
5/8/2018	13:01:00	Property 3	Interior	room G	WALL	DRYWALL	WHITE	0	0

**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #4  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi



## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #4 located at 45.001932°N, -101.229035°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 8<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### Asbestos-Containing Material

Of the four (4) bulk samples submitted for laboratory analysis, one (1) sample was determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #4</b>		
Linoleum	Kitchen	130 sq. ft.

Notes:  
sq. ft. = square feet

### Lead-Based Paint

Based on the XRF results, no elevated lead concentrations were present. LBP is not considered a COC in relation to the Site.

### PCBs, Mercury, and Mold

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No PCB-containing fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.
- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

0003/1711-09

## RECOMMENDATIONS

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Abatement of friable ACM (i.e., linoleum) is recommended prior to any demolition activities at the Site. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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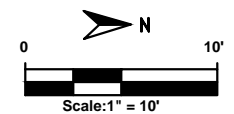
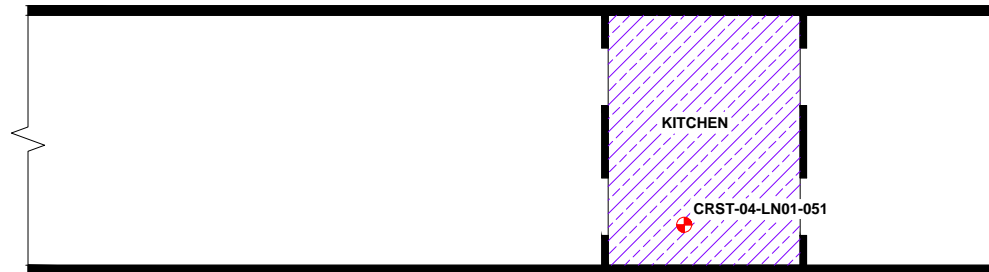
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## FIGURES

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### LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL  
ACM SAMPLE LOCATION (APPROXIMATE)  
ACM LINOLEUM EXTENT



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #4 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 10'

Figure

7

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## TABLES

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**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
Property #4					
CRST-04-LN01-051	Linoleum	A - Brown adhesive w/ tan wood	Chrysotile Trace	--	130 sq. ft.
		B - Tan/multi-colored sheet vinyl w/ white fibrous backing	Chrysotile 15%	--	

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #4</b>		
CRST-04-CT01-049	Ceiling Tile	A - Brown/gray/white ceiling tile
CRST-04-DW01-050	Drywall	A - White/multi-colored wall covering
		B - Tan/white drywall
CRST-04-FT01-052	Floor Tile	A - Brown/multi-colored tile w/ colorless adhesive

**Table 3**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/8/2018	9:29:49	CRST	--	--	--	SRM2570	WHITE	0	0
5/8/2018	9:30:13	CRST	--	--	--	SRM2571	YELLOW	3.1	0.3
5/8/2018	9:30:49	CRST	--	--	--	SRM2572	ORANGE	1.75	0.18
5/8/2018	9:31:16	CRST	--	--	--	SRM2573	RED	1.08	0.05
5/8/2018	9:32:10	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	9:32:36	CRST	--	--	--	SRM2575	GREEN	0.35	0.06
5/8/2018	14:59:58	CRST	--	--	--	SRM2571	WHITE	0	0
5/8/2018	15:00:23	CRST	--	--	--	SRM2571	YELLOW	3.99	0.39
5/8/2018	15:00:45	CRST	--	--	--	SRM2572	ORANGE	1.7	0.17
5/8/2018	15:01:15	CRST	--	--	--	SRM2573	RED	0.84	0.07
5/8/2018	15:01:52	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	15:02:21	CRST	--	--	--	SRM2575	GREEN	0.34	0.06
<i>Readings</i>									
5/8/2018	13:50:17	Property 4	Exterior	--	WALL	METAL	LT BLUE	0	0
5/8/2018	13:52:31	Property 4	Exterior	--	TRIM	METAL	LT BLUE	0	0
5/8/2018	13:53:12	Property 4	Exterior	--	TRIM	METAL	WHITE	0	0
5/8/2018	13:54:09	Property 4	Interior	--	CEILING	WOOD	GRAY	0	0

**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #5  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #5 located at 45.0062936°N, -101.2327953°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 9<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos-Containing Material**

Of the 13 bulk samples submitted for laboratory analysis, a total of four (4) samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #5</b>		
Drywall	Throughout	1,100 sq. ft.
Linoleum	Northwest Room	420 sq. ft.
Vermiculite	Throughout	1,600 sq. ft.

Notes:  
sq. ft. = square feet

### **Lead-Based Paint**

Based on the XRF results, no elevated lead concentrations were present. LBP is not considered a COC in relation to the Site.

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No PCB-containing fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.

0003/1711-09

- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

## RECOMMENDATIONS

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Due to severe fire damage and ACM presence, this building will need to be disposed of as ACM. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

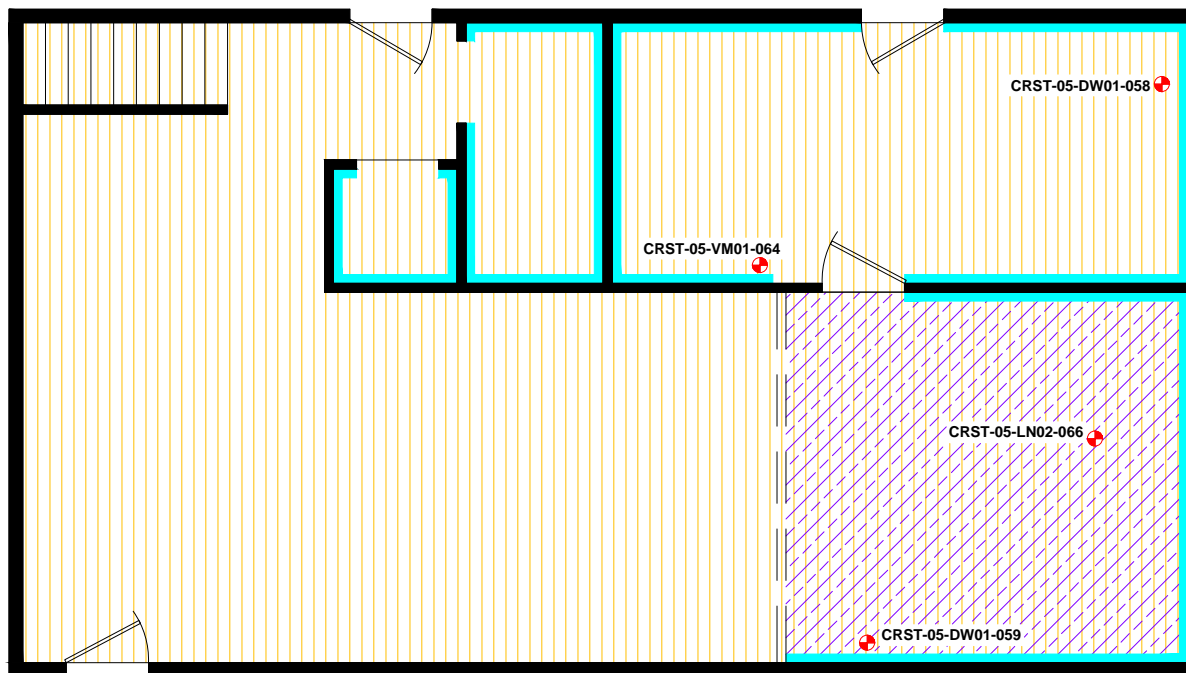


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## FIGURES

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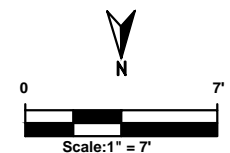


### LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ▨ ACM LINOLEUM EXTENT
- ▨ ACM VERMICULITE DEBRIS EXTENT
- ▨ ACM DRYWALL COMPOUND (APPROXIMATE)

### NOTE:

1. BURNED STRUCTURE: ENTIRE BUILDING ASSUMED TO BE ACM



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #5 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 7'

Figure

8

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## TABLES

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**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
Property #5					
CRST-05-DW01-058	Drywall	B - Tan/white compound	Chrysotile 3%	--	1,100 sq. ft.
		C - Off white joint compound	Chrysotile 4%	--	
CRST-05-DW01-059	Drywall	C - Brown/black charred joint compound	Chrysotile 4%	--	
CRST-05-VM01-064	Vermiculite	A - Brown vermiculite	Tremolite/Actinolite Trace	--	1,600 sq. ft.
CRST-05-LN02-066	Linoleum	C - Tan tile	Chrysotile 6%	--	420 sq. ft.

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #5</b>		
CRST-05-DB01-055	Debris	A - Black/multi-colored charred debris
CRST-05-DW01-056	Drywall	A - Off white fibrous woven material
		B - White compound w/ black charred paint
		C - White/tan drywall
CRST-05-DW01-057	Drywall	A - Tan compound
		B - Tan/black charred drywall
CRST-05-DW01-060	Drywall	A - White fibrous woven material
		B - Tan paper w/ black tar
		C - Black charred paint w/ white compound
		D - Pink insulation
		E - White/brown drywall
CRST-05-WF01-061	Felt	A - Black/brown felt
CRST-05-WF01-062	Felt	A - Black/brown felt
CRST-05-RM01-063	Roofing Material	A - Brown/black fibrous felt
		B - Red/white/black shingle
CRST-05-LN01-065	Linoleum	A - Tan adhesive
		B - Off white sheet vinyl w/ off white fibrous backing material
CRST-05-WL01-067	Wall Linoleum	A - Black/gray charred fibrous material

**Table 3**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/9/2018	9:11:27	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	9:11:58	CRST	--	--	--	SRM2571	YELLOW	4.2	0.4
5/9/2018	9:13:41	CRST	--	--	--	SRM2571	YELLOW	3.63	0.35
5/9/2018	9:14:05	CRST	--	--	--	SRM2572	ORANGE	1.7	0.15
5/9/2018	9:14:28	CRST	--	--	--	SRM2573	RED	1.19	0.1
5/9/2018	9:14:57	CRST	--	--	--	SRM2574	GOLD	0.57	0.07
5/9/2018	9:15:21	CRST	--	--	--	SRM2575	GREEN	0.35	0.07
5/9/2018	14:15:58	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	14:16:20	CRST	--	--	--	SRM2571	YELLOW	3.48	0.34
5/9/2018	14:16:42	CRST	--	--	--	SRM2572	ORANGE	1.56	0.14
5/9/2018	14:17:04	CRST	--	--	--	SRM2573	RED	1.12	0.06
5/9/2018	14:17:52	CRST	--	--	--	SRM2574	GOLD	0.71	0.09
5/9/2018	14:18:17	CRST	--	--	--	SRM2575	GREEN	0.27	0.06
<i>Readings</i>									
5/9/2018	9:17:22	Property 5	Exterior	--	WALL	WOOD	WHITE	0	0.01
5/9/2018	9:17:49	Property 5	Exterior	--	WALL	WOOD	BLUE	0	0
5/9/2018	9:18:42	Property 5	Exterior	--	WALL	WOOD	YELLOW	0	0
5/9/2018	9:20:11	Property 5	Interior	--	WALL	DRYWALL	RED	0	0
5/9/2018	9:21:00	Property 5	Interior	--	WALL	DRYWALL	WHITE	0	0



**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #6  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #6 located at 45.005935°N, -101.23311°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 9<sup>th</sup>, 2018. Results of the Phase II ESA have not identified the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos-Containing Material**

Of the four (4) bulk samples submitted for laboratory analysis, no samples were determined to be “positive” (>1% asbestos) for asbestos. Asbestos is not considered a COC in relation to the Site.

### **Lead-Based Paint**

Based on the XRF results, no elevated lead concentrations were present. LBP is not considered a COC in relation to the Site.

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.
- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

## RECOMMENDATIONS

Based on the results of the Phase II ESA conducted, START recommends the following:

- The building can be demolished without additional testing of materials or remediation.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented.

0003/1711-09

The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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## TABLES

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**Table 1**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #6</b>		
CRST-06-DB01-068	Debris	A - Black charred debris
CRST-06-LN01-069	Linoleum	A - Brown adhesive
		B - Yellow/multi-colored sheet vinyl w/ gray fibrous backing material
CRST-06-FT01-070	Floor Tile	A - Gray tile w/ colorless adhesive
CRST-06-WF01-071	Felt	A - Tan paper w/ silver foil

**Table 2**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/9/2018	9:11:27	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	9:11:58	CRST	--	--	--	SRM2571	YELLOW	4.2	0.4
5/9/2018	9:13:41	CRST	--	--	--	SRM2571	YELLOW	3.63	0.35
5/9/2018	9:14:05	CRST	--	--	--	SRM2572	ORANGE	1.7	0.15
5/9/2018	9:14:28	CRST	--	--	--	SRM2573	RED	1.19	0.1
5/9/2018	9:14:57	CRST	--	--	--	SRM2574	GOLD	0.57	0.07
5/9/2018	9:15:21	CRST	--	--	--	SRM2575	GREEN	0.35	0.07
5/9/2018	14:15:58	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	14:16:20	CRST	--	--	--	SRM2571	YELLOW	3.48	0.34
5/9/2018	14:16:42	CRST	--	--	--	SRM2572	ORANGE	1.56	0.14
5/9/2018	14:17:04	CRST	--	--	--	SRM2573	RED	1.12	0.06
5/9/2018	14:17:52	CRST	--	--	--	SRM2574	GOLD	0.71	0.09
5/9/2018	14:18:17	CRST	--	--	--	SRM2575	GREEN	0.27	0.06
<i>Readings</i>									
5/9/2018	9:53:59	Property 6	Exterior	--	WALL	METAL	CREAM	0	0
5/9/2018	9:54:27	Property 6	Exterior	--	WALL	METAL	WHITE	0	0
5/9/2018	9:55:03	Property 6	Exterior	--	DOOR FRAME	METAL	WHITE	0	0
5/9/2018	9:55:38	Property 6	Exterior	--	TRIM	METAL	DK BLUE	0	0



**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #7  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #7 located at 45.005329°N, -101.232390°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 9<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### Asbestos-Containing Material

Of the 13 bulk samples submitted for laboratory analysis, a total of four (4) samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #7</b>		
Drywall	Throughout	1,400 sq. ft.
Floor Tile	Rear Entry	40 sq. ft.

Notes:  
sq. ft. = square feet

### Lead-Based Paint

Based on the XRF results, elevated lead concentrations are present on the ceilings and walls on the interior of the building. The following table lists the location, current surface paint color, and estimated extent of LBP present at the Site. LBP is considered a COC in relation to the Site.

Location	Current Surface Paint Color	Estimated Extent
<b>Property #7 - Interior</b>		
Ceiling	White	80 sq. ft.
Wall	White	200 sq. ft.

Notes:  
sq. ft. = square feet

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No PCB-containing fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.
- Mold was observed inside of the building. Mold is considered a COC in relation to the Site.

### **RECOMMENDATIONS**

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Abatement of friable ACM (i.e., drywall) is recommended prior to any demolition activities at the Site. The non-friable ACM identified is classified as Category I or II non-friable; therefore, ACM remediation may not be required prior to demolition as the non-friable ACM may be disposed with construction debris, if acceptable by the landfill. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris. Though non-friable ACM may be able to be disposed of as construction waste, construction worker need to be made aware of the ACM present and appropriate protective measures will need to be implemented.
- START recommends contracting an accredited lead remediation company to assess disposal requirements for LBP at the Site if the building is to be demolished. Dust control methods should be implemented for the debris and all work performed should be done so by an EPA Lead-Safe certified firm. It is recommended that a construction debris disposal facility be contacted to determine if Toxicity Characteristic Leaching Procedure (TCLP) samples will be required.
- Mold should be controlled during demolition (e.g., dust control, ventilation, etc.).

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.




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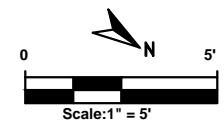
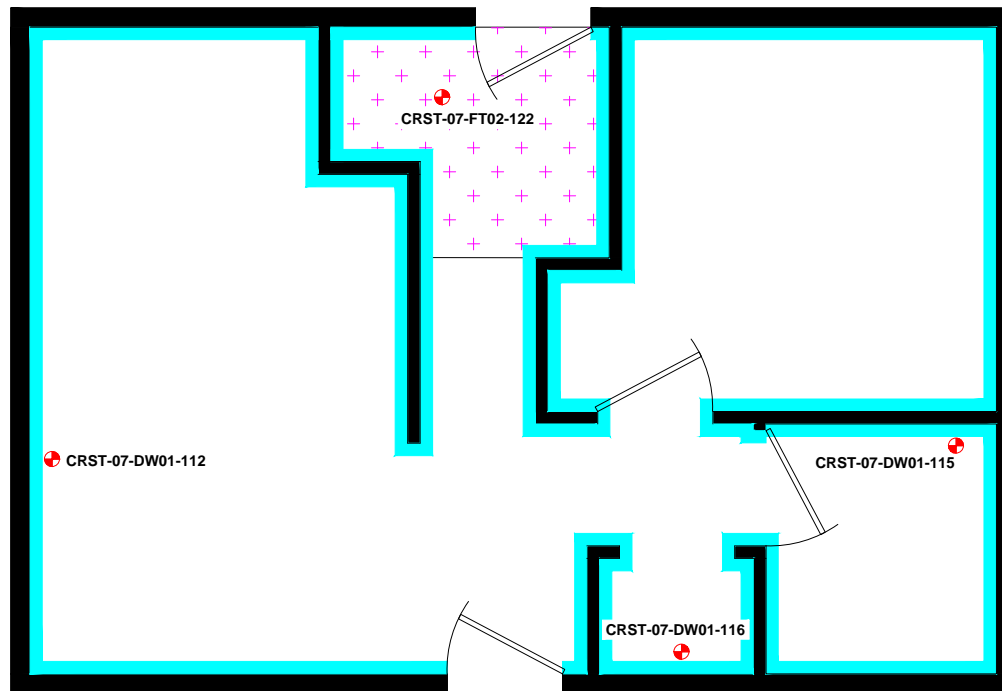
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## FIGURES

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## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
-  ACM SAMPLE LOCATION (APPROXIMATE)
-  ACM FLOOR TILE EXTENT
-  ACM DRYWALL COMPOUND (APPROXIMATE)



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #7 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 5'

Figure

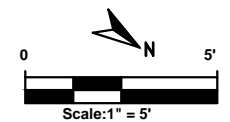
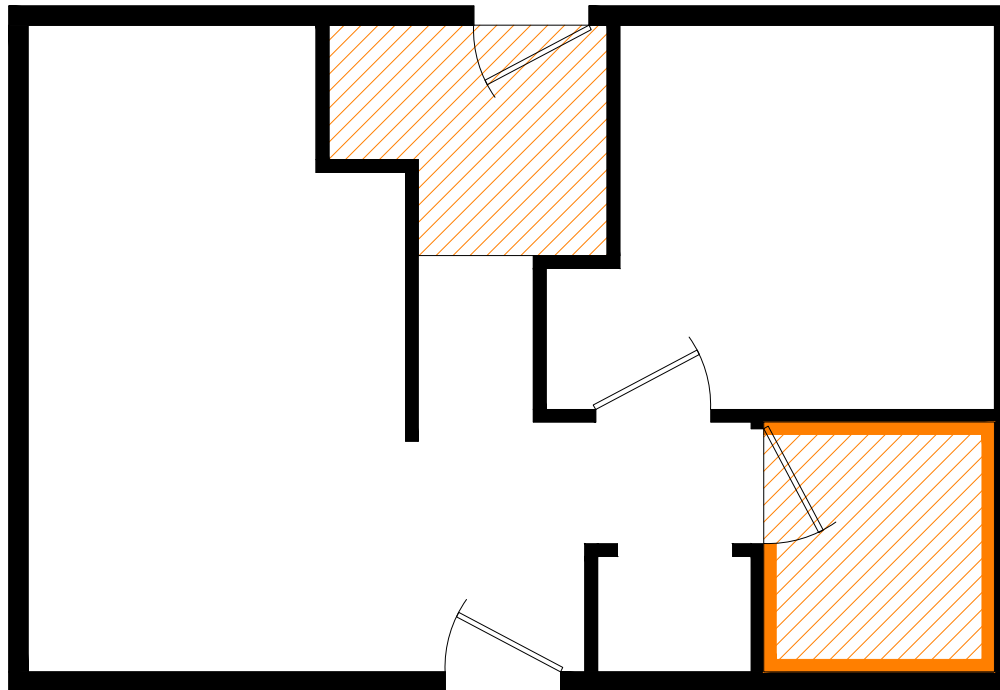
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### LEGEND:

LBP LEAD BASED PAINT

 LEAD BASED PAINT EXTENT

 LEAD BASED PAINT EXTENT



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

LBP LOCATION AND EXTENT MAP  
PROPERTY #7  
CRST  
HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 5'

Figure

10



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## TABLES

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**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
<b>Property #7</b>					
CRST-07-DW01-112	Drywall	D - Off white joint compound	Chrysotile 3%	--	1,400 sq. ft.
		E - Off white compound	Chrysotile 3%	--	
CRST-07-DW01-115	Drywall	B - Off white compound w/ tan multi-layered paint	Chrysotile 2%	--	
		C - White joint compound	Chrysotile 3%	--	
CRST-07-DW01-116	Drywall	A - White compound w/ white/blue paint	Chrysotile 4%	--	
CRST-07-FT02-122	Floor Tile	B - Red tile	Chrysotile 2%	--	40 sq. ft.

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #7</b>		
CRST-07-DW01-113	Drywall	A - White compound w/ white paint
		B - White/tan drywall
CRST-07-DW01-114	Drywall	A - Tan/white drywall
		B - White joint compound
		C - White tape
		D - White compound w/ white & tan multi-layered paint
CRST-07-CD01-117	Ceiling Drywall	A - White texture w/ white paint
		B - White/tan drywall
CRST-07-CD01-118	Ceiling Drywall	A - White micaceous compound w/ white paint
		B - White/tan drywall
CRST-07-CD01-119	Ceiling Drywall	A - White micaceous compound w/ white paint
		B - White/tan drywall
CRST-07-FT01-120	Floor Tile	A - Yellow adhesive
		B - White tile
CRST-07-FT01-121	Floor Tile	A - Yellow adhesive
		B - White tile
CRST-07-WF01-123	Felt	A - Black felt
CRST-07-RM01-124	Roofing Material	A - Black/white shingle

**Table 3**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/9/2018	9:11:27	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	9:11:58	CRST	--	--	--	SRM2571	YELLOW	4.2	0.4
5/9/2018	9:13:41	CRST	--	--	--	SRM2571	YELLOW	3.63	0.35
5/9/2018	9:14:05	CRST	--	--	--	SRM2572	ORANGE	1.7	0.15
5/9/2018	9:14:28	CRST	--	--	--	SRM2573	RED	1.19	0.1
5/9/2018	9:14:57	CRST	--	--	--	SRM2574	GOLD	0.57	0.07
5/9/2018	9:15:21	CRST	--	--	--	SRM2575	GREEN	0.35	0.07
5/9/2018	14:15:58	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	14:16:20	CRST	--	--	--	SRM2571	YELLOW	3.48	0.34
5/9/2018	14:16:42	CRST	--	--	--	SRM2572	ORANGE	1.56	0.14
5/9/2018	14:17:04	CRST	--	--	--	SRM2573	RED	1.12	0.06
5/9/2018	14:17:52	CRST	--	--	--	SRM2574	GOLD	0.71	0.09
5/9/2018	14:18:17	CRST	--	--	--	SRM2575	GREEN	0.27	0.06
<i>Readings</i>									
5/9/2018	13:59:26	Property 7	Exterior	--	WALL	WOOD	WHITE	0	0
5/9/2018	13:59:51	Property 7	Exterior	--	TRIM	WOOD	RED	0.55	0.13
5/9/2018	14:01:30	Property 7	Interior	room A	CEILING	DRYWALL	WHITE	0	0
5/9/2018	14:01:59	Property 7	Interior	room A	WALL	DRYWALL	CREAM	0	0
5/9/2018	14:02:27	Property 7	Interior	room A	DOOR	WOOD	BLACK	0	0
5/9/2018	14:03:38	Property 7	Interior	room A	WALL	DRYWALL	WHITE	0	0
5/9/2018	14:04:24	Property 7	Interior	room B	WALL	DRYWALL	WHITE	1	0.16
5/9/2018	14:05:11	Property 7	Interior	room B	CEILING	DRYWALL	WHITE	1	0.08
5/9/2018	14:05:36	Property 7	Interior	room B	CEILING	DRYWALL	WHITE	0	0
5/9/2018	14:06:06	Property 7	Interior	room B	DOOR	WOOD	WHITE	0	0
5/9/2018	14:06:44	Property 7	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/9/2018	14:07:15	Property 7	Interior	room C	CEILING	DRYWALL	WHITE	0	0
5/9/2018	14:07:39	Property 7	Interior	room C	WALL	DRYWALL	WHITE	0.01	0.01
5/9/2018	14:08:24	Property 7	Interior	room C	DOOR	WOOD	WHITE	0	0
5/9/2018	14:08:50	Property 7	Interior	room D	DOOR	METAL	WHITE	0	0
5/9/2018	14:09:39	Property 7	Interior	room D	WALL	DRYWALL	WHITE	0.06	0.03
5/9/2018	14:10:13	Property 7	Interior	room D	CEILING	DRYWALL	WHITE	1	0.09

**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #8  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #8 located at 45.005267°N, -101.231618°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 9<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos-Containing Material**

Of the 12 bulk samples submitted for laboratory analysis, a total of six (6) samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #8</b>		
Drywall – Ceilings	Throughout	400 sq. ft.
Drywall – Walls		1,400 sq. ft.

Notes:  
sq. ft. = square feet

### **Lead-Based Paint**

Based on the XRF results, no elevated lead concentrations were present. LBP is not considered a COC in relation to the Site.

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No PCB-containing fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.

0003/1711-09



- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

## RECOMMENDATIONS

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Abatement of friable ACM (i.e., drywall) is recommended prior to any demolition activities at the Site. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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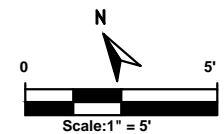
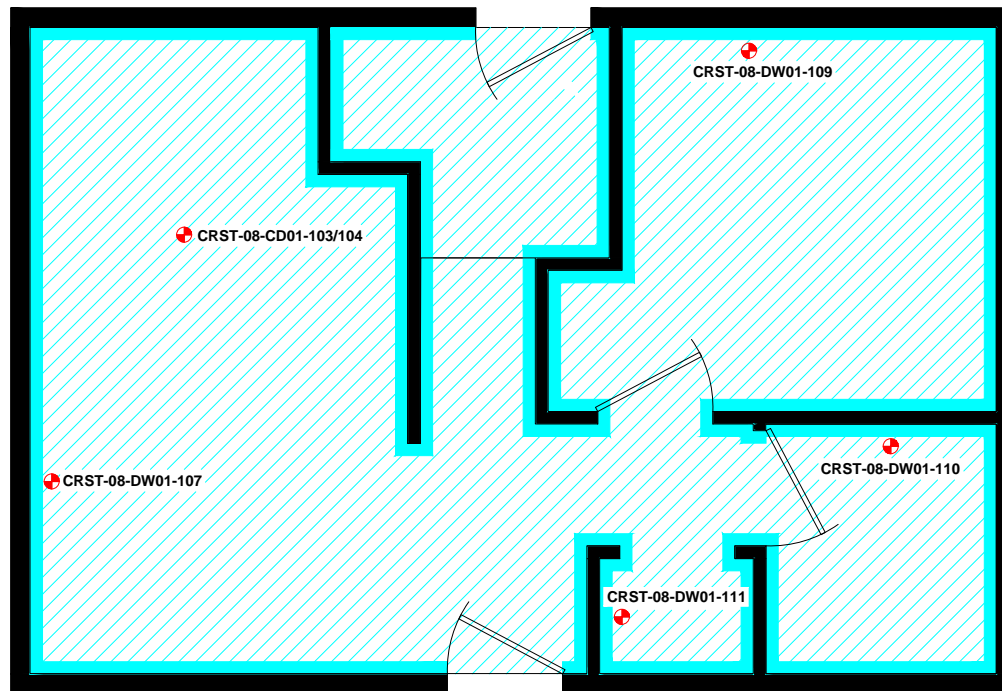
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## FIGURES

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## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM DRYWALL COMPOUND EXTENT
- ACM DRYWALL COMPOUND EXTENT



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #8 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 5'

Figure

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## TABLES

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**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
<b>Property #8</b>					
CRST-08-CD01-103	Ceiling Drywall	D - Off white compound	Chrysotile 3%	--	400 sq. ft.
		E - Off white joint compound	Chrysotile 3%	--	
CRST-08-CD01-104	Ceiling Drywall	D - Off white compound	Chrysotile 3%	--	
		E - Off white joint compound	Chrysotile 3%	--	
CRST-08-DW01-107	Drywall	C - Off white compound	Chrysotile 3%	--	1,400 sq. ft.
		D - Off white joint compound	Chrysotile 3%	--	
CRST-08-DW01-109	Drywall	C - Off white joint compound	Chrysotile 3%	--	
		D - Off white compound	Chrysotile 3%	--	
CRST-08-DW01-110	Drywall	D - Off white compound	Chrysotile 3%	--	
		E - Off white joint compound	Chrysotile 3%	--	
CRST-08-DW01-111	Drywall	B - Off white compound	Chrysotile 3%	--	

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #8</b>		
CRST-08-RM01-100	Roofing Material	A - Black felt
		B - Black/gray shingle
CRST-08-WF01-101	Felt	A - Black felt
CRST-08-LN01-102	Linoleum	A - Yellow adhesive
		B - Cream/off white sheet vinyl w/ off white fibrous backing material
CRST-08-CD01-105	Ceiling Drywall	A - White micaceous compound w/ white paint
		B - White/tan drywall w/ blue/white paint
CRST-08-CD01-106	Ceiling Drywall	A - White micaceous compound w/ white paint
		B - White/tan drywall w/ white paint
CRST-08-DW01-108	Drywall	A - White compound w/ blue paint
		B - White joint compound
		C - Off white tape
		D - White/tan drywall w/ blue/green paint



**Table 3**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/9/2018	9:11:27	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	9:11:58	CRST	--	--	--	SRM2571	YELLOW	4.2	0.4
5/9/2018	9:13:41	CRST	--	--	--	SRM2571	YELLOW	3.63	0.35
5/9/2018	9:14:05	CRST	--	--	--	SRM2572	ORANGE	1.7	0.15
5/9/2018	9:14:28	CRST	--	--	--	SRM2573	RED	1.19	0.1
5/9/2018	9:14:57	CRST	--	--	--	SRM2574	GOLD	0.57	0.07
5/9/2018	9:15:21	CRST	--	--	--	SRM2575	GREEN	0.35	0.07
5/9/2018	14:15:58	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	14:16:20	CRST	--	--	--	SRM2571	YELLOW	3.48	0.34
5/9/2018	14:16:42	CRST	--	--	--	SRM2572	ORANGE	1.56	0.14
5/9/2018	14:17:04	CRST	--	--	--	SRM2573	RED	1.12	0.06
5/9/2018	14:17:52	CRST	--	--	--	SRM2574	GOLD	0.71	0.09
5/9/2018	14:18:17	CRST	--	--	--	SRM2575	GREEN	0.27	0.06
<i>Readings</i>									
5/9/2018	13:28:19	Property 8	Exterior	--	TRIM	WOOD	YELLOW	0	0
5/9/2018	13:28:42	Property 8	Exterior	--	TRIM	WOOD	YELLOW	0	0
5/9/2018	13:29:14	Property 8	Exterior	--	TRIM	WOOD	BROWN	0.58	0.07
5/9/2018	13:30:48	Property 8	Interior	room A	WALL	DRYWALL	WHITE	0	0
5/9/2018	13:31:17	Property 8	Interior	room A	CEILING	DRYWALL	WHITE	0	0
5/9/2018	13:31:41	Property 8	Interior	room A	DOOR	WOOD	WHITE	0	0
5/9/2018	13:32:09	Property 8	Interior	room B	DOOR	WOOD	WHITE	0.04	0.05
5/9/2018	13:33:11	Property 8	Interior	room B	WALL	DRYWALL	LT BLUE	0	0
5/9/2018	13:34:38	Property 8	Interior	room B	CEILING	DRYWALL	WHITE	0	0
5/9/2018	13:35:07	Property 8	Interior	room C	CEILING	DRYWALL	WHITE	0	0
5/9/2018	13:35:33	Property 8	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/9/2018	13:35:59	Property 8	Interior	room C	WALL	DRYWALL	YELLOW	0.01	0.02
5/9/2018	13:36:51	Property 8	Interior	room C	DOOR	WOOD	YELLOW	0	0.01
5/9/2018	13:37:25	Property 8	Interior	room D	DOOR	WOOD	YELLOW	0	0
5/9/2018	13:37:52	Property 8	Interior	room D	WALL	DRYWALL	YELLOW	0.08	0.1
5/9/2018	13:38:31	Property 8	Interior	room D	CEILING	DRYWALL	WHITE	0	0

**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #9  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #9 located at 45.002705°N, -101.227261°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 8<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### Asbestos-Containing Material

Of the 19 bulk samples submitted for laboratory analysis, a total of eight (8) samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #9</b>		
Drywall	West Room	520 sq. ft.
Floor Tile	Throughout	430 sq. ft.
Transite	On Chimney	10 sq. ft.
Window Glazing	Exterior	10 LF

Notes:  
LF = linear feet  
sq. ft. = square feet

### Lead-Based Paint

**Limited XRF Survey:** Based on the XRF results, elevated lead concentrations are present on the trim and walls on the interior and/or exterior of the building. The following table lists the location, current surface paint color, and estimated extent of LBP present at the Site. If there were positive readings ( $\geq 1$  milligram per square centimeter [ $\text{mg}/\text{cm}^2$ ]) on the exterior and paint chips were visible in the soil or paint was chipping, lead impacts to surface soil were evaluated. LBP is considered a COC in relation to the Site.

Location	Current Surface Paint Color	Estimated Extent
<b>Property #9 - Interior</b>		
Wall	Cream	400 sq. ft.
<b>Property #9 – Exterior</b>		
Trim	Green	50 LF
Wall	White	700 sq. ft.

Notes:  
LF = linear feet  
sq. ft. = square feet

**Lead-in-Soils:** One composite sample and duplicate were collected to evaluate potential lead impacts to surface soils. Based on the laboratory results, lead concentrations did not exceed the EPA Regional Screening Level (RSL) for residential soil in either sample. Lead impacts to surface soils are not considered a COC in relation to the Site.

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No PCB-containing fluorescent light fixtures or ballasts were observed in the building. No PCBs were detected in the glazing collected from the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.
- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

### **RECOMMENDATIONS**

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Abatement of friable ACM (i.e., drywall and window glazing) is recommended prior to any demolition activities at the Site. The non-friable ACM identified is classified as Category I or II non-friable; therefore, ACM remediation may not be required prior to demolition as the non-friable ACM may be disposed with construction debris, if acceptable by the landfill. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris. Though non-friable ACM

0003/1711-09

may be able to be disposed of as construction waste, construction worker need to be made aware of the ACM present and appropriate protective measures will need to be implemented.

- START recommends contracting an accredited lead remediation company to assess disposal requirements for LBP at the Site if the building is to be demolished. Dust control methods should be implemented for the debris and all work performed should be done so by an EPA Lead-Safe certified firm. It is recommended that a construction debris disposal facility be contacted to determine if Toxicity Characteristic Leaching Procedure (TCLP) samples will be required.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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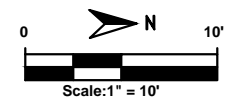
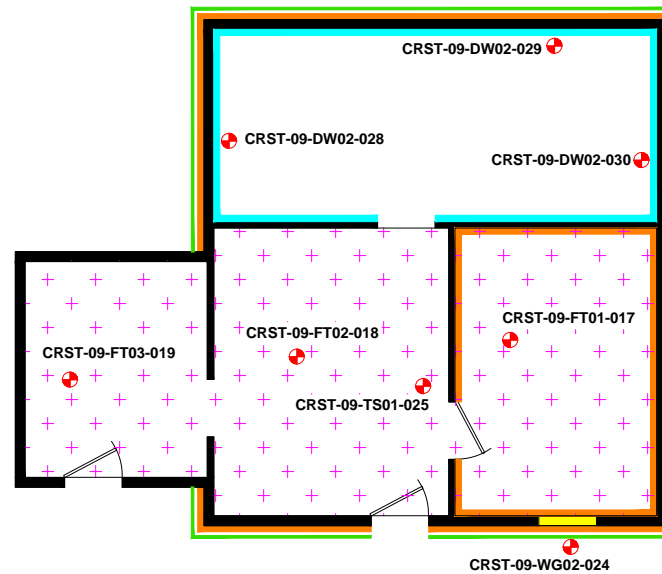
## FIGURES

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## LEGEND:

ACM	ASBESTOS CONTAINING MATERIAL
LBP	LEAD BASE PAINT
	ACM SAMPLE LOCATION (APPROXIMATE)
	ACM FLOOR TILE EXTENT
	ACM DRYWALL COMPOUND
	ACM WINDOW GLAZING
	LBP
	LEAD IN SOIL DRIPLINE SAMPLES
CRST-09-PB-SS01 98.7 mg/kg	
CRST-09-PB-SS01A 101mg/kg	



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM, LBP AND LEAD IN SOIL SAMPLE LOCATION AND EXTENT MAP PROPERTY #9 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18

SCALE:  
1" = 10'

Figure

12

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## TABLES

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**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
<b>Property #9</b>					
CRST-09-FT01-017	Floor Tile	B - Brown tile	Chrysotile 12%	--	150 sq. ft
CRST-09-FT02-018	Floor Tile	B - Green tile	Chrysotile 10%	--	180 sq. ft.
CRST-09-FT03-019	Floor Tile	B - Brown tile	Chrysotile 12%	--	100 sq. ft.
CRST-09-WG02-024	Window Glazing	A - Gray glazing	Chrysotile 8%	--	10 LF
CRST-09-TS01-025	Transite	A - Gray fibrous cementitious material	Chrysotile 14%	--	10 sq. ft.
CRST-09-DW02-028	Drywall	A - White compound w/ blue paint	Chrysotile 8%	--	520 sq. ft.
CRST-09-DW02-029	Drywall	A - Tan compound w/ beige paint	Chrysotile 7%	--	
CRST-09-DW02-030	Drywall	B - Tan joint compound	Chrysotile 7%	--	
		C - Tan compound w/ blue paint	Chrysotile 8%	--	

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #9</b>		
CRST-09-DW01-012	Drywall	A - White tape
		B - White joint compound
		C - White/tan drywall
CRST-09-DW01-013	Drywall	A - White tape
		B - White joint compound
		C - White/tan drywall
CRST-09-DW01-014	Drywall	A - Tan tape
		B - White joint compound
		C - White/gray compound
		D - White/tan drywall
CRST-09-RM01-015	Roofing Material	A - Black/white shingle
CRST-09-RM02-016	Roofing Material	A - White/black shingle
CRST-09-WP01-020	Wall Paper	A - Brown paper
CRST-09-WP01-021	Wall Paper	A - Brown paper
CRST-09-WM01-022	Wall Material	A - Brown felt
		B - Tan multi-colored shingle
CRST-09-WG01-023	Window Glazing	A - White glazing
CRST-09-FM01-026	Flue Material	A - Red ceramic tile
CRST-09-CM01-027	Chimney Material	A - Green/multi-colored paint
		B - Gray/white granular perlitic material

**Table 3**  
**PCB Glazing Sample Results**

Analyte	Cas No.	Area:	Property #9			
		Sample ID:	CRST-09-PCB-001		CRST-09-PCB-001A	
		Date:	5/8/2018		5/8/2018	
		Type:	Glazing		Glazing	
		Units	µg/kg		µg/kg	
PCBs (8082A)						
PCB-1016 (Aroclor 1016)	12674-11-2	--	30.7	U	32.6	U
PCB-1221 (Aroclor 1221)	11104-28-2	--	55.8	U	59.2	U
PCB-1232 (Aroclor 1232)	11141-16-5	--	36.9	U	39.2	U
PCB-1242 (Aroclor 1242)	53469-21-9	--	62	U	65.8	U
PCB-1248 (Aroclor 1248)	12672-29-6	--	45.7	U	48.5	U
PCB-1254 (Aroclor 1254)	11097-69-1	--	91.8	U	97.4	U
PCB-1260 (Aroclor 1260)	11096-82-5	--	25.2	U	26.8	U
PCB-1262 (Aroclor 1262)	37324-23-5	--	90.3	U	95.9	U
PCB-1268 (Aroclor 1268)	11100-14-4	--	32	U	34	U

Notes:

µg/kg

= micrograms per kilogram

U

= Analyte not detected above method detection limit

**Table 4**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/8/2018	9:29:49	CRST	--	--	--	SRM2570	WHITE	0	0
5/8/2018	9:30:13	CRST	--	--	--	SRM2571	YELLOW	3.1	0.3
5/8/2018	9:30:49	CRST	--	--	--	SRM2572	ORANGE	1.75	0.18
5/8/2018	9:31:16	CRST	--	--	--	SRM2573	RED	1.08	0.05
5/8/2018	9:32:10	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	9:32:36	CRST	--	--	--	SRM2575	GREEN	0.35	0.06
5/8/2018	14:59:58	CRST	--	--	--	SRM2571	WHITE	0	0
5/8/2018	15:00:23	CRST	--	--	--	SRM2571	YELLOW	3.99	0.39
5/8/2018	15:00:45	CRST	--	--	--	SRM2572	ORANGE	1.7	0.17
5/8/2018	15:01:15	CRST	--	--	--	SRM2573	RED	0.84	0.07
5/8/2018	15:01:52	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	15:02:21	CRST	--	--	--	SRM2575	GREEN	0.34	0.06
<i>Readings</i>									
5/8/2018	10:27:46	Property 9	Exterior	--	WALL	WOOD	WHITE	0.01	0.02
5/8/2018	10:29:22	Property 9	Exterior	--	TRIM	WOOD	GREEN	0.66	0.08
<b>5/8/2018</b>	<b>10:29:56</b>	<b>Property 9</b>	<b>Exterior</b>	<b>--</b>	<b>WALL</b>	<b>WOOD</b>	<b>WHITE</b>	<b>4.86</b>	<b>0.44</b>
<b>5/8/2018</b>	<b>10:30:46</b>	<b>Property 9</b>	<b>Exterior</b>	<b>--</b>	<b>TRIM</b>	<b>WOOD</b>	<b>GREEN</b>	<b>1.12</b>	<b>0.07</b>
5/8/2018	10:33:10	Property 9	Interior	room A	WALL	DRYWALL	CREAM	0	0
5/8/2018	10:33:55	Property 9	Interior	room A	WALL	DRYWALL	GREEN	0.01	0.03
<b>5/8/2018</b>	<b>10:35:06</b>	<b>Property 9</b>	<b>Interior</b>	<b>room B</b>	<b>WALL</b>	<b>WOOD</b>	<b>CREAM</b>	<b>3.98</b>	<b>0.36</b>
5/8/2018	10:36:15	Property 9	Interior	room C	WALL	WOOD	GREEN	0.09	0.07



**Table 5**  
**Lead-in-Soil Screening Results**

Screening ID	Location	Date	Time	Lead (mg/kg)	(+/-) Error
<b><i>XRF Standard Check STD2711 (Lead = 1162 +/- 31 mg/kg)</i></b>					
CRST-STD2711	N/A	5/8/2018	10:51:04	923	25
CRST-STD2711	N/A	5/8/2018	10:51:54	1180	31
CRST-STD2711	N/A	5/8/2018	10:52:31	1188	31
CRST-STD2711	N/A	5/8/2018	10:53:13	1062	29
CRST-STD2711	N/A	5/8/2018	10:58:28	1085	31
CRST-STD2711	N/A	5/8/2018	10:59:05	1042	30
CRST-STD2711	N/A	5/8/2018	10:59:47	1045	31
CRST-STD2711	N/A	5/8/2018	11:00:33	1102	32
<b><i>XRF Screening of Drip Line Composite Samples</i></b>					
CRST-09-PB-SS01	Building #9	5/8/2018	10:54:35	94	7
CRST-09-PB-SS01	Building #9	5/8/2018	10:55:29	139	8
CRST-09-PB-SS01	Building #9	5/8/2018	10:56:12	180	9

**Table 6**  
**Lead-in-Soil Analytical Results**

Soil Sample ID	Location	Lead Results (mg/kg)	EPA RSL – Residential Soil (mg/kg)	EPA RSL – Industrial Soil (mg/kg)
CRST-09-PB-SS01	Property #9	<b>98.7</b>	400	800
CRST-09-PB-SS01A		<b>101</b>		

Notes:

**Bold** = Analyte detected above detection limit  
 EPA = Environmental Protection Agency  
 mg/kg = milligrams per kilogram  
 RSL = Regional Screening Level

**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #10  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #10 located at 45.005066°N, -101.233668°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 9<sup>th</sup>, 2018. Results of the Phase II ESA have confirmed the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### Asbestos-Containing Material

Of the 16 bulk samples submitted for laboratory analysis, a total of five (5) samples were determined to be “positive” (>1% asbestos) for asbestos. The following table indicates the location and estimated extents of ACM identified in the building at the Site.

ACM	Location	Estimated Volume / Extent
<b>Property #10</b>		
Drywall	Throughout	1,400 sq. ft.
Floor Tile	Rear Entry	40 sq. ft.
Linoleum	Throughout	330 sq. ft.
Stair Tread	Rear Entry	15 sq. ft.

Notes:  
sq. ft. = square feet

### Lead-Based Paint

Based on the XRF results, elevated lead concentrations are present on the walls on the interior of the building. The following table lists the location, current surface paint color, and estimated extent of LBP present at the Site. LBP is considered a COC in relation to the Site.

Location	Current Surface Paint Color	Estimated Extent
<b>Property #10 - Interior</b>		
Wall	White	200 sq. ft.

Notes:  
sq. ft. = square feet

0003/1711-09

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No PCB-containing fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.
- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

### **RECOMMENDATIONS**

Based on the results of the Phase II ESA conducted, START recommends the following:

- START recommends contracting an accredited asbestos remediation company to determine appropriate remedial actions to address the ACM at the Site during the cleanup phase of demolition. Abatement of friable ACM (i.e., drywall and linoleum) is recommended prior to any demolition activities at the Site. The non-friable ACM identified is classified as Category I or II non-friable; therefore, ACM remediation may not be required prior to demolition as the non-friable ACM may be disposed with construction debris, if acceptable by the landfill. The landfill should be contacted prior to redevelopment regarding the disposal requirements of the construction debris. Though non-friable ACM may be able to be disposed of as construction waste, construction worker need to be made aware of the ACM present and appropriate protective measures will need to be implemented.
- START recommends contracting an accredited lead remediation company to assess disposal requirements for LBP at the Site if the building is to be demolished. Dust control methods should be implemented for the debris and all work performed should be done so by an EPA Lead-Safe certified firm. It is recommended that a construction debris disposal facility be contacted to determine if Toxicity Characteristic Leaching Procedure (TCLP) samples will be required.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented. The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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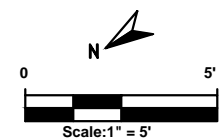
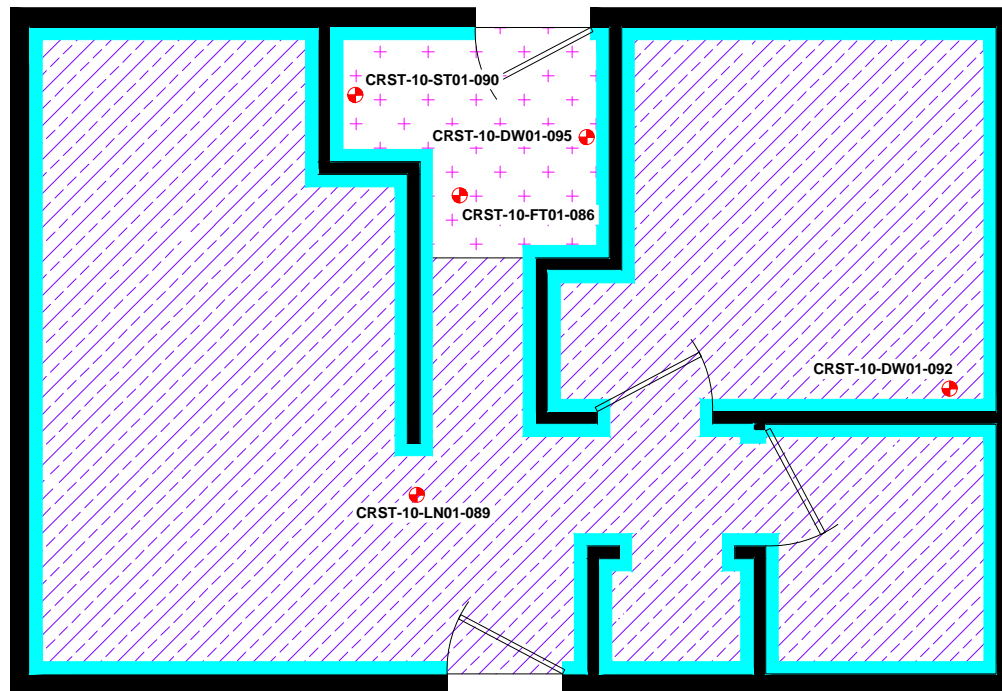
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## FIGURES

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## LEGEND:

- ACM ASBESTOS CONTAINING MATERIAL
- ACM SAMPLE LOCATION (APPROXIMATE)
- ACM FLOOR TILE EXTENT
- ACM LINOLEUM EXTENT
- ACM DRYWALL COMPOUND (APPROXIMATE)



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

### ACM SAMPLE LOCATION AND EXTENT MAP PROPERTY #10 CRST HAZARDOUS BUILDING MATERIALS SURVEY

DATE:  
6/07/18


SCALE:  
1" = 5'

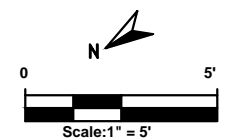
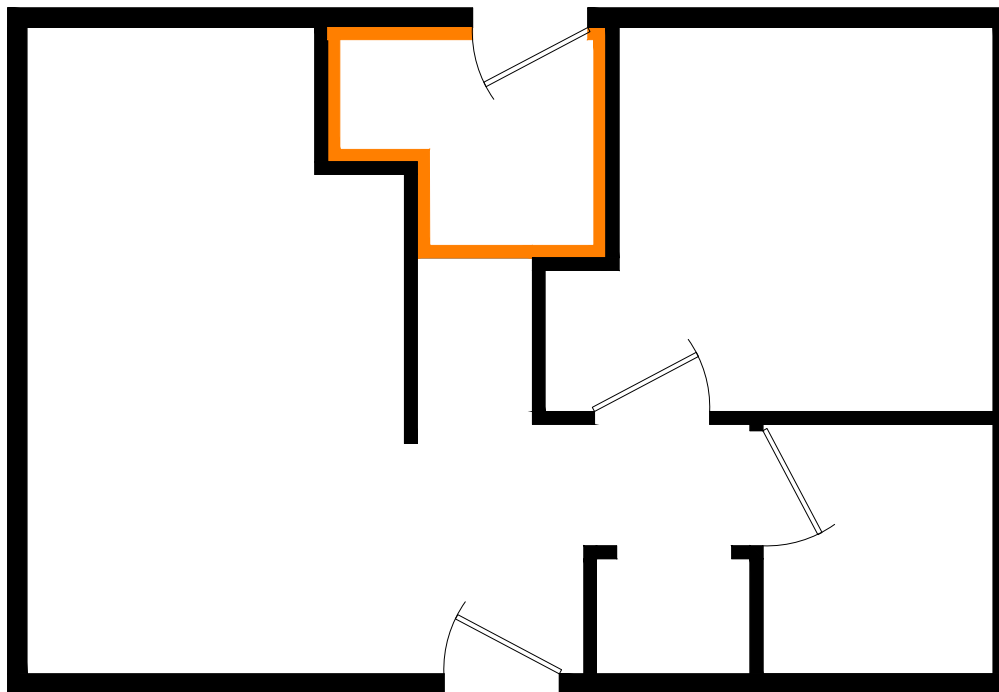
Figure

13



### LEGEND:

LBP LEAD BASED PAINT  
 LEAD BASED PAINT



Contract No.:  
EP-S8-13-01  
TDD: 1711-09  
TO: 0003



Prepared By:  
Weston Solutions, Inc.  
START IV  
Suite 100  
1435 Garrison Street  
Lakewood, CO 80215

**LBP LOCATION AND EXTENT MAP  
PROPERTY #10  
CRST  
HAZARDOUS BUILDING MATERIALS SURVEY**

DATE:  
6/07/18

SCALE:  
1" = 5'

Figure

14

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## TABLES

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**Table 1**  
**ACM Sample Results and Estimated Volumes**

Sample ID	Physical Description	ACM Layer	Asbestos Type and Percent Composition (by PLM Method)	Point Count Method Result	Estimated Volume
<b>Property #10</b>					
CRST-10-FT01-086	Floor Tile	B - Gray tile	Chrysotile 10%	--	40 sq. ft.
CRST-10-LN01-089	Linoleum	B - Beige sheet vinyl w/ off white fibrous backing material	Chrysotile 20%	--	330 sq. ft.
CRST-10-ST01-090	Stair Tread	B - Brown stair tread	Chrysotile 2%	--	15 sq. ft.
CRST-10-DW01-092	Drywall	C - Off white compound	Chrysotile 3%	--	1,400 sq. ft.
		D - Off white joint compound	Chrysotile 3%	--	
CRST-10-DW01-095	Drywall	C - Off white compound	Chrysotile 3%	--	
		D - Off white joint compound	Chrysotile 3%	--	

**Table 2**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #10</b>		
CRST-10-RM01-084	Roofing Material	A - Black/gray shingle
CRST-10-WF01-085	Felt	A - Black felt
CRST-10-FT02-087	Floor Tile	A - Brown/black tile w/ colorless adhesive
CRST-10-FT03-088	Floor Tile	A - Green/black tile w/ colorless adhesive
		B - Off white/gray/black tile w/ colorless adhesive
CRST-10-DW01-091	Drywall	A - Off white tape
		B - Tan/white drywall
		C - White compound w/ white/multi-colored paint
		D - White joint compound
CRST-10-DW01-093	Drywall	A - White compound w/ off white paint
		B - White/tan drywall
CRST-10-DW01-094	Drywall	A - White compound w/ white paint
		B - White/tan drywall w/ white/green paint
CRST-10-CD01-096	Ceiling Drywall	A - Off white compound w/ white paint
		B - White/tan drywall w/ green/white paint
CRST-10-CD01-097	Ceiling Drywall	A - Off white tape
		B - Tan/white drywall w/ blue paint
		C - White micaceous compound w/ white paint
		D - White joint compound
CRST-10-CD01-098	Ceiling Drywall	A - Off white compound w/ green/white paint
		B - White/tan drywall
		C - Off white tape
		D - White micaceous compound w/ white paint
		E - White joint compound
CRST-10-SL01-099	Stove Liner	A - Brown adhesive
		B - Brown/red fibrous resinous material w/ colorless/yellow adhesive

**Table 3**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/9/2018	9:11:27	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	9:11:58	CRST	--	--	--	SRM2571	YELLOW	4.2	0.4
5/9/2018	9:13:41	CRST	--	--	--	SRM2571	YELLOW	3.63	0.35
5/9/2018	9:14:05	CRST	--	--	--	SRM2572	ORANGE	1.7	0.15
5/9/2018	9:14:28	CRST	--	--	--	SRM2573	RED	1.19	0.1
5/9/2018	9:14:57	CRST	--	--	--	SRM2574	GOLD	0.57	0.07
5/9/2018	9:15:21	CRST	--	--	--	SRM2575	GREEN	0.35	0.07
5/9/2018	14:15:58	CRST	--	--	--	SRM2570	WHITE	0	0
5/9/2018	14:16:20	CRST	--	--	--	SRM2571	YELLOW	3.48	0.34
5/9/2018	14:16:42	CRST	--	--	--	SRM2572	ORANGE	1.56	0.14
5/9/2018	14:17:04	CRST	--	--	--	SRM2573	RED	1.12	0.06
5/9/2018	14:17:52	CRST	--	--	--	SRM2574	GOLD	0.71	0.09
5/9/2018	14:18:17	CRST	--	--	--	SRM2575	GREEN	0.27	0.06
<i>Readings</i>									
5/9/2018	11:44:49	Property 10	Exterior	--	WALL	WOOD	WHITE	0.07	0.05
5/9/2018	11:45:20	Property 10	Exterior	--	WALL	WOOD	GRAY	0	0
5/9/2018	11:45:47	Property 10	Exterior	--	TRIM	WOOD	RED	0	0
5/9/2018	11:46:13	Property 10	Exterior	--	TRIM	METAL	RED	0.51	0.1
5/9/2018	11:49:36	Property 10	Interior	room A	WALL	DRYWALL	WHITE	0	0
5/9/2018	11:50:03	Property 10	Interior	room A	CEILING	DRYWALL	WHITE	0	0
5/9/2018	11:50:44	Property 10	Interior	room B	CEILING	DRYWALL	WHITE	0.05	0.07
5/9/2018	11:51:14	Property 10	Interior	room B	WALL	DRYWALL	WHITE	0	0
5/9/2018	11:51:45	Property 10	Interior	room B	DOOR	WOOD	WHITE	0.01	0.02
5/9/2018	11:52:43	Property 10	Interior	room C	DOOR	METAL	WHITE	0	0
5/9/2018	11:53:10	Property 10	Interior	room C	DOOR	WOOD	WHITE	0.04	0.04
5/9/2018	11:53:45	Property 10	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/9/2018	11:54:05	Property 10	Interior	room C	WALL	DRYWALL	WHITE	0	0
5/9/2018	11:54:30	Property 10	Interior	room C	CEILING	DRYWALL	WHITE	0	0
5/9/2018	11:55:21	Property 10	Interior	room C	WALL	DRYWALL	RED	0.25	0.04
5/9/2018	11:55:52	Property 10	Interior	room C	WALL	DRYWALL	YELLOW	0	0
5/9/2018	11:56:08	Property 10	Interior	room C	WALL	DRYWALL	YELLOW	0	0
5/9/2018	11:56:42	Property 10	Interior	room D	WALL	DRYWALL	WHITE	1	0.02
5/9/2018	11:57:05	Property 10	Interior	room D	WALL	DRYWALL	WHITE	1	0.03
5/9/2018	11:57:43	Property 10	Interior	room D	CEILING	DRYWALL	WHITE	0.01	0.02

**PHASE II ENVIRONMENTAL SITE ASSESSMENT SUMMARY  
FOR  
CRST PROPERTY #11  
EAGLE BUTTE, DEWEY COUNTY, SOUTH DAKOTA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
1595 Wynkoop Street  
Denver, Colorado 80202

Prepared by:

**WESTON SOLUTIONS, INC.**  
1435 Garrison Street, Suite 100  
Lakewood, Colorado 80215  
303-729-6100 • Fax 303-729-6101

Date Prepared	June 2018
TDD No.	0003/1711-09
Contract No.	EP-S8-13-01
U.S. EPA Work Assignment Manager	Melisa Devincenzi

## SUMMARY

The United States Environmental Protection Agency (EPA) tasked the Weston Solutions, Inc. (WESTON) Superfund Technical Assessment and Response Team (START) to assist the EPA in conducting a Phase II Environmental Site Assessment (ESA) at the Cheyenne River Sioux Tribe (CRST) Property #11 located at 45.000823°N, -101.232200°W in Eagle Butte, South Dakota (SD) (Site).

## SUMMARY OF RESULTS AND CONCLUSIONS

Phase II ESA fieldwork was conducted on May 8<sup>th</sup>, 2018. Results of the Phase II ESA have not identified the presence of contaminants of concern (COCs) at the Site. The following is a summary of the results and conclusions regarding COCs and associated media identified by START at the Site:

### **Asbestos-Containing Material**

Of the two (2) bulk samples submitted for laboratory analysis, no samples were determined to be “positive” (>1% asbestos) for asbestos. Asbestos is not considered a COC in relation to the Site.

### **Lead-Based Paint**

Based on the XRF results, no elevated lead concentrations were present. LBP is not considered a COC in relation to the Site.

### **PCBs, Mercury, and Mold**

A summary of the observations regarding the visual inspections and sampling conducted are presented below:

- No fluorescent light fixtures or ballasts were observed in the building. PCBs are not considered COCs in relation to the Site.
- No mercury thermostat switches were observed in the building. Mercury is not considered a COC in relation to the Site.
- No mold was observed inside of the building. Mold is not considered a COC in relation to the Site.

## RECOMMENDATIONS

Based on the results of the Phase II ESA conducted, START recommends the following:

- The building can be demolished without additional testing of materials or remediation.

This summary is intended to be a general description of the scope of work, results, conclusions, and recommendations identified based on the Phase II ESA of the Site; however, this section is not intended to be a “stand alone” document or to include the basis of all conclusions presented.

0003/1711-09



The report should be read and used in its entirety. Information included in this section is subject to the scope of services and limitations noted in the original TDD and in this complete report.

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## TABLES

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**Table 1**  
**Non-detect for Asbestos Samples**

Sample ID	Physical Description	Sample Layer(s)
<b>Property #11</b>		
CRST-11-LN01-053	Linoleum	A - Yellow/multi-colored sheet vinyl w/ black fibrous backing material
CRST-11-CT01-054	Ceiling Tile	A - Brown fibrous material w/ white paint

**Table 2**  
**Lead-Based Paint Screening Results**

Date	Time	Property	Location	Room	Component	Substrate	Color	Lead mg/cm <sup>2</sup>	(+/-) Error
<i>XRF - Calibration Checks</i>									
5/8/2018	9:29:49	CRST	--	--	--	SRM2570	WHITE	0	0
5/8/2018	9:30:13	CRST	--	--	--	SRM2571	YELLOW	3.1	0.3
5/8/2018	9:30:49	CRST	--	--	--	SRM2572	ORANGE	1.75	0.18
5/8/2018	9:31:16	CRST	--	--	--	SRM2573	RED	1.08	0.05
5/8/2018	9:32:10	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	9:32:36	CRST	--	--	--	SRM2575	GREEN	0.35	0.06
5/8/2018	14:59:58	CRST	--	--	--	SRM2571	WHITE	0	0
5/8/2018	15:00:23	CRST	--	--	--	SRM2571	YELLOW	3.99	0.39
5/8/2018	15:00:45	CRST	--	--	--	SRM2572	ORANGE	1.7	0.17
5/8/2018	15:01:15	CRST	--	--	--	SRM2573	RED	0.84	0.07
5/8/2018	15:01:52	CRST	--	--	--	SRM2574	GOLD	0.67	0.09
5/8/2018	15:02:21	CRST	--	--	--	SRM2575	GREEN	0.34	0.06
<i>Readings</i>									
5/8/2018	14:27:03	Property 11	Exterior	--	WALL	METAL	WHITE	0	0
5/8/2018	14:27:45	Property 11	Exterior	--	TRIM	METAL	BROWN	0.09	0.03
5/8/2018	14:28:21	Property 11	Exterior	--	TRIM	WOOD	WHITE	0	0
5/8/2018	14:29:45	Property 11	Interior	room A	CEILING	WOOD	WHITE	0	0
5/8/2018	14:30:27	Property 11	Interior	room B	WALL	WOOD	WHITE	0.01	0.03
5/8/2018	14:30:52	Property 11	Interior	room B	CEILING	WOOD	WHITE	0	0
5/8/2018	14:31:24	Property 11	Interior	room B	WALL	WOOD	CREAM	0.02	0.03
5/8/2018	14:32:22	Property 11	Interior	room C	CEILING	WOOD	WHITE	0	0
5/8/2018	14:33:04	Property 11	Interior	room D	WALL	WOOD	LT BLUE	0	0
5/8/2018	14:33:48	Property 11	Interior	room D	WALL	WOOD	WHITE	0	0.02