



October 14, 2015

Mr. Steve Spurlin  
On-Scene Coordinator  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street, SW, 11th Floor  
Atlanta, Georgia 30303

**Subject: Removal Action Report  
Wrigley Charcoal  
Lyles, Hickman County, Tennessee  
EPA Contract Number (No.) EP-S4-14-03  
Technical Direction Document (TDD) No. TT-01-026**

Dear Mr. Spurlin:

The Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting this removal action report summarizing asbestos removal, building demolition, disposal, backfilling, and multimedia sampling activities conducted from July 20 through September 2, 2015 at the Wrigley Charcoal Industrial Plastics Company (Industrial Plastics) in Lyles, Hickman County, Tennessee. This report includes five enclosures and two attachments. Enclosure 1 contains figures illustrating the site location, site layout, air sampling locations, soil assessment locations, soil removal and sampling locations, and soil restoration areas. Enclosure 2 contains tables summarizing the air and soil sampling results. Enclosure 3 contains the photographic log of the site activities. Enclosure 4 contains the Tetra Tech START logbook notes. Enclosure 5 contains the accreditation documentation of the Tetra Tech START, State of Tennessee-certified asbestos inspector and project monitor. Attachment 1 contains the laboratory accreditation certificates. Attachment 2 contains the laboratory results for the air and soil samples collected.

## **EXECUTIVE SUMMARY**

From July 20 through September 2, 2015, U.S. Environmental Protection Agency (EPA) On-Scene Coordinator (OSC) Steve Spurlin, Tetra Tech START, and the Emergency and Rapid Response Services (ERRS) contractor, CMC, Inc. (CMC), conducted site removal, demolition, disposal, restoration, and multimedia sampling activities at the Industrial Plastics site at the Wrigley Charcoal Plant located in Lyles, Hickman County, Tennessee. Tetra Tech START collected perimeter area air samples during removal activities and soil samples from areas previously unassessed and excavated areas in accordance with the site-specific sampling and analysis plan (SAP), dated July 24, 2015. On September 3, 2015, Tetra Tech START demobilized from the site.

## **SITE BACKGROUND**

The former Wrigley Charcoal Plant Superfund site occupies 35 acres, 15 of which are occupied by Industrial Plastics on the southern portion of the property. Industrial Plastics' address is 8526 Plant Road, Hickman County, Lyles, Tennessee. The coordinates for the site (as measured from the approximate center of Industrial Plastics) are latitude 35.902574 degrees north and longitude 87.353025 degrees west (see

Figure 1 in Enclosure 1). The western boundary of the Industrial Plastics site is North Fork Mill Creek with residential neighborhoods in close proximity surrounding the site (see Figure 1 in Enclosure 1). The Wrigley Charcoal Plant Superfund site was placed on the National Priorities List (NPL) in 1989 because of contaminated debris, groundwater, and soil resulting from facility operations dating back to the 1880's. The Wrigley Charcoal Plant site currently includes active remediation and groundwater monitoring of site contaminants, including wood tar chemicals, metals, and creosote, throughout the property. Industrial Plastics is a small-scale recycling facility that conducts metals and plastics recycling, storage of waste products, and other related activities. The Industrial Plastics property consists of a large warehouse, a large processing building, and approximately 5 acres of outside/uncovered storage of processed and unprocessed acrylic, polycarbonate, acrylonitrile butadiene styrene (ABS), polyethylene, polypropylene, styrene, polyvinyl chloride (PVC), and polyethylene terephthalate (PETG) plastics in totes and piles.

On December 18, 2013, there was a fire at the Industrial Plastics site. EPA OSC Spurlin and the EPA Emergency Response and Removal Branch (ERRB) were contacted. EPA mobilized Tetra Tech START and CMC, the EPA ERRS contractor, to provide community air monitoring support and supplement local fire resources. ERRS utilized soil from a local borrow pit to smother the fire, while Tetra Tech START conducted air monitoring activities to protect on-site personnel and the surrounding community. On December 20, 2013, ERRS extinguished the fire and begun placing erosion control barriers (silt fencing and straw wattles) to protect the creek adjacent to the site (see Figures 2 and 3 in Enclosure 1). On December 20, 2013, all EPA personnel and contractors demobilized from the site.

Under the NPL process, the EPA Superfund Remedial and Site Evaluation Branch (SRSEB) anticipated conducting additional sampling and cleanup actions. Since the integrity of the cementitious asbestos roofing tiles (roofing tiles) were weakened by the December 2013 fire, subsequent severe weather, including high wind events, resulted in the collapse of the majority of the roofing tiles. The ground inside the structures and near the exterior of the buildings was littered with whole and partial pieces of the roofing tiles. Due to concerns of asbestos exposure to site workers and the public from damaged and deteriorated roofing materials on site, SRSEB referred the Industrial Plastics site to the EPA Emergency Response, Removal, and Prevention Branch (ERRPB, formerly known as ERRB) for a Removal Site Evaluation (RSE).

On April 20 and 21, 2015, EPA OSC Spurlin and Tetra Tech START conducted a site assessment of the Industrial Plastics site at the Wrigley Charcoal Plant to determine the extent of asbestos contamination at the site for removal activities. Tetra Tech START collected bulk samples of suspected asbestos-containing building materials (ACBM) from each building and soil samples from delineated areas around the site in accordance with the site-specific SAP. Bulk sampling results of the roofing materials and soil sampling results for five of the delineated areas indicated the presence of asbestos.

## **ASBESTOS REMOVAL AND DEMOLITION ACTIVITIES**

From July 20 through September 2, 2015, the EPA and CMC prepared for and conducted asbestos removal, demolition, and backfilling activities at the Industrial Plastics site. Visual inspections of building footprints and excavations associated with demolition and removal activities were conducted by a Tetra Tech START, State of Tennessee-accredited asbestos inspector and project monitor.

### **Asbestos Removal and Building Demolition Activities**

From July 22 through September 2, 2015, CMC conducted gross removal of asbestos-containing materials (ACM) and asbestos-contaminated debris from inside and outside the small office and north building using a skid steer and tracked excavators with bucket, grappler, and shear attachments. Fire-damaged equipment and metal were removed from inside and outside of the buildings using the tracked excavators. Equipment and metal identified for recycling was reduced in size using a tracked excavator with a shear attachment and staged until it could be washed and loaded into rolloff containers for recycling.

On July 22, 2015, CMC demolished the small office building located southeast of the north building using tracked excavators with the shear and bucket attachments. The ACM and asbestos-contaminated debris generated during removal and demolition activities was removed from the ground surface and placed into lined rolloff containers for transport and disposal.

CMC continued removing ACM, asbestos-contaminated debris, and metal for recycling from inside and outside of the north building. Prior to beginning demolition of the north building, CMC removed general debris and surface soil from the area located across the roadway north of the north building (north staging area) to stage bricks generated from demolition activities. General debris and surface soil were removed using a tracked excavator with a bucket attachment and placed into lined rolloff containers for transport off site and disposal. The roadway was washed by a water truck to remove residual asbestos-contaminated soil and debris. The staging area and the roadway were visually inspected by Tetra Tech START prior to demolition. Tetra Tech START observed no remaining ACM or asbestos-contaminated debris in either area.

From July 27 through August 5, 2015, CMC demolished the north building in multiple stages. CMC started demolition at the northern wall using a tracked excavator with a bucket attachment and a water truck to minimize airborne dust generation. After the north wall was demolished, the debris was visually inspected by Tetra Tech START. Debris that was not observed to be mixed with ACM was placed in the north staging area. Debris that was observed to be mixed with ACM was loaded into lined rolloff containers for transport off site and disposal. Each subsequent phase of the north building demolition included the following activities:

- Removal of ACM, asbestos-contaminated debris, and structural steel from the demolition area.
- Removal of ACM, asbestos-contaminated debris, and structural steel from the next demolition area. Also, torch cutting of structural steel supports as needed to assist with demolition activities.
- Scraping and washing residual asbestos-contaminated dust and debris from the footprint of the next demolition area and roadways around the building.
- Visual inspection, conducted by Tetra Tech START, of the washed area prior to demolition.
- Removal and disposal or staging building brick generated during demolition activities based on visual inspection results.

From August 1 through 6, 2015, CMC conducted gross removal of ACM and asbestos-contaminated debris from inside and outside of the south building using the same equipment as identified for the north building. Also, ACM (asbestos-containing roofing material) was removed from portions of the eastern side of the roof using the excavator with the bucket attachment and manual scrapers. Fire-damaged equipment and metal were removed from inside and outside of the building, identified for recycling or disposal, reduced in size, and staged in the same manner as described for the north building. The ACM and asbestos-contaminated debris generated during removal activities was removed from the ground

surface and placed into lined rolloff containers for transport off site and disposal. A water truck was used to minimize the generation of airborne dust during removal and disposal activities.

Prior to demolition of the south building, CMC removed residual asbestos-contaminated debris from the roadways north and east of the south building using water from the water truck. The roadway surfaces were visually inspected by Tetra Tech START and no remaining ACM or asbestos-contaminated debris were observed in the area.

From August 7 through 20, 2015, CMC demolished the south building in multiple stages. CMC started demolition at the eastern wall using a tracked excavator with a bucket attachment and a water truck to minimize the generation of airborne dust. After the eastern wall was demolished, the debris was visually inspected by Tetra Tech START. Debris that was not observed to be mixed with ACM was placed in the depressed area next to the loading dock located on the southeastern side of the south building. Debris observed to be mixed with ACM was loaded into lined rolloff containers for transport off site and disposal. Each subsequent phase of the south building demolition included the following activities:

- Removal of ACM and asbestos-contaminated debris and fire-damaged equipment from the demolition area.
- Removal of ACM and asbestos-contaminated debris from the next demolition area.
- Scraping and washing residual asbestos-contaminated dust and debris from the roadways near the next demolition area.
- Visual inspection, conducted by Tetra Tech START, of the washed area prior to demolition.
- Removal and disposal or staging building brick generated during demolition.

Once the demolition debris was removed from the south building, CMC used torches to cut the structural framework of the building. Cables were placed around the structural steel at the northern end of the building and attached to the tracked excavators. The excavators pulled the cables until the structural framework of the south building collapsed. The tracked excavator with the shear attachment proceeded to dismantle the framework and the tracked excavator with the grappler attachment staged the structural steel for decontamination, loading, and recycling.

After demolition of the south building framework was completed, residual ACM and asbestos-contaminated demolition debris were removed from the building footprint using a skid steer and a tracked excavator with a bucket attachment. The footprint was washed with a water truck and the pooled residual asbestos-contaminated debris was removed and placed in a lined rolloff container for transport off site and disposal.

### **Soil Removal and Backfill Activities**

After the site buildings demolition was completed, CMC removed surface soil from areas identified during removal and previous assessment sampling activities. These removal areas were located on the southern and western sides of the site and included grids 10 through 14 and 26 through 29 (see Figures 4 and 5 in Enclosure 1). CMC removed approximately two to four inches of asbestos-contaminated soil from these areas using a tracked excavator with a bucket attachment. During removal activities in grids 26 and 27, CMC discovered a former building footprint and a trench (see Figure 6 in Enclosure 1). As CMC was excavating soil from the trench, a black, tar-like sludge appeared from the northern end of the south trench. CMC ceased excavation and notified EPA OSC Spurlin. No further excavation was conducted in the trench area. After excavation was completed, a visual inspection of each area was conducted by Tetra

Tech START. Additional removals were conducted in areas where there was visible, remaining ACM on the ground.

Soil was also removed from the access road along the eastern side of the site (grids 3 through 9 and 23 through 25), the north staging area (grids 18 through 20), and small areas located between the building footprints to remove possible contamination from the regulated area. CMC removed approximately one to two inches of soil from these areas using a tracked excavator with a bucket attachment. After excavation was completed, a visual inspection of each area was conducted by Tetra Tech START. Once there was no visible ACM observed on the ground, removals were concluded.

Excavated areas were backfilled by placing approximately six inches of clean soil in the grid locations, as well as between the small office and north and south buildings (see Figure 6 in Enclosure 1). Sixty-nine truckloads of soil were provided by Jenco Construction, Inc., located in Bon Aqua, Tennessee. Other small surface depressions located between the buildings were filled with brick from the north staging area (see Figure 6 in Enclosure 1).

### **Disposal and Recycling Activities**

The ACM and asbestos-contaminated debris generated during removal and demolition activities was removed from the ground surface using a tracked excavator with a grappling or bucket attachment and placed into rolloffs lined with two layers of 0.006-inch (six-mil) plastic sheeting. Prior to transport, the plastic sheeting was folded “burrito style” and sealed with spray glue. Generator labels were placed on top of the plastic sheeting and asbestos warning labels on the sides of the rolloff containers. Approximately 2,860 cubic yards, in a total of 143, 20-cubic yard rolloff containers, were picked up by Waste Management, Inc. and transported to West Camden Sanitary Landfill, located in Camden, Tennessee, a State of Tennessee-approved asbestos landfill.

Structural steel and fire-damaged metal identified for recycling was decontaminated using the water truck. A tracked excavator with a grappler attachment placed the recoverable metal into rolloff containers for recycling. Approximately 336 tons of recyclable metal, in a total of 31 rolloff containers, were picked up by and transported to Shapiro Metals located in Dickson, Tennessee, for recycling.

### **AIR SAMPLING**

From July 20 through August 28, 2015, Tetra Tech START conducted initial background and daily perimeter air sampling at four perimeter site locations (see Figure 3 in Enclosure 1). There was one on-site location and three residential locations. Initial background and daily perimeter air sampling around the Industrial Plastics site was conducted to determine the presence or absence of airborne fibers that might be migrating off site prior to or during removal activities, as well as to implement appropriate safety controls. Sampling was conducted in accordance with the site-specific SAP. EPA established site action levels of 0.01 f/cc for the perimeter air sampling location (L01) associated with the on-site industrial area and 0.001 f/cc for perimeter air sampling locations (L02 through L04) associated with residential areas in accordance with the Office of Solid Waste and Emergency Response (OSWER) Directive #9200.0-68, *Framework for Investigating Asbestos-Contaminated Superfund Sites*. The air samples were analyzed by Material Analytical Services (MAS), located in Suwanee, Georgia, using phase contrast microscopy (PCM) in accordance with the guidelines established in CFR 1926.1101, Safety and Health Regulations for Construction - Asbestos, Appendix A and Appendix B, using the National Institute of Occupational Safety and Health (NIOSH) Method 7400. PCM air sampling results exceeding their respective action levels

were analyzed by transmission electron microscopy (TEM) using the NIOSH Method 7402, to determine whether airborne asbestos fibers were migrating from the work area prior to and during removal activities. On July 20, 2015, Tetra Tech START collected four background perimeter air samples at one on-site location and at three residential locations prior to removal activities. The PCM result for the on-site location was 0.0017 f/cc and the PCM results for the residential locations ranged from 0.0010 f/cc to 0.0017 f/cc (see Table 1 in Enclosure 2). All four samples were identified and analyzed via TEM to be reported in a PCM-equivalent (PCME). The TEM results indicated there were no asbestos fibers detected and the PCME concentrations were less than the limit of detection (see Table 3 in Enclosure 2).

From July 24, 2015 to August 28, 2015, Tetra Tech START collected 110 perimeter area air samples at one on-site and at three residential locations during removal activities. The PCM results for the on-site location ranged from 0.00080 f/cc to 0.0075 f/cc and the PCM results for the residential locations ranged from <0.00060 f/cc to 0.0060 f/cc (see Table 2 in Enclosure 2). A total of 12 PCM samples from the residential locations were identified and analyzed via TEM to be reported in a PCME. The TEM results indicated there were no asbestos fibers detected and the PCME concentrations were less than the limit of detection (see Table 4 in Enclosure 1).

## ASBESTOS SOIL SAMPLING

In accordance with the site-specific SAP, Tetra Tech START collected surface soil samples from two locations not sampled during the previous site assessment, as well as from excavated areas around the site to determine the presence or absence of asbestos and the effectiveness of removal efforts. Sampling areas were delineated based on areas identified during the previous assessment, areas identified during removal activities, and areas travelled by site equipment during removal activities (see Figures 4 and 5 in Enclosure 1). A 5-point composite soil sample was collected from the surface of each sampling area to a depth of 1 inch below ground surface (bgs) and homogenized to form one sample for each grid. A 7-point composite sample was collected from the area comprised of Grids 3 through 9 due to the size of the sampling area.

All soil samples were submitted to MAS and were analyzed for asbestos in accordance with the EPA OSWER Asbestos Committee of the Technical Review Workgroup, *Framework for Investigating Asbestos-Contaminated Superfund Sites*, OSWER Directive #9200.0-68; and California Environmental Protection Agency Air Resources Board (CARB) Method 435, *Determination of Asbestos Content of Serpentine Aggregate*.

On July 21, 2015, Tetra Tech START collected two surface composite soil samples from Grids 10 and 27. The samples were submitted to MAS for analysis via CARB Method 435. Sampling results indicated Grid 10 contained 0.75 percent asbestos and Grid 27 contained 0.75 percent chrysotile asbestos and 0.25 percent amosite asbestos (see Table 5 in Enclosure 2). These grids were identified for soil removal.

From August 20 through 26, 2015, Tetra Tech START collected 15 surface composite soil samples, including one duplicate sample, from excavated areas throughout the site. The samples were submitted to MAS for analysis via CARB Method 435. Sampling results indicated that the percentage of asbestos ranged 0.5 to 5.25 percent chrysotile asbestos (see Table 5 in Enclosure 2). Additional soil removal was not conducted and the excavated areas were capped using backfill soil.

Mr. S. Spurlin  
October 14, 2015  
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If you have any questions or need additional copies of this report, please contact me at (678) 775-3106 or Todd Taylor at (615) 992-5556.

Sincerely,



Paul E. Prys II  
Tetra Tech START IV Senior Scientist



Andrew F. Johnson  
Tetra Tech START IV Program Manager

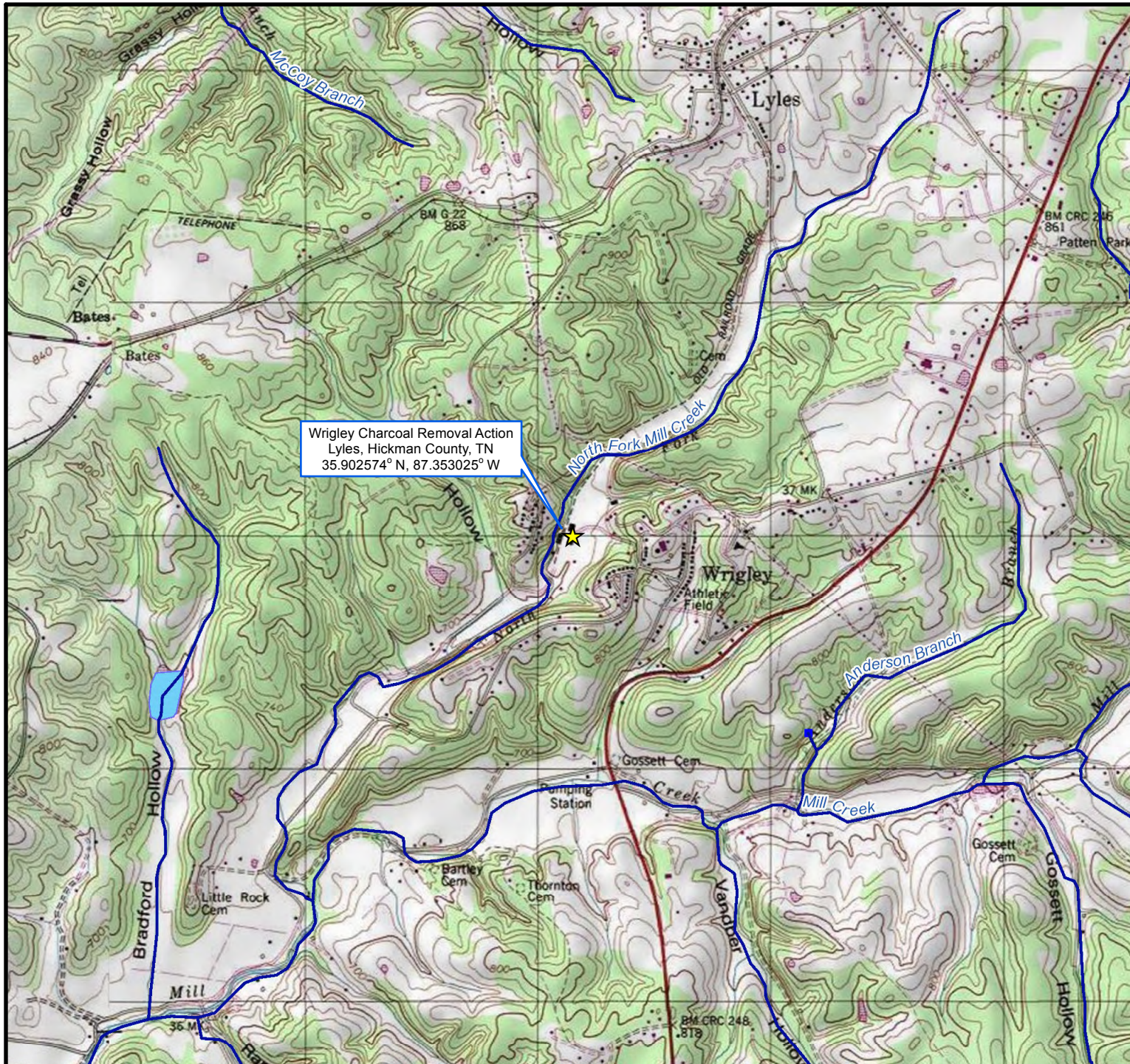
Enclosures (5)  
Attachments (2)

cc: Katrina Jones, EPA Project Officer  
Angel Reed, Tetra Tech START IV Document Control Coordinator

**ENCLOSURE 1**

**FIGURES**

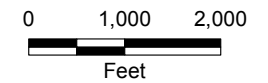
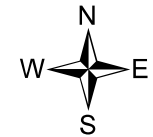
(Six Pages)



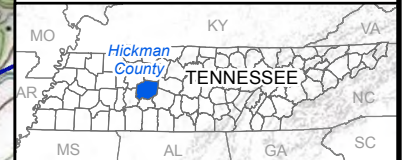
Wrigley Charcoal Removal Action  
 Lyles, Hickman County, TN  
 35.902574° N, 87.353025° W

**Legend**

★ Site Location



Map Sources:  
 USGS 7.5 Minute Topographic Quadrangle Maps:  
 Texas Hollow, TN 1968 & Lyles, TN 1992.  
 National Hydrology Dataset, 2015.



United States  
 Environmental Protection Agency  
 Region 4

**FIGURE 1**

**Site Location**

**TDD Name:** Wrigley Charcoal Removal Action

**TDD No.:** TT-01-026

**City:** Lyles      **County:** Hickman      **State:** Tennessee



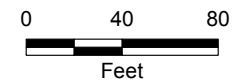
**TETRA TECH**

**Date:**  
 9/14/2015  
**Analyst:**  
 dale.vonbusch

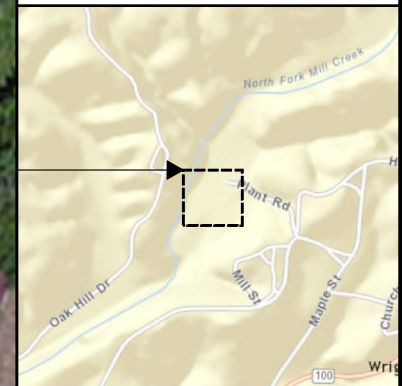


**Legend**

- - - South Trench
- - - Silt Fence
- X X X X Former Structure Outline



Map Source:  
ESRI Aerial Imagery, 2012.



 **United States Environmental Protection Agency Region 4**

**FIGURE 2**

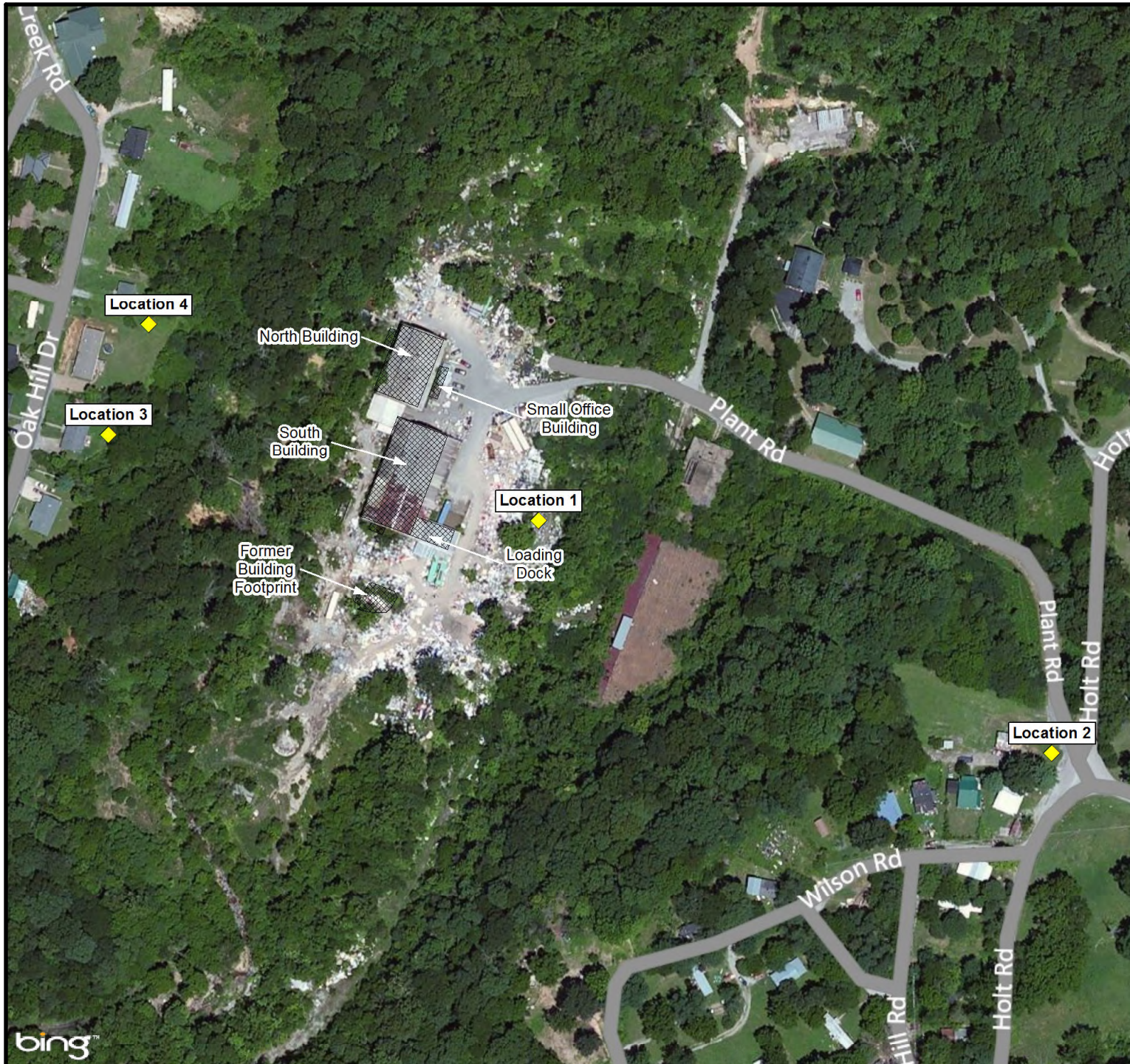
Site Layout

**TDD Name:** Wrigley Charcoal Removal Action



**TDD No.:** TT-01-026

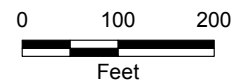
**City:** Lyles      **County:** Hickman      **State:** Tennessee

 **TETRA TECH**      **Date:** 9/18/2015  
**Analyst:** dale.vonbusch



**Legend**

-  Air Sampling Location
-  Former Structure Outline



Map Source:  
Bing Aerial Imagery, 2012.



**United States**  
Environmental Protection Agency  
Region 4

**FIGURE 3**

Air Sampling Locations

**TDD Name:** Wrigley Charcoal Removal Action

**TDD No.:** TT-01-026

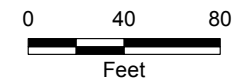
**City:** Lyles      **County:** Hickman      **State:** Tennessee



**Date:** 9/18/2015  
**Analyst:** dale.vonbusch



- Legend**
- Soil Sampling Area, No Asbestos Detected (grids approx. 50' x 25')
  - Additional Soil Sampling Area, No Asbestos Detected (grids approx. 100' x 100')
  - Identified Removal Area



Notes:  
 ## - Grid Number  
 L## - Grid Number  
 042115 - Date Sample Collected  
 AS - Asbestos Soil Sample  
 NAD - No Asbestos Detected  
 WC - Wrigley Charcoal

Map Source:  
 ESRI Aerial Imagery, 2012.



**FIGURE 4**  
 Soil Assessment Areas with Results

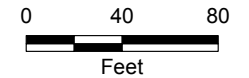
**TDD Name:** Wrigley Charcoal Removal Action  
**TDD No.:** TT-01-026  
**City:** Lyles      **County:** Hickman      **State:** Tennessee

**TETRA TECH**      **Date:** 9/12/2015  
**Analyst:** dale.vonbusch



### Legend

- South Trench
- Silt Fence
- Soil Removal/Post Removal Sampling Areas with Asbestos Detected
- April 2015 Assessment Area (grids approx. 50' x 25')
- April 2015 Assessment Area (grids approx. 100' x 100')
- Site Building Removal Area



Notes:  
 L## - Grid Number  
 082615 - Date Sample Collected  
 AS - Asbestos Soil Sample  
 WC - Wrigley Charcoal

Map Source:  
 ESRI Aerial Imagery, 2012.



**United States  
 Environmental Protection Agency  
 Region 4**

### FIGURE 5

Soil Removal and Post Removal  
 Sampling Areas with Results

**TDD Name:** Wrigley Charcoal  
 Removal Action

**TDD No.:** TT-01-026

**City:** Lyles      **County:** Hickman      **State:** Tennessee

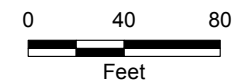


**Date:**  
 9/12/2015  
**Analyst:**  
 dale.vonbusch



**Legend**

- - - - South Trench
- Silt Fence
- Former Structure Outline
- Brick Backfilled Area
- Brick Staging
- Soil Backfill Covered Area
- Soil Assessment Areas



Map Source:  
ESRI Aerial Imagery, 2012.



**United States  
Environmental Protection Agency  
Region 4**

**FIGURE 6**

**Backfill and Staging Areas**

**TDD Name:** Wrigley Charcoal  
Removal Action

**TDD No.:** TT-01-026

**City:** Lyles      **County:** Hickman      **State:** Tennessee



**Date:**  
10/2/2015  
**Analyst:**  
dale.vonbusch

**ENCLOSURE 2**

**AIR AND SOIL SAMPLING RESULTS TABLES**

(Three Pages)

**TABLE 1  
PHASE CONTRAST MICROSCOPY RESULTS  
WRIGLEY CHARCOAL REMOVAL ACTION  
LYLES, HICKMAN COUNTY, TENNESSEE**

Location Id	Sampling Location	Type of Sample	Calculated Concentration (f/cc)
WC-BG-L01	Location 1 - Industrial	Background	0.0017
WC-BG-L02	Location 2 - Residential	Background	0.0016
WC-BG-L03	Location 3 - Residential	Background	0.0010
WC-BG-L04	Location 4 - Residential	Background	0.0017

Notes:

BG: Background air sample  
f/cc: Fibers per cubic centimeter  
Id: Identification

L: Location sampled  
WC: Wrigley Charcoal

**TABLE 2  
PHASE CONTRAST MICROSCOPY RESULTS  
WRIGLEY CHARCOAL REMOVAL ACTION  
LYLES, HICKMAN COUNTY, TENNESSEE**

Location Id	Sampling Location	Type of Sample	Calculated Concentration (f/cc)
WC-AA-L01	Location 1 - Industrial	Area	0.00080 - 0.0075
WC-AA-L02	Location 2 - Residential	Area	0.00066 - 0.0033
WC-AA-L03	Location 3 - Residential	Area	<0.00081 - 0.0060
WC-AA-L04	Location 4 - Residential	Area	<0.00060 - 0.0037

Notes:

AA: Area air sample  
f/cc: Fibers per cubic centimeter  
Id: Identification

L: Location sampled  
WC: Wrigley Charcoal

**TABLE 3  
TRANSMISSION ELECTRON MICROSCOPY RESULTS  
WRIGLEY CHARCOAL REMOVAL ACTION  
LYLES, HICKMAN COUNTY, TENNESSEE**

Location Id	Sampling Location	Type of Sample	PCM Calculated Concentration (f/cc)	TEM Percent Asbestos Fibers (%)	PCM Calculated Concentration (f/cc)
WC-BG-L01	Location 1 - Industrial	Background	0.0017	0	<0.0009
WC-BG-L02	Location 2 - Residential	Background	0.0016	0	<0.0009
WC-BG-L03	Location 3 - Residential	Background	0.0010	0	<0.0009
WC-BG-L04	Location 4 - Residential	Background	0.0017	0	<0.0008

Notes:

BG: Background air sample  
f/cc: Fibers per cubic centimeter  
Id: Identification  
L: Location sampled

PCM: Phase Contrast Microscopy  
%: Percent  
TEM: Transmission Electron Microscopy  
WC: Wrigley Charcoal

**TABLE 4  
TRANSMISSION ELECTRON MICROSCOPY RESULTS  
WRIGLEY CHARCOAL REMOVAL ACTION  
LYLES, HICKMAN COUNTY, TENNESSEE**

Location Id	Sampling Location	Type of Sample	PCM Calculated Concentration (f/cc)	TEM Percent Asbestos Fibers (%)	PCM Calculated Concentration (f/cc)
WC-AA-L02	Location 2 - Residential	Area	0.0016 - 0.0033	0	<0.00081 - <0.0012
WC-AA-L03	Location 3 - Residential	Area	0.0014 - 0.0060	0	<0.00081 - <0.0012
WC-AA-L04	Location 4 - Residential	Area	0.0014 - 0.0037	0	<0.00083 - <0.0012

Notes:

AA: Area air sample  
f/cc: Fibers per cubic centimeter  
Id: Identification  
L: Location sampled

PCM: Phase Contrast Microscopy  
%: Percent  
TEM: Transmission Electron Microscopy  
WC: Wrigley Charcoal

**TABLE 5**  
**SOIL SAMPLING RESULTS**  
**WRIGLEY CHARCOAL REMOVAL ACTION**  
**LYLES, HICKMAN COUNTY, TENNESSEE**

Sample ID	Location	Date Sampled	Type of Sample	Analytical Results
WC-AS-L10-072115	Grid 10	7/21/2015	Composite (5 pt)	0.75% Chrysotile Asbestos
WC-AS-L27-072115	Grid 27	7/21/2015	Composite (5 pt)	0.75% Chrysotile Asbestos, 0.25% Amosite Asbestos
WC-AS-L29-082015	Grid 29	8/20/2015	Composite (5 pt)	3.75% Chrysotile Asbestos
WC-AS-L26A-082415	Grid 26A	8/24/2015	Composite (5 pt)	1.5% Chrysotile Asbestos
WC-AS-L26B-082415	Grid 26B	8/24/2015	Composite (5 pt)	0.75% Chrysotile Asbestos
WC-AS-L26B-082415-DUP	Grid 26B	8/24/2015	Composite (5 pt)	0.5% Chrysotile Asbestos
WC-AS-L03:L09-082415	Grids 3 through 9	8/24/2015	Composite (7 pt)	1% Chrysotile Asbestos
WC-AS-L23:L25-082415	Grids 23 through 25	8/24/2015	Composite (5 pt)	0.5% Chrysotile Asbestos
WC-AS-L27A-082515	Grid 27A	8/25/2015	Composite (5 pt)	5.25% Chrysotile Asbestos
WC-AS-L27B-082515	Grid 27B	8/25/2015	Composite (5 pt)	5.25% Chrysotile Asbestos
WC-AS-L10-082515	Grid 10	8/25/2015	Composite (5 pt)	4.75% Chrysotile Asbestos
WC-AS-L11-082615	Grid 11	8/26/2015	Composite (5 pt)	0.75% Chrysotile Asbestos
WC-AS-L12-082615	Grid 12	8/26/2015	Composite (5 pt)	2.25% Chrysotile Asbestos
WC-AS-L13-082615	Grid 13	8/26/2015	Composite (5 pt)	1% Chrysotile Asbestos
WC-AS-L14-082615	Grid 14	8/26/2015	Composite (5 pt)	2% Chrysotile Asbestos
WC-AS-L28-082615	Grid 28	8/26/2015	Composite (5 pt)	1.25% Chrysotile Asbestos
WC-AS-L18:L20-082615	Grids 18 through 20	8/26/2015	Composite (5 pt)	1.25% Chrysotile Asbestos

Notes:

%: percent  
AS: Asbestos soil sample  
DUP: Duplicate  
ID: Identification

L: Location  
pt: Point  
WC: Wrigley Charcoal

**ENCLOSURE 3**  
**PHOTOGRAPHIC LOG**  
(32 Pages)

**ENCLOSURE 4**

**LOGBOOK**

(66 Pages)

TT-01-026  
Wrigley Charcoal  
Removal Action



*Rite in the Rain*<sup>®</sup>  
ALL-WEATHER  
**JOURNAL**  
№ 390N

Logbook 1

July 20, 2015

to

September 2, 2015

CONTENTS

PAGE	REFERENCE	DATE
	EPA OSC STEVE Spurlin	
	TE START TODD TAYLOR	
	TE START PAUL PRYS	



ALL-WEATHER  
**JOURNAL  
 FIELD BOOK**

Numbered Pages

Name WRIGLEY CHARCOAL REMOVAL ACTION

Address 7828 WRIGLEY ROAD  
LYLES, TN 37098

Phone \_\_\_\_\_

Project TT-01-026

**Rite in the Rain** – A patented, environmentally responsible, all-weather writing paper that sheds water and enables you to write anywhere, in any weather. Using a pencil or all-weather pen, *Rite in the Rain* ensures that your notes survive the rigors of the field, regardless of the conditions.

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**RiteintheRain.com**

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 8-14

July 20, 2015

Prys

weather: High of 95°F, Partly Cloudy, 20%  
chance of rain, winds from west, northwest  
at 5-10 mph.

Scops: Background Air Sampling and Site Prep.

0630 Start Prys on-site. CMC was on site with  
1 supervisor and 3 workers. Discussed  
site activities with CMC Hollingsworth.  
Prepared high volume air sampling  
pumps (Gilan Air Cow 2) to conduct  
background perimeter air sampling.

0725 Departed site office to conduct background  
perimeter air sampling. Each pump was  
field calibrated by using a MESA LABS  
DEFENDER S10 DRYCAL (S/N 141658) (EPA #  
SC8321). Background perimeter air  
samples were collected at the following  
locations:

Location 1: 35.902428, -87.352402

- Southeast corner of Grid 23 (SEE  
Fig 4 in the site-specific SAP).

Location 2: 35.901585, -87.350159

- 7830 Wrigley Road at telephone pole  
at intersection of Wrigley Road and Plant Rd

Location 3: 35.902794, -87.354538

- 6578 Oak Hill Road (backyard at open fence)

Cal E. [Signature]

July 20, 2015

Prys

0725 Location 4: 35.903168, -87.354271

- 6592 Oak Hill Road (southeast area of  
backyard).

0900 Returned to site office. CMC was  
building the DECON unit and doing site  
prep. Began unloading equipment and  
setting up site office. Updated OSC  
Spurlin on site activities. Note: Site  
PREP MIKE RIVERS (931) 996-9034.

1100 Hickman County EMA Jim TANNER and  
Janet Kelley arrived on site and  
discussed site activities with OSC Spurlin

1240 Departed site office to pick up  
background perimeter air samples.  
SEE LOG for stop times and flow rates.

1340 Returned to site. CMC continued building  
DECON and was spreading gravel near the  
site trailers.

1350 Start Prys at LNUUN for 30 min.

1430 Began processing samples. Background air  
samples were collected using Zefon  
International, Inc. Asbestos PCM Air  
Sampling Cassettes, 25mm, 3pc with 0.8µm  
MCE Filter, REF Z0698A, Lot 38360.  
Also, QSI RUTLEDGE arrived on site to

Cal E. [Signature]

July 20, 2015

Prags

1430 DROP OFF AND SET UP THE FIELD COMMUNICATIONS SATELLITE.

1705 START PRAGS OFF-SITE TO DELIVER SAMPLES TO FEDEX FOR SHIPPING.

Pal E B  
20 Jul 2015

July 21, 2015

Prags

WEATHER: High of 95°F, Sunny, 20% chance of rain. Winds from west at 10 to 15 mph

SCOPE: Soil Sampling and Site Prep.

0630 START PRAGS AND CMC ARE ON SITE. DISCUSSED SITE ACTIVITIES AND DECON PROCEDURES.

0700 CMC BEGAN INSTALLING FENCING TO ESTABLISH REGULATED AREA AND LOADING SCRAP METAL FOR RECYCLING. START PRAGS WAS TROUBLESHOOTING COMPUTER ISSUES.

0730 2 ROLL OFFS ARRIVED ON SITE FOR ASBESTOS DEBRIS DISPOSAL. DISCUSSED SITE ACTIVITIES

0800<sup>(P)</sup> WITH OSC SPURLIN.

0800 START PRAGS DEPARTED SITE TO TROUBLESHOOT COMPUTER ISSUES AT HOTEL.

0920 START PRAGS RETURNED TO SITE. CMC CONTINUED LOADING OUT SCRAP METAL. AS OF 7/20/15, CMC HAS DISPOSED OF \$1000S FOR RECYCLING.

1030 UPDATED SITE FILBS. PREPARED SOIL SAMPLING EQUIPMENT AND SUPPLIES.

1245 START PRAGS AT LUNCH FOR 45 MIN.

1330 SHOWED CMC GRIDS 10 AND 26 TO CLEAR FOR ASBESTOS SOIL SAMPLING THAT WAS NOT CONDUCTED DURING THE APRIL 2015 SITE ASSESSMENT.

1440 CMC COMPLETED CLEARING GRIDS 10 AND 26.

Pal E B

July 20, 21, 2015

Prags

1445 START PRAGS COLLECTED A 5-gal composite sample from GRID 10. The soil was homogenized and placed in an 8-oz glass jar with a TEFLON LINED LID. THE SAMPLE WAS COLLECTED USING A STAINLESS STEEL SPOON AND DISPOSABLE ALUMINUM PAN.  
WC-AS-LID-072115

1510 COLLECTED WC-AS-L26-072115 FROM GRID 26 IN SOME MANNER AS DESCRIBED FOR GRID 10.

1535 RETURNED TO SITE OFFICE AND PROCESSED SOIL SAMPLES FOR SHIPPING TO MATERIAL ANALYTICAL SERVICES, INC., located at 3945 LAKEFIELD COURT, SUWANEE, GA 30024. MAS WILL ANALYZE BOTH AIR AND SOIL SAMPLES. AIR SAMPLES WILL BE ANALYZED VIA PCM/TEPA AND SOIL SAMPLES WILL BE ANALYZED VIA CAES 435.

1600 QSI Rutledge could not get the satellite operational. PACKED UP EQUIPMENT AND DEMOBILIZED FROM THE SITE. START PRAGS PACKED UP SAMPLES FOR SHIPPING.

1700 START PRAGS OFF SITE TO DELIVER SAMPLES TO FEDEX FOR SHIPPING.

21 JUL 2015

July 22, 2015

Prags

WEATHER: High of 85°F, SCATTERED THUNDERSTORMS, 60% CHANCE OF RAIN, WINDS LIGHT AND VARIABLE

SCOPE: PERIMETER AIR MONITORING/PROJECT OVERSIGHT

0625 START PRAGS ON SITE. CMC ON SITE AT 0610

FINISHING UP FINAL PREP TO BEGIN REMOVAL IN THE NORTH BUILDING. CALIBRATED CMC

PERSONAL AIR SAMPLING PUMP. SEE CMC FOR START TIME AND FLOW RATE. DISCUSSED

SITE ACTIVITIES WITH OSC SPURLIN.

0715 MODERATE TO HEAVY RAIN ON SITE. PERIMETER AIR SAMPLING POSTPONED UNTIL RAIN PASSES.

0730 CMC BEGAN REMOVAL ACTIVITIES IN NORTH END OF NORTH BUILDING.

0810 WASTE MANAGEMENT (WM), WEST CAMDEN SANITARY LANDFILL, 2410 HIGHWAY 70 WEST, CAMDEN, TN 38320, DROPPED 2 ROLL OFFS. DEPARTED SITE WITH 1 DISPOSAL ROLL OFF.

CMC WRAPPED THE ASBESTOS-CONTAMINATED DEBRIS BUREAU STYLE AND SEALED EACH LAYER WITH SPRAY GLUE. GENERATOR INFO WAS ATTACHED WITH SPRAY GLUE TO THE TOP OF THE PLASTIC SHEETING. 2 LAYERS OF 6-MIL PLASTIC SHEETING WILL BE USED TO LINE THE ROLL OFFS PRIOR TO DISPOSAL.

CMC SUSPENDED WORK ACTIVITIES DUE TO

P.I.F.R.K.

July 22, 2015

Prags

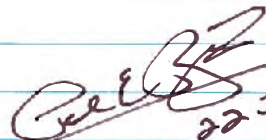
- 0810 lightning in the area. \_\_\_\_\_
- 0910 CMC resumed removal activities. \_\_\_\_\_
- 1000 OSC Spaulin off site. CMC continued loading asbestos-contaminated debris into the lined roll offs. \_\_\_\_\_
- 1030 TDEC John Haffelt arrived on site to check on site activities. Start Prags and CMC Hollingsworth discussed site activities with TDEC Haffelt. \_\_\_\_\_
- 1145 TDEC Haffelt off site and CMC at lunch. Start Prags wrote quick start guide for the day. \_\_\_\_\_
- 1230 CMC continued to remove debris from around the perimeter of the north building. Metal was staged for cleaning and recycling and debris was placed in roll offs. \_\_\_\_\_
- 1250 Start Prags was at lunch for 30 min.
- 1320 Received PCM background perimeter air sampling results from MAS. Results ranged from 0.0010 - 0.0017 f/cc. Discussed results with OSC Spaulin and Start Prags directed MAS to analyze all 4 samples via NIOSH 7402 for report in PCM.
- 1430 CMC demolished the "office" building located at the southeast side of the



July 22, 2015

Prags

- 1430 North building using a track hoe with a grapple attachment. Dust suppression was provided using a water truck with a hose attachment. The office bldg was thoroughly wetted prior to and during demolition. The metal roof structure was washed and placed to the side for recycling. The remaining debris was/will be placed into lined roll offs for disposal. \_\_\_\_\_
- 1500 Wm on site to drop off 2 more roll offs. Picked up 1 for disposal. \_\_\_\_\_
- 1530 Collected personal air sampling pump from CMC. Personal air sample was damaged. CMC was notified. CMC disposal of office building debris. \_\_\_\_\_
- 1600 Updated photolog and posted photos to the EPA website. \_\_\_\_\_
- 1730 Start Prags and CMC off ~~site~~<sup>site</sup> site. \_\_\_\_\_
- Note: Perimeter air samples were not collected due to rain throughout the day.



22 Jun 2015

July 23, 2015

Prays

WEATHER: High of 82°F, 60% chance of rain,  
scattered thunderstorms, winds from  
west at 5-10 mph

scope: Project Oversight.

0630 Start Prays and CMC on site. Calibrated  
CMC personal air sampling pump. See CMC  
for start time and flow rate. Conducted

<sup>(P)</sup> SAFETY REVIEW of site activities. No  
perimeter air monitoring will be conducted  
today due to the forecast of rain throughout  
the day and the wet conditions.

0700 CMC continued removing asbestos-contaminated  
debris from the office building area and  
around the north building. CMC was also  
removing metal from the south end of the  
north building.

0800 Wm on-site to drop <sup>(P)</sup> off a roll off and  
picked up a roll off for disposal.

0930 CMC continued removing debris and metal  
from around the north building, including  
waste drums filled with debris.

1100 Wm returned to site and dropped off a  
roll off and picked up one for disposal.

1150 CMC at lunch.

1215 Start Prays at lunch for 30 min.

Paul E. [Signature]

July 23, 2015

Prays

1245 CMC continued removing metal and debris  
from around the north building. Start  
Prays loaded the site Removal Assessment  
report to the OSC website and supplied a  
copy to TDEC Hoffelt. Edited draft site-  
specific SAP.

1445 Entered regulated area to watch site  
activities. CMC was removing fire damaged  
equipment/materials from inside of the  
north bldg and metal from the south end  
of the north bldg. All metal that was  
recyclable was staged for Decon. CMC  
also began removing metal from the  
west side of the south bldg. Collected  
CMC personal sample. See CMC CMC for  
stop time.

1540 Departed regulated area and post-  
calibrated personal pump. See CMC CMC  
for flow rate. Processed personal air  
sample.

1600 Shagiro Metals (SM), 199 Bordeaux Dr,  
Dickson, TN, arrived on site to drop off  
a recycling roll off and pick up a full  
recycling roll off. Updated <sup>(P)</sup> photo log.

1710 Start Prays off-site to FedEx.

Paul E. [Signature] 23 July 2015

July 24, 2015

Pris

weather: High of 89°F, Partly Sunny, WINDS  
Light and Variable up to 5 mph

scope: Perimeter Air Sampling and Project Oversight

0625 CMC AND START PRYS on-site. CMC conducted

Daily ops and safety meeting. Start PRYS  
and calibrated CMC personal air sampling  
pump. SEE CMC for start time and flow rate.

0705 Departed site office to set out perimeter air  
sampling pumps. Calibration conducted at  
each sampling location. SEE CMC for start times  
and flow rates.

0750 Returned to site office. CMC was cutting and  
loading metal for recycling. Began preparing  
LOC and updating draft site-specific SAP.

0900 Discussed site activities with OSC Spurlin  
and CMC Hollingsworth.

0920 WM on site to drop off 1 roll off and  
pick up 1 roll off for disposal.

0930 Bradley Martin, Editor, Hickman County  
Times arrived on site. Discussed site  
activities with OSC Spurlin and CMC  
Hollingsworth. OSC Spurlin escorted Mr.  
Martin to observe site activities and take  
photos.

1000 Discussed site documentation for use in

Palmer

July 24, 2015

Pris

1000 POLREP including site disposal of asbestos-  
contaminated materials. Prepared spreadsheet  
to track disposal of asbestos-contaminated  
waste.

1130 Departed site office to check on perimeter  
air sampling pumps.

1155 Returned to site office. All pumps  
functioning properly.

1250 Start PRYS AT LUNCH for 30 min.

1320 OSC Spurlin and Start PRYS discussed the  
edits to the draft site-specific SAP. OSC  
Spurlin approved the edits and SAP will  
be submitted as final.

1330 WM arrived on site to drop off 1 roll off  
and pick up 1 roll off for disposal. ~~PR~~  
Incorporated additional edits into site-specific SAP.

1510 Collected CMC personal air sampling pump.  
Post-calibrated pump. SEE CMC for stop  
time and flow rate.

1530 Departed site office to pick up perimeter air  
sampling pumps. Post-calibrated pumps in field  
SEE LOC for stop times and flow rates.

1605 Returned to site office. Processed and packaged  
samples for shipping.

1705 Start PRYS off-site to FERREX.

Palmer 24 JUL 2015

July 25, 2015

Prays

weather: High of 93°F, Sunny, Winds from east up to 3 mph

scope: Perimeter Air Sampling and Project Oversight

0630 CMC AND START Prays on site. CMC conducted daily ops and safety meeting. CMC Smith not on site today. CMC will not collect personal air sample today.

0650 Wm received with 3 trucks and 3 roll offs.

Picked up 3 roll offs for disposal. Start Prays prepared perimeter air sampling pumps.

0655 Departed site office to set out perimeter air sampling pumps. Pumps calibrated in the field. See COC for start times and flow rates.

0730 Returned to the site office. Began preparing COC. CMC was cleaning and loading metal for recycling and picking up and loading debris for disposal.

0810 Entered regulated area. CMC continued loading metal for recycling and was removing debris from the south bldg. CMC removed most of the debris from the west side of the south bldg for disposal/recycling/staging. Conducted a visual inspection of the west side of the north bldg. There was visible roofing material on and

Gal E [Signature]

July 25, 2015

Prays

0810 AROUND THE REMAINING DEBRIS. <sup>PP</sup>

RECOMMENDED TO CMC TO DISPOSE OF THE REMAINING DEBRIS. VISUALLY INSPECTED STAGE <sup>PP</sup> DEBRIS STAGED ON EAST SIDE OF SITE AT BARRIER. THERE WAS VISIBLE ROOFING MATERIAL IN 2 OF THE CONTAINERS AND RECOMMENDED FOR DISPOSAL. THERE APPEARED TO BE NO VISIBLE ACM IN OR ON THE OTHER CONTAINERS.

0900 DEPARTED REGULATED AREA AND RETURNED TO SITE OFFICE. BRIEFED CMC HOLLINGSWORTH ON FINDINGS.

1030 CMC DISPOSAL OF DEBRIS FROM NORTHEAST AREA OUTSIDE OF SOUTH BLDG. INTO ROLL OFF. REMOVING METAL AND FIRE DAMAGED EQUIPMENT FROM SOUTH BLDG FOR CLEANING AND RECYCLING.

1200 CMC AT LUNCH.

1245 CMC CONDUCTED MAINTENANCE ON SITE EQUIPMENT.

1330 START Prays OFF-SITE TO PICK UP PERIMETER AIR SAMPLING PUMPS. POST-CALIBRATED PUMPS IN FIELD. SEE COC FOR STOP TIMES AND FLOW RATES.

CMC RECEIVED A LONG REACH EXCAVATOR ON SITE.

1400 RETURNED TO SITE OFFICE AND PROCESSED SAMPLES.

1430 START Prays AND CMC OFF-SITE.

Gal E [Signature] 25 JUL 2015

July 27, 2015

Prjs

Weather: High 95°F, Partly Cloudy, Winds From the West up to 5 mph.

SCOPE: Perimeter Air monitoring and Project Oversight

0625 CMC AND START Prjs on site. CMC conducted daily ops briefing and have 1 new person on site. START Prjs calibrated one personal air sampling pump. See CMC for start times and flow rates.

0700 Departed site office to set out perimeter air sampling pumps. Pumps were field calibrated. See CMC for start times and flow rates.

0750 Wm arrived on site to deliver 1 roll off and to pick up 1 roll off for disposal. Began preparing COCs.

0830 CMC was scraping the staging area north of the north building with the long reach excavator and scraping inside of the north building and the concrete area outside of the north end of the north bldg with a skid steer. The other 2 personnel were inside of the bldg cleaning the area with shovels.

1000 Entered the regulated area. CMC was completing scraping and disposal from the staging area north of the north bldg.

Cal E. [Signature]

July 27, 2015

Prjs

1000 Conducted a visual inspection of the north 1/3 of the north bldg, the staging area north of the north bldg, and the driveway area between the two areas. There appeared to be no visible ACM in the staging area or the on the driveway. Inside the bldg, minor pieces of the roofing material was on the floor, but will be picked up after the area is washed. START Prjs pointed out and CMC cleaned up debris from the window sills.

1100 START Prjs at lunch for 30 min.

1130 CMC at lunch.

1148 Wm on site to drop off 1 roll off and pick up 1 roll off for disposal. Air Gas on site to drop of gas cylinders for torch cutting. Note: AT&T on site earlier this morning to install a phone line.

1230 CMC began washing driveway and north end of the north bldg.

1245 Entered regulated area. CMC started to take down the north wall and a section of the northeast corner of the north bldg. The extended reach excavator was used to bring the walls down in sections. Demolition was conducted by pulling the brick out

Cal E. [Signature]

July 27, 2015

Phys

1245 AND AWAY FROM THE BLDG AS BEST AS POSSIBLE.

DEBRIS WAS VISUALLY INSPECTED BY START PHYS.

IF THERE APPEARED TO BE NO ACM IN THE DEBRIS, THE DEBRIS WAS STAGED IN THE AREA NORTH OF THE NORTH BLDG. IF THERE APPEARED

TO BE DEBRIS <sup>(PP)</sup> ACM IN THE DEBRIS, THE DEBRIS WAS PUSHED TO THE WEST SIDE OF THE NORTH BLDG FOR DISPOSAL. CMC USED THE WATER

TANK FOR DUST SUPPRESSION. THE EXTENDED REACH EXCAVATOR AND THE SLID STEER

WERE USED TO STAGE DEBRIS. SHAPIRO METALS WAS ON-SITE TO PICK UP AND DROP

OFF A ROLL OFF FOR METALS RECYCLING.

1425 START PHYS DEPARTED THE REGULATED AREA AND RETURNED TO THE SITE OFFICE.

1505 COLLECTED AND POST-CALIBRATED CMC PERSONAL PUMP. SEE CMC FOR STOP TIMES AND FLOW RATES.

1535 CMC DEMOLISHED THE NORTHWEST CORNER OF THE NORTH BLDG. ROOFING MATERIAL MIXED WITH THE DEBRIS AND WILL NEED TO BE DISPOSED OF. CMC STAGED THE MATERIAL ON THE WEST SIDE OF THE BLDG. START PHYS DEPARTS SITE OFFICE TO PICK UP PERIMETER AIR PUMPS. PUMPS WERE POST-CALIBRATED IN THE FIELD. SEE COC FOR STOP TIMES AND FLOW RATES.

————— GLENN —————

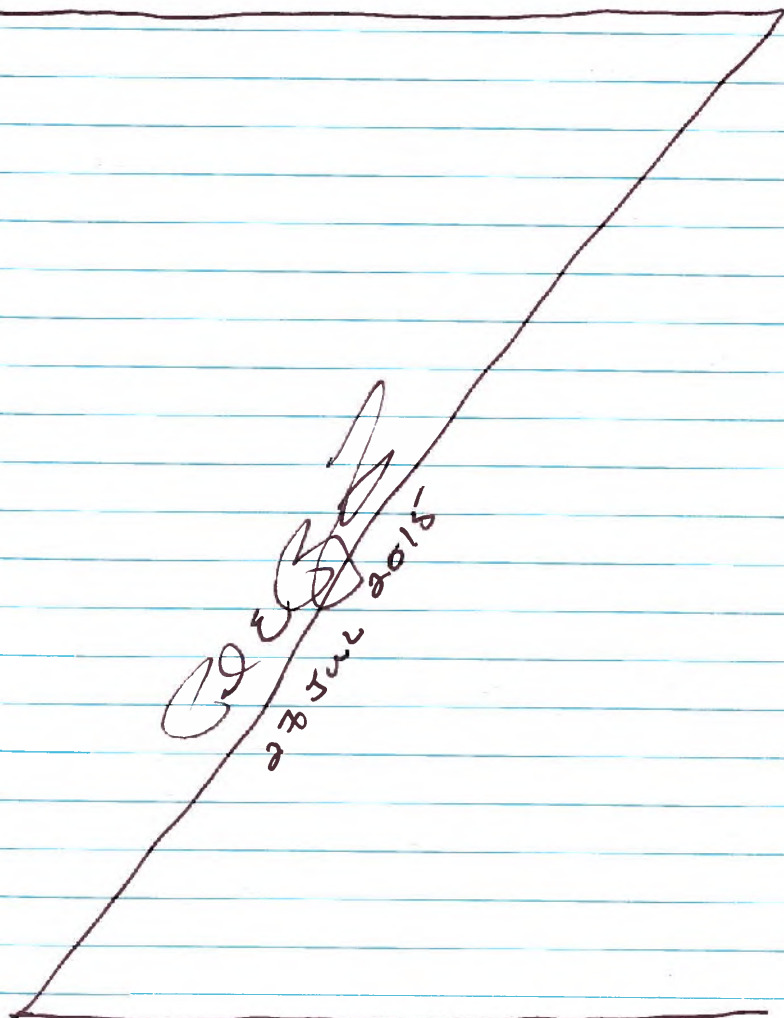
July 27, 2015

Phys

1610 RETURNED TO SITE OFFICE AND PROCESSED SAMPLES.

DOWNLOADED SITE PHOTOS AND UPDATED LOGBOOK.

1700 START PHYS OFF-SITE TO DELIVER SAMPLES TO FEDEX.



July 27, 2015

Phys

weather: High of 92°F, Partly cloudy, 40% chance of rain, winds from west, northwest at 5-10 mph

SCOPE: PERIMETER AIR MONITORING / PROJECT OVERSIGHT

0625 CMC AND START Phys. CMC CONDUCTED DAILY ops AND SAFETY BRIEFING. START Phys CALIBRATED CMC PERSONAL AIR SAMPLING PUMP. SSG COC FOR START TIME AND FLOW RATE.

0650 START Phys DEPARTED SITE OFFICE TO SET OUT PERIMETER AIR SAMPLING PUMPS. PUMP WAS CALIBRATED IN FIELD. SSG COC FOR START TIMES AND FLOW RATES.

0730 RETURNED TO SITE OFFICE. CMC STARTED CUTTING FIRE DAMAGED STRUCTURAL STEEL INSIDE OF THE NORTH BUILDING. BEGAN PREPARING COC.

0825 ENTERED <sup>(P)</sup> REGULATED AREA TO CHECK ON SITE ACTIVITIES. CMC HAD REMOVED SOME STRUCTURAL STEEL FROM THE NORTH END OF THE NORTH BLDG. CMC WAS CUTTING UP THE STEEL AND STAGING IT FOR DECON. CONDUCTED A VISUAL INSPECTION OF THE REMAINING DEBRIS ON THE NORTHEAST SIDE OF THE NORTH BLDG.

DEBRIS WAS ALLOWED TO BE STAGED NORTH OF THE NORTH BLDG SINCE THERE APPEARED TO BE NO ACM MIXED WITH IT.

0905 DEPARTED THE REGULATED AREA. DISCUSSED

Paul E. [Signature]

July 28, 2015

Phys

0905 SITE ACTIVITIES WITH OSC SPURLIN.

0925 WRM ARRIVED ON SITE TO DROP OFF 1 ROLL OFF AND TO PICK UP 1 ROLL OFF FOR DISPOSAL.

1040 ENTERED THE REGULATED AREA TO CONDUCT A VISUAL INSPECTION OF THE NORTHEAST AREA OF THE NORTH BLDG. VISUAL INSPECTION THE DEBRIS FROM THE DEMOLITION OF THE WALLS. THE AREA OUTSIDE OF THE WALLS APPEARED TO NOT HAVE ACM AND COULD BE STAGED IN THE NORTH STAGING AREA. THE DEBRIS WITHIN THE NORTH BLDG WALLS APPEARED TO HAVE ACM AND WAS STAGED FOR DISPOSAL.

1145 DEPARTED REGULATED AREA. UPDATED OSC SPURLIN AND CMC HOLLINGSWORTH ON INSPECTION.

1230 DISCUSSED SITE ACTIVITIES AND PERIMETER SAMPLING RESULTS WITH OSC SPURLIN. DISCUSSED SOIL SAMPLING RESULTS FOR GRIDS 10 AND 27 WITH OSC SPURLIN. RESULTS FOR BOTH GRIDS INDICATE A SMALL PERCENTAGE OF ASBESTOS. START Phys WORKED ON PROCUREMENT OF A SUBCONTRACTOR FOR THE SITE.

1530 DEPARTED SITE OFFICE TO PICK UP PERIMETER AND PERSONAL AIR SAMPLING PUMPS. PERIMETER PUMPS WERE POST-CALIBRATED IN THE FIELD. PERSONAL PUMP POST-CALIBRATED IN THE OFFICE.

Paul E. [Signature]

July 28, 2015

Phys

- 1530 SEE COC FOR STOP TIMES AND FLOW RATES FOR PERIMETER PUMPS. SOB CMC COC FOR STOP TIME AND FLOW RATE. CMC WAS ALSO REMOVING STRUCTURAL STEEL FROM THE NORTH BLDG.
- 1610 RETURNED TO SITE OFFICE. PROCESSED AND PREPARED SAMPLES FOR SHIPPING. UPDATED LOGBOOK AND PHOTOLOG.
- 1700 START Phys OFF-SITE TO DELIVER SAMPLES TO FEDEX.

Paul E. [Signature]  
28 JUN 2015

July 29, 2015

Phys

- WEATHER: Partly Sunny, High of 93°F, 60% chance of rain, winds from northwest at 5-10 mph
- scope: Perimeter Air Monitoring/Project Oversight
- 0630 CMC AND START Phys ON SITE. CMC CONDUCTED DAILY OPS AND SAFETY BRIEFING. CALIBRATED CMC PERSONAL PUMP. SEE CMC COC FOR START TIMES AND FLOW RATES.
- 0650 DEPARTED SITE OFFICE TO SET OUT PERIMETER AIR PUMPS. PUMPS WERE FIELD CALIBRATED. SOB COC FOR START TIMES AND FLOW RATES. WERE ARRIVED ON SITE TO DROP OFF 1 ROLL OFF AND PICK UP 1 ROLL OFF FOR DISPOSAL.
- 0730 START Phys RETURNED TO SITE OFFICE. CMC WAS LOADING LINED ROLL OFF WITH ASBESTOS-CONTAMINATED DEBRIS AND REMOVING STRUCTURAL STEEL. CMC WAS ALSO MOVING FIRE DAMAGED EQUIPMENT IN THE SOUTH BLDG WITH THE SKID STEER. CMC WAS USING THE <sup>(P)</sup>0800 WATER TANK TO WASH THE STRUCTURAL STEEL PRIOR TO STAGING FOR DISPOSAL.
- 0940 DEPARTED SITE OFFICE TO PICK UP PERIMETER AIR SAMPLING PUMPS. PERIMETER AIR SAMPLING SUSPENDED DUE TO INCOMING RAIN.
- 1000 RETURNED TO SITE OFFICE. POST-CALIBRATED PERIMETER PUMPS. CONTINUED UPLOADING

Paul E. [Signature]

NT  
July 29, 2015

Prags

1000 site photos AND project documents to  
EPA website.

1100 Entered the regulated area. CMC was  
cleaning the floor inside the north bldg.  
using the skid steer and extended reach  
excavator, in preparation to bring down  
the northwest wall of the north bldg.

1140 Departed regulated area. Returned to office.

1200 Start Prags at lunch for 30 min.

1230 Departed site office to redeploy perimeter  
air pumps. Pumps calibrated in the field.  
See COC for start times and flow rates.

1305 Returned to site office. Updated COC.

1340 Wm on site to drop off 1 roll off and picking  
1 roll off for disposal. CMC was still cleaning  
inside the north end of the north bldg.

Note: Wm arrived on site approx. 1030  
to drop off 1 roll off and pick up one roll off  
roll off for disposal.

1405 Sharp Metals arrived on site to pick up  
1 roll off for recycling and drop off 1 roll off.

1425 Entered regulated area. CMC was washing  
floor inside of north end of north bldg. After  
visual inspection, there appeared to be no  
ACM on the floor. CMC demolished the

Cal E R Z

25

July 29, 2015

Prags

1425 northwest wall by pushing it into the north  
bldg. Water truck provided dust suppression.  
After visual inspection, there appeared  
to be no ACM in the debris and it was  
approved for placement in the north  
staging area.

1530 Departed regulated area. Picked up and  
post-calibrated CMC personal pump. See  
CMC COC for stop time and flow rate.

1545 Departed site office to pick up perimeter  
air pumps. Post-calibrated pumps in the  
field. See COC for stop times and flow rates.

1610 Returned to site office. Processed and  
packaged samples for shipping. Updated  
logbook and OSC Spinel on site activities.  
CMC was loading a roll off with asbestos-  
contaminated debris, loading a roll off  
with metal for recycling, and placing  
demolition debris in north staging area.

1705 Departed site office to deliver samples to  
FedEx.

Cal E R Z  
29 JUN 2015

July 30, 2015

Prays

weather: High of 88°F, Mostly Sunny, Winds From North, Northeast at 10-15 mph

scope: Perimeter Air Sampling / Project Oversight

0630 CMC AND START Prays on site. CMC WAS conducting daily ops and safety briefing. Calibrated CMC personal sampling pump. SEE CMC CMC for start times and flow rates.

0650 Sharpes metals arrived on site to drop off 1 roll of and to pick up 1 roll off for recycling. Wm on site to drop off 2 roll offs and pick up 2 roll offs for disposal.

0705 Departed site office to set out perimeter air pumps. SEE CMC for start times and flow rates.

0710 Returned to site office. CMC WAS loading the roll offs for disposal, and preparing to torch cut the support beams to demo the south end of the north building, and general site clean up. START Prays began preparing CMCs and updating site files.

0820 Wm on site to drop off 1 roll off and pick up 1 roll off for disposal.

1045 Wm on site to drop off 2 roll offs and pick up 2 roll offs for disposal.

1105 Entered regulated area. CMC completed

Pal [Signature]

July 30, 2015

Prays

1105 torch cutting of structural beams. CMC

rigged cables to the structural beams and attached them to the excavators with the shear and grapple attachments. CMC used the excavators to pull down the bulk of the south end of the north bldg. Currently, the southeast section of the north bldg remains standing. The water tank provided dust suppression during demolition.

1150 Wm on site to drop off 1 roll off and to pick up 1 roll off for disposal.

1200 CMC AND START Prays departed the regulated area. CMC at lunch.

1245 CMC continued loading lined roll offs with asbestos contaminated debris for disposal and cutting structural steel from demolition. START Prays at lunch for 30 min.

1320 Wm on site with 1 roll off to deliver and pick up 1 roll off for disposal. Updated PCM results sheets. Updated photolog.

1450 Wm on site to drop off 1 roll off and pick up 1 roll off for disposal. CMC continued loading roll offs with asbestos-contaminated debris from the demolition of south end of the north bldg. and cutting structural steel for

Pal [Signature]

July 30, 2015

1450 cleaning, staging, and recycling. Updated photos on EPA website. Prjs

1545 Departed site office to pick up perimeter and CMC personal air pumps. Perimeter pumps were post-calibrated in the field. CMC personal pump post-calibrated in the office. SEE CMC AND CMC CMC FOR STOP TIMES AND FLOW RATES.

1620 Returned to site office. Processed and packaged samples for delivery to FEDEX. CMC continued cutting and staging structural steel.

1700 START PRJS OFF-SITE TO FEDEX TO DELIVER SAMPLES FOR SHIPPING.

*[Signature]*  
30 July 2015

July 31, 2015

weather: High of 90°F, Sunny, winds from north, northeast at 10-15 mph Prjs

SCOPE: Perimeter air sampling (Project Oversight)  
0620 START PRJS AND CMC ON SITE. CMC CONDUCTED daily ops and safety meeting. Calibrated CMC AND TB PERSONAL PUMPS. SEE CMC AND CMC CMC FOR START TIMES AND FLOW RATES.

0650 DEPARTED SITE OFFICE TO SET OUT PERIMETER AIR PUMPS. PUMPS WERE CALIBRATED IN THE FIELD. SEE CMC FOR START TIMES AND FLOW RATES.

0730 RETURNED TO SITE OFFICE. WM WAS ON SITE TO ~~drag off~~ 1 roll off AND TO PICK UP 1 roll off FOR DISPOSAL. CMC CONTINUED CUTTING AND STAGING METAL FOR RECYCLING AND LOADING ASBESTOS-CONTAMINATED DEBRIS INTO ROLL OFF'S FOR DISPOSAL.

0830 CMC BEGAN DEMOLISHING SECTIONS OF THE SOUTHWEST ROOM OF THE NORTH BUILDING AND USING THE WATER TRUCK FOR DUST SUPPRESSION. CMC ALSO STARTED REMOVING BRICK FROM THE ALLEY BETWEEN THE NORTH AND SOUTH BLDGS.

1015 START PRJS ENTERED THE REGULATED MSA. CMC WAS IN THE PROCESS OF DEMOLISHING THE SOUTHWEST ROOM OF THE NORTH BLDG, SEPARATING METAL FOR WASHING AND RECYCLING, AND STOCKPILING

*[Signature]*

July 31, 2015

Pays

1015 Asbestos-contaminated debris for disposal.

1030 Wm arrived on site to drop off 1 roll off and pick up 1 roll off.

1110 Start Pays departed regulated area and returned to site office, review 7/28 and 7/29 perimeter air sampling results. See site results sheets. Results for 7/28 ranged from 0.0010 - 0.0020 f/cc and 7/29 ranged from 0.0028 - 0.0043 f/cc.

1135 Shapiro Metals arrived on site to pick up 1 roll off for recycling and drop 1 off.

1200 CMC broke for lunch.

1215 Start Pays at lunch for 30 min.

1300 CMC continued cleaning up demolition debris, demolishing sections of the southeast room, and removing and staging metal for recycling from the north bldg.

1440 Entered regulated area. CMC continued cleaning up demolition debris and removing and staging metal for recycling. Wm arrived on site to drop off 1 roll off and to pick up 1 roll off for disposal.

1505 Departed regulated area and picked up CMC and TE personal sampling pumps. Returned to site office and

Paul [Signature]

July 31, 2015

Pays

1505 post-calibrated personal pumps. See CMC and CMC CMC for stop times and flow rates.

1545 Departed site office to pick up perimeter pumps. Pumps were post-calibrated in the field. See CMC for stop times and flow rates.

1630 Returned to site office. Processed and packaged samples for shipping. Downloaded site photos. Updated OSC Spurlin on site activities.

1705 Start Pays off-site to FedEx to drop off samples for delivery.

Paul [Signature]  
31 July 2015

August 1, 2015

Prys

weather: High of 91°F, Sunny, Wind from  
NORTH AT 5-10 mph

scope: Perimeter Air Sampling / Project Oversight  
0625 START PRYS AND CMC ON SITE. CMC CONDUCTED

DAILY OPS AND SAFETY MEETINGS.

0650 START PRYS DEPARTED SITE OFFICE TO SET OUT  
PERIMETER AIR SAMPLING PUMPS. PUMPS  
WERE CALIBRATED IN THE FIELD. SEE LOC <sup>AND</sup>  
FOR START TIMES AND FLOW RATES.

0725 RETURNED TO SITE OFFICE. CMC WAS LOADING  
ROLL OFFS WITH ASBESTOS-CONTAMINATED  
DEBRIS AND SEPARATING METAL FROM THE  
NORTH BUILDING. CMC WAS ALSO REMOVING  
AND STAGING METAL FROM THE SOUTH BLDG.

1000 ENTERED REGULATED AREA. CMC WAS SEPARATING  
AND STAGING METAL AND REMOVING DEMOLITION  
DEBRIS FROM THE NORTH BLDG. CMC SCRAPED  
DEBRIS FROM THE ALLEY BETWEEN THE NORTH AND  
SOUTH BLDGS AND WASHED THE AREA WITH THE  
WATER TRUCK. CMC ALSO BEGAN CLEANING  
ASBESTOS-CONTAMINATED SNEFORE DEBRIS FROM  
THE SOUTH BLDG FLOOR FOR DISPOSAL.

1115 DEPARTED REGULATED AREA. RETURNED TO  
SITE OFFICE.

1125 START PRYS AT LUNCH FOR 30 min.

Cal ERK

August 1, 2015

Prys

1135 CMC AT LUNCH

1200 Download photos AND updated photo log.  
Updated spreadsheets AND weekly summary.  
Updated photos on ERA website.

1325 DEPARTED SITE OFFICE TO PICK UP PERIMETER  
PUMPS. PUMPS WERE POST-CALIBRATED IN  
THE FIELD. SEE LOC FOR STOP TIMES AND  
FLOW RATES. CMC WAS REMOVING ASBESTOS-  
CONTAMINATED DEBRIS FROM NORTH BLDG AND  
STAGING FOR DISPOSAL, AND PREPARING FOR  
DEMOLITION OF REMAINING SOUTHEAST WALLS.

1400 RETURNED TO SITE OFFICE AND PROCESSED  
SAMPLES.

1430 CMC AND START PRYS OFF-SITE.

Cal ERK  
1 Aug 2015

August 3, 2015

Phys, Espy

WEATHER: High of 94°F, Sunny, Winds From  
West 5-10 mph

scope: PERIMETER AIR Sampling/Project Oversight  
0630 CMC, START PRYS, AND START DAVID ESPY ON  
SITE. CMC CONDUCTED DAILY OPS BRIEFING.  
START CALIBRATED CMC PERSONAL PUMP. SEE  
CMC FOR START TIME AND FLOW RATES. START  
PRYS BEGAN SITE ORIENTATION WITH START ESPY.  
0655 SHARPIED METALS ON SITE TO PICK UP 1  
ROLL OFF FOR RECYCLING AND DROP OFF 1  
ROLL OFF.

0655 W/M ON SITE TO DELIVER 2 ROLL OFFS AND  
PICK UP 2 ROLL OFFS FOR DISPOSAL.

0705 START DEPARTED SITE OFFICE TO SET OUT  
PERIMETER AIR PUMPS. PUMPS WERE  
CALIBRATED IN FIELD. SEE CMC FOR  
START TIMES AND FLOW RATES.

0750 RETURNED TO SITE OFFICE. CMC WAS  
LOADING ASBESTOS-CONTAMINATED DEBRIS  
INTO LINED ROLL OFFS FOR DISPOSAL. W/M  
ARRIVED ON-SITE TO DELIVER 1 ROLL OFF AND  
PICK UP 1 ROLL OFF FOR DISPOSAL. CONTINUED  
WITH SITE ORIENTATION.

1000 START ENTERED REGULATED AREA. CMC  
CLEANED THE SOUTHEAST AREA INSIDE THE

Cal E

August 3, 2015

Phys, Espy

1000 NORTH BLDG IN PREPARATION OF DEMOLISHING  
THE SOUTHEAST WALL. A VISUAL INSPECTION OF  
THE AREA INDICATED SOME MINOR FRAGMENTS  
OF ACM. CMC REMOVED THE FRAGMENTS AND  
DEMOLISHED THE SOUTHEAST WALL FOR  
PLACEMENT IN THE NORTH STAGING AREA.

1050 W/M ON SITE TO DROP OFF 2 ROLL OFFS AND  
PICK UP 2 ROLL OFFS FOR DISPOSAL.

1115 W/M ON SITE TO DROP OFF 1 ROLL OFF AND PICK  
UP 1 ROLL OFF FOR DISPOSAL. START DEPARTED  
REGULATED AREA. UPDATED OSC SPURLIN ON  
SITE ACTIVITIES. RECEIVED PCM RESULTS FOR  
7/30. THE ON-SITE SAMPLE WAS 0.0075 F/CC.

THE RESIDENTIAL SAMPLES RANGED FROM  
0.0033 F/CC TO 0.0060 F/CC. THE RESIDENTIAL  
SAMPLES WILL BE ANALYZED VIA TEM. RECEIVED  
TEM RESULTS FOR 7/20 AND 7/24. TEM  
RESULTS INDICATED NO ASBESTOS DETECTED.

1215 START PRYS AND ESPY AT LUNCH FOR 45 MIN.

1320 UPDATED OSC SPURLIN AND OSC TIM NEAL ON  
SITE ACTIVITIES.

~~1350 W/M ON SITE TO DROP OFF 2 ROLL OFFS FOR PICK UP  
AND DISPOSAL~~

1350 W/M ON SITE TO DROP 2 ROLL OFFS AND PICK UP  
2 ROLL OFFS FOR DISPOSAL.

Cal E

00  
August 3, 2015

Prys, Espy

1540 START DEPARTED SITE OFFICE to pick up perimeter pumps. Pumps were post-calibrated in the field. SEE COC for stop times and flow rates.

1630 Picked up personal pump from CMC. Post-calibrated pumps. SEE CMC COC for stop time and flow rate. PROCESSED AND packaged samples for shipping.

1705 START off site to FEDEX to ship samples.

Call Espy  
3 AM

August 4, 2015

Prys, Espy

weather: High of 95°. Partly cloudy w/ a 10% chance of rain.

Scope: Perimeter air monitoring / Project ~~oversite~~ <sup>DME</sup> monitoring

0630 - START Espy arrives on site, Start Prys already on site.

CMC conducted daily OPs meeting, START calibrated CMC personal pump. See COC for start time & flow rate.

0700 - START Espy and Prys leave trailer to set out perimeter air pumps. Pumps calibrated in the field. See COC for start times and flow rate.

0745 - Returned to site office, Sharpino metals on site to drop off 1 roll off and pick up 1 roll off for recycling. WM on site with 2 trucks for 2 pick ups and 2 drop offs at roll off.

0850 - Todd Taylor with START team arrives on site for meeting with START Prys and Espy.

0930 - START Taylor leaves site.

1030 - START Prys & Espy entered regulated area. We observed the Southeast corner of the North building. CMC plans to knock down the remaining walls of the North building later today.

1120 - START Prys and Espy exit regulated area, WM drops off 2 roll offs and picks up 2 roll offs for disposal.

1200 - START Prys and Espy go off site to lunch for 50 minutes.

105 <sup>05</sup> 1305 - START Prys and Espy enter - David G.

August 4, 2015

Prys, Espy

1305- regulated area, CMC is knocking down the remaining building parts of the North building.

1350- CMC has all of the North building knocked down.

1400- START Prys and Espy exit the regulated area.

1445- WM drops off 1 roll off and picks up 1 roll off for disposal. START Espy downloaded and labeled photos taken today.

1540- Picked up personal pump from CMC. See CMC COC for post stop time and flow rate, began collecting perimeter pumps. Pumps were post calibrated in the field, See COC for stop times and flow rates. Processed and packaged samples for shipping.

~~16:05~~ Start off site for FedEx to ship samples.

17:25

DE

DE

David Espy

August 5, 2015

Espy

Weather: High of 96°, Partly cloudy with a 50% chance of thunderstorms starting around noon. Wind ESE 4mph.

Scope: Perimeter air monitoring and Project Monitoring.

0630- START Espy on site, CMC has already conducted daily ops briefing. WM is on site dropping off 1 roll off and picking up 1 roll off for disposal. Calibrated CMC personal pump. See CMC COC for start time and flow rate.

DE

0650- Departed site office to set out perimeter air pumps. Pumps were calibrated in the field, See COC for start times and flow rate.

0730- Returned to site office, WM was on site to drop off 1 roll off and to pick up 1 roll off for disposal. CMC does repair to an attachment on one of the excavators, CMC is also scooping brick from the dirty pile and loading it into the WM roll offs.

0845- START Espy checked on the sampling pump at location 1 and the pump was not running. Espy changed out the batteries to G1 pump and it is working fine. Espy replaced the cassette and began a new sample, See COC for sample time and flow rate.

DE

0905- START Espy departs site office to check on the perimeter pumps, All pumps are running properly.

0930- START Espy returns to site office.

David Espy

August 5, 2015

Espy

1000 - WM drops off 1 roll off and picks up 1 roll off for disposal. (DE)

1030 - WM drops off 1 roll off and picks up 1 roll off for disposal. (DE)

1050 - CMC continues repair on one of the excavators. CMC has been lining the WM roll offs with poly. (DE)

1100 - START Espy leaves job site for lunch.

1120 - START Espy returns from lunch.

12:30 - START Espy departs site office to collect the perimeter pumps. It looks like it may rain soon.

1320 - START Espy returns to site office.

1350 - Diesel truck arrives on site to fill up the diesel tank for CMC.

1415 - START Espy enters the regulated area, CMC is cleaning out debris in the South building and is putting debris in the ACM stack pile, CMC begins moving brick and debris from the west barrier (west of north building foundation) to the ACM stack pile, WM drops off 1 roll off and picks up 1 roll off for disposal. (DE)

1545 - START exits regulated area, WM drops off 1 roll off and picks up 1 roll off for disposal.

1500 - START collects final high volume sample from the day. See COC for stop time and flow rate.

David Espy

August 5, 2015

Espy

1515 - START inputs data, process and packages perimeter air samples.

1550 - CMC continues removing debris from South building and moving brick and debris from west barrier area to the stack pile.

1650 - START collects personal pump from CMC worker, Processes and packages CMC air samples.

START does final paperwork for the day.

1730 - START off site for FedEx to ship samples.

David Espy  
05 August 2015

August 6, 2015

Weather: High of 79°, rain and thunderstorms all day.  
W winds up to 12 mph

Scope: Project monitoring (will not collect air samples today due to weather conditions).

0630- START Espy arrives on site, CMC conducts daily ops meeting, WM onsite to drop off and pick up 1 roll off for disposal.

0650- Sharpiro drops off 1 roll off and picks up 1 roll off for recycling.

0720- CMC is using an excavator with a grappler attachment to move metal from the stock pile to the recycling roll off.

0750- WM drops off 1 roll off and picks up 1 roll off for disposal, CMC continues work in the regulated area. They are using an excavator with a grappler attachment to put metal in recycling roll off, CMC is using an excavator with a shear attachment to cut and move metal, Using the long reach excavator to move debris from the west barrier to the ACM stock pile, CMC uses the smaller skid steer to remove debris and materials out of the south building. CMC is also lining WM dumpsters with 6 mil poly.

0920- CMC stops work in regulated area because of lightening.

David Espy

August 6, 2015

0950- Water truck arrives on site. WM drops off 1 roll off and picks up 1 roll off for disposal.

1005- CMC returns to regulated area to continue with work, The lightening has stopped, CMC is separating metal to be recycled, lining WM roll offs with 6 mil poly and moving ACM debris from the ACM stock pile to WM roll offs.

1100- START Espy enters regulated area, CMC is taking ACM shingles off of the south building roof using the long reach excavator, WM drops off 1 roll off and picks up one roll off for disposal.

1130- START Espy exits the regulated area.

11:45- START Espy takes lunch.

12:45- Return from lunch, CMC is actively removing ACM shingles off of the east side of the south building roof.

1315- WM drops off 1 roll off and pick up 1 roll off for disposal.

1400- Discuss how to remove ACM shingles off of the SE side of the south building which are hard to get to, with CMC and Tim Neal.

1415- ~~Enter the~~ START Espy enters the regulated area, CMC is scraping smaller ACM shingles off of the roof with manual scrapers, Also, lining pull offs and loading debris into the ACM stock pile.

David Espy

August 6, 2015

Espy

- 1505 - START Espy exits the regulated area, WM drops off 1 pull off and picks up 1 pull off for disposal.
- 1520 - Shapiro metals drops off 1 pull off and picks up 1 pull off for recycling.
- 1630 - CMC continues removal of ACM roof shingles from the E side of the south building, CMC is also loading debris from the west side of the north building foundation into WM pull offs.
- START Espy finalizes paperwork for the day.
- 1700 - START Espy departs job site.

David Espy  
06 August 2015

NE

August 7, 2015

Espy

- Weather: High of 84°, Cloudy in the AM and mostly sunny in the afternoon winds NNW 4mph.
- Scope: Perimeter air monitoring and project monitoring.
- 0630 - START Espy arrives on site, CMC conducts daily ops meeting.
- 0710 - START Espy sets up perimeter air sampling pumps and sets CMC worker with a personal pump, WM drops off 2 roll offs and picks up 2 roll offs for disposal.
- 0840 - CMC is washing down an area with water from the water truck to use as a staging area for clean brick, The area that they are cleaning is outside the south building on the northeast corner of the building.
- 0900 - WM drops off 1 roll off and picks up 1 roll off for disposal.
- 1015 - Espy enters the regulated area, CMC is ready for a visual inspection of what will be a staging area for clean brick coming from the south building.
- START Espy does visual inspection, The staging area <sup>NE</sup> of the south building looks good and passes visual inspection, CMC begins demolishing the south building NE wall, CMC is using water from the water truck for dust control, They are spraying water with a water hose.

August 7, 2015

1015- START Espy exits the regulated area through the decon. DE

1100- WM drops off 2 roll offs and picks up 2 roll offs for disposal. CMC moves clean brick to the clean brick staging area on the north side of the job site. CMC is also loading dirty debris into the WM roll offs for disposal. DE

1130- START Espy takes lunch. DE

1145- START Espy returns from lunch. DE

1220- WM drops off 1 roll off and picks up 1 roll off for disposal. DE

1400- CMC has cleaned another area on the north side of the south wall to have clean brick fall onto and temporarily stage it there. START Espy enters the regulated area. The area on the north side of the south building is visibly clean therefore passes visual inspection, CMC can now demolish that area of the south building. DE

1430- CMC demolishes the north side of the northeast side of the south building. WM drops off 2 roll offs and picks up 2 roll offs for disposal. DE

1555- Shapiro Metals trucks arrives and drops off 1 roll off and picks up 1 roll off for recycling. START Espy begins collecting perimeter air sampling pumps. See COC for stop times and

David Espy

August 7, 2015

Flow rate. DE

1620- START Espy returns to site office from collecting perimeter air sampling pumps. Espy does paperwork and processed and packaged samples for shipping. DE

1705- START off site to Fedex to ship samples. DE

David Espy  
07 August, 2015

August 10, 2015

Weather - High of 89° with scattered thunderstorms for the majority of the day. Winds SW 7mph.

Scope - Perimeter air monitoring and project monitoring.

0630 - SMART Espy arrives on site, CMC conducts daily ops meeting. (DE)

0645 - WM drops off 1 roll off and picks up 1 roll off for disposal. (DE)

0710 - CMC enters regulated area. It is predicted to rain most of the day so I will not conduct perimeter air sampling unless it clears up later. (DE)

0745 - WM drops off 1 roll off and picks up 1 roll off for disposal.

0930 - CMC scraped and washed asphalt on the north side of the south building to prepare for demolition of the north side brick wall. CMC is also loading ACM debris into the WM roll offs. (DE)

1015 - WM drops off 1 roll off and picks up 1 roll off for disposal.

1045 - CMC uses 2 excavators with a shear and grappler attachment to pull down the center of the north wall of the south building with cables attached to the structural beams. The water truck provided dust suppression during demolition. (DE)

1105 - WM drops off 1 roll off and picks up 1 roll off for disposal. (DE)

1150 - SMART Espy takes lunch. (DE)

1240 - SMART Espy returns from lunch. CMC is demolishing (DE)

August 10, 2015

the north wall of the south building. They are using an excavator with a shear attachment and an excavator with the grappler attachment. CMC is using the water truck for dust suppression. (DE)

1400 - CMC has knocked down the majority of the north wall of the south building. CMC is salvaging brick that fell in the clean area which is on the outside of the south building. Any brick that fell on the inside of the south building is being collected and disposed of in the WM roll offs. (DE)

\*Note - Around 1300 WM dropped off 1 roll off and picked up 1 roll off for disposal. (DE)

1430 - WM drops off 1 roll off and picks up 1 roll off for disposal.

1445 - Shapiro metals drops off 1 roll off and picks up 1 roll off for recycling. (DE)

1520 - SMART Espy enters site photos into EPA web site.

1530 - Collect personal air sample from CMC worker. Process and package air samples for CMC. See CMC COC for stop time and air flow. (DE)

1615 - CMC loads metal into Shapiro roll off and lines WM roll offs with 6 mil poly. (DE)

1700 - SMART Espy off site to FedEx to ship samples.

Daniel Espy  
10 August 2015

August 11, 2015

Weather - High of 87°, Partly cloudy all day, winds N 9mph.

Scope - Perimeter air monitoring and project monitoring.

0630 - START Espy arrives on site, CMC conducts daily ops meeting, START calibrated CMC personal pump. See CMC COC for start time and flow rate.

0650 - START Espy departed site office to set out perimeter air sampling pumps, Pumps were calibrated in the field, See COC for start times and flow rate.

0740 - Returned to site office, Shapiro metals drops off one roll off and picks up one roll off for recycling.

0820 - CMC is clearing out the area outside of the south building on the southeast side of the building. They are also separating metals for recycling. START Espy observed and took a few photographs.

0930 - START Espy departs site office to check on perimeter air sampling pumps. Residential perimeter air sampling pumps are all running properly, but the on site perimeter pump has stopped running due to a low battery, START Espy brings in on site perimeter pump and post calibrates.

1035 - START Espy begins running a new sample with fresh batteries at the sample 1 location. WM drops off 2 roll offs and picks up 2 roll offs for disposal, these are the 3<sup>rd</sup> and 4<sup>th</sup> drop offs and pick ups for the day, I missed 2 WM white

David Espy

August 11, 2015

1035 - checking on perimeter pumps earlier.

1115 - CMC is removing corrugated metal roofing off of the southeast side of the south building.

1145 - START Espy takes lunch.

1215 - START Espy finishes lunch.

1320 - START Espy enters regulated area, CMC is removing metal shingles off of the southeast side of the south building, CMC also continues moving debris from inside the south building to the WM roll offs for disposal.

1345 - START Espy exits the regulated area through the decon.

1430 - START Espy uploads photos to EPA web site.

WM dropped off 2 roll offs and picked up 2 roll offs for disposal.

1530 - START Espy departs site office to collect perimeter air samples.

1615 - START Espy returns to site office, Calibrated air sampling pumps in the field, See COC for stop times and flow rate. CMC continues collecting metal to recycle and removing debris from within the south building. START Espy processes and packages samples for shipping.

1700 - START Espy off site to Fedex to ship samples.

David Espy

August 12, 2015

Weather: High 86°, Sunny Winds NNE 5-10 mph.

scope: perimeter air monitoring and project monitoring.

0630- SMART Espy arrives on site, CMC conducts daily ops meeting. (DE)

0640- START Espy calibrates personal pump for CMC, See CMC COC for start time and flow rate, Set (DE) START Espy sets out perimeter air sampling pumps, See COC for start times and flow rates. (DE)

0740- Return to site office, CMC is removing debris from inside the south building, CMC is also manually scraping smaller pieces of roofing off of the south building using flat hoe scrapers. (DE)

0900- CMC is separating scrap metal and scraping dirt and debris on the outside of the south building on the southeast side. (DE)

0950- START Espy checks on the onsite perimeter pump and it has stopped running due to a low battery. START Espy post calibrates Location 1 pump and saves the air sample. START changes the batteries for Location 1 pump and begins running another sample. (DE)

1015- START Espy checks on all the other perimeter air pumps. All three pumps are running properly. (DE)

1040- CMC continues separating scrap metal and scraping dirt and debris from outside the (DE)

David Espy

August 12, 2015

1040- southeast side of the south building.

1130- Shapiro Metals onsite to drop off 1 roll off and pick up 1 roll off for recycle. (DE)

1145- START Espy takes lunch (DE)

1215- START Espy finishes lunch and suits up in proper PPE and enters regulated area. START Espy looks over the outside of the south building on the southeast side for a visual inspection before CMC demolishes the remaining brick on the east wall, SMART Espy points out a few places that need a little more cleaning, CMC cleans the few spots that were pointed out, SMART Espy gives approval to knock down the brick on the south building east wall. (DE)

1310- SMART Espy exits the regulated area through the door.

1400- CMC demolishes the remainder of the brick wall on the east side of the south building using the long reach excavator. They are now filling the small ditch on the east side of the south building with the brick that was just knocked down. (DE)

1440- SMART Espy downloads photos of site activity to the EPA website. (DE)

1510- SMART Espy collects CMC's personal pump. See CMC COC for stop time and flow rate. SMART Espy departs site office to collect perimeter air (DE)

David Espy

August 12, 2015

1510 - samples. See COC for stop times and flow rate

1610 - <sup>TIME</sup> SMART Espy returns to site office. SMART

Espy processes and packages samples for shipping.

1640 - CMC cleans debris from inside the south

building <sup>DE</sup> the south side.

1700 - SMART Espy off site to FedEx to ship samples.

David Espy  
12 August 2015

August 13, 2015

Weather: High 86° sunny winds NE at 5-10 mph.

scope: perimeter air monitoring and project monitoring

0635 - <sup>TIME</sup> SMART Espy arrives on site. CMC conducts daily ops meeting. WM drops off 1 roll off and picks up 1 roll off for disposal. <sup>DE</sup>

0645 - Calibrate CMC personal pump and give it to worker. See CMC COC for start time and flow rate. <sup>DE</sup>

SMART Espy begins setting out perimeter air sampling pumps. See COC for start times and flow rate. <sup>DE</sup>

0740 - SMART Espy returns to site office. CMC is removing debris and cleaning the concrete slab inside the south building on the south side. CMC will be knocking the south wall onto the cleaned slab and use the brick for filler outside the south building on the southeast side. <sup>DE</sup>

0930 - SMART Espy enters regulated area for visual inspection of the south side floor in the south building. Visual inspection passes. CMC is free to knock clean brick onto the south building south side floor.

1000 - WM drops off 1 roll off and picks up 1 roll off for disposal. <sup>DE</sup>

1045 - CMC demolishes the south side brick wall on the south building. <sup>DE</sup>

1100 - SMART Espy exits the regulated area through the decon. <sup>DE</sup>

David Espy

August 13, 2015

1145 - SMART Espy goes to lunch. (DE)

1215 - SMART Espy returns from lunch and checks on the perimeter air sampling pumps. All pumps are running properly. (DE)

1245 - SMART returns to site office. CMC is moving brick from the south wall of the south building to the small ditch or pit area east of the south building. (DE)

1310 - WM drops off 1 roll off and picks up 1 roll off for disposal. (DE)

1335 - Shapiro metals drops off 1 roll off and picks up 1 roll off for recycling. (DE)

1415 - CMC is demolishing the NW wall of the south building. All remaining brick is to be disposed of as ACM. I check on the onsite perimeter pump and it has stopped due to a low battery. I post calibrate the pump and collect the sample. (DE)

1445 - WM drops off 1 roll off and picks up 1 roll off for disposal. (DE)

1545 - SMART START Espy departs site office to collect perimeter air samples. Samples were post calibrated in the field, see COC for stop times and flow rate. (DE)

1615 - SMART Espy returns to the site office. CMC is demolishing the west wall of the south building and putting the brick into WM roll offs for disposal. (DE)

START Espy processes and packages samples for shipping. (DE)

1700 - SMART Espy off site to FedEx to ship samples. (DE)

David Espy

August 14, 2015

Weather: High 87° Mostly cloudy 20% chance of rain wind E. 6 mph. (DE)

Scope: Perimeter air sampling and project monitoring. (DE)

0625 - SMART Espy arrives on site, CMC conducts daily ops meeting. (DE)

0645 - Shapiro metals drops off 1 roll off and picks up 1 roll off for recycling. SMART Espy begin setting out perimeter air sampling pumps. Pumps were calibrated in the field. See COC for start times and flow rate. (DE)

0745 - SMART Espy returns to site office. While SMART Espy was setting up perimeter pumps WM dropped off 1 roll off and picked up 1 roll off for disposal. CMC is collecting brick and debris and putting it in WM roll offs for disposal. (DE)

0915 - CMC demolishes the remainder of the brick off of the SW wall of the south building. (DE)

1005 - SMART Espy checks on the onsite perimeter pump and it had stopped running due to a low battery. SMART Espy collected the sample and began running a new sample with a different pump and different batteries. See COC for start times and flow rates. (DE)

10:30 - WM drops off 2 roll offs and picks up 2 roll offs for disposal. (DE)

David Espy

August 14, 2015

1110 - START Espy departs site office to check on perimeter air sampling pumps. All pumps are running properly. (DE)

1130 - START Espy returns to site office. (DE)

1200 - START Espy takes 45 min lunch break. (DE)

1300 - CMC continues separating some metal and collecting brick and debris and putting it in a dirty pile or putting it into WM roll offs. (DE)

1310 - START Espy enters the regulated area, CMC continues with the same work tasks. (DE)

1330 - START Espy exits the regulated area through the decon. (DE)

1340 - WM drops off 1 roll off and picks up 1 roll off for disposal. (DE)

1400 - START Espy uploads photos to EPA website.

1530 - START Espy departs site office to gather perimeter air samples. See COC for stop times and flow rate. (DE)

16:20 - START Espy returns to site office, CMC continues separating metal and brick/debris for recycle or disposal. (DE)

START Espy processes and packages samples for shipping. (DE)

1700 - START Espy off site to Fedex to ship samples.

~~David Espy~~  
14 August 2015

August 15, 2015

Weather: High 87° Partly cloudy w/ a 50% chance of rain. Winds SE 6 mph. (DE)

Scope: Perimeter air sampling and project monitoring.

0630 - START Espy arrives on site. CMC conducts daily ops meeting. (DE)

0645 - START Espy begins setting out perimeter air sampling pumps. See COC for start times and flow rate. (DE)

0725 - START Espy returns to site office. CMC is moving brick/debris to a dirty pile to the east of the south building. CMC is also strapping cables to the frame of the south building. (DE)

0805 - CMC is knotching the steel structural beams on the south building in preparation to pull down the entire frame.

0945 - It started to rain. START Espy left site office to collect air sampling pump due to the rain.

1015 - START Espy returns to site office.

1120 - CMC pulls down the entire frame of the south building using 2 excavators with cables attached to them.

1140 - START Espy takes lunch break.

1205 - START Espy returns from lunch.

START Espy enters regulated area to take photos

David Espy

August 15, 2015

1205 - AT demolished south building frame.

1310 - START Espy exits regulated area.

1330 - START Espy updates EPA website with photos,  
START Espy does paperwork and processes and packages  
samples.

1430 - CMC and START Espy off site.

David Espy  
15. August 2015

August 17, 2015

Prays

WEATHER: High of 79°F, 60% chance of rain,

winds from southeast a 5-10 mph

SCOPE: Project monitoring

0635

0755 START Prays on site. CMC completed daily  
ops briefing. Shapiro metals on site to  
drop off 1 roll off and to pick up 1 roll  
off for recycling. CMC will not conduct  
personal air sampling today.

0705

0805 Wm on site to drop off 1 roll off and  
pick up 1 roll off for disposal.

0735

0835 Wm on site to drop off 1 roll off and  
pick up 1 roll off for disposal.

0750 Wm on site to drop off 1 roll off and pick  
up 1 roll off for disposal.

0825 Entered regulated area. CMC was  
lining the roll offs and placing the dirty  
brick staged on the east side of the  
south bridge into the roll offs for disposal.  
CMC was also removing structural steel  
from the south bldg frame and staging  
it for decon and recycling. START Prays  
conducted a visual inspection of the soil  
scraped area located on the west side of  
the north bldg footprint. There were  
spots of visible ACM mixed with loose

— Gel [Signature] —

August 17, 2015

Prags

- 0825 Debris along the side of the bldg footprint and pieces of ACM along the west side of the scraping area along the silt fence. NOTE: Perimeter air sampling was not conducted today due to the threat of rain throughout the day.
- 0915 Departed regulated area. Downloaded site photos and updated photo log.
- 0945 Updated OSC Spaulin on site activities.
- 1045 Wm arrived on site to drop off 1 roll off and to pick up 1 roll off for disposal.
- 1115 Wm arrived on site to drop off 2 roll offs and to pick up 2 roll offs for disposal.
- 1220 Start Prags at lunch for 30 min.
- 1300 Updated electronic laboratory and cost tracking files. Communicated with TE and RSI personnel. Reviewed 7/29 and 7/31 TEM results. Updated OSC Spaulin that there was no asbestos detected and results were less than LOD.
- 1440 Wm on site to drop off 3 roll offs and to pick up 3 roll offs for disposal. CMC continued lining roll offs and loading waste back for disposal and removing structural steel from the remaining

*Paul E. [Signature]*

August 17, 2015

Prags

- 1440 frame of the south building.
- 1500 Continued reviewing and updating site electronic files. Packaged up samples for shipment to lab for quant analysis. Samples were perimeter samples from 8/15/15.
- 1700 Start Prags off-site to FEDEX to drop off samples.

*Paul E. [Signature]*  
17 August 2015

August 18, 2015

Prays

weather: High of 83°F, 60% chance of rain,

Winds light and variable

scope: Perimeter Air Sampling and Project

Monitoring.

0635 START PRAYS on site. CMC conducting site ops meeting. Calibrated CMC personal air pump. SEE CMC CDC FOR start time AND Flow rates.

0710 Shapiro Metals ARRIVED on site to drop off 1 roll off AND pick up 1 roll off for recycling. WM ARRIVED on site to drop off 2 roll offs AND pick up 2 roll offs for disposal. START PRAYS off site to set out perimeter air sampling pumps. SEE CDC FOR start times AND Flow rates.

0800 Returned to the site office. WM on site dropping off 1 roll off AND picking up 1 roll off for disposal. Began preparing CDCs AND sampling labels.

0830 Shapiro Metals ARRIVED on site to drop off 1 roll off AND to pick up 1 roll off for recycling. Updated disposal AND recycling logs.

1000 RPM Cowdrey Jackson arrived on site to look at 2 seepage areas located at the northeast area of the site.

Paul E. [Signature]

August 18, 2015

Prays.

1030 START PRAYS ENTERED the regulated area.

CMC continued removing structural steel from the south bldg frame using the shears AND the grapple for recycling AND loading roll offs for disposal. WM ARRIVED on site to drop off 3 roll offs AND pick up 3 roll offs for disposal. Shapiro Metals ARRIVED on site to pick up 1 roll off for recycling AND to drop 1 off. START PRAYS marked grid locations 10, 11, 26, 27 so CMC could begin scraping the surface soil. START PRAYS also outlined the soil scraping area between the silt fence AND the north AND south bldgs. THE AREA BETWEEN THE silt fence AND south bldg is Grid 28. AND THE area between the silt fence AND the north bldg is Grid 29.

1215 DEPARTED the regulated area. AND returned to the site office.

1245 START PRAYS AT LUNCH for 30 min.

1315 updated OSC Neal on site activities.

1430 CMC continued removing structural steel from the south bldg frame using the shears AND the grapple for recycling. CMC was also scraping the surface soil

Paul E. [Signature]

August 18, 2015

Prys

1430 IN GRID 26. THE BULLDOZER WAS USED TO TRANSPORT THE SCRAPED SURFACE SOIL FROM GRID 26 TO THE DISPOSAL ROLL OFF STAGED ON THE EAST SIDE OF THE NORTH BLDG. 1510 DEPARTED SITE OFFICE TO PICK UP PERIMETER AIR SAMPLES. PUMPS WERE POST-CALIBRATED IN THE FIELD. SEE COC FOR STOP TIMES AND FLOW RATES. PICKED UP CMC PERSONAL PUMP. 1550 RETURNED TO SITE OFFICE. POST-CALIBRATED CMC PERSONAL PUMP. SEE CMC FOR STOP TIME AND FLOW RATES. PROCESSED AND PACKAGED SAMPLES FOR SHIPPING. 1700 START PRYS OFF SITE TO FEDEX.

Cal EIR  
18 August 2015

August 19, 2015

Pryg

WEATHER: High of 83°F, 60% chance of RAIN, winds from south southwest at 10-15 mph  
SCOPE: PERIMETER AIR MONITORING / PROJECT MONITORING  
0630 START PRYS ON SITE. CMC CONDUCTING DAILY OPS AND SAFETY BRIEFING. CALIBRATED CMC PERSONAL PUMPS. SEE CMC COC FOR START TIME AND FLOW RATES.

0730 WM ARRIVED ON SITE TO DROP OFF 3 ROLL OFFS AND PICK UP 3 ROLL OFFS FOR DISPOSAL. START PRYS DEPARTED THE SITE OFFICE TO SET OUT THE PERIMETER AIR SAMPLING PUMPS. PUMPS WERE CALIBRATED IN THE FIELD. SEE COC FOR START TIMES AND FLOW RATES.

0805 RETURNED TO SITE OFFICE. MONITORED WEATHER ACTIVITIES.

1005 ENGAGED REGULATED AREA TO CHECK ON SITE ACTIVITIES. CMC CONTINUED REMOVING STRUCTURAL STEEL FROM THE REMAINING SOUTH BLDG FRAMES USING THE SHEAR AND THE GRAPPLE. CMC WAS USING THE EXTENDED REACH EXCAVATOR TO SCRAPE GRIDS 26 AND 27 SOUTH OF THE BARRIER TAPE. START PRYS VISUALLY INSPECT GRID 26 AND PART OF 27. AND IDENTIFIED THOSE AREAS NEEDING ADDITIONAL CLEAN UP. WM ARRIVED ON SITE TO DROP OFF 3 ROLL OFFS

Cal EIR

August 19, 2015

Prags

1005 AND to pick up 3 for disposal. \_\_\_\_\_

1115 DEPARTED REGULATED AREA at <sup>PP</sup> AND  
RETURNED to site office. \_\_\_\_\_

1210 START PRAGS AT LUNCH FOR 30 min. \_\_\_\_\_

1245 BEGAN PREPARING COC AND sampling labels. \_\_\_\_\_

1340 START PRAGS DEPARTED SITE OFFICE to pick  
up PERIMETER air sampling pumps DUE  
to rain. BATTERIES for Pump G1 at Location  
1 malfunctioned AND STOPPED at 3 hrs.

Enough volume was collected to meet the  
minimum standards AND the sample for  
that location will be submitted for  
analysis. All other pumps functioned  
normally. Post-calibration of the pumps  
was conducted in the field. SEE COC FOR  
stop times AND flow rates. \_\_\_\_\_

1415 RETURNED to site OFFICE AND cleaned off the  
perimeter pumps. \_\_\_\_\_

1430 WM ARRIVED on site with 2 roll offs for  
drop off AND 2 roll offs for pick up/disposal.

1500 COLLECTED CMC PERSONAL pump. Post-  
calibrated pump. SEE CMC for stop  
time AND flow rate. WM ARRIVED on site  
to drop off <sup>1</sup> roll offs for disposal. START

1555 PRAGS PROCESSED AND PACKAGED SAMPLES

\_\_\_\_\_ Paul E. [Signature]

August 19, 2015

Prags

1500 FOR shipment. \_\_\_\_\_

1530 <sup>PP</sup> Shapiro Metals ARRIVED on site to  
pick up 1 roll off for RECYCLING AND drop  
off 1 roll off. \_\_\_\_\_

1600 DUE to heavy rain AND lightning in the  
AREA, CMC shut DOWN operations for  
the day. \_\_\_\_\_

1640 START PRAGS of site. CMC personnel off site  
except for CMC Hollingsworth. \_\_\_\_\_

Paul E. [Signature]  
19 August 2015

August 20, 2015

Prus

Weather: High of 81°F, Partly Sunny, 20%  
chance of rain, Winds from north at 5 mph

scope: Perimeter Air monitoring / Project monitoring  
0630 Start Prus on site. CMC conducted daily gas  
and safety briefings. CMC will not collect  
personal samples today. Start Prus  
prepared the perimeter air sampling prep.

0705 Departed site office to set out perimeter  
air sampling pumps. Pumps were calibrated  
in the field. See COC for start times and  
flow rates. Wm on site to drop off 1 roll  
off and pick up 1 roll off for disposal.

0740 Returned to site office. Begin preparing  
COC and sampling labels. Updated disposal  
and recycling tracking sheets. Sharped  
metals on site for a live loading and  
departures for recycling.

0805 Wm arrived on site to drop off 1 roll off  
and to pick up 1 roll off for disposal.

0930 OSC Neal, Start Prus, and CMC Hollingsworth  
looked at the grids for soil scraping to  
discuss plans of attack for removal.

1050 Wm arrived on site to drop off 1 roll off  
and pick up 1 roll off for disposal.

1115 TDEC Hoffelt arrived on site to discuss

Paul E. [Signature]

August 20, 2015

Prus

1115 site activities.

1125 Wm arrived on site to drop off 1 roll  
off and pick up 1 roll off for disposal.

Reviewed invoices and updated site photography.  
1200 TDEC Hoffelt departed site. Start Prus  
updated photos on OSC website.

1300 Start Prus at lunch for 30 min.

1330 Checked on perimeter pump at location 1.  
Pump functioning normally.

1410 Entered the regulated area. CMC completed  
removing structural steel from the south  
bldg frame and staged it at the north end  
of the site. CMC completed scraping of the  
Grid 29, previously known as the area between  
the north bldg and the silt fence. Start Prus  
conducted a visual inspection of Grid 29.

There appears to be no visible ACM in Grid 29.

1430 Start Prus collected a 5-pt composite soil  
sample from Grid 29 at a depth of 0-1"  
below ground surface (logs). Equipment used:

- 1 8-oz glass jar with Teflon lined lid.
- 1 stainless steel spoon
- 1 disposable aluminum pan.

Sample will be analyzed via CARB 435 by  
MRS in Suwanee, GA.

Paul E. [Signature]

August 20, 2015

Prys

1430 Note: This pit in the northeast corner of Grid 29 had been mucked out and mostly water remained. Also, Wm arrived on site to drop off 1 roll off and pick up on roll off for disposal.

1500 DEPARTED REGULATED AREA AND RETURNED TO SITE OFFICE. PROCESS GRID 29 SAMPLE.

1515 Wm on site to drop off 1 roll off and to pick up 1 roll off for disposal.

1535 DEPARTED SITE OFFICE TO PICK UP PERIMETER AIR SAMPLING PUMPS. PUMPS WERE POST-CALIBRATED IN THE FIELD. SEE COC FOR STOP TIMES AND FLOW RATES. Note: Pump G6 at Location 1 stopped running at 7:25 hrs.

Sample will still be submitted for analysis.

1610 RETURNED TO SITE OFFICE. PROCESSED AND PACKAGED SAMPLES FOR SHIPPING.

1710 START PRYS OFF SITE TO DROP OFF SAMPLES TO FEDEX.

*Paul E. G. Z.*  
20 August 2015

August 21, 2015

Prys

WEATHER: High of 84°F, Partly Sunny, Winds from East northeast at 5 mph

SCOPE: PERIMETER AIR MONITORING / PROJECT MONITORING  
0625 START PRYS ON SITE. CMC WAS CONDUCTING DAILY OPS AND SAFETY MEETINGS. SHAPIRO METALS ARRIVED ON SITE. CMC CONDUCTED LIVE LOADING OF TRUCK WITH STRUCTURAL STEEL FOR RECYCLING.

0655 DEPARTED SITE OFFICE TO SET OUT PERIMETER AIR SAMPLING PUMPS. PUMPS WERE CALIBRATED IN THE FIELD. SEE COC FOR START TIMES AND FLOW RATES. CMC NOT CONDUCTING PERSONAL SAMPLING TODAY.

0735 RETURNED TO SITE OFFICE. CMC WAS DEEMING MAW-LIFT TO BE TRANSPORTED OFF SITE. BEGAN FILLING OUT COC AND SAMPLING LABELS. UPDATED PHOTOLOG AND OSC WEBSITE.

1030 ENTERED REGULATED AREA. CMC CONTINUED CLEANING FOOTPRINT OF SOUTH BLDG. AND STAGING STRUCTURAL STEEL FOR LOAD-OUT. CMC WAS ALSO SCRAPING SOIL FROM GRIDS 26 AND 27. USING THE EXTENDED REACH EXCAVATOR, SKID STEER, AND GRAPPLER. PRELIMINARY VISUAL INSPECTION IDENTIFIED AREAS WITH ACM THAT REQUIRED ADDITIONAL SCRAPING.

*Paul E. G. Z.*

August 21, 2015

Pays

1030 START PAYS ALSO MARKED GRID LOCATIONS  
11-14 ON THE SILT FENCES.

1210 DEPARTED REGULATED AREA AND RETURNED  
TO SITE OFFICE.

1230 START PAYS AT LUNCH FOR 30 MIN.

1300 DOWNLOADED SITE PHOTOS, UPDATED PHOTOLOGY  
AND UPDATED EPA WEBSITE.

1430 ENTERED REGULATED AREA. CMC CONTINUED  
SCRAPING SOIL IN GRID 27. CONDUCTED VISUAL  
INSPECTION OF GRID 26. RECOMMENDED WASHING  
OFF THE CONCRETE PAD AND IDENTIFIED SOME  
MINOR AREAS FOR ADDITIONAL SCRAPING. THERE  
WAS STILL VISIBLE DEM ROOFING MATERIAL IN  
PORTIONS OF GRID 27. WILL SHOW THIS AREA TO  
OSC SPECIALIST ON 8/24/15 FOR DIRECTION. CMC  
WAS ALSO EASING THE SOUTH BLDG FOOTPRINT AND  
STACK PILING SOIL FOR DISPOSAL.

1530 DEPARTED REGULATED AREA AND RETURNED TO  
SITE OFFICE.

1550 DEPARTED SITE OFFICE TO PICK UP PERIMETER  
AIR SAMPLING PUMPS. PUMPS POST-CALIBRATED  
IN FIELD. SEE COC FOR STOP TIMES AND FLOW RATES.

1620 RETURNED TO SITE OFFICE. PROCESSED AND PACKAGED  
SAMPLES FOR SHIPPING.

1705 DEPARTED SITE TO DELIVER SAMPLES TO FEDEX.

Paul E. [Signature]

21 August 2015

August 22, 2015

Pays

WEATHER: High of 82°F, Partly Sunny, 30% CHANCE  
OF RAIN, WINDS FROM SOUTH, SOUTHEAST AT 5 MPH

SCOPE: PERIMETER AIR MONITORING / PROJECT MONITORING

0630 START PAYS ON SITE. CMC CONDUCTING DAILY OPS  
AND SAFETY MEETING. CMC WILL NOT COLLECT  
PERSONAL AIR SAMPLES TODAY.

0655 DEPARTED SITE OFFICE TO SET OUT PERIMETER  
AIR SAMPLING PUMPS. PUMPS WERE  
CALIBRATED IN THE FIELD. SEE COC FOR  
START TIMES AND FLOW RATES.

0735 RETURNED TO SITE OFFICE. BEGAN PREPARING  
COC AND SAMPLING LABELS.

0810 CMC WAS DEANNING A CONTAINER OF CABLES.  
CMC DEMOBILIZED THE CABLES AND THE  
MANIFOLD FROM THE SITE.

0900 SHAPIRO METALS ON SITE TO DROP OFF 1 ROLL OFF  
AND TO PICK UP 1 ROLL OFF FOR RECYCLING.

0930 SHAPIRO METALS ON SITE TO DROP OFF 1 ROLL OFF  
AND TO PICK UP 1 ROLL OFF FOR RECYCLING.

0945 CMC WAS SCRAPING ACCESS ROAD ON EAST SIDE  
OF SITE THAT STRETCHES FROM GRIDS 3 TO 7. CMC  
WAS LOADING STRUCTURAL STEEL AND DEANNING  
EXCAVATOR WITH SHEAR ATTACHMENT.

1030 UPDATED ELECTRONIC FILES TO INCLUDE AIR  
SAMPLING RESULTS, DISPOSAL/RECYCLING LOGS,

Paul E. [Signature]

August 22, 2015

Prjs

1030 AND WEEKLY site summary.

1145 START PRJS AT LUNCH FOR 30 min.

1230 Downloaded site photos AND updated site photology. Completed weekly site summary AND sent to OSC Spaulin.

1515 Departed site office to pick up perimeter air sampling pumps. Post-calibrated pumps in the field. Pump 04 at location 4 stopped running after 3:06 hrs due to battery malfunction. Sample will still be submitted for analysis. CMC washing AND scraping minor debris from footprint of the south bldg.

1350 Returned to site office AND processed samples.

1430 START PRJS AND CMC DEPARTED SITE.

~~Paul E. O'Connell  
22 August 2015~~

August 24, 2015

Prjs

Weather: High of 83°F, Sunny, Winds from the north, northwest at 5-10 mph.

Scope: Perimeter Air Monitoring / Project Monitoring  
0630 START PRJS on site. CMC conducted daily ops AND safety meeting.

0655 Departed site office to set out perimeter air sampling pumps. Pumps were calibrated in the field. See COC for start times AND flow rates.

0735 Returned to site office. Began preparing COC AND sampling labels.

0755 Wm on site to drop off 2 roll offs AND pick up 2 roll offs for disposal. Updated site cost tracking spreadsheet.

0900 OSC Spaulin, START PRJS, AND CMC Hollingsworth looked at AND discussed the soil scraping areas located in grids 26, 27, AND 11-14.

0925 Wm ARRIVED on site to drop off 1 roll off AND to pick up 1 roll off for disposal.

1100 Entered regulated areas AND took photos of the trench located south of the south bldg.

1130 Departed regulated area. Downloaded photos AND emailed them to RPM Candice Teichsat.

Shapiro Metals on site to pick up 1 roll off for recycling. Wm on site to drop off 2 roll offs AND pick up 2 for disposal.

~~Paul E. O'Connell~~

August 24, 2015

Phyllis

1150 Entered regulated area. Mapped out soil sampling areas using marking point and the Trimble GeoXT 2005 series Pocket PC (GPA # A80307). Soil sampling areas included grids 26A, 26B, 23-25, 3-9. The perimeter of each sampling area was mapped using the Trimble. The trench located south of the south bldg was also mapped using the Trimble.

1255 Collected samples WC-AS-L26B-082415 and WC-AS-L26B-082415-DUP (DUPLICATE) for grid 26B. Sample was collected in same manner as described on pg 71 of this logbook.

1325 Collected sample WC-AS-L26A-082415 from grid 26A in same manner as described <sup>(p)</sup> described on pg 71 of this logbook. WM on site to drop off 1 roll off and to pick up 1 roll off for disposal.

1420 Collected sample WC-AS-L03:L09-082415 from grids 03 through 09. Sample was collected in same manner as described on pg. 71 of this logbook except 1 aliquot was collected from each grid area for a 7-point composite sample.

— *Gal E* —

August 24, 2015

Phyllis

1500 ~~WC~~ Collected sample WC-AS-L23:L25-082415 from grids 23 through 25. Sample was collected in same manner as described on pg. 71 of this logbook. Note: During the day, CMC was loading soil for disposal from the stockpile located at the north end of the south bldg and removing large pieces of metal and general debris from grids 12 to 14.

1515 Departed regulated area. Prepared COC and sampling labels for soil samples. Note: At 1445, WM arrived on site to drop off 2 roll offs and to pick up 2 roll offs for disposal.

1545 Departed site office to pick up perimeter air sampling pumps. Pumps were post-calibrated in the field. SEE COC for stop times and flow rates.

1620 Returned to site office. Processed and packaged soil and air samples for shipping.

1705 Departed site office for FEDEX. Late Note: Initial scanning of grid 27B uncovered previously unseen asbestos roofing material. Additional removal

— *Gal E* —

August 24, 2015

Prjs

OSC Efforts continued to uncover more asbestos roofing material throughout this area.

After viewing the extent of the remaining asbestos roofing material located in Grid 27B, OSC Spualin discussed the findings with RPM Teichert. Given the amount of asbestos material at depth in sections of this grid, OSC Spualin recommended backfilling this area with 1ft of clean soil and documenting the location with the Trimble. RPM Teichert agreed and also mentioned that additional excavation could potentially uncover other possible site contaminants.

Paul E. Spualin  
24 August 2015

August 25, 2015

Prjs

Weather: High of 79°F, Sunny, Winds from north, northwest at 10-15 mph.

0630 START Prjs on site. CMC was conducting daily ops and safety briefing.

0700 DEPARTED SITE OFFICE to set out perimeter air sampling pumps. Pumps were calibrated in the field. SEE CMC FOR START TIMES AND FLOW RATES.

0735 RETURNED to site office. Was on site with 3 roll offs to drop off and pick up 3 roll offs for disposal.

0750 ENTERED REGULATED AREA to visually inspect Grid 27B. Continued to find various sized pieces of asbestos roofing material. Since there would be no additional excavation, START Prjs will sample this grid area.

0825 DEPARTED REGULATED AREA and prepared for soil sampling.

0940 ENTERED THE REGULATED. Collected sample WC-AS-L27B-082515 at 0910 hrs in same manner as described on pg 71 of this logbook. CMC continued loading stockpiled soil into the roll offs for disposal and continued scanning Grids 27A and 10.

Paul E. Spualin

August 25, 2015

Plays

1005 DEPARTED REGULATED AREA AND RETURNED TO SITE OFFICE.

1045 W/M ARRIVED ON SITE TO DROP OFF 3 ROLL OFFS AND TO PICK UP 3 ROLL OFFS FOR DISPOSAL.

1115 UPDATED OSC SQUAD ON SITE ACTIVITIES.

1205 START PLAYS AT LUNCH 30 MIN.

1415 W/M ARRIVED ON SITE TO DROP OFF 3 ROLL OFFS AND PICK UP 3 ROLL OFFS FOR DISPOSAL.

1440 ENTERED REGULATED AREA. CMC CONTINUED SCRUBBING SOIL AND CLEANING THE BUILDING IN GRID 11 AS WELL AS LOADING ROLL OFF WITH STOCKPILED SOIL FOR DISPOSAL. CONDUCTED VISUAL INSPECTION OF GRIDS 27A AND 10. THERE APPEARED TO BE NO VISIBLE ASBESTOS ROOFING MATERIALS IN THIS AREA.

1515 COLLECTED SAMPLE WC-AS-127A-082515 FROM GRID 27A IN SAME MANNER AS DESCRIBED ON PG. 71 OF THIS LOGBOOK.

1530 COLLECTED SAMPLE WC-AS-110-082515 FROM GRID 10 IN SAME MANNER AS DESCRIBED ON PG. 71 OF THIS LOGBOOK.

1540 DEPARTED REGULATED AREA AND RETURNED TO SITE OFFICE.

1555 DEPARTED SITE OFFICE TO PICK UP

Pal ERZ

August 25, 2015

Plays

1555 PERIMETER AIR SAMPLES. PUMPS WERE POST-CALIBRATED IN THE FIELD. SEE LOG FOR STOP TIMES AND FLOW RATES. THE SAMPLE AT LOCATION 2 WILL NOT BE SUBMITTED FOR ANALYSIS DUE TO PUMP FAILURE AFTER 2 HOURS.

1630 RETURNED TO SITE OFFICE AND PROCESSED AIR AND SOIL SAMPLES. PACKAGE SAMPLES FOR SHIPPING AND COMPLETED CMC PREPARATION. (710 DEPARTED SITE OFFICE FOR FEDEX.

Pal ERZ  
25 August 2015

August 26, 2015

Prags

WEATHER: High of 80°F, Sunny, Winds from the north, north east at 5-10 mph.

SCOPE: Perimeter Air monitoring and Project Oversight 0635 Start Prags on site. CMC conducted daily ops and safety meeting.

0700 Departed site office to set out perimeter air sampling pumps. Pumps were calibrated in the field. SEE CMC FOR START TIMES AND FLOW RATES.

0745 RETURNED to site office. Wm on site to drop off 2 roll offs and to pick up 2 roll offs for disposal. Updated OSC Spurlin on soil sampling results for Grids 29, 26A, 26B, 26C, 3-9, and 23-25. Results ranged from 0.67% to 3.75% asbestos. Discussed results with CMC Hollingsworth. Those grid areas will be backfilled with 6-12 inches of clean soil. Provided CMC Hollingsworth with an approx. estimate of square footage for grid area.

1005 Began preparing COR and sampling labels.

1100 Entered regulated area to visually inspect Grids 11, 12, 13, 14, 28, and 18-20. Found some small areas in Grids 12 and 28 that need

PALEZZ

August 26, 2015

Prags

1100 Additional roof removal. Areas were marked and additional removal was conducted by CMC.

1220 Departed regulated area and returned to site office. Prepared to conduct soil sampling.

1300 Entered regulated area to conduct soil sampling in Grids 11, 12, 13, 14, 28, and 18-20. CMC continued scavenging the north debris from the north bldg footprint, washing the concrete/road area north of the north bldg., and loading roll offs for disposal.

1320 Collected sample WC-AS-L11-082615 from Grid 11 in same manner as described on pg. 71 of this logbook.

1340 Collected sample WC-AS-L12-082615 from Grid 12 in same manner as described on pg. 71 of this logbook.

1355 Collected sample WC-AS-L13-082615 from Grid 13 in same manner as described on pg. 71 of this logbook.

1420 Collected sample WC-AS-L14-082615 from Grid 14 in same manner as described on pg. 71 of this logbook.

1440 Collected sample WC-AS-L28-082615 from

PALEZZ

August 26, 2015

Pays

1440 GRID 28 in same manner as described on  
pg. 71 of this logbook.

1500 Collected sample WC-AS-L18:L20-082615  
from grids 18 to 20 in same manner as  
described on pg. 71 of this logbook.

1520 Departed regulated area and returned  
to site office.

1530 Departed site office to pick up perimeter  
air sampling pumps. Pumps were post-  
calibrated in the field. See LOC for  
stop times and flow rates.

1610 Returned to site office. Processed and  
packaged samples for shipping.

1705 Departed site office to deliver samples  
to FEDEX. Late note: Wm dropped off  
a total of 6 roll offs and picked up 6  
roll offs for disposal.

Paul E. [Signature]  
26 August 2015

August 27, 2015

Pays

Weather: High of 83°F, Sunny, winds from  
East, northeast at 5-10 mph.

SCOPE: Perimeter Air Monitoring and Project Monitoring  
0635 Start Pays on-site. EMC conducting daily ops  
and safety meeting.

0650 Departed site office to set out perimeter  
air sampling pumps. Pumps were calibrated  
in the field. See LOC for start times and  
flow rates.

0730 Returned to site office. Began preparing  
LOC and sampling labels.

0745 Wm on site to drop off 2 roll offs and to  
pick up 2 roll offs for disposal.

1000 Entered regulated area. Marked grids  
18-20 with marking paint and mapped  
soil sampling areas from 8/25 and 8/26  
using the stamper. Collected photos of  
site activities and sampling areas. EMC  
was scraping a small soil area located  
between the footprints of the north and  
"offices" bldgs, washing the concrete/road  
area on the northeast portion of the site,  
and back filling the trench in grid 27B.

1145 Departed the regulated area and returned  
to the site office. Wm on site to drop off

Paul E. [Signature]

August 27, 2015

Pays

1145 2 roll offs AND pick up 2 roll offs for disposal.

1215 START PAYS AT LUNCH FOR 30 min.

1300 REVIEWED SITE EXPENDITURES AND INVOICES. Communicated with project personnel.

1415 Wm on site to drop off 1 roll off AND pick up 1 roll off for disposal. CMC was backfilling south section of bed 27B, scavenging debris from the north end of this south bldg, and washing the foot print of the southeast section of the north bldg.

1445 DOWNLOADED SITE GPS DATA FROM TRIMBLE.

1520 Wm on site to drop off 1 roll off AND to pick up 1 roll off for disposal.

1540 DEPARTED SITE OFFICE TO PICK UP PERIMETER AIR sampling pumps. Pumps WERE post-calibrated in the field. SEE CDC FOR STOP TIMES AND FLOW RATES.

1615 RETURNED TO SITE OFFICE. PROCESSED AND packaged samples for shipping.

1700 START PAYS OFF-SITE TO FEDEX.

*Cal E R K*  
27 August 2015

August 28, 2015

Pays

weather: High of 88°F, Sunny, Winds from southeast at 5-10 mph

SCOPE: PERIMETER AIR MONITORING AND PROJECT MONITORING

0630 START PAYS ON SITE. CMC CONDUCTED DAILY OPS AND SAFETY MEETING.

0700 DEPARTED SITE OFFICE TO SET OUT PERIMETER AIR sampling pumps. Pumps WERE calibrated in the field. SEE CDC FOR STOP TIMES AND FLOW RATES.

0730 Wm on site to drop off 1 roll off AND pick up 1 roll off for disposal. Began preparing CMC AND sampling labels. updated site photolog.

0745 CMC BULLDOZER ARRIVED ON SITE. DEMOBILIZING EXTENDED REACH EXCAVATOR.

0930 updated OBC SPREAD IN SITE ACTIVITIES. RECEIVED soil sampling results for GAUGES <sup>(P)</sup> L10, L27A, AND L27B. RESULTS RANGED FROM 4.25% - 5.25% chrysotile asbestos.

1030 ENTERED REGULATED AREA. MAPPED bldg footprints locations using the TRIMBLE. CONDUCTED VISUAL INSPECTIONS AT THE NORTH END OF THE SOUTH bldg AND ON THE EAST SIDE OF THE NORTH bldg. MINOR AMOUNTS OF ASBESTOS ROOFING MATERIALS WERE IDENTIFIED AND REMOVED. CMC CONTINUED WASHING THE NORTH bldg FOOTPRINT AND DEMOBILIZED THE EXCAVATOR WITH THE GRAPPLE.

*Cal E R K*

August 28, 2015

Prags

1030 Attachment for demobilization.

1120 Departed regulated area and updated OSC  
Special in on results of the visual inspection.

1200 Departed site office to check on perimeter  
air sampling pumps. CMC demobilized 2  
personnel. Pumps were functioning properly.

1230 Start Prags at lunch for 30 min.

1300 Continued updating site photology. Updated  
air sampling results sheets.

1415 CMC continued washing south bldg footprint.  
Water was pooled in the northern corner  
of the footprint. CMC waiting for it to  
drain. Conducted visual inspection of  
office and northern<sup>PP</sup> bldg footprints. There  
appeared to be no visible ACM remaining  
on either footprint.

1500 Returned to site office. Updated disposal  
and recycling spreadsheets.

1540 Departed site office to pick up perimeter  
air sampling pumps. Pumps were post-  
calibrated in the field. Set COC for flow  
rates and stop times. Pump G2 at location  
2 stopped after 6:17 hrs. Sample will still  
be submitted for analysis.

1620 Returned to site office. Processed and

Paul E. [Signature]

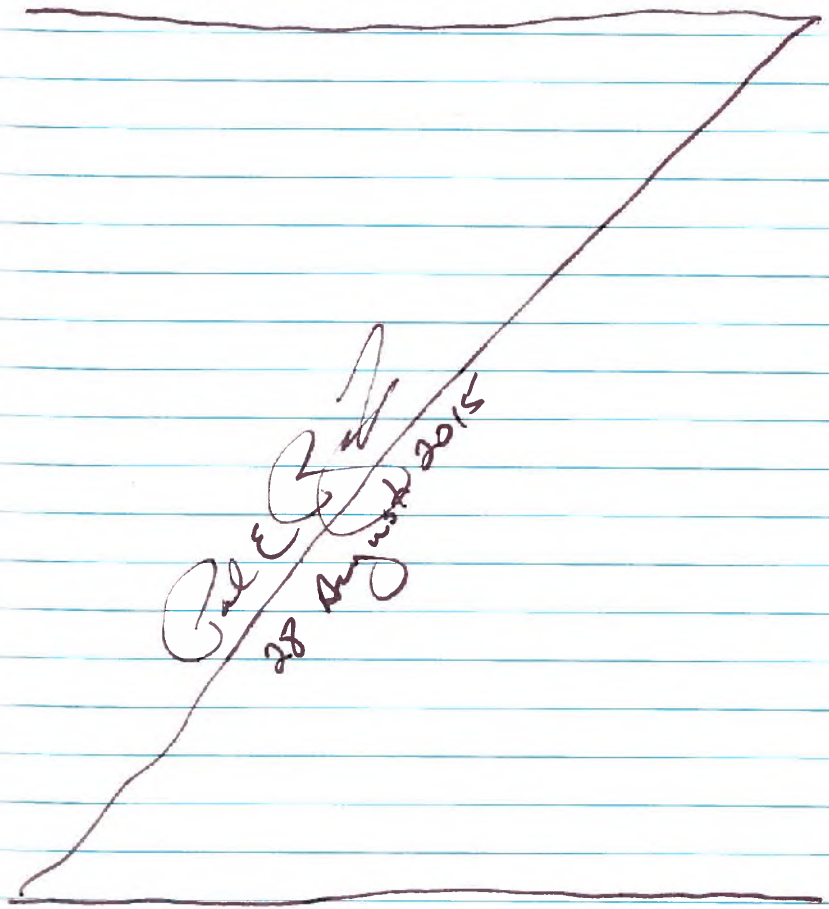
August 28, 2015

Prags

1620 packaged samples for shipping.

1630 CMC off-site for the day. Updated and  
emailed the site weekly summary of weekly  
chemical site activities.

1700 Start Prags off-site to deliver samples to  
FEDEX.



August 31, 2015

Page 5

weather: High of 88°F, Mostly Sunny, Winds from light and variable.

scope: Project monitoring

0635 START PRYS on site. CMC CONDUCTED DAILY ops and safety briefing. CMC will complete washing the north end of the south bldg and backfilling soil scraped REGAS.

0730 2 trucks of backfill arrived on site.

CMC began backfilling Grid 29 and small soil REGA located between north bldg and office bldg. Backfill provided by Owen Jenkins, Jenco Construction, Inc, Highway 46 South, P.O. Box 37, Bon Aqua, TN 37205.

0830 2 trucks of backfill arrived on site.

0930 2 trucks of backfill arrived on site. START PRYS continued cleaning field sampling equipment.

1030 2 trucks of backfill arrived on site. Dropped loads in Grids 22 and 29.

1130 2 trucks of backfill arrived on site.

Dropped loads in Grids 22 and 29. Continued cleaning equipment and updated OSE Spinel on site activities.

1230 2 trucks of backfill arrived on site.

1300 START PRYS AT LUNCH FOR 30 min.

ERE

August 31, 2015

Page 5

1330 2 trucks of backfill arrived on site.

1400 Wm on site to pick up 2 empty roll offs.

1430 2 trucks of backfill arrived on site. CMC continued spreading backfill in Grids 29, 22, 23, 3, and 4.

1510 1 truck of backfill arrived on site. CMC continued spreading backfill in Grids 3, 4, 23.

1525 1 truck of backfill arrived on site.

1550 1 truck of backfill arrived on site. CMC continued spreading backfill in Grids 5 and 24.

1615 1 truck of backfill arrived on site.

1635 1 truck of backfill arrived on site. CMC continued spreading backfill in Grids 5, 6, and 24.

NOTE: After lunch, CMC washed and scraped a portion of the north end of the south bldg Footprint. Reviewed perimeter air sampling results from 8/24, 8/26, and 8/27. On site results ranged from <math>0.00084</math> to <math>0.0016</math> f/cc. Residential results ranged from <math>0.00083</math> to <math>0.0013</math> f/cc.

1700 1 truck of backfill arrived on site.

1730 START PRYS AND START PRYS OFF SITE.

Cal ERE 31 August 2015

September 1, 2015

Weather: High of 92°F, mostly Sunny, Winds light and variable.

Prys

scope: Project monitoring

- 0630 START Prys on site. CMC conducted daily ops and safety meeting and continued spreading backfill in grids 6 and 24.
- 0700 Continued decomming site equipment and downloaded Tumble data.
- 0820 2 trucks of backfill arrived on site. CMC began spreading backfill in grids 25 and 7. CMC also removed silt from north end of south bldg footprint and central alleyway.
- 0905 2 trucks of backfill arrived on site. CMC continued spreading backfill in grids 7 and 8.
- 0945 2 trucks of backfill arrived on site. Start Prys updated OSC Spaulin on site activities and completed a soil sampling results summary sheet.
- 1030 2 trucks of backfill arrived on site. CMC continued spreading backfill in grids 2, 26, 27.
- 1120 2 trucks of backfill arrived on site.
- 1220 2 trucks of backfill arrived on site. CMC continued spreading backfill at the south end of the site.
- 1305 2 trucks of backfill arrived on site. CMC

Cal E

September 1, 2015

Prys

- 1305 continued spreading backfill on the south end of the site and in grids 27 A and B west of the silt fence.
- 1350 2 trucks of backfill arrived on site. CMC continued working in the same area.
- 1435 2 trucks of backfill arrived on site. CMC continued spreading backfill at the south end of the site. CMC also filled in a small area of the northwest corner of the south bldg with back.
- 1525 2 trucks of backfill arrived on site. CMC continued working in the same area.
- 1610 2 trucks of backfill arrived on site. Last delivery of this day.
- 1730 START Prys and CMC off site.

Cal E  
1 September 2015

September 2, 2015

Prags

weather: High of 92°F, Partly Sunny, Winds  
Light and Variable

scope: Project monitoring

0630 START Prags on site. CMC was conducting  
daily ops and safety meeting.

0715 2 trucks of backfill arrived on site and  
deposited loads in Grids 10 and 20. CMC continued  
spreading backfill at south end of site.

0805 2 trucks of backfill arrived on site. CMC  
continued spreading backfill at south end of site.

0850 2 trucks of backfill arrived on site.

0940 2 trucks of backfill arrived on site.

1025 2 trucks of backfill arrived on site and  
deposited backfill in Grid 28. CMC completed  
spreading backfill at south end of sight. Now  
spreading backfill in Grid 28. START Prags  
began mapping backfill areas using Trimble.

1115 2 trucks of backfill on site. CMC continued  
spreading backfill in Grid 28 and began in  
Grid 12.

1200 2 trucks of backfill arrived on site. CMC  
continued spreading backfill in Grids 28, 12, 13.  
CMC in process of demobilizing equipment  
from the site. START Prags reviewed 8/28/15  
air sampling results and updated the air

Paul E. [Signature]

September 2, 2015

Prags

1200 sampling results sheets. Results ranged from  
<0.00081 f/cc to 0.00096 f/cc.

1255 2 trucks of backfill arrived on site and placed  
in Grids 28, 20.

1340 12 trucks of backfill arrived on site. CMC  
was spreading backfill in Grids 13, 28.

1405 1 truck of backfill arrived on site.

1425 1 truck of backfill arrived on site.

1450 1 truck of backfill arrived on site. Dumped  
backfill at north end. CMC completed spreading  
backfill on west side of site.

1515 1 truck of backfill arrived on site. CMC  
continued spreading backfill at the north end of site.  
CMC also backfilled northwest corner of  
south blob with brick and soil.

1600 1 truck of backfill arrived at site. CMC continued  
spreading soil at north end.

1620 1 truck of soft backfill arrived at the site.  
Completed mapping the west side of the  
site with Trimble along with backfill locations  
with in the middle alleyway. CMC continued  
spreading backfill at the north end.

1655 CMC completed spreading backfill at north end.  
START Prags mapped north end with Trimble.

1730 START Prags and CMC off site. START Prags to demob  
to Dunwoody, GA office on 9/3/15.

Paul E. [Signature] 25675-086 2015

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September 2, 2015

Photo #	Time	Subject	D P
P1050938	1310	Completed backfill in Grids 29, 20	W PP
P1050939	1710	Completed backfill in Grids 18, 19, 20	E PP

Paul E. [Signature]  
2 September 2015

September 2, 2015

Photo #	Time	Subject	D P
P1050915	1120	Completed backfill south end of site	S PP
0916	1121	Completed backfill south end of site	N
0917	1121	Brick backfill at SW corner of south bldg	NW
0918	1121	Backfill b/w footer and south bldg	NA
0919	1122	Moving backfill to Grids 12, 13	NW
0920	1122	Spreading backfill in Grid 12	W ↓
0921	1623	Complete backfill on east side of site	S PP
0922	1623	Brick backfill in middle alley area	W
0923	1624	Brick/soil backfill at NW corner of south bldg SW	
0924	1624	Brick/soil backfill at NW corner of south bldg SE	
0925	1624	Completed backfill in Grid 28	S
0926	1624	Completed backfill in Grid 12	SW
0927	1625	Completed backfill in Grids 11, 12	S
0928	1625	Completed backfill in Grid 13	S
0929	1625	Completed backfill in Grid 14	NW
0930	1626	Completed backfill in Grid 29	N
0931	1627	Spreading backfill at north end	NE
0932	1627	Spreading backfill at north end	N
0933	1627	Completed backfill in Grid 29	S
0934	1627	Completed backfill in Grid 29	S
0935	1628	South bldg footprint after washing	S
0936	1709	Completed backfill in Grid 20	NW
0937	1709	Completed backfill in Grids 18, 19, 20	W ↓

September 1, 2015

Photo #	Time	Subject	O.P.
P1050894	1547	Compacting backfill on east side of site	S or
0895	1547	Compacting backfill on east side of site	N
0896	1547	Spread backfill in Grids P, 26A, 27A	W
0897	1548	Spread backfill in Grid 26B	SW
0898	1548	Brick backfill SW corner of south bldg	W
0899	1549	Spread backfill at south end of site	SE
0900 0900 <sup>Ⓟ</sup>	1549	Spread backfill in Grids 27A, 27B	S
0901	1549	Brick backfill at south bldg loading dock	NE
0902	1550	Backfill b/w office and north bldgs	NE

September 2, 2015

Photo #	Time	Subject	O.P.
P1050903	1115	Backfilling in Grids 28, 12	S or
0904	1116	Completed backfill east side of site.	S
0905	1117	Completed backfill east side of site	N
0906	1118	Completed backfill south end of site	SW
0907	1118	Completed backfill south end of site	SW
0908	1118	Completed backfill south end of site	W
0909	1118	Big footprint south end of site	W
0910	1119	Completed backfill south end of site	W
0911	1119	Completed backfill south end of site	NW
0912	1119	Big footprint south end of the site	NE
0913	1120	Completed backfill south end of site	NE
0914	1120	Completed backfill south end of site	S

August 28, 2015

Photo #	Time	Subject	O.P.
P1050872	1446	Scraped/washed office bldg footprint	NE or
0873	1446	Scraped/washed north bldg footprint	NW
0874	1447	Scraped/washed north bldg footprint	SE
0875	1448	Scraped/washed south bldg footprint	SE
0876	1448	Scraped/washed south bldg footprint	SE
0877	1449	Scraped/washed south bldg footprint	N
0878	1449	Scraped/washed south bldg footprint	E
0880	1450	Scraped/washed south bldg footprint	NW

August 31, 2015

Photo #	Time	Subject	O.P.
P1050881	0736	Spreading backfill in Grid 29	N or
0882	0932	Backfilling b/w north and office bldgs	N
0883	0932	Backfilling b/w north and office bldgs	NW
0884	1127	Dropping brick in Grid 29	NW
0885	1127	Dropping backfill in Grid 29	N
0886	1130	Dropping backfill in Grids 22 and 23	N
0887	1454	Backfill spread in Grids 3, 22, and 23	N
0888	1454	Backfill spread in Grids 3 and 4	NE

September 1, 2015

Photo #	Time	Subject	O.P.
P1050889	1001	Backfill spread on east side of site	S or
0890	1003	Backfill spread on Grids P, 26A, 26B	E
0891	1329	Backfill spread in Grid 26B	SE
0893	1330	Backfill spread in Grids 27A, 27B	SW

August 27, 2015

Photo #	Time	Subject	O P
P1050752	1136	Scrapped/sampled AREA IN GRID 27A	W
0853	1137	Scrapped/sampled AREA IN GRID 11	NW
0854	1137	Scrapped bldg located IN GRID 11	N
0855	1137	Scrapped bldg located IN GRIDS 11 AND 12	N
0856	1137	Scrapped bldg located IN GRIDS 11 AND 12	N
0857	1138	Scrapped bldg located IN GRIDS 11 AND 12	S
0858	1138	Scrapped bldg located IN GRIDS 11 AND 12	S
0859	1138	Scrapped bldg located IN GRIDS 11 AND 12	S
0860	1138	Scrapped/sampled AREA IN GRID 12	SW
0861	1139	Scrapped/sampled AREA IN GRID 13	NW
0862	1139	Scrapped/sampled AREA IN GRID 13	SW
0863	1139	Scrapped/sampled AREA IN GRID 14	NW
0864	1140	Scrapped/sampled AREA IN GRID 14	SW
0865	1140	Scrapped/sampled AREA IN GRID 14	S
0866	1140	Scrapped/sampled AREA IN GRID 28	SE SW (FP)
0867	1141	Scrapped/sampled AREA IN GRID 28	N
0868	1142	Scrapped/sampled AREA IN GRID 29	N
0869	1143	Scrapped/sampled AREA IN GRID 29	S
0870	1143	Scrapped/sampled AREA IN GRIDS 18-20	E
0871	1144	Scrapped/sampled AREA IN GRIDS 18-20	W
			(FP)
			(FP)
			(FP)

August 25, 2015

Photo #	Time	Subject	O P
P1050729	1458	Excavation AREA IN GRID 27B	NW FP
0830	1458	Excavation AREAS IN GRIDS 26B AND 27B	NE
0831	1459	Excavation AREA IN GRID 27B	E
0832	1459	Excavation AREA IN GRID 27B	E
August 27, 2015			
Photo #	Time	Subject	O P
P1050835	1007	conc clearing ROAD east of north bldg	W
0836	1008	Sampling soil b/w north and office bldg	SW
0837	1008	Sparged roadway north of north bldg	W
0838	1012	north bldg foot print after sparging	SW
0839	1133	backfilling south trench IN GRID 27B	N
0840	1133	backfilling south trench IN GRID 27B	N
0841	1134	backfilling south trench IN GRID 27B	N
0842	1134	Excavated AREA IN GRID 27B	W
0843	1134	Excavated AREA IN GRID 27B	SW
0844	1134	Excavated AREA IN GRID 27B	NW
0845	1134	Excavated AREAS IN AND south of GRID 27B	NW
0846	1135	Excavated AREAS IN AND south of GRID 27B	NA
0847	1135	Excavated AREAS IN AND south of GRID 27B	NA
0848	1135	Excavated AREAS IN AND south of GRID 27B	E
0849	1135	Excavated AREA IN GRID 27B	E
0850	1135	backfilled AREAS IN GRID 27B	S
0851	1136	Scrapped/sampled AREA IN GRID 10	NW

August 23, 2015

Photo #	Time	Subject	O.P.
P1050807	1112	TRENCH south of south bldg in GRID 27B	N PP
0808	1113	TRENCH south of south bldg in GRID 27B	N
0809	1113	TRENCH south of south bldg in GRID 27B	NA
0810	1113	TRE-LIKE material in TRENCH in GRID 27B	NA
0811	1114	TRENCH south of south bldg in GRID 27B	N
0812	1114	TRENCH south of south bldg in GRID 27B	S

August 25, 2015

Photos #	Time	Subject	O.P.
P1050813	0956	SCRAPED AREA in GRID 27B	S PP
0814	0956	SCRAPED AREA in GRID 27B	SW
0815	0956	SCRAPED AND SAMPLED AREA in GRID 26B	SE
0816	0957	SCRAPED AND SAMPLED AREA in GRID 27B	NW
0817	0957	SCRAPED AND SAMPLED AREA in GRID 26B	NE
0818	0957	SCRAPED AND SAMPLED AREA in GRID 26B	E
0819	0958	SCRAPED/SAMPLED AREAS in GRIDS 26A, 8-9	NE
0820	1001	SCRAPED/SAMPLED AREAS in GRIDS 3-6, 23-25	S
0821	1002	SCRAPED/SAMPLED AREAS marked with paint	NA
0822	1445	Bldg in GRID 11	NW
0823	1446	cleaning bldg in GRID 11	N
0824	1446	cleaning bldg in GRID 11	N
0825	1446	cleaning bldg in GRID 11	S
0826	1447	ASBESTOS roofing material in GRID 11 bldg	NA
0828	1452	Excavation AREA of GRID 27B	W

August 20, 2015

Photo #	Time	Subject	O.P.
P1050788	1417	Removal of south bldg completed	SE PP
0786	1420	Removal of south bldg completed	SW
0787	1422	Removal of south bldg completed	N
0789	1423	Removal of south bldg completed	NE
0790	1424	Removal of south bldg completed	NW
0791	1424	Removal of south bldg completed	NW

August 21, 2015

Photo #	Time	Subject	O.P.
P1050792	1036	Removing debris on W. side of S. Bldg	S PP
0793	1038	Removing debris From GRID 10	SW
0794	1112	S. Bldg Footprint	NW
0795	1113	SCRAPED soil in GRIDS 9 AND 10	NW
0796	1115	STAGING STRUCTURAL STEEL for recycling	W
0797	1132	Removing ACM from notches in concrete	NW
0798	1132	Removing ASBESTOS-contaminated soil	GRID 27
0800	1147	Removing ACM from notches in concrete	NE

August 22, 2015

Photo #	Time	Subject	O.P.
P1050801	0954	Disconnecting excavator with grapple	E PP
0802	0955	SCRAPING ACCESS ROAD on EAST SIDE	S
0803	0956	SCRAPED ACCESS ROAD on SOUTH END	SW
0804	0956	SCRAPED ACCESS ROAD on EAST SIDE	N
0805	0957	South END of SITE	SW
0806	0957	North END of SITE	NW

August 17, 2015

Photo #	Time	Subject	O	P
P1050765	0847	South bldg remaining frame	SW	FF
0766	0847	South bldg remaining frame	S	
0768	0850	South bldg remaining frame	SE	
0769	0903	Demo brick staged N. of north bldg NW		
0770	0923	AREAS MARKED FOR ADDITIONAL SCRAPING N	N	
0771	0923	AREAS MARKED FOR ADDITIONAL SCRAPING N	N	
0772	0923	AREAS MARKED FOR ADDITIONAL SCRAPING N	N	
0773	0924	AREAS MARKED FOR ADDITIONAL SCRAPING N	N	
0774	0924	AREAS MARKED FOR ADDITIONAL SCRAPING S	S	

August 19, 2015

Photo #	Time	Subject	O	P
P1050776	1037	STRUCTURAL STEEL REMOVAL South Bldg	SW	FF
0776	1037	STRUCTURAL STEEL REMOVAL South Bldg	SW	
0777	1037	STRUCTURAL STEEL STAGING	NW	
0778	1038	STRUCTURAL STEEL REMOVAL South Bldg	SW	
0779	1039	SOIL SCRAPING IN GRID 26	W	
0780	1039	SOIL SCRAPING IN GRID 26	S	
0781	1039	SOIL SCRAPING IN GRID 26	S	
0782	1040	SOIL SCRAPPED AREA IN GRID 26	W	

August 20, 2015

Photo #	Time	Subject	O	P
P1050783	1403	SCRAPING GRID 29	S	FF
P1050784	1417	SCRAPING GRID 29	N	FF

August 14, 2015

Photo	Time	Subject	O	P
P1050734	0850	View of south building with most walls down	SW	DE
735	1004	View of south building with all brick walls down	W	
736	1004	View of south building with all brick walls down	SW	
737	1101	CMC putting brick/debris in WM roll off	SW	
741	1319	CMC collecting brick/debris inside south building	SE	
742	1320	View of area filled with brick from S bldg, St E walls S.		
743	1321	CMC clearing brick/debris inside S. building	W	
744	1322	CMC clearing brick/debris inside S. building	SW	
745	1323	CMC clearing brick/debris inside S. building	W	

August 15, 2015

Photo	Time	Subject	O	P
P1050746	0757	CMC connecting cables to south building	SW	DE
748	0808	CMC notching structural beams of S. building	W	
749	0808	CMC notching structural beams of S. building	W	
750	1058	view of S. building before it is pulled down	SW	
754	1122	CMC about to pull down S. building	W	
755	1122	CMC excavators with cables attach. to S. bldg.	NW	
756	1122	view of S. building before it is pulled down	SW	
757	1123	view of S. build right after it is pulled down	SW	
759	1125	view of S. building right after it is pulled down	SW	
760	1256	view of pulled down S. building frame	SW	
761	1256	view of demolished S. building frame	S	
763	1256	view of S. building frame + ACM shingles	S	
764	1259	view of demolished S. building frame	W	

Dmitry

August 12, 2015

Photo	Time	Subject	O	P
P1050701	1409	Demolition of east wall of south building	SW	DE
↓ 704	1410	Demolition of SE wall of south building	SW	↓
↓ 708	1431	View of E. wall of south building after wall demo	W	↓

August 13, 2015

Photo	Time	Subject	O	P
P1050709	0936	View of south wall of south building	S	DE
↓ 710	0937	South building south wall and floor after wash, before demo	SW	↓
711	0937	South building south floor after wash, before demo	W	
712	0951	CMC wetting the S. wall of S. building before demo	SW	
713	1040	S. end of S. bldg. before demo	SW	
714	1040	Demolition of south wall of south building	SW	
716	1041	Demolition of south wall of south building	SW	
718	1041	Demolition of south wall of south building	SW	
721	1045	Demolition of south wall of south building	NW	
723	1045	Demolition of south wall of south building	NW	
725	1047	Demolition of south wall of south building	NW	
726	1049	Demolition of south wall of south building	W	
730	1051	Demolition of south wall of south building	SW	
↓ 731	1051	Demolition of south wall of south building	SW	↓
↓ 733	1321	CMC fill ditch E of the S. bldg. with clean brick	SW	↓

David Egan  
12 August 2015

August 11, 2015

Photo	Time	Subject	O	P
P1050658	0826	CMC separates metal with excavator	SW	DE
↓ 659	1058	CMC transporting metal to recycling roll off	SW	↓
660	1058	CMC placing metal into recycling roll off	NW	
662	1119	CMC removing corrugated roofing from south bldg.	SW	
663	1119	CMC removing corrugated metal roof from south bldg.	SW	
665	1122	CMC removing corrugated metal roof from south bldg.	SW	
666	1304	CMC using water truck to suppress dust	S	
667	1305	CMC removing metal roof from south building	W	
668	1320	inside south building	SW	
670	1324	previous staging area for ACM debris	NW	
671	1324	CMC removing debris from inside south building	SW	
↓ 673	1326	Outside south building on east side	SW	↓

August 12, 2015

Photo	Time	Subject	O	P
P1050677	0801	CMC using man lift to remove small pieces of roof material	SW	DE
↓ 679	0807	CMC removing smaller pieces of roof material	SW	↓
680	1037	CMC removing dirt and debris from pit	SW	
684	1114	CMC dumping debris from pit into WM roll off	NW	
686	1253	Pit area east of S. building after CMC scraped	NW	
687	1253	CMC scraping small pit area E. of S. bldg.	NW	
688	+107 1256	area E. of S. bldg. after CMC scraped	N	
692	+106 1401	Demolition of east wall of south building	W	
695	1406	Demolition of east wall of south building	SW	
↓ 698	1406	Demolition of east wall of south building	SW	↓

David Egan

August 7, 2015

Photo	Time	Subject	O	P
P1050618	1115	CMC loads excavator with clean brick to recycle	SW	DE
619	1116	CMC dumps clean brick into clean brick storage area.	SW	DE
622	1410	cleaned asphalt N side of south building.	SW	
623	1440	Demolition of NE wall of south building	SW	
624	1440	Demolition of NE wall of south building	SW	
625	1441	Demolition of NE wall of south building	SW	
628	1445	Demolition of NE wall of south building	SW	

August 10, 2015

Photo	Time	Subject	O	P
P1050629	0920	CMC tying cable around the N. wall of the S. bldg.	SW	DE
631	0945	CMC cleaning asphalt on N. side of south building	SW	
632	1004	cleaned asphalt N. side of south building	SW	
633	1040	2 excavators tied with cables to N. wall of S. bldg.	SW	
634	1041	right after CMC pulled majority of N. wall down	SW	
636	1041	Demolition of N. wall of south building	SW	
637	1044	north wall of south building during demo	SW	
639	1248	Demolition of N. wall of south building	W	
640	1248	Demolition of north wall of south building	W	
642	1250	Demolition of north wall of south building	W	
646	1258	Demolition of north wall of south building	W	
648	1258	Demolition of north wall of south building	W	
649	1302	Demolition of north wall of south building	SW	
650	1405	CMC collecting debris for ACM disposal	W	
652	1412	CMC collecting debris for ACM disposal	SW	
653	1413	CMC dumping debris into WM roll off for disposal	W	

August 6, 2015

Photo #	Time	Subject	O	P
P1050571	0734	CMC moving metal into recycling roll off	SW	DE
572	0735	CMC moving metal into recycling roll off	SW	
578	1115	Demolition removal of ACM roof shingles off S. bldg. W	W	
579	1115	removal of ACM roof shingles on NE side of S. bldg.	W	
580	1115	removal of ACM roof shingle on NE side of S. bldg.	W	
584	1120	removal of ACM roof shingle on NE side of S. bldg.	E	
588	1434	interior of SE side of S. bldg. roof	SE	
591	1437	interior of SE side of S. bldg. roof	NE	
592	1459	removal of ACM roof shingles on E side of S. bldg.	SW	
593	1500	CMC scraping small pieces of ACM shingles	W	
595	1501	CMC scraping ACM shingles on E side of S. bldg.	SW	

August 7, 2015

Photo #	Time	Subject	O	P
P1050596	0804	CMC cleaning asphalt outside south building	SW	DE
597	0804	CMC cleaning asphalt outside south building	W	
598	0805	CMC loading ACM debris into lined roll off	W	
599	1021	cleaned asphalt before brick wall demo	SW	
601	1021	CMC begins demo of south bldg. NE wall	SW	
602	1022	Demolition of NE wall of south building	SW	
605	1023	Demolition of NE wall of south building	SW	
606	1023	Demolition of NE wall of south building	SW	
607	1023	Demolition of NE wall of south building	SW	
609	1024	CMC uses water truck for dust control	S	
615	1032	Demolition of NE wall of south building	SW	

Photo #	Time	Subject	O	P
P1050519	1046	CMC lining poly in WM roll off	NW	DE
20	1046	CMC doing repair to long reach excavator	SE	
21	1047	CMC doing repair to long reach excavator	SW	
24	1048	CMC linking poly in WM roll off	NW	
25	1410	inside south building	SW	
26	1411	CMC scraping debris out of south building	S	
28	1412	removing debris from south building	E	
29	1412	WM dropping off a roll off	NE	
34	1415	removing debris from south building	S	
35	1415	removing debris from south building	S	
36	1416	removing debris from south building	S	
41	1419	dumping south bldg. debris onto ACM pile	NW	
44	1427	inside south building	S	
47	1427	removing debris from west of N. bldg. foundation	N	
49	1427	removing debris from west of N. bldg. foundation	NW	
51	1428	dumping debris onto ACM pile	N	
52	1428	dumping debris onto ACM pile	N	
54	1429	removing debris from west of N. bldg. foundation	N	
58	1429	removing debris from W. of N. bldg. foundation	N	
60	1429	dumping debris onto ACM pile	N	
62	1431	dumping debris onto ACM pile	N	
65	1433	removing debris from W. of N. bldg. foundation	S	
66	1433	removing debris from W. of N. bldg. foundation	SW	
67	1434	dumping debris onto ACM pile	S	
68	1434	dumping debris onto ACM pile	S	

Dail Espy

August 3, 2015

Photo #	Time	Subject	O	P
P1050494	1044	demolition of SW wall of N. Bldg	NW	PP
0495	1058	demolition of SW storage of N. Bldg	NW	
0496	1058	Demolition of SW storage of N. Bldg	NW	
0497	1100	demolition of SW storage of N. Bldg	NW	
0498	1107	demolition of SW storage of N. Bldg	N	

August 4, 2015

Photo #	Time	Subject	O	P
P1050499	1303	Demolition of SE wall of N. Bldg	W	PP
500	1308	_____	W	PP
501	1306	_____	SE	PP
502	1308	_____	SW	PP
503	1310	_____	W	PP
504	1313	_____	W	PP
505	1325	_____	NE	PP
506	1326	_____	NE	PP
507	1326	_____	NE	PP
508	1337	Demolition of SE structural beam in N. E building	SE	PP
509	1337	_____	W	PP
510	1343	_____	W	PP
513	1350	_____	SE	PP

PP

PP

PP

July 31, 2015

Photo #	Time	Subject	O	P
1050469	1047	SE ROOM DEMOLITION N. Bldg	S	PP
0470	1048	SE ROOM DEMOLITION N. Bldg	S	
0471	1050	SE ROOM DEMOLITION N. Bldg	SW	
0475	1454	North bldg DEBRIS CLEAN UP	S	
0474	1454	North bldg DEBRIS CLEAN UP	S	
0476	1455	SE ROOM DEBRIS CLEAN UP N. Bldg	SE	
0477	1455	N. Bldg DEBRIS CLEAN UP - ACM IN DEBRIS	S	↓

August 1, 2015

Photo #	Time	Subject	O	P
1050480	1016	SCRAPING DEBRIS FROM ALLEY b/w N AND S. Bldgs	NE	PP
0481	1017	WASHING ALLEY BETWEEN N AND S. Bldgs	E	
0482	1019	SEPARATING METAL FROM N. Bldg DEMO	SE	
0484	1024	STAGING DEBRIS W/IDE South Bldg	SW	
0486	1026	REMOVING DEBRIS INSIDE South bldg	SW	
0487	1101	ALLEY AFTER WASHING b/w N AND S. bldg	W	
0488	1101	ALLEY AFTER WASHING b/w N AND S. bldg	E	↓

August 3, 2015

Photo #	Time	Subject	O	P
1050489	1018	WASHED SECTION OF SE NEGA OF N. Bldg	SW (PP)	N PP
0490	1033	WASHED (W/ACROSS) SE NEGA OF N. Bldg	SW (PP)	NE
0491	1037	DEMOLITION OF SE WALL OF N. Bldg	SW (PP)	NW
0492	1037	DEMOLITION OF SE WALL OF N. Bldg	SW (PP)	NW
0493	1039	DEMOLITION OF SE WALL OF N. Bldg	SW (PP)	NW ↓

July 30, 2015

Photo #	Time	Subject	O	P
1050445	1149	DEMO OF THE SOUTH END OF THE NORTH Bldg	SW	PP
0446	1150	DEMO OF THE SOUTH END OF THE NORTH Bldg	SW	
0447	1150	DEMO OF THE SOUTH END OF THE NORTH Bldg	S	
0448	1151	DEMO OF THE SOUTH END OF THE NORTH Bldg	SE	
0449	1153	DEMO OF THE SOUTH END OF THE NORTH Bldg	NE	
0450	1153	DEMO OF THE SOUTH END OF THE NORTH Bldg	NE ↓	

July 31, 2015

Photo #	Time	Subject	O	P
1050452	0936	SE ROOM DEMOLITION N. Bldg.	W	PP
0453	1014	DEBRIS REMOVED b/w N. AND S. Bldgs	W	
0454	1015	REMAINING N. Bldg AFTER DEMO	N	
0455	1018	SE ROOM DEMOLITION N. Bldg	SW	
0456	1019	STRUCTURAL STEEL STAGING FOR RECYCLING	NW	
0457	1020	N. Bldg DEBRIS CLEAN UP	S	
0458	1020	N. Bldg DEBRIS CLEAN UP	SW	
0459	1021	N. Bldg DEBRIS CLEAN UP	S	
0460	1022	N. Bldg DEBRIS CLEAN UP - ACM IN DEBRIS	SE	
0462	1036	SE ROOM DEMOLITION N. Bldg	SE	
0463	1037	SE ROOM DEMOLITION N. Bldg	SW	
0464	1037	SE ROOM DEMOLITION N. Bldg	SW	
0465	1039	SE ROOM DEMOLITION N. Bldg	SW	
0466	1039	SE ROOM DEBRIS CLEAN UP N. Bldg	W	
0468	1044	SE ROOM DEMOLITION N. Bldg	SE ↓	

July 29, 2015

<u>Photo #</u>	<u>Time</u>	<u>Subject</u>	<u>O</u>	<u>P</u>
P1050423	1517	northwest wall demo in north bldg	W	PP
P1050424	1518	northwest wall demo in north bldg	W	PP

July 30, 2015

<u>Photo #</u>	<u>Time</u>	<u>Subject</u>	<u>O</u>	<u>P</u>
P1050426	1122	STRUCTURAL BEAMS CUT FOR DEMO	SW	
0427	1123	STRUCTURAL BEAMS CUT FOR DEMO	SE	
0428	1126	HOOKING CABLES TO BEAMS FOR DEMO	NA	
0429	1129	HOOKING CABLES TO BEAMS FOR DEMO	NA	
0430	1135	DEMO OF SOUTH END OF NORTH BLDG	SW	
0431	1135	DEMO OF SOUTH END OF NORTH BLDG	SW	
0432	1135	DEMO OF SOUTH END OF NORTH BLDG	SW	
0433	1135	DEMO OF SOUTH END OF NORTH BLDG	SW	
0434	1135	DEMO OF SOUTH END OF NORTH BLDG	SW	
0435	1137	DEMO OF SOUTH END OF NORTH BLDG	SW	
0436	1138	DEMO OF SOUTH END OF NORTH BLDG	SE	
0437	1140	DEMO OF SOUTH END OF NORTH BLDG	SW	
0438	1141	DEMO OF SOUTH END OF NORTH BLDG	N	
0439	1141	DEMO OF SOUTH END OF NORTH BLDG	NE	
0440	1147	DEMO OF SOUTH END OF NORTH BLDG	SW	
0441	1148	DEMO OF SOUTH END OF NORTH BLDG	SW	
0442	1148	DEMO OF SOUTH END OF NORTH BLDG	SW	
0443	1148	DEMO OF SOUTH END OF NORTH BLDG	SW	
0444	1149	DEMO OF SOUTH END OF NORTH BLDG	SW	

July 28, 2015

<u>Photo #</u>	<u>Time</u>	<u>Subject</u>	<u>O</u>	<u>P</u>
P1050396	1134	GRAPPLER CRUSHING LARGE SECTIONS OF WALL	NW	PP
P1050397	1134	GRAPPLER CRUSHING LARGE SECTIONS OF WALL	NW	PP
P1050399	1548	BULLDOZER TRANSPORTING TO N. STAGING AREA	W	PP
P1050400	1543	REMOVING STRUCTURAL STEEL N. BLDG	W	PP
P1050401	1544	REMOVING STRUCTURAL STEEL FROM N. BLDG	W	PP

July 29, 2015

<u>Photo #</u>	<u>Time</u>	<u>Subject</u>	<u>O</u>	<u>P</u>
P1050403	0859	SKID STEER CLEANING EXCESS DIRT	SW	
0404	0901	WASHING METAL PRIOR TO RECYCLING	W	
0405	1118	NORTH END OF NORTH BLDG	SW	
0406	1119	SCRAPING DEBRIS FROM NORTH BLDG	S	
0408	1123	SCRAPING DEBRIS FROM NORTH BLDG	N	
0410	1438	WASHING FLOOR IN NORTH BLDG	NW	
0411	1441	WASHING FLOOR IN NORTH BLDG	N	
0414	1442	WASHING FLOOR IN NORTH BLDG	N	
0415	1451	WASHING FLOOR IN NORTH BLDG	N	
0416	1452	WASHING FLOOR IN NORTH BLDG	SE	
0417	1458	FLOOR AFTER WASHING IN NORTH BLDG	S	
0418	1511	NORTHWEST WALL DEMO IN NORTH BLDG	W	
0419	1511	NORTHWEST WALL DEMO IN NORTH BLDG	W	
0420	1514	NORTHWEST WALL DEMO IN NORTH BLDG	W	
0421	1514	NORTHWEST WALL DEMO IN NORTH BLDG	W	
0422	1516	NORTHWEST WALL DEMO IN NORTH BLDG	W	

July 27, 2015

Photo #	Time	Subject	O	P
P1050371	1305	wetting north wall debris	W	PP
0372	1306	north staging AREA of north bldg.	SW	
0373	1311	skid steer removing north wall debris	W	
0374	1326	north bldg driveway after cleaning	W	
0375	1329	extended reach excavator removing debris	NE	
0376	1353	wetting and removing northeast wall	SW	
0377	1405	wetting and removing north wall	SW	
0378	1417	wetting and removing north wall	SW	
0379	1538	Perimeter Air Sampling Location 1	E	
0380	1547	Perimeter Air Sampling Location 2	S	
0381	1554	Perimeter Air Sampling Location 3	NE	
0382	1600	Perimeter air sampling location 4	NW	

July 28, 2015

Photo #	Time	Subject	O	P
P1050384	0842	removing structural steel from N. Bldg	SE	PP
0385	0849	NE room of N. Bldg after equip removal	E	
0386	0849	Acum mixed with demo debris in N. bldg	N	
0387	0850	Post north wall removal in N. bldg	N	
0390	1102	demolition of NE room in N. bldg	W	
0391	1108	demo debris to north staging AREA	NE	
0392	1129	demo debris removal for N-staging AREA	E	
0393	1130	demolition of NE room in N. Bldg	SE	
0394	1131	Acum mixed with demo debris in NE room	NA	

July 28, 2015

Photo #	Time	Subject	O	P
P1050346	0909	After debris cleanup in north bldg	E	PP
0348	0838	Debris on west side of north bldg	S	
0349	0841	west side of south bldg	N	
0350	0847	metal for recycling from north bldg	NW	
0351	0847	metal for recycling from north bldg	N	
0353	0852	Acum mixed with plastic debris	NA	

July 27, 2015

Photo #	Time	Subject	O	P
P1050355	0847	Storage Soil disposal north staging AREA	WPP	
0357	1011	removing debris from north bldg windows	NW	
0358	1016	soil scraping in north staging AREA	SE	
0359	1017	soil scraping in north staging AREA	W	
0360	1018	soil scraping in north staging AREA	NW	
0361	1019	soil scraping in north staging AREA	NE	
0362	1023	Post gross debris removal in north bldg	S	
0363	1023	Post gross debris removal in north bldg	W	
0364	1027	Sealing plastic sheeting prior to disposal	W	
0365	1028	Sealing plastic sheet prior to disposal	W	
0366	1029	Sealing plastic sheeting prior to disposal	W	
0367	1247	Removal of the north wall in north bldg	SE	
0368	1250	Removal of north wall in north bldg	SE	
0369	1250	Removal of north wall in north bldg	SE	
0370	1252	wetting northeast portion of north bldg	SE	

July 23, 2015

Photo#	Time	Subject	O	P
P1050325	0937	DISPOSAL OF DRUM WITH DEBRIS	W	PP
0326	0938	DISPOSAL OF DRUM WITH DEBRIS	SW	
0327	1457	SCRAPED AREA NE OF NORTH BLDG	NW	
0328	1457	DEBRIS REMOVED FROM OFFICE BLDG PAD	NW	
0329	1458	METAL REMOVED FROM S. END OF NORTH BLDG	W	
0330	1459	CLEARED AREA N. OF NORTH BLDG	NW	
0331	1502	EQUIPMENT REMOVAL FROM NORTH BLDG	SE	
0332	1502	EQUIPMENT REMOVAL FROM NORTH BLDG	E	
0333	1503	EQUIPMENT REMOVAL FROM NORTH BLDG	S	
0334	1504 <sup>(PP)</sup> 1508	DEBRIS AREA POST REMOVAL FROM NORTH BLDG	S	
0335	1508	FIRE DAMAGED STRUCTURAL STEEL - N. BLDG	SW	
0336	1521	METAL <sup>(PP)</sup> STAGED FOR CLEANING/RECYCLING	S	
0337	1524	WEST SIDE OF NORTH BLDG	S	
0338	1526	WEST SIDE OF SOUTH BLDG	SW	

July 25, 2015

Photo#	Time	Subject	O	P
P1050339	0824	METAL FOR RECYCLING	NW	PP
0340	0826	WEST SIDE OF SOUTH BLDG	S	
0341	0826	WEST SIDE OF NORTH BLDG	N	
0342	0827	WEST SIDE OF NORTH BLDG	N	
0343	0827	AREA BETWEEN NORTH AND SOUTH BLDGS	E	
0344	0827	AFTER DEBRIS CLEAN UP IN NORTH BLDG	N	
0345	0829	AFTER DEBRIS CLEAN UP IN NORTH BLDG	S	

July 22, 2015

Photo#	Time	Subject	O	P
P1050307	1459	DISPOSAL OF ASBESTOS-CONTAMINATED DEBRIS	SW	PP
0308	1459	METAL STAGED FOR RECYCLING	SW	
0309	1459	BARRIER TAPE AROUND SITE PERIMETER	S	
0310	1459	DECON AT SITE ENTRANCE	SW	
0311	1500	BARRIER TAPE ACROSS SITE ENTRANCE	W	
0312	1500	WARNING LABEL POSTED ON ROLL OFF	NA	
0313	1500	EURETO WRAPPED DISPOSAL DEBRIS	NW	
0314	1500	GENERATOR INFO FOR DISPOSAL	NA	
0315	1538	DEMOLITION OF OFFICE BLDG	(PP) SW	W
0316	1538	DEMOLITION OF OFFICE BLDG	(PP) SW	W
0317	1539	DEMOLITION OF OFFICE BLDG	W	
0318	1541	DEMOLITION OF OFFICE BLDG	W	
0319	1543	DEMOLITION OF OFFICE BLDG	SW	
0320	1543	DEMOLITION OF OFFICE BLDG	W	
0321	1656	LINED ROLL OFF FOR DISPOSAL	SW	
0323	1657	DISPOSAL OF DEMOLITION DEBRIS	SW	
0324	1658	DISPOSAL OF DEMOLITION DEBRIS	SW	

NOTE: PHOTO TIMES OCCURRED 1 HR PRIOR TO ABOVE DOCUMENTATIONS. TIME ON CAMERA HAS BEEN RESET TO ACCOUNT FOR CENTRAL TIME ZONE.

\_\_\_\_\_ (PP)

\_\_\_\_\_ (PP)

\_\_\_\_\_ (PP)

## MEASUREMENT CONVERSIONS

### U.S. to METRIC

inch x 2.54 = centimeter  
 foot x 0.3048 = meter  
 yards x 0.914 = meter  
 mile x 1.609 = kilometer  
 quart x 0.946 = liter  
 gallon x 3.785 = liter  
 ounce x 28.349 = grams  
 lbs x 0.454 = kg  
 mpg x 0.245 = km/ltr  
 mph x 1.609 = km/hr  
 °F to °C (F - 32) x .555

### METRIC to U.S.

centimeter x 0.394 = inch  
 meter x 3.28 = foot  
 meter x 1.094 = yards  
 kilometer x 0.621 = mile  
 liter x 1.057 = quarts  
 liter x 0.264 = gallon  
 grams x 0.035 = ounce  
 kg x 2.205 = lbs  
 km/ltr x 2.354 = mpg  
 km/hr x 0.621 = mph  
 °C to °F (C x 1.8) + 32

### ENGLISH LINEAR MEASUREMENTS

12 inches = 1 foot  
 36 inches = 1 yard  
 3 feet = 1 yard  
 1,760 yards = 1 mile statute  
 2,026.8 yards = 1 mile nautical  
 5,280 feet = 1 mile statute  
 6,060.4 feet = 1 mile nautical  
 63,360 inches = 1 mile statute  
 72,963 inches = 1 mile nautical

### MAP SCALES—ENGLISH & METRIC

SCALE	1 INCH =	1 CENTIMETER =
1:10,000	833.33 feet 254 meters	328.1 feet 100 meters
1:25,000	2,083.3 feet 635 meters	820.2 feet 250 meters
1:50,000	4,166.7 feet 1,270 meters	1,640.4 feet 500 meters
1:63,360	5,280 feet 1,609.3 meters	2,078 feet 633.6 meters
1:100,000	8,333.3 feet 2,540 meters	3,280.8 feet 1,000 meters
1:250,000	20,833 feet 6,350 meters	8,202 feet 2,500 meters
1:500,000	41,667 feet 12,700 meters	16,404 feet 5,000 meters



**USE WET OR DRY**  
*most pens stop writing when wet*

- ALL PENCILS
- RITE IN THE RAIN PENS
- WAX MARKERS
- CRAYONS
- OIL PASTELS / PAINT



**WHEN DRY ONLY**  
*what you write won't wash off*

- PERMANENT MARKERS
- STANDARD BALLPOINTS



**WON'T WORK**  
*water-based inks bead off sheet*

- GEL PENS
- MOST HIGHLIGHTERS
- FOUNTAIN PENS
- WATER COLORS
- ACRYLIC PAINT

TACOMA, WA  
*Rite in the Rain*  
 ALL-WEATHER WRITING PAPER

**Yes, Rite in the Rain**  
 is a wood-based & recyclable  
 paper, but unlike plain paper...  
**it won't turn to mush**  
 when exposed to:



**ALL-WEATHER TOUGH!**



The *Rite in the Rain* story began nearly a century ago in the forests of the Great Northwest. Entrepreneur, Jerry Darling, recognized the logging industry's need for a durable material that could be written on and survive in poor weather conditions. Jerry developed a special coating that created a unique moisture shield on the hand-dipped sheets of paper that he and his wife, Mary, processed at their home.

From humble beginnings our first all-weather paper was born! Over the many years we've perfected and patented our environmentally responsible coating process. Still located in Tacoma, our continued mission is to provide innovative products for professionals and enthusiasts who brave the outdoors.



*other product styles available*



**BOUND BOOKS    NOTEBOOKS    LOOSE LEAF & PLANNERS    COPIER PAPER    PENS, PENCILS & REFILLS**

**ENCLOSURE 5**

**ASBESTOS INSPECTOR CERTIFICATION**

(Four Pages)

**THE STATE OF TENNESSEE**

Department of Environment and Conservation  
Division of Solid Waste Management  
Toxic Substances Program

07-5043-34043



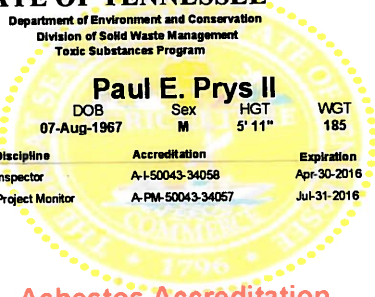
Re-Accreditation

**Paul E. Prys II**

DOB	Sex	HGT	WGT
07-Aug-1967	M	5' 11"	185

Discipline	Accreditation	Expiration
Inspector	A-I-50043-34058	Apr-30-2016
Project Monitor	A-PM-50043-34057	Jul-31-2016

**Asbestos Accreditation**



## Certificate of Training

# Paul Prys

is hereby awarded this certificate to acknowledge completion of the  
8-hour HAZWOPER General Site Worker Refresher Course

Hazardous Waste Operations and Emergency Response  
(HAZWOPER) Refresher Training for Compliance with OSHA  
29 CFR 1910.120 (e)(3)(i)

prepared and instructed by

Tetra Tech TSS

Date Course Completed: **November 6, 2014**



---

Chris Draper  
Safety Manager

# THE STATE OF TENNESSEE

Department of Environment and Conservation  
Division of Solid Waste Management  
Toxic Substances Program

62777-24693



Date Issued: 3/4/2015

Re-Accreditation

## David M Espy

DOB	Sex	HGT	WGT
18-Sep-1985	M	6'0"	190

Discipline	Accreditation	Expiration
Inspector	A-I-55949-34954	May-31-2015
Project Monitor	A-PM-55949-40481	Jan-31-2016

## Asbestos Accreditation



RESOLUTION, INCORPORATED  
1101-A DARBYTOWN DRIVE  
NASHVILLE, TN. 37207  
(615) 865-8813

*Certifies That*

Certification

Number: RI-HWR04130510

**DAVID ESPY**

Has successfully completed the course entitled

**8 HOUR HAZWOPER GENERAL SITE REFRESHER TRAINING**

Training was in accordance with Federal OSHA REGULATIONS 29 CFR 1910.120

Training Date: April 11, 2013

Expiration Date: April 11, 2014

Ron Francis – Training Manager

Dale Rainey – Instructor

**ATTACHMENT 1**  
**LABORATORY CERTIFICATIONS**  
(Four Pages)

United States Department of Commerce  
National Institute of Standards and Technology



---

## Certificate of Accreditation to ISO/IEC 17025:2005

---

NVLAP LAB CODE: 101235-0

**MAS, LLC**  
Suwanee, GA

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

### **AIRBORNE ASBESTOS FIBER ANALYSIS**

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

2015-07-01 through 2016-06-30

*Effective dates*



A handwritten signature in black ink, appearing to read "William R. M. M. M.", is written over a horizontal line.

*For the National Institute of Standards and Technology*



**National Voluntary  
Laboratory Accreditation Program**



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**MAS, LLC**  
 3945 Lakefield Court  
 Suwanee, GA 30024  
 Mr. William Longo, PhD.  
 Phone: 770-866-3202 Fax: 770-866-3259  
 E-Mail: wlongo@mastest.com  
 URL: <http://www.mastest.com>

**AIRBORNE ASBESTOS FIBER ANALYSIS (TEM)**

**NVLAP LAB CODE 101235-0**

***NVLAP Code    Designation / Description***

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

2015-07-01 through 2016-06-30

*Effective dates*

*For the National Institute of Standards and Technology*

United States Department of Commerce  
National Institute of Standards and Technology



---

## Certificate of Accreditation to ISO/IEC 17025:2005

---

NVLAP LAB CODE: 101235-0

**MAS, LLC**  
Suwanee, GA

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

### **BULK ASBESTOS FIBER ANALYSIS**

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

2015-07-01 through 2016-06-30

*Effective dates*



A handwritten signature in black ink, appearing to read "William R. M. L. D.", is written over a horizontal line.

*For the National Institute of Standards and Technology*



**National Voluntary  
Laboratory Accreditation Program**



**SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005**

**MAS, LLC**  
 3945 Lakefield Court  
 Suwanee, GA 30024  
 Mr. William Longo, PhD.  
 Phone: 770-866-3202 Fax: 770-866-3259  
 E-Mail: wlongo@mastest.com  
 URL: http://www.mastest.com

**BULK ASBESTOS FIBER ANALYSIS (PLM)**

**NVLAP LAB CODE 101235-0**

<i>NVLAP Code</i>	<i>Designation / Description</i>
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

2015-07-01 through 2016-06-30

*Effective dates*

*For the National Institute of Standards and Technology*

**ATTACHMENT 2**  
**LABORATORY ANALYTICAL RESULTS**  
(101 Pages)

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 7/21/2015  
 Sampling Date: 7/20/2015

MAS Project: M62436  
 Date Reported: 7/22/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62436-001	WC-BG-L01-072015	Location 1	3119.6	11	100	14.0	0.00086	0.0017	
M62436-002	WC-BG-L02-072015	Location 2	3146.9	10	100	12.7	0.00086	0.0016	
M62436-003	WC-BG-L03-072015	Location 3	3188.7	6.5	100	8.3	0.00085	0.0010	
M62436-004	WC-BG-L04-072015	Location 4	3135.4	11	100	14.0	0.00086	0.0017	
M62436-005	WC-FB-01-072015	Field Blank 1	0	0	100	0.0	NA	NA	
M62436-006	WC-FB-02-072015	Field Blank 2	0	0	100	0.0	NA	NA	
M62436-007	WC-LB-072015	Lot Blank	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: Chris J. Bauer  
 Materials Analytical Services, LLC. PH: (770) 866-3200  
 3945 Lakeland Court Fax: (770) 866-3259  
 Suwanee, GA 30024  
[www.mastest.com](http://www.mastest.com)

M62436

MATERIAL ANALYTICAL SERVICES, INC.

3945 Lakefield Court. Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/20/2015

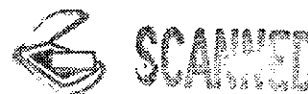
SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-BG-L01-072015	Location 1	G1	7:28	12:42	314	10.12	9.75	9.94	3119.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-BG-L02-072015	Location 2	G2	7:43	12:58	315	10.15	9.83	9.99	3146.9	
WC-BG-L03-072015	Location 3	G3	8:10	13:24	314	10.16	10.15	10.16	3188.7	
WC-BG-L04-072015	Location 4	G4	8:22	13:30	308	10.20	10.16	10.18	3135.4	
WC-FB-01-072015	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072015	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-LB-072015	Lot Blank	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>7/20/15 @ 17:30</u>
Received By: <u>[Signature]</u>	Date/Time: <u>7.21.15 10:15</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/20/2015



Shipping Package Inspected By:  
 1. [Signature] Date 7-21-15  
 2. [Signature] Date 7-27-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 7/21/2015  
 Sampling Date: 7/20/2015

MAS Project: M62436  
 Date Reported: 7/22/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)
M62436-001	WC-BG-L01-072015	Location 1	3119.6	11	100	14.0	0.00086	0.0017
M62436-002	WC-BG-L02-072015	Location 2	3146.9	10	100	12.7	0.00086	0.0016
M62436-003	WC-BG-L03-072015	Location 3	3188.7	6.5	100	8.3	0.00085	0.0010
M62436-004	WC-BG-L04-072015	Location 4	3135.4	11	100	14.0	0.00086	0.0017
M62436-005	WC-FB-01-072015	Field Blank 1	0	0	100	0.0	NA	NA
M62436-006	WC-FB-02-072015	Field Blank 2	0	0	100	0.0	NA	NA
M62436-007	WC-LB-072015	Lot Blank	0	0	100	0.0	NA	NA

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise noted

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

*Chinda B...*

Materials Analytical Services, LLC.

PH: (770) 866-3200

3945 Lakefield Court

Fax: (770) 866-3259

Suwanee, GA 30024

M62436

MATERIAL ANALYTICAL SERVICES, INC.  
 3945 Lakefield Court, Suwanee, GA 30024  
 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/20/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-BG-L01-072015	Location 1	G1	7:28	12:42	314	10.12	9.75	9.94	3119.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetrattech.com paul.prys@tetrattech.com.
WC-BG-L02-072015	Location 2	G2	7:43	12:58	315	10.15	9.83	9.99	3146.9	
WC-BG-L03-072015	Location 3	G3	8:10	13:24	314	10.16	10.15	10.16	3188.7	
WC-BG-L04-072015	Location 4	G4	8:22	13:30	308	10.20	10.16	10.18	3135.4	
WC-FB-01-072015	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072015	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-LB-072015	Lot Blank	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>[Signature]</u>	Date/Time:	<u>7/20/15 @ 17:30</u>
Received By:	<u>[Signature]</u>	Date/Time:	<u>7-21-15 10:15</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/20/2015



Shipping Package Inspected By:  
 1. [Signature] Date 7-21-15  
 2. [Signature] Date 7-27-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 7/27/2015  
 Sampling Date: 7/24/2015

MAS Project: M62465  
 Date Reported: 7/22/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62465-001	WC-AA-L01-072415	Location 1	3120	13	100	16.6	0.00086	0.0020	
M62465-002	WC-AA-L02-072415	Location 2	3097.5	10	100	12.7	0.00087	0.0016	
M62465-003	WC-AA-L03-072415	Location 3	3080.1	8.5	100	10.8	0.00087	0.0014	
M62465-004	WC-AA-L04-072415	Location 4	3086.2	8.5	100	10.8	0.00087	0.0014	
M62465-005	WC-FB-01-072415	Field Blank 1	0	0	100	0.0	NA	NA	
M62465-006	WC-FB-02-072415	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

*Chris DuBour*

Materials Analytical Services, LLC.  
 3945 Lakefield Court  
 Suwanee, GA 30024  
[www.mastest.com](http://www.mastest.com)

PH: (770) 866-3200  
 Fax: (770) 866-3259

M62465

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/24/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-072415	Location 1	G1	7:12	15:32	500	6.32	6.16	6.24	3120.0	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-AA-L02-072415	Location 2	G2	7:24	15:40	496	6.32	6.17	6.25	3097.5	
WC-AA-L03-072415	Location 3	G3	7:34	15:48	494	6.31	6.16	6.24	3080.1	
WC-AA-L04-072415	Location 4	G4	7:40	15:53	493	6.33	6.19	6.26	3086.2	
WC-FB-01-072415	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072415	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<i>Paul Prys</i>	Date/Time:	7/24/15 @ 1730
Received By:	<i>W Thorpe</i>	Date/Time:	7-27-15 9:45
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 7/24/2015



Shipping Package Inspected By:  
 1. WT Date 7-27-15  
 2. [Signature] Date 7/27/15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 7/28/2015  
 Sampling Date: 7/25/2015

MAS Project: M62472  
 Date Reported: 7/29/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62472-001	WC-AA-L01-072515	Location 1	3224.9	22	100	28.0	0.00084	0.0033	
M62472-002	WC-AA-L02-072515	Location 2	3247.7	11.5	100	14.6	0.00083	0.0017	
M62472-003	WC-AA-L03-072515	Location 3	3245.3	13.5	100	17.2	0.00083	0.0020	
M62472-004	WC-AA-L04-072515	Location 4	3239	14.5	100	18.5	0.00083	0.0022	
M62472-005	WC-FB-01-072515	Field Blank 1	0	0	100	0.0	NA	NA	
M62472-006	WC-FB-02-072515	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.  
 3945 Lakefield Court  
 Suwanee, GA 30024  
[www.mastest.com](http://www.mastest.com)

PH: (770) 866-3200  
 Fax: (770) 866-3259

M62472

MATERIAL ANALYTICAL SERVICES, INC.  
 3945 Lakefield Court, Suwanee, GA 30024  
 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/25/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-072515	Location 1	G1	6:58	13:32	394	8.29	8.08	8.19	3224.9	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetrattech.com paul.prys@tetrattech.com.
WC-AA-L02-072515	Location 2	G2	7:08	13:40	392	8.38	8.19	8.29	3247.7	
WC-AA-L03-072515	Location 3	G5	7:17	13:48	391	8.39	8.21	8.30	3245.3	
WC-AA-L04-072515	Location 4	G6	7:23	13:53	390	8.37	8.24	8.31	3239.0	
WC-FB-01-072515	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072515	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>7/27/15 @ 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>7-28-15 945</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/27/2015



Shipping Package Inspected By:  
 1. [Signature] Date 7-28-15  
 2. [Signature] Date 7-28-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 7/28/2015  
 Sampling Date: 7/27/2015

MAS Project: M62473  
 Date Reported: 7/29/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62473-001	WC-AA-L01-072715	Location 1	3244.2	12	100	15.3	0.00083	0.0018	
M62473-002	WC-AA-L02-072715	Location 2	3200.2	12	100	15.3	0.00084	0.0018	
M62473-003	WC-AA-L03-072715	Location 3	3234.2	11	100	14.0	0.00083	0.0017	
M62473-004	WC-AA-L04-072715	Location 4	3231.6	10.5	100	13.4	0.00083	0.0016	
M62473-005	WC-FB-01-072715	Field Blank 1	0	0	100	0.0	NA	NA	
M62473-006	WC-FB-02-072715	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.  
 3945 Lakefield Court  
 Suwanee, GA 30024  
[www.mastest.com](http://www.mastest.com)

PH: (770) 866-3200  
 Fax: (770) 866-3259

M62473

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/#: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 7/27/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-072715	Location 1	G1	7:02	15:39	517	6.38	6.17	6.28	3244.2	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-AA-L02-072715	Location 2	G2	7:10	15:47	517	6.31	6.07	6.19	3200.2	
WC-AA-L03-072715	Location 3	G3	7:20	15:55	515	6.36	6.20	6.28	3234.2	
WC-AA-L04-072715	Location 4	G4	7:25	16:00	515	6.34	6.21	6.28	3231.6	
WC-FB-01-072715	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072715	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time:      Normal (5 days):          3 Days Rush:          2 Days Rush:          Next Day Rush:   

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>7/27/15 @ 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>7-28-15 9:15</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:          Shipped:   

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 7/27/2015



Shipping Package Inspected By:  
 1. [Signature] Date 7-28-15  
 2. [Signature] Date 7-28-15

David Branch  
 Branch Environmental, Inc.  
 72 1/2 N. Main Street  
 Watkinsville, GA 30677



Client Project Name: 103X902701026.001F  
 Date Received: 7/29/2015  
 Sampling Date: 7/28/2015

MAS Project: M62477  
 Date Reported: 7/31/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62477-001	WC-AA-L01-072815	Location 1	3292.3	13.5	100	17.2	0.00082	0.0020	
M62477-002	WC-AA-L02-072815	Location 2	3298	7	100	8.9	0.00082	0.0010	
M62477-003	WC-AA-L03-072815	Location 3	3303.8	10	100	12.7	0.00082	0.0015	
M62477-004	WC-AA-L04-072815	Location 4	3299	8.5	100	10.8	0.00082	0.0013	
M62477-005	WC-FB-01-072815	Field Blank 1	0	0	100	0.0	NA	NA	
M62477-006	WC-FB-02-072815	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62477

MATERIAL ANALYTICAL SERVICES, INC.  
 3945 Lakefield Court, Suwanee, GA 30024  
 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/28/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-072815	Location 1	G1	6:56	15:39	523	6.38	6.21	6.30	3292.3	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 µcc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-AA-L02-072815	Location 2	G2	7:05	15:51	526	6.38	6.16	6.27	3298.0	
WC-AA-L03-072815	Location 3	G3	7:15	15:59	524	6.37	6.24	6.31	3303.8	
WC-AA-L04-072815	Location 4	G4	7:21	16:03	522	6.38	6.26	6.32	3299.0	
WC-FB-01-072815	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072815	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:		Date/Time:	7/28/15 1730
Received By:		Date/Time:	7-29-15 10:00 AM
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/28/2015



Shipping Package Inspected By:  
 1. Date 7-29-15  
 2. Date 7/29/15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 7/30/2015  
 Sampling Date: 7/29/2015

MAS Project: M62487  
 Date Reported: 7/31/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62487-001	WC-AA-L01-072915	Location 1	2276.4	20	100	25.5	0.0012	0.0043	
M62487-002	WC-AA-L02-072915	Location 2	2200.1	15	100	19.1	0.0012	0.0033	
M62487-003	WC-AA-L03-072915	Location 3	2174.3	12.5	100	15.9	0.0012	0.0028	
M62487-004	WC-AA-L04-072915	Location 4	2176.6	16.5	100	21.0	0.0012	0.0037	
M62487-005	WC-FB-01-072915	Field Blank 1	NA	0	100	0.0	NA	NA	
M62487-006	WC-FB-02-072915	Field Blank 2	NA	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

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\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/#: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 7/29/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			SEGMENT VOLUME	TOTAL VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG			
WC-AA-L01-072915	Location 1	G1	6:55	9:44	169	6.32	6.23	6.28	1060.5	2276.4	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
			12:37	15:50	193	6.25	6.35	6.30	1215.9		
WC-AA-L02-072915	Location 2	G2	7:06	9:48	162	6.31	6.22	6.27	1014.9	2200.1	
			12:43	15:54	191	6.24	6.17	6.21	1185.2		
WC-AA-L03-072915	Location 3	G3	7:14	9:53	159	6.32	6.25	6.29	999.3	2174.3	
			12:53	16:01	188	6.28	6.22	6.25	1175.0		
WC-AA-L04-072915	Location 4	G4	7:20	9:55	155	6.36	6.28	6.32	979.6	2176.6	
			12:56	16:06	190	6.33	6.27	6.30	1197.0		
WC-FB-01-072915	Field Blank 1	NA	NA	NA	NA	NA	NA	NA	NA		
WC-FB-02-072915	Field Blank 2	NA	NA	NA	NA	NA	NA	NA	NA		

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: The total volume is the sum of each segment volume for each location (i.e. Location 1 volume 1 + Location 1 volume 2 = Loc 1 total volume).

Relinquished By: <u>[Signature]</u>	Date/Time: <u>7/29/15 9:130</u>
Received By: <u>[Signature]</u>	Date/Time: <u>7-30-15 9:30</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 7/29/2015



Shipping Package Inspected By:  
1. W.F. Date 7-30-15  
2. [Signature] Date 7-30-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 7/31/2015  
 Sampling Date: 7/30/2015

MAS Project: M62498  
 Date Reported: 8/3/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62498-001	WC-AA-L01-073015	Location 1	3303.1	50.5	100	64.3	0.00082	0.0075	
M62498-002	WC-AA-L02-073015	Location 2	3248.4	22	100	28.0	0.00083	0.0033	
M62498-003	WC-AA-L03-073015	Location 3	3273.4	40	100	51.0	0.00082	0.0060	
M62498-004	WC-AA-L04-073015	Location 4	3261.9	22	100	28.0	0.00083	0.0033	
M62498-005	WC-FB-01-073015	Field Blank 1	NA	0	100	0.0	NA	NA	
M62498-006	WC-FB-02-073015	Field Blank 2	NA	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62498

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 3945 Lakefield Court, Suwanee, GA 30024  
 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/30/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-073015	Location 1	G1	7:09	15:50	521	6.34	6.34	6.34	3303.1	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetrattech.com paul.prys@tetrattech.com.
WC-AA-L02-073015	Location 2	G2	7:19	16:00	521	6.36	6.11	6.24	3248.4	
WC-AA-L03-073015	Location 3	G3	7:28	16:08	520	6.36	6.23	6.30	3273.4	
WC-AA-L04-073015	Location 4	G4	7:33	16:12	519	6.34	6.23	6.29	3261.9	
WC-FB-01-073015	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-073015	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<i>[Signature]</i>	Date/Time:	7/30/15 07:30
Received By:	<i>W Thorne</i>	Date/Time:	7-31-15 10:00
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/30/2015



Shipping Package Inspected By:  
 1. *WI* Date *7-31-15*  
 2. *IS* Date *7-31-15*

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/3/2015  
 Sampling Date: 7/31/2015

MAS Project: M62513  
 Date Reported: 8/4/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62513-001	WC-AA-L01-073115	Location 1	3388.2	8.5	100	10.8	0.00080	0.0012	
M62513-002	WC-AA-L02-073115	Location 2	3323.1	14	100	17.8	0.00081	0.0021	
M62513-003	WC-AA-L03-073115	Location 3	3317.5	10	100	12.7	0.00081	0.0015	
M62513-004	WC-AA-L04-073115	Location 4	2931.8	10.5	100	13.4	0.00092	0.0018	
M62513-005	WC-PA-FP01-073115	Personal - Prys	1037	18	100	22.9	0.0026	0.0085	
M62513-006	WC-FB-01-073115	Field Blank 1	0	1	100	1.3	NA	NA	
M62513-007	WC-FB-02-073115	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.  
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M62513

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/31/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-073115	Location 1	G1	6:55	15:49	534	6.32	6.37	6.35	3388.2	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-AA-L02-073115	Location 2	G2	7:05	15:55	530	6.36	6.18	6.27	3323.1	
WC-AA-L03-073115	Location 3	G3	7:15	16:02	527	6.35	6.24	6.30	3317.5	
WC-AA-L04-073115	Location 4	G4	7:21	15:06	465	6.33	6.28	6.31	2931.8	
WC-PA-FP01-073115	Personal Sample - Prys	S97011	6:50	15:05	495	2.08	2.11	2.10	1037.0	
WC-FB-01-073115	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-073115	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>7/31/15 @ 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>8-3-15 9:40</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/31/2015



Shipping Package Inspected By:  
 1. WT Date 8-3-15  
 2. PS Date 8-3-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



**Client Project Name:** Wrigleys 103X902701026.001F  
**Date Received:** 8/4/2015  
**Sampling Date:** 8/1/2015

**MAS Project:** M62524  
**Date Reported:** 8/4/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62524-001	WC-AA-L01-080115	Location 1	3450	8	100	10.2	0.00078	0.0011	
M62524-002	WC-AA-L02-080115	Location 2	3356	4	100	5.1	0.00080	<0.00080	
M62524-003	WC-AA-L03-080115	Location 3	3375.5	8	100	10.2	0.00080	0.0012	
M62524-004	WC-AA-L04-080115	Location 4	3383	6	100	7.6	0.00080	0.00087	
M62524-005	WC-FB-01-080115	Field Blank 1	0	2	100	2.5	NA	NA	
M62524-006	WC-FB-02-080115	Field Blank 2	0	0	100	0.0	NA	NA	
M62524-007	WC-LB-080115	Lot Blank	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



**Approved Signatory:** \_\_\_\_\_

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 3945 Lakefield Court  
 Suwanee, GA 30024

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Tel: (770) 866-3200 (800) 421-8451

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**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 8/1/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080115	Location 1	G1	6:53	13:33	400	8.52	8.73	8.63	3450.0	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-AA-L02-080115	Location 2	G2	6:59	13:39	400	8.50	8.28	8.39	3356.0	
WC-AA-L03-080115	Location 3	G3	7:08	13:47	399	8.54	8.38	8.46	3375.5	
WC-AA-L04-080115	Location 4	G4	7:13	13:51	398	8.43	8.57	8.50	3383.0	
WC-FB-01-080115	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080115	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-LB-080115	Lot Blank	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/3/15 @ 1730</u>
Received By: <u>WThorpe</u>	Date/Time: <u>8-4-15 10:00 am</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/3/2015



Shipping Package Inspected By:  
 1. WT Date 8-4-15  
 2. AS Date 8-4-15 2 of 2

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



**Client Project Name:** Wrigleys 103X902701026.001F  
**Date Received:** 8/4/2015  
**Sampling Date:** 8/1/2015

**MAS Project:** M62524  
**Date Reported:** 8/4/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62524-001	WC-AA-L01-080115	Location 1	3450	8	100	10.2	0.00078	0.0011	
M62524-002	WC-AA-L02-080115	Location 2	3356	4	100	5.1	0.00080	<0.00080	
M62524-003	WC-AA-L03-080115	Location 3	3375.5	8	100	10.2	0.00080	0.0012	
M62524-004	WC-AA-L04-080115	Location 4	3383	6	100	7.6	0.00080	0.00087	
M62524-005	WC-FB-01-080115	Field Blank 1	0	2	100	2.5	NA	NA	
M62524-006	WC-FB-02-080115	Field Blank 2	0	0	100	0.0	NA	NA	
M62524-007	WC-LB-080115	Lot Blank	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



**Approved Signatory:** \_\_\_\_\_

Materials Analytical Services, LLC.  
 3945 Lakefield Court  
 Suwanee, GA 30024

PH: (770) 866-3200  
 Fax: (770) 866-3259

M62524

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 8/1/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080115	Location 1	G1	6:53	13:33	400	8.52	8.73	8.63	3450.0	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-AA-L02-080115	Location 2	G2	6:59	13:39	400	8.50	8.28	8.39	3356.0	
WC-AA-L03-080115	Location 3	G3	7:08	13:47	399	8.54	8.38	8.46	3375.5	
WC-AA-L04-080115	Location 4	G4	7:13	13:51	398	8.43	8.57	8.50	3383.0	
WC-FB-01-080115	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080115	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-LB-080115	Lot Blank	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time:      Normal (5 days):          3 Days Rush:          2 Days Rush:          Next Day Rush:   

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/3/15 @ 1730</u>
Received By: <u>WThorpe</u>	Date/Time: <u>8-4-15 10:00 am</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:          Shipped:      
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/3/2015



Shipping Package Inspected By:  
 1. WT Date 8-4-15  
 2. AS Date 8-4-15 2 of 2

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: Wrigleys 103X902701026.001F  
 Date Received: 8/4/2015  
 Sampling Date: 8/3/2015

MAS Project: M62525  
 Date Reported: 8/5/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62525-001	WC-AA-L01-080315	Location 1	3201.6	9	100	11.5	0.00084	0.0014	
M62525-002	WC-AA-L02-080315	Location 2	3166.2	7	100	8.9	0.00085	0.0011	
M62525-003	WC-AA-L03-080315	Location 3	3229.3	7.5	100	9.6	0.00083	0.0011	
M62525-004	WC-AA-L04-080315	Location 4	3186.4	6.5	100	8.3	0.00085	0.0010	
M62525-005	WC-FB-01-080315	Field Blank 1	0	0	100	0.0	NA	NA	
M62525-006	WC-FB-02-080315	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62525

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/ #: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 8/3/2015

SAMPLE ID	SAMPLE DESCRIPTION (c.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080315	Location 1	G1	7:15	15:44	509	6.40	6.18	6.29	3201.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-080315	Location 2	G2	7:26	15:53	507	6.34	6.15	6.25	3166.2	
WC-AA-L03-080315	Location 3	G3	7:38	16:01	503	6.47	6.37	6.42	3229.3	
WC-AA-L04-080315	Location 4	G4	7:46	16:07	501	6.37	6.35	6.36	3186.4	
WC-FB-01-080315	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080315	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/3/15 @ 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>8-4-15 10:00am</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/3/2015



Shipping Package Inspected By:  
 1. W.F. Date 8-4-15  
 2. [Signature] Date 8-4-15 2 of 2

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: Wrigleys 103X902701026.001F  
 Date Received: 8/4/2015  
 Sampling Date: 8/3/2015

MAS Project: M62525  
 Date Reported: 8/5/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62525-001	WC-AA-L01-080315	Location 1	3201.6	9	100	11.5	0.00084	0.0014	
M62525-002	WC-AA-L02-080315	Location 2	3166.2	7	100	8.9	0.00085	0.0011	
M62525-003	WC-AA-L03-080315	Location 3	3229.3	7.5	100	9.6	0.00083	0.0011	
M62525-004	WC-AA-L04-080315	Location 4	3186.4	6.5	100	8.3	0.00085	0.0010	
M62525-005	WC-FB-01-080315	Field Blank 1	0	0	100	0.0	NA	NA	
M62525-006	WC-FB-02-080315	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62525

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3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/ #: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 8/3/2015

SAMPLE ID	SAMPLE DESCRIPTION (c.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080315	Location 1	G1	7:15	15:44	509	6.40	6.18	6.29	3201.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-080315	Location 2	G2	7:26	15:53	507	6.34	6.15	6.25	3166.2	
WC-AA-L03-080315	Location 3	G3	7:38	16:01	503	6.47	6.37	6.42	3229.3	
WC-AA-L04-080315	Location 4	G4	7:46	16:07	501	6.37	6.35	6.36	3186.4	
WC-FB-01-080315	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080315	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/3/15 @ 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>8-4-15 10:00am</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/3/2015



Shipping Package Inspected By:  
 1. W.F. Date 8-4-15  
 2. [Signature] Date 8-4-15 2 of 2

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



**Client Project Name:** Wrigley Charcoal 103X902701026.001F  
**Date Received:** 8/5/2015  
**Sampling Date:** 8/4/2015

**MAS Project:** M62535  
**Date Reported:** 8/5/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62535-001	WC-AA-L01-080415	Location 1	3144.3	9	100	11.5	0.00086	0.0014	
M62535-002	WC-AA-L02-080415	Location 2	3224.6	4.5	100	5.7	0.00084	<0.00084	
M62535-003	WC-AA-L03-080415	Location 3	3426.2	8.5	100	10.8	0.00079	0.0012	
M62535-004	WC-AA-L04-080415	Location 4	3293.4	5	100	6.4	0.00082	<0.00082	
M62535-005	WC-FB-01-080415	Field Blank 1	0	0	100	0.0	NA	NA	
M62535-006	WC-FB-02-080415	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.38, >20-50 fiber range Sr = 0.36, >50-100 fiber range Sr = 0.16

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated

\* Volumes are supplied by customer

\*Samples are not blank corrected



**Approved Signatory:** \_\_\_\_\_

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M62535

MATERIAL ANALYTICAL SERVICES, INC.

3945 Lakeland Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/4/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080415	Location 1	G1	7:03	15:12	489	6.40	6.46	6.43	3144.3	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-080415	Location 2	G2	7:19	15:57	518	6.35	6.10	6.23	3224.6	
WC-AA-L03-080415	Location 3	G3	7:28	16:04	516	6.47	6.81	6.64	3426.2	
WC-AA-L04-080415	Location 4	G4	7:35	16:10	515	6.45	6.34	6.40	3293.4	
WC-FB-01-080415	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080415	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>David Espy</u>	Date/Time:	<u>8/4/15 17:30</u>
Received By:	<u>W Thorne</u>	Date/Time:	<u>8-5-15 9:45</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/4/2015



Shipping Package Inspected By:  
 1. WTE Date 8-5-15  
 2. (b) Date 8-5-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



**Client Project Name:** Wrigley Charcoal 103X902701026.001F  
**Date Received:** 8/5/2015  
**Sampling Date:** 8/4/2015

**MAS Project:** M62535  
**Date Reported:** 8/5/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62535-001	WC-AA-L01-080415	Location 1	3144.3	9	100	11.5	0.00086	0.0014	
M62535-002	WC-AA-L02-080415	Location 2	3224.6	4.5	100	5.7	0.00084	<0.00084	
M62535-003	WC-AA-L03-080415	Location 3	3426.2	8.5	100	10.8	0.00079	0.0012	
M62535-004	WC-AA-L04-080415	Location 4	3293.4	5	100	6.4	0.00082	<0.00082	
M62535-005	WC-FB-01-080415	Field Blank 1	0	0	100	0.0	NA	NA	
M62535-006	WC-FB-02-080415	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.38, >20-50 fiber range Sr = 0.36, >50-100 fiber range Sr = 0.16

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated

\* Volumes are supplied by customer

\*Samples are not blank corrected



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M62535

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Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/4/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080415	Location 1	G1	7:03	15:12	489	6.40	6.46	6.43	3144.3	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-080415	Location 2	G2	7:19	15:57	518	6.35	6.10	6.23	3224.6	
WC-AA-L03-080415	Location 3	G3	7:28	16:04	516	6.47	6.81	6.64	3426.2	
WC-AA-L04-080415	Location 4	G4	7:35	16:10	515	6.45	6.34	6.40	3293.4	
WC-FB-01-080415	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080415	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>David Espy</u>	Date/Time:	<u>8/4/15 17:30</u>
Received By:	<u>W Thorne</u>	Date/Time:	<u>8-5-15 9:45</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/4/2015



Shipping Package Inspected By:  
 1. WTE Date 8-5-15  
 2. (b) Date 8-5-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: Wrigley Charcoal 103X902701026.001F  
 Date Received: 8/6/2015  
 Sampling Date: 8/5/2015

MAS Project: M62541  
 Date Reported: 8/6/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62541-001	WC-AA-L01-080515	Location 1	3576.6	6.5	100	8.3	0.00075	0.00089	
M62541-002	WC-AA-L02-080515	Location 2	3201.4	9	100	11.5	0.00084	0.0014	
M62541-003	WC-AA-L03-080515	Location 3	3408.5	10	100	12.7	0.00079	0.0014	
M62541-004	WC-AA-L04-080515	Location 4	3427.1	7	100	8.9	0.00079	0.0010	
M62541-005	WC-FB-01-080515	Field Blank 1	0	0	100	0.0	NA	NA	
M62541-006	WC-FB-02-080515	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.

PH: (770) 866-3200

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Fax: (770) 866-3259

Suwanee, GA 30024

[www.mastest.com](http://www.mastest.com)

M62541

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/5/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080515	Location 1	G1	8:56	14:56	360	9.99	9.88	9.94	3576.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-080515	Location 2	G2	7:06	12:40	334	9.73	9.44	9.59	3201.4	
WC-AA-L03-080515	Location 3	G3	7:16	12:50	334	9.83	10.58	10.21	3408.5	
WC-AA-L04-080515	Location 4	G4	7:21	12:56	335	9.82	10.64	10.23	3427.1	
WC-FB-01-080515	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080515	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>David Espy</u>	Date/Time:	<u>8/5/15 17:25</u>
Received By:	<u>W Thorpe</u>	Date/Time:	<u>8-6-15 9:30</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/5/2015



Shipping Package Inspected By:  
 1. WT Date 8-6-15  
 2. AS Date 8-6-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: Wrigley Charcoal 103X902701026.001F  
 Date Received: 8/6/2015  
 Sampling Date: 8/5/2015

MAS Project: M62541  
 Date Reported: 8/6/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62541-001	WC-AA-L01-080515	Location 1	3576.6	6.5	100	8.3	0.00075	0.00089	
M62541-002	WC-AA-L02-080515	Location 2	3201.4	9	100	11.5	0.00084	0.0014	
M62541-003	WC-AA-L03-080515	Location 3	3408.5	10	100	12.7	0.00079	0.0014	
M62541-004	WC-AA-L04-080515	Location 4	3427.1	7	100	8.9	0.00079	0.0010	
M62541-005	WC-FB-01-080515	Field Blank 1	0	0	100	0.0	NA	NA	
M62541-006	WC-FB-02-080515	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/5/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080515	Location 1	G1	8:56	14:56	360	9.99	9.88	9.94	3576.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetrattech.com, paul.prys@tetrattech.com, despy@resolutionusa.com.
WC-AA-L02-080515	Location 2	G2	7:06	12:40	334	9.73	9.44	9.59	3201.4	
WC-AA-L03-080515	Location 3	G3	7:16	12:50	334	9.83	10.58	10.21	3408.5	
WC-AA-L04-080515	Location 4	G4	7:21	12:56	335	9.82	10.64	10.23	3427.1	
WC-FB-01-080515	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080515	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>David Espy</u>	Date/Time:	<u>8/5/15 17:25</u>
Received By:	<u>WThorpe</u>	Date/Time:	<u>8-6-15 9:30</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/5/2015



Shipping Package Inspected By:  
 1. WT Date 8-6-15  
 2. AS Date 8-6-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: Wrigleys Charcoal 103X902701026.001F  
 Date Received: 8/10/2015  
 Sampling Date: 8/7/2015

MAS Project: M62552  
 Date Reported: 8/14/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62552-001	WC-AA-L01-080715	Location 1	2788.1	5	100	6.4	0.0010	<0.0010	
M62552-002	WC-AA-L02-080715	Location 2	3201.6	6	100	7.6	0.00084	0.00092	
M62552-003	WC-AA-L03-080715	Location 3	2807.6	2	100	2.5	0.0010	<0.0010	
M62552-004	WC-AA-L04-080715	Location 4	2785.7	7.5	100	9.6	0.0010	0.0013	
M62552-005	WC-P-01-080715	Personal Espy #6653	1021.2	31	100	39.5	0.0026	0.015	
M62552-006	WC-FB-01-080715	Field Blank 1	0	0	100	0.0	NA	NA	
M62552-007	WC-FB-02-080715	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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www.mastest.com

M102552

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/7/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-080715	Location 1	G1	7:10	14:27	437	6.36	6.40	6.38	2788.1	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetrattech.com, paul.prys@tetrattech.com, despy@resolutionusa.com.
WC-AA-L02-080715	Location 2	G2	7:27	15:56	509	6.38	6.20	6.29	3201.6	
WC-AA-L03-080715	Location 3	G3	7:39	15:05	446	6.34	6.25	6.30	2807.6	
WC-AA-L04-080715	Location 4	G4	7:45	15:10	445	6.32	6.20	6.26	2785.7	
WC-P-01-080715	David Espy #6653	S97012	7:21	15:25	484	2.10	2.11	2.11	1021.2	
WC-FB-01-080715	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-080715	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<i>David Espy</i>	Date/Time:	<i>8/7/15 17:30</i>
Received By:	<i>Edmonds</i>	Date/Time:	<i>8/10/2015 MAS</i>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/7/2015

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: Wrigley Charcoal 103X902701026.001F  
 Date Received: 8/12/2015  
 Sampling Date: 8/11/2015

MAS Project: M62591  
 Date Reported: 8/14/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62591-001	WC-AA-L01-081115	Location 1	1068.9	5.5	100	7.0	0.0025	0.0025	
M62591-002	WC-AA-L02-081115	Location 2	3156.3	6	100	7.6	0.00085	0.00093	
M62591-003	WC-AA-L03-081115	Location 3	3157.6	3	100	3.8	0.00085	<0.00085	
M62591-004	WC-AA-L04-081115	Location 4	3140	6	100	7.6	0.00086	0.00094	
M62591-005	WC-FB-01-081115	Field Blank 1	0	0	100	0.0	NA	NA	
M62591-006	WC-FB-02-081115	Field Blank 2	0	0	100	0.0	NA	NA	
M62591-007	WC-AA-L01B-081115	Location 1	3285.2	6.5	100	8.3	0.00082	0.0010	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.  
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 Suwanee, GA 30024  
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M62591

MATERIAL ANALYTICAL SERVICES, INC.

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/11/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-081115	Location 1	G1	6:59	9:48	169	6.35	6.30	6.33	1068.9	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-081115	Location 2	G2	7:10	15:35	505	6.32	6.18	6.25	3156.3	
WC-AA-L03-081115	Location 3	G3	7:20	15:44	504	6.35	6.18	6.27	3157.6	
WC-AA-L04-081115	Location 4	G4	7:29	15:49	500	6.36	6.20	6.28	3140.0	
WC-FB-01-081115	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-081115	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-AA-L01B-081115	Location 1	G1	10:35	16:05	330	9.94	9.97	9.96	3285.2	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments:

Relinquished By:	<u>David Espy</u>	Date/Time:	<u>08/11/15 17:30</u>
Received By:	<u>W Thorpe</u>	Date/Time:	<u>8-12-15 10:00</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/11/2015



Shipping Package Inspected By:  
 1. W.T. Date 8-12-15  
 2. DE Date 8/11/15 2 of 2

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/13/2015  
 Sampling Date: 8/12/2015

MAS Project: M62602  
 Date Reported: 8/17/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62602-001	WC-AA-L01-081215	Location 1	947.6	3	100	3.8	0.0028	<0.0028	
M62602-002	WC-AA-L02-081215	Location 2	3153.7	3.5	100	4.5	0.00085	<0.00085	
M62602-003	WC-AA-L03-081215	Location 3	3153.7	4.5	100	5.7	0.00085	<0.00085	
M62602-004	WC-AA-L04-081215	Location 4	3196.1	7	100	8.9	0.00084	0.0011	
M62602-005	WC-FB-01-081215	Field Blank 1	0	0	100	0.0	NA	NA	
M62602-006	WC-FB-02-081215	Field Blank 2	0	0	100	0.0	NA	NA	
M62602-007	WC-AA-L01B-081215	Location 1	3523.9	9.5	100	12.1	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/12/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-081215	Location 1	G1	6:54	9:23	149	6.39	6.33	6.36	947.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-081215	Location 2	G2	7:08	15:33	505	6.35	6.14	6.25	3153.7	
WC-AA-L03-081215	Location 3	G3	7:18	15:43	505	6.32	6.17	6.25	3153.7	
WC-AA-L04-081215	Location 4	G4	7:30	15:49	499	6.31	6.50	6.41	3196.1	
WC-FB-01-081215	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-081215	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-AA-L01B-081215	Location 1	G1	10:05	16:10	365	9.65	9.67	9.66	3525.9	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>David Espy</u>	Date/Time:	<u>8/12/15 17:30</u>
Received By:	<u>W Thorpe</u>	Date/Time:	<u>8-13-15 9:05</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/12/2015



Shipping Package Inspected by:  
 1. WT Date 8-13-15  
 2. CTA Date 8/13/15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/13/2015  
 Sampling Date: 8/12/2015

MAS Project: M62602  
 Date Reported: 8/17/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62602-001	WC-AA-L01-081215	Location 1	947.6	3	100	3.8	0.0028	<0.0028	
M62602-002	WC-AA-L02-081215	Location 2	3153.7	3.5	100	4.5	0.00085	<0.00085	
M62602-003	WC-AA-L03-081215	Location 3	3153.7	4.5	100	5.7	0.00085	<0.00085	
M62602-004	WC-AA-L04-081215	Location 4	3196.1	7	100	8.9	0.00084	0.0011	
M62602-005	WC-FB-01-081215	Field Blank 1	0	0	100	0.0	NA	NA	
M62602-006	WC-FB-02-081215	Field Blank 2	0	0	100	0.0	NA	NA	
M62602-007	WC-AA-L01B-081215	Location 1	3523.9	9.5	100	12.1	0.00076	0.0013	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62602

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/12/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-081215	Location 1	G1	6:54	9:23	149	6.39	6.33	6.36	947.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-081215	Location 2	G2	7:08	15:33	505	6.35	6.14	6.25	3153.7	
WC-AA-L03-081215	Location 3	G3	7:18	15:43	505	6.32	6.17	6.25	3153.7	
WC-AA-L04-081215	Location 4	G4	7:30	15:49	499	6.31	6.50	6.41	3196.1	
WC-FB-01-081215	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-081215	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-AA-L01B-081215	Location 1	G1	10:05	16:10	365	9.65	9.67	9.66	3525.9	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>David Espy</u>	Date/Time:	<u>8/12/15 17:30</u>
Received By:	<u>W Thorpe</u>	Date/Time:	<u>8-13-15 9:05</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/12/2015



Shipping Package Inspected by:  
 1. WT Date 8-13-15  
 2. CTA Date 8/13/15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: Wrigley Charcoal 103X902701026.001F  
 Date Received: 8/14/2015  
 Sampling Date: 8/13/2015

MAS Project: M62614  
 Date Reported: 8/18/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62614-001	WC-AA-L01-081315	Location 1	2466.8	5.5	100	7.0	0.0011	0.0011	
M62614-002	WC-AA-L02-081315	Location 2	3277.1	4	100	5.1	0.00082	<0.00082	
M62614-003	WC-AA-L03-081315	Location 3	3287.5	5	100	6.4	0.00082	<0.00082	
M62614-004	WC-AA-L04-081315	Location 4	3297.9	3.5	100	4.5	0.00082	<0.00082	
M62614-005	WC-FB-01-081315	Field Blank 1	0	0	100	0.0	NA	NA	
M62614-006	WC-FB-02-081315	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62614

MATERIAL ANALYTICAL SERVICES, INC.  
 3945 Lakefield Court, Suwanee, GA 30024  
 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: David Espy  
 Sampling Date: 8/13/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-081315	Location 1	G1	6:55	13:25	390	6.33	6.32	6.33	2466.8	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-081315	Location 2	G2	7:05	15:46	521	6.32	6.26	6.29	3277.1	
WC-AA-L03-081315	Location 3	G3	7:15	15:56	521	6.33	6.29	6.31	3287.5	
WC-AA-L04-081315	Location 4	G4	7:20	16:01	521	6.37	6.29	6.33	3297.9	
WC-FB-01-081315	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-081315	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>David Espy</u>	Date/Time: <u>8/13/15 17:30</u>
Received By: <u>WThorpe</u>	Date/Time: <u>8-14-15 9:35</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/13/2015



Shipping Package Inspected By:  
 1 WT Date 8-14-15  
 2 AS Date 8-14-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: Wrigley Charcoal 103X902701026.001F  
 Date Received: 8/17/2015  
 Sampling Date: 8/14/2015

MAS Project: M62625  
 Date Reported: 8/18/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62625-001	WC-AA-L01-081415	Location 1	805.8	3	100	3.8	0.0033	<0.0033	
M62625-002	WC-AA-L02-081415	Location 2	3285.2	7.5	100	9.6	0.00082	0.0011	
M62625-003	WC-AA-L03-081415	Location 3	3165	8	100	10.2	0.00085	0.0012	
M62625-004	WC-AA-L04-081415	Location 4	3241.1	8.5	100	10.8	0.00083	0.0013	
M62625-005	WC-FB-01-081415	Field Blank 1	0	0	100	0.0	NA	NA	
M62625-006	WC-FB-02-081415	Field Blank 2	0	2	100	2.5	NA	NA	
M62625-007	WC-AA-L01B-081415	Location 1	3533.5	11.5	100	14.6	0.00076	0.0016	

5-20 fiber range Sr=0..26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0..15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62625

MATERIAL ANALYTICAL SERVICES, INC.

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/#: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: David Espy

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 8/14/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-081415	Location 1	G5	6:48	8:55	127	6.35	6.34	6.35	805.8	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 µcc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-081415	Location 2	G2	7:12	15:29	497	6.38	6.84	6.61	3285.2	
WC-AA-L03-081415	Location 3	G3	7:20	15:46	506	6.30	6.21	6.26	3165.0	
WC-AA-L04-081415	Location 4	G4	7:25	15:55	510	6.37	6.34	6.36	3241.1	
WC-FB-01-081415	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-081415	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-AA-L01B-081415	Location 1	G1	10:19	16:12	353	9.98	10.04	10.01	3533.5	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>David Espy</u>	Date/Time:	<u>8/14/15 17:30</u>
Received By:	<u>WThorpe</u>	Date/Time:	<u>8-17-15 10:10</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 8/14/2015



Shipping Package Inspected By:  
1. WThorpe Date 8-17-15  
2. DS Date 8-17-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/18/2015  
 Sampling Date: 8/15/2015

MAS Project: M62642  
 Date Reported: 8/24/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62642-001	WC-BG-L01-081515	Location 1	1553.7	5	100	6.4	0.0017	0.0016	
M62642-002	WC-BG-L02-081515	Location 2	1476.1	2	100	2.5	0.0018	0.00066	
M62642-003	WC-BG-L03-081515	Location 3	1475.7	2.5	100	3.2	0.0018	0.00083	
M62642-004	WC-BG-L04-081515	Location 4	1408.6	3	100	3.8	0.0019	0.0010	
M62642-005	WC-FB-01-081515	Field Blank 1	0	0	100	0.0	NA	NA	
M62642-006	WC-FB-02-081515	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62642

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/ #: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: David Espy

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 8/15/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-081515	Location 1	G1	6:48	9:51	183	8.55	8.43	8.49	1553.7	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com, paul.prys@tetratech.com, despy@resolutionusa.com.
WC-AA-L02-081515	Location 2	G2	6:59	9:54	175	8.53	8.34	8.44	1476.1	
WC-AA-L03-081515	Location 3	G3	7:08	9:59	171	8.55	8.71	8.63	1475.7	
WC-AA-L04-081515	Location 4	G4	7:15	10:02	167	8.53	8.34	8.44	1408.6	
WC-FB-01-081515	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-081515	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/13/15 @ 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>8-18-15 10:15</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 8/15/2015



Shipping Package Inspected By:  
1. WT Date 8-18-15  
2. DJ Date 8-18-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/19/2015  
 Sampling Date: 8/18/2015

MAS Project: M62648  
 Date Reported: 8/24/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62648-001	WC-AA-L01-081815	Location 1	2758	6	100	7.6	0.00098	0.0011	
M62648-002	WC-AA-L02-081815	Location 2	3893	4	100	5.1	0.00069	<0.00069	
M62648-003	WC-AA-L03-081815	Location 3	3937.8	8.5	100	10.8	0.00068	0.0011	
M62648-004	WC-AA-L04-081815	Location 4	3931.6	5.5	100	7.0	0.00069	0.00069	
M62648-005	WC-FB-01-081815	Field Blank 1	0	0	100	0.0	NA	NA	
M62648-006	WC-FB-02-081815	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62648

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Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/ #: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 8/18/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-081815	Location 1	G1	7:26	12:52	326	8.58	8.34	8.46	2758.0	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com and paul.prys@tetratech.com.
WC-AA-L02-081815	Location 2	G2	7:36	15:20	464	8.52	8.26	8.39	3893.0	
WC-AA-L03-081815	Location 3	G3	7:44	15:27	463	8.60	8.41	8.51	3937.8	
WC-AA-L04-081815	Location 4	G4	7:50	15:32	462	8.59	8.43	8.51	3931.6	
WC-FB-01-081815	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-081815	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/18/15 @ 1730</u>
Received By: <u>WThorpe</u>	Date/Time: <u>8-19-15 9:00</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 8/18/2015



Shipping Package Inspected By:  
 1. W Date 8-19-15  
 2. DS Date 8-19-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



**Client Project Name:** Wrigley Charcoal 103X902701026.001F  
**Date Received:** 8/20/2015  
**Sampling Date:** 8/19/2015

**MAS Project:** M62660  
**Date Reported:** 8/25/2015

**NIOSH Method 7400- PCM Analysis Summary**

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62660-001	WC-AA-L01-081915	Location 1	1528.2	8	100	10.2	0.0018	0.0026	
M62660-002	WC-AA-L02-081915	Location 2	3083	8.5	100	10.8	0.00087	0.0014	
M62660-003	WC-AA-L03-081915	Location 3	3163	17.5	100	22.3	0.00085	0.0027	
M62660-004	WC-AA-L04-081915	Location 4	3116.5	17.5	100	22.3	0.00086	0.0028	
M62660-005	WC-FB-01-081915	Field Blank 1	0	0	100	0.0	NA	NA	
M62660-006	WC-FB-02-081915	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



**Approved Signatory:** \_\_\_\_\_

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www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/ #: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 8/19/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-081915	Location 1	G1	7:36	10:36	180	8.50	8.48	8.49	1528.2	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com and paul.prys@tetratech.com.
WC-AA-L02-081915	Location 2	G2	7:42	13:53	371	8.51	8.11	8.31	3083.0	
WC-AA-L03-081915	Location 3	G3	7:50	13:58	368	8.65	8.54	8.60	3163.0	
WC-AA-L04-081915	Location 4	G4	7:54	14:00	366	8.60	8.43	8.52	3116.5	
WC-FB-01-081915	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-081915	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/19/15 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>8-20-15 10:00</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 8/19/2015



Shipping Package Inspected By:  
1. WT Date 8-20-15  
2. [Signature] Date 8/20/15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/21/2015  
 Sampling Date: 8/20/2015

MAS Project: M62680  
 Date Reported: 8/24/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62680-001	WC-AA-L01-082015	Location 1	2850.2	5.5	100	7.0	0.00095	0.00095	
M62680-002	WC-AA-L02-082015	Location 2	3216.4	4	100	5.1	0.00084	<0.00084	
M62680-003	WC-AA-L03-082015	Location 3	3227.9	4	100	5.1	0.00083	<0.00083	
M62680-004	WC-AA-L04-082015	Location 4	3234	4	100	5.1	0.00083	<0.00083	
M62680-005	WC-FB-01-082015	Field Blank 1	0	0	100	0.0	NA	NA	
M62680-006	WC-FB-02-082015	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.  
 3945 Lakefield Court  
 Suwanee, GA 30024  
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 Fax: (770) 866-3259

M62680

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 8/20/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-082015	Location 1	G6	7:11	14:36	445	6.47	6.34	6.41	2850.2	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com and paul.prys@tetratech.com.
WC-AA-L02-082015	Location 2	G2	7:20	15:41	501	6.51	6.33	6.42	3216.4	
WC-AA-L03-082015	Location 3	G3	7:28	15:50	502	6.50	6.36	6.43	3227.9	
WC-AA-L04-082015	Location 4	G4	7:33	15:54	501	6.50	6.41	6.46	3234.0	
WC-FB-01-082015	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-082015	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/20/15 @ 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>8-21-15 9:10AM</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 8/20/2015



Shipping Package Inspected By:  
 1. WT Date 8-21-15  
 2. NS Date 8-21-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/24/2015  
 Sampling Date: 8/21/2015

MAS Project: M62691  
 Date Reported: 8/28/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62691-001	WC-AA-L01-082215	Location 1	3276.3	9.5	100	12.1	0.0008	0.0014	
M62691-002	WC-AA-L02-082215	Location 2	3045	4	100	5.1	0.00089	<0.00089	
M62691-003	WC-AA-L03-082215	Location 3	3242.8	8	100	10.2	0.00083	0.0012	
M62691-004	WC-AA-L04-082215	Location 4	3003.7	4	100	5.1	0.00090	<0.00090	
M62691-005	WC-FB-01-082215	Field Blank 1	0	0	100	0.0	NA	NA	
M62691-006	WC-FB-02-082215	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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Suwanee, GA 30024

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M62691

**MATERIAL ANALYTICAL SERVICES, INC.**

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Tel: (770) 866-3200 (800) 421-8451

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**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

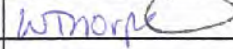
Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 8/21/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-082115	Location 1	G6	7:00	15:51	531	6.24	6.10	6.17	3276.3	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetrattech.com and paul.prys@tetrattech.com.
WC-AA-L02-082115	Location 2	G2	7:10	15:30	500	6.17	6.01	6.09	3045.0	
WC-AA-L03-082115	Location 3	G3	7:18	16:07	529	6.19	6.07	6.13	3242.8	
WC-AA-L04-082115	Location 4	G4	7:24	15:36	492	6.18	6.03	6.11	3003.7	
WC-FB-01-082115	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-082115	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:		Date/Time:	8/21/2015 @ 1730
Received By:		Date/Time:	8-24-15 9:50
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/21/2015



Shipping Package Inspected By:  
 1. WT Date 8-24-15  
 2. JD Date 8-24-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/24/2015  
 Sampling Date: 8/22/2015

MAS Project: M62704  
 Date Reported: 8/28/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62704-001	WC-AA-L01-082215	Location 1	3258.4	5.5	100	7.0	0.00083	0.00083	
M62704-002	WC-AA-L02-082215	Location 2	3136	7	100	8.9	0.00086	0.0011	
M62704-003	WC-AA-L03-082215	Location 3	3247.9	4	100	5.1	0.00083	<0.00083	
M62704-004	WC-AA-L04-082215	Location 4	1654.5	1	100	1.3	0.0016	<0.0016	
M62704-005	WC-AA-L05-082215	Field Blank 1	0	0	100	0.0	NA	NA	
M62704-006	WC-AA-L06-082215	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62704

MATERIAL ANALYTICAL SERVICES, INC.

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Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

1762704

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/ #: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 8/22/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-082215	Location 1	G6	7:00	13:18	378	8.69	8.55	8.62	3258.4	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com and paul.prys@tetratech.com.
WC-AA-L02-082215	Location 2	G2	7:08	13:15	367	8.64	8.45	8.55	3136.0	
WC-AA-L03-082215	Location 3	G3	7:16	13:33	377	8.66	8.57	8.62	3247.9	
WC-AA-L04-082215	Location 4	G4	7:22	10:28	186	8.73	9.06	8.90	1654.5	
WC-FB-01-082215	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-082215	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:		Date/Time:	8/24/15 @ 1730
Received By:		Date/Time:	8/25/15 @ 0930
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 8/24/2015

Shipping Package Inspected By:

- Date 8/25/15
- Date 9/12/15



Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/25/2015  
 Sampling Date: 8/24/2015

MAS Project: M62705  
 Date Reported: 8/31/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm <sup>2</sup> )	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62705-001	WC-AA-L01-082415	Location 1	3103.8	10	100	12.7	0.00087	0.0016	
M62705-002	WC-AA-L02-082415	Location 2	3287.1	6	100	7.6	0.00082	0.00090	
M62705-003	WC-AA-L03-082415	Location 3	3274	8.5	100	10.8	0.00082	0.0013	
M62705-004	WC-AA-L04-082415	Location 4	3231.9	7	100	8.9	0.00083	0.0011	
M62705-005	WC-FB-01-082415	Field Blank 1	0	0	100	0.0	NA	NA	
M62705-006	WC-FB-02-082415	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

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\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M02705

162705

MATERIAL ANALYTICAL SERVICES, INC.

3945 Lakeland Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.
Address: 1955 Evergreen Blvd, Bldg 200, Suite 300
Duluth, GA 30096

Contact: Paul Prys
Phone: 404-849-7136
Fax: 678-775-3138

Project Name/ #: 103X902701026.001F
Samplers Name: Paul Prys
Sampling Date: 8/24/2015

Table with columns: SAMPLE ID, SAMPLE DESCRIPTION (e.g. Locations, Name, etc), PUMP NUMBER, TIME (START, END, TOTAL), FLOW RATE (INITIAL, FINAL, AVG), VOLUME, ANALYSIS REQUESTED/REMARKS. Includes rows for locations 1-4 and field blanks.

Turnaround Time: Normal (5 days): X 3 Days Rush: O 2 Days Rush: O Next Day Rush: O

Comments:

Table for Relinquished/Received By with Date/Time. Includes handwritten signatures and dates like 8/24/15 1730.

Delivered Direct to Lab: O Shipped: X
Method of Shipment: FedEx
Lab Recipient: Sample Receiving
Date: 8/24/2015

Shipping package inspected By:
1. [Signature] Date 8/24/15
2. [Signature] Date 8/24/15



Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/26/2015  
 Sampling Date: 8/25/2015

MAS Project: M62720  
 Date Reported: 8/28/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62720-001	WC-AA-L01-082215	Location 1	2574.4	8	100	10.2	0.0010	0.0015	
M62720-002	WC-AA-L02-082215	Sample Missing	NA	NA	NA	NA	NA	NA	
M62720-003	WC-AA-L03-082215	Location 3	3352.4	10.5	100	13.4	0.00080	0.0015	
M62720-004	WC-AA-L04-082215	Location 4	3378.6	8	100	10.2	0.00080	0.0012	
M62720-005	WC-FB-01-082215	Field Blank 1	0	0	100	0.0	NA	NA	
M62720-006	WC-FB-02-082215	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.

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Suwanee, GA 30024

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M62720

MATERIAL ANALYTICAL SERVICES, INC.

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.
Address: 1955 Evergreen Blvd, Bldg 200, Suite 300
Duluth, GA 30096

Contact: Paul Prys
Phone: 404-849-7136
Fax: 678-775-3138

Project Name/#: 103X902701026.001F
Samplers Name: Paul Prys
Sampling Date: 8/25/2015

Table with columns: SAMPLE ID, SAMPLE DESCRIPTION (c.g. Locations, Name, etc), PUMP NUMBER, TIME (START, END, TOTAL), FLOW RATE (INITIAL, FINAL, AVG), VOLUME, ANALYSIS REQUESTED/REMARKS. Includes data for locations 1-4 and field blanks.

Turnaround Time: Normal (5 days): X 3 Days Rush: O 2 Days Rush: O Next Day Rush: O

Comments:

Table for Relinquished/Received By and Date/Time. Includes handwritten signatures and dates like 8/25/15 and 8-26-15.

Delivered Direct to Lab: O Shipped: X
Method of Shipment: FedEx
Lab Recipient: Sample Receiving
Date: 8/25/2015



Shipping Package Inspected By:
1. [Signature] Date 8-26-15
2. [Signature] Date 8-26-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/27/2015  
 Sampling Date: 8/26/2015

MAS Project: M62731  
 Date Reported: 8/31/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62731-001	WC-AA-L01-082615	Location 1	3215.3	2	100	2.5	0.00084	<0.00084	
M62731-002	WC-AA-L02-082615	Location 2	3243.2	4	100	5.1	0.00083	<0.00083	
M62731-003	WC-AA-L03-082615	Location 3	3245.8	6	100	7.6	0.00083	0.00091	
M62731-004	WC-AA-L04-082615	Location 4	3256.9	4	100	5.1	0.00083	<0.00060	
M62731-005	WC-FB-01-082615	Field Blank 1	0	0	100	0.0	NA	NA	
M62731-006	WC-FB-02-082615	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

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M62731

MATERIAL ANALYTICAL SERVICES, INC.  
 3945 Lakefield Court, Suwanee, GA 30024  
 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 8/26/2015

SAMPLE ID	SAMPLE DESCRIPTION (c.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-082615	Location 1	G6	7:06	15:28	502	6.47	6.34	6.41	3215.3	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com and paul.prys@tetratech.com.
WC-AA-L02-082615	Location 2	G2	7:21	15:45	504	6.50	6.37	6.44	3243.2	
WC-AA-L03-082615	Location 3	G3	7:29	15:53	504	6.48	6.40	6.44	3245.8	
WC-AA-L04-082615	Location 4	G4	7:34	15:57	503	6.50	6.45	6.48	3256.9	
WC-FB-01-082615	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-082615	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/26/15 @ 17:30</u>
Received By: <u>[Signature]</u>	Date/Time: <u>8-27-15 9:30</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/26/2015



Shipping Package Inspected By:  
 1. WT Date 8-27-15  
 2. nc Date 8-27-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/28/2015  
 Sampling Date: 8/27/2015

MAS Project: M62734  
 Date Reported: 8/31/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62734-001	WC-AA-L01-082715	Location 1	3215.3	3	100	3.8	0.00084	<0.00084	
M62734-002	WC-AA-L02-082715	Location 2	3243.2	6.5	100	8.3	0.00083	0.00098	
M62734-003	WC-AA-L03-082715	Location 3	3245.8	4	100	5.1	0.00083	<0.00083	
M62734-004	WC-AA-L04-082715	Location 4	3256.9	7	100	8.9	0.00083	0.0011	
M62734-005	WC-FB-01-082715	Field Blank 1	0	0	100	0.0	NA	NA	
M62734-006	WC-FB-02-082715	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.

PH: (770) 866-3200

3945 Lakefield Court

Fax: (770) 866-3259

Suwanee, GA 30024

[www.mastest.com](http://www.mastest.com)

M62734

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/#: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 8/27/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-082715	Location 1	G6	6:56	14:49	473	6.50	6.33	6.42	3034.3	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com and paul.prys@tetratech.com.
WC-AA-L02-082715	Location 2	G2	7:06	15:52	526	6.48	6.31	6.40	3363.8	
WC-AA-L03-082715	Location 3	G3	7:14	15:52	518	6.43	6.37	6.40	3315.2	
WC-AA-L04-082715	Location 4	G4	7:19	15:55	516	6.51	6.44	6.48	3341.1	
WC-FB-01-082715	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-082715	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time:      Normal (5 days):          3 Days Rush:          2 Days Rush:          Next Day Rush:   

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8/27/15 @ 1730</u>
Received By: <u>WThorpe</u>	Date/Time: <u>8-28-15 9:40</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:          Shipped:   

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 8/27/2015



Shipping Package Inspected By:  
1. WT Date 8-28-15  
2. NS Date 8-28-15

Tetra Tech EM, Inc.  
 1955 Evergreen Boulevard  
 Building 200  
 Suite 300  
 Duluth, Georgia 30096



Client Project Name: 103X902701026.001F  
 Date Received: 8/31/2015  
 Sampling Date: 8/28/2015

MAS Project: M62740  
 Date Reported: 9/2/2015

### NIOSH Method 7400- PCM Analysis Summary

MAS Sample No.	Client Sample ID	Sample Location	Volume (liters)	Total Fibers Counted	Total Fields Counted	Fiber Density (f/mm2)	Detection Limit (f/cc)	Calculated Conc. (f/cc)	Comments
M62740-001	WC-AA-L01-082815	Location 1	3352.6	2.5	100	3.2	0.00080	<0.00080	
M62740-002	WC-AA-L02-082815	Location 2	2445.7	2.5	100	3.2	0.0011	<0.0011	
M62740-003	WC-AA-L03-082815	Location 3	3326.8	0	100	0.0	0.00081	<0.00081	
M62740-004	WC-AA-L04-082815	Location 4	3330.7	6.5	100	8.3	0.00081	0.00096	
M62740-005	WC-AA-L05-082815	Field Blank 1	0	1	100	1.3	NA	NA	
M62740-006	WC-AA-L06-082815	Field Blank 2	0	0	100	0.0	NA	NA	

5-20 fiber range Sr=0.26, >20-50 fiber range Sr = 0.32, >50-100 fiber range Sr = 0.15

NA = Not applicable

Analyst - CJD

Note - Samples with less than 5.5 fibers counted are reported as less than the detection limit

\*These results apply only to items tested.

\*All samples arrived in good condition unless otherwise stated.

\* Volumes are supplied by customer

\*Samples are not blank corrected



Approved Signatory: \_\_\_\_\_

Materials Analytical Services, LLC.

PH: (770) 866-3200

3945 Lakefield Court

Fax: (770) 866-3259

Suwanee, GA 30024

[www.mastest.com](http://www.mastest.com)

M62740

MATERIAL ANALYTICAL SERVICES, INC.  
 3945 Lakefield Court, Suwanee, GA 30024  
 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 8/28/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-082815	Location 1	G6	7:05	15:46	521	6.54	6.33	6.44	3352.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com and paul.prys@tetratech.com.
WC-AA-L02-082815	Location 2	G2	7:15	13:33	378	6.53	6.41	6.47	2445.7	
WC-AA-L03-082815	Location 3	G3	7:27	16:00	513	6.56	6.41	6.49	3326.8	
WC-AA-L04-082815	Location 4	G4	7:32	16:06	514	6.53	6.43	6.48	3330.7	
WC-FB-01-082815	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-082815	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>Paul Prys</u>	Date/Time: <u>8/28/15 @ 1730</u>
Received By: <u>WJN</u>	Date/Time: <u>8-31-15 9:50</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 8/28/2015



Shipping Package Inspected By:  
 1. WT Date 8-31-15  
 2. NS Date 8-31-15

**MAS Report of Results  
NIOSH 7402  
Percent Asbestos**



**Tetra Tech EM, Inc.  
Building 200, Suite 300  
Duluth, GA 30096**

3945 Lakefield Court  
Suwanee, Georgia 30024  
Ph: 770-866-3200 Fax: 700-866-3259

**Job Name:** Wrigley Charcoal  
**Job Number:** 103X902701026.001F  
**MAS Proj. No:** M62436

**Date Received:** 07/21/15  
**Date Reported:** 08/03/15  
**Analysis Type:** NIOSH 7402

The following summarizes the 7402 analytical results for the samples selected for TEM analysis that were received at MAS LLC facility in Suwanee, GA.

MAS Sample Number	Client Sample Number	Air Volume (L)	# of Grid Opening	Asbestos Fibers Counted (>5.0 µm)	Non Asbestos Fibers Counted (>5.0 µm)	PCM Fiber Conc. (f/cc)	TEM Percent Asbestos Fibers (%)	PCME Concentration (f/cc)
M62436-001	WC-BG-L01-072015	3119.6	40	0	2	0.0017	0	<0.0009
M62436-002	WC-BG-L02-072015	3146.9	40	0	0	0.0016	0	<0.0009
M62436-003	WC-BG-L03-072015	3188.7	40	0	0	0.0010	0	<0.0009
M62436-004	WC-BG-L04-072015	3135.4	40	0	2	0.0017	0	<0.0008

NA - Not Applicable

Note: Poisson statistics state that 1 fiber = +/- 3 fibers.

PCME Concentration = PCM f/cc x % asbestos  
If % asbestos =0, then PCME = <PCM LOD

**Approved Signatory:** \_\_\_\_\_  
email - vpanariello@mastest.com

The samples were prepared and analyzed in general accordance with NIOSH 7402(MAS SOP MT-016); this method is not accredited under current AIHA-LAP accreditation.

This report relates only to items tested as received, and may not be used to claim endorsement by NVLAP or any other U.S. government agency. This report may not be reproduced except in full without the approval of Materials Analytical Services, Inc.(MAS). MAS assumes that samples were collected by qualified personnel using proper procedures. MAS does not assume any responsibility for analyses reported as fibers/cc on samples collected by non-laboratory personnel.

**NVLAP Lab Code 101235-0**

M62436

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/20/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-BG-L01-072015	Location 1	G1	7:28	12:42	314	10.12	9.75	9.94	3119.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-BG-L02-072015	Location 2	G2	7:43	12:58	315	10.15	9.83	9.99	3146.9	
WC-BG-L03-072015	Location 3	G3	8:10	13:24	314	10.16	10.15	10.16	3188.7	
WC-BG-L04-072015	Location 4	G4	8:22	13:30	308	10.20	10.16	10.18	3135.4	
WC-FB-01-072015	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072015	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-LB-072015	Lot Blank	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>7/20/15 @ 17:30</u>
Received By: <u>[Signature]</u>	Date/Time: <u>7-21-15 10:15</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/20/2015



Shipping Package Inspected By:  
 1. W.F. Date 7-21-15  
 2. W.F. Date 7-27-15

**MAS Report of Results  
NIOSH 7402  
Percent Asbestos**



Jessica Vickers.  
Tetra Tech EM, Inc.  
Building 200, Suite 300  
Duluth, GA 30096

3945 Lakefield Court  
Suwanee, Georgia 30024  
Ph: 770-866-3200 Fax: 700-866-3259

**Job Name:** Wrigley Charcoal  
**Job Number:** 103X902701026.001F  
**MAS Proj. No:** M62436

**Date Received:** 07/21/15  
**Date Reported:** 07/28/15  
**Analysis Type:** NIOSH 7402

The following summarizes the 7402 analytical results for the samples selected for TEM analysis that were received at MAS LLC facility in Suwanee, GA.

MAS Sample Number	Client Sample Number	Air Volume (L)	# of Grid Opening	Asbestos Fibers Counted (>5.0 µm)	Non Asbestos Fibers Counted (>5.0 µm)	PCM Fiber Conc. (f/cc)	TEM Percent Asbestos Fibers (%)	PCME Concentration (f/cc)
M62436-001	WC-BG-L01-072015	3119.6	40	0	2	0.0017	0	<0.0009
M62436-004	WC-BG-L04-072015	3135.4	40	0	2	0.0017	0	<0.0009

NA - Not Applicable

Note: Poisson statistics state that 1 fiber = +/- 3 fibers.

PCME Concentration = PCM f/cc x % asbestos  
If % asbestos =0, then PCME = <PCM LOD

**Approved Signatory:**   
email - vpanariello@mastest.com

The samples were prepared and analyzed in general accordance with NIOSH 7402(MAS SOP MT-016); this method is not accredited under current AIHA-LAP accreditation. This report relates only to items tested as received, and may not be used to claim endorsement by NVLAP or any other U.S. government agency. This report may not be reproduced except in full without the approval of Materials Analytical Services, Inc.(MAS). MAS assumes that samples were collected by qualified personnel using proper procedures. MAS does not assume any responsibility for analyses reported as fibers/cc on samples collected by non-laboratory personnel.

NVLAP Lab Code 101235-0

M62436

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 Tel: (770) 866-3200 (800) 421-8451  
 www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096


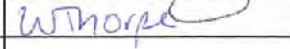
Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/ #: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/20/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-BG-L01-072015	Location 1	G1	7:28	12:42	314	10.12	9.75	9.94	3119.6	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-BG-L02-072015	Location 2	G2	7:43	12:58	315	10.15	9.83	9.99	3146.9	
WC-BG-L03-072015	Location 3	G3	8:10	13:24	314	10.16	10.15	10.16	3188.7	
WC-BG-L04-072015	Location 4	G4	8:22	13:30	308	10.20	10.16	10.18	3135.4	
WC-FB-01-072015	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072015	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	
WC-LB-072015	Lot Blank	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:		Date/Time:	7/20/15 @ 17:30
Received By:		Date/Time:	7-21-15 10:15
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/20/2015



Shipping Package Inspected By:  
 1. W.F. Date 7-21-15  
 2. W.F. Date 7-27-15

**MAS Report of Results  
NIOSH 7402  
Percent Asbestos**



**Tetra Tech EM, Inc.  
Building 200, Suite 300  
Duluth, GA 30096**

3945 Lakefield Court  
Suwanee, Georgia 30024  
Ph: 770-866-3200 Fax: 700-866-3259

**Job Name:** Wrigley Charcoal  
**Job Number:** 103X902701026.001F  
**MAS Proj. No:** M62465

**Date Received:** 07/27/15  
**Date Reported:** 08/03/15  
**Analysis Type:** NIOSH 7402

The following summarizes the 7402 analytical results for the samples selected for TEM analysis that were received at MAS LLC facility in Suwanee, GA.

MAS Sample Number	Client Sample Number	Air Volume (L)	# of Grid Opening	Asbestos Fibers Counted (>5.0 µm)	Non Asbestos Fibers Counted (>5.0 µm)	PCM Fiber Conc. (f/cc)	TEM Percent Asbestos Fibers (%)	PCME Concentration (f/cc)
M62465-002	WC-AA-L02-072415	3097.5	40	0	2	0.0016	0	<0.0009
M62465-003	WC-AA-L03-072415	3080.1	40	0	0	0.0014	0	<0.0009
M62465-004	WC-AA-L04-072415	3086.2	40	0	2	0.0014	0	<0.0009

NA - Not Applicable

Note: Poisson statistics state that 1 fiber = +/- 3 fibers.

PCME Concentration = PCM f/cc x % asbestos  
If % asbestos =0, then PCME = <PCM LOD

**Approved Signatory:** \_\_\_\_\_  
email - vpanariello@mastest.com

The samples were prepared and analyzed in general accordance with NIOSH 7402(MAS SOP MT-016); this method is not accredited under current AIHA-LAP accreditation. This report relates only to items tested as received, and may not be used to claim endorsement by NVLAP or any other U.S. government agency. This report may not be reproduced except in full without the approval of Materials Analytical Services, Inc.(MAS). MAS assumes that samples were collected by qualified personnel using proper procedures. MAS does not assume any responsibility for analyses reported as fibers/cc on samples collected by non-laboratory personnel.

**NVLAP Lab Code 101235-0**

M62465

**MATERIAL ANALYTICAL SERVICES, INC.**

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www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/24/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-072415	Location 1	G1	7:12	15:32	500	6.32	6.16	6.24	3120.0	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-AA-L02-072415	Location 2	G2	7:24	15:40	496	6.32	6.17	6.25	3097.5	
WC-AA-L03-072415	Location 3	G3	7:34	15:48	494	6.31	6.16	6.24	3080.1	
WC-AA-L04-072415	Location 4	G4	7:40	15:53	493	6.33	6.19	6.26	3086.2	
WC-FB-01-072415	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-072415	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>[Signature]</u>	Date/Time:	<u>7/24/15 @ 1730</u>
Received By:	<u>WThorpe</u>	Date/Time:	<u>7-27-15 9:45</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/24/2015



Shipping Package Inspected By:  
 1. WT Date 7-27-15  
 2. [Signature] Date 7/27/15

**MAS Report of Results  
NIOSH 7402  
Percent Asbestos**



**Tetra Tech EM, Inc.  
Building 200, Suite 300  
Duluth, GA 30096**

3945 Lakefield Court  
Suwanee, Georgia 30024  
Ph: 770-866-3200 Fax: 700-866-3259

**Job Name:** 103X902701026.001F  
**Job Number:** 103X902701026.001F  
**MAS Proj. No:** M62487

**Date Received:** 07/30/15  
**Date Reported:** 08/17/15  
**Analysis Type:** NIOSH 7402

The following summarizes the 7402 analytical results for the samples selected for TEM analysis that were received at MAS LLC facility in Suwanee, GA.

MAS Sample Number	Client Sample Number	Air Volume (L)	# of Grid Opening	Asbestos Fibers Counted (>5.0 µm)	Non Asbestos Fibers Counted (>5.0 µm)	PCM Fiber Conc. (f/cc)	TEM Percent Asbestos Fibers (%)	PCME Concentration (f/cc)
M62487-002	WC-AA-L02-072915	2200.1	40	0	0	0.0033	0	<0.0012
M62487-003	WC-AA-L03-072915	2174.3	40	0	0	0.0028	0	<0.0012
M62487-004	WC-AA-L04-072915	2176.6	40	0	0	0.0037	0	<0.0012

NA - Not Applicable

Note: Poisson statistics state that 1 fiber = +/- 3 fibers.

PCME Concentration = PCM f/cc x % asbestos  
If % asbestos =0, then PCME = <PCM LOD

**Approved Signatory:** \_\_\_\_\_  
email - vpanariello@mastest.com

The samples were prepared and analyzed in general accordance with NIOSH 7402(MAS SOP MT-016); this method is not accredited under current AIHA-LAP accreditation. This report relates only to items tested as received, and may not be used to claim endorsement by NVLAP or any other U.S. government agency. This report may not be reproduced except in full without the approval of Materials Analytical Services, Inc.(MAS). MAS assumes that samples were collected by qualified personnel using proper procedures. MAS does not assume any responsibility for analyses reported as fibers/cc on samples collected by non-laboratory personnel.

**NVLAP Lab Code 101235-0**

M62487

MATERIAL ANALYTICAL SERVICES, INC.

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS

Client name: Tetra Tech EM, Inc.

Contact: Paul Prys

Project Name/#: 103X902701026.001F

Address: 1955 Evergreen Blvd, Bldg 200, Suite 300

Phone: 404-849-7136

Samplers Name: Paul Prys

Duluth, GA 30096

Fax: 678-775-3138

Sampling Date: 7/29/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			SEGMENT VOLUME	TOTAL VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG			
WC-AA-L01-072915	Location 1	G1	6:55	9:44	169	6.32	6.23	6.28	1060.5	2276.4	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
			12:37	15:50	193	6.25	6.35	6.30	1215.9		
WC-AA-L02-072915	Location 2	G2	7:06	9:48	162	6.31	6.22	6.27	1014.9	2200.1	
			12:43	15:54	191	6.24	6.17	6.21	1185.2		
WC-AA-L03-072915	Location 3	G3	7:14	9:53	159	6.32	6.25	6.29	999.3	2174.3	
			12:53	16:01	188	6.28	6.22	6.25	1175.0		
WC-AA-L04-072915	Location 4	G4	7:20	9:55	155	6.36	6.28	6.32	979.6	2176.6	
			12:56	16:06	190	6.33	6.27	6.30	1197.0		
WC-FB-01-072915	Field Blank 1	NA	NA	NA	NA	NA	NA	NA	NA		
WC-FB-02-072915	Field Blank 2	NA	NA	NA	NA	NA	NA	NA	NA		

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: The total volume is the sum of each segment volume for each location (i.e. Location 1 volume 1 + Location 1 volume 2 = Loc 1 total volume).

Relinquished By: <u>[Signature]</u>	Date/Time: <u>7/29/15 9:130</u>
Received By: <u>[Signature]</u>	Date/Time: <u>7-30-15 9:30</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:

Method of Shipment: FedEx

Lab Recipient: Sample Receiving

Date: 7/29/2015



Shipping Package Inspected By:  
1. W.F. Date 7-30-15  
2. [Signature] Date 7-30-15

**MAS Report of Results  
NIOSH 7402  
Percent Asbestos**



**Tetra Tech EM, Inc.**  
1955 Evergreen Blvd, Building 200  
Suite 300  
Duluth, GA 30096

3945 Lakefield Court  
Suwanee, Georgia 30024  
Ph: 770-866-3200 Fax: 700-866-3259

**Job Name:** Wrigley Charcoal  
**Job Number:** 103X902701026.001F  
**MAS Proj. No:** M62498

**Date Received:** 07/31/15  
**Date Reported:** 08/07/15  
**Analysis Type:** NIOSH 7402

The following summarizes the 7402 analytical results for the samples selected for TEM analysis that were received at MAS LLC facility in Suwanee, GA.

MAS Sample Number	Client Sample Number	Air Volume (L)	# of Grid Opening	Asbestos Fibers Counted (>5.0 µm)	Non Asbestos Fibers Counted (>5.0 µm)	PCM Fiber Conc. (f/cc)	TEM Percent Asbestos Fibers (%)	PCME Concentration (f/cc)
M62498-002	WC-AA-L02-073015	3248.4	40	0	3	0.0033	0	<0.00083
M62498-003	WC-AA-L03-073015	3273.4	40	0	3	0.0060	0	<0.00082
M62498-004	WC-AA-L04-073015	3261.9	40	0	1	0.0033	0	<0.00083

NA - Not Applicable

Note: Poisson statistics state that 1 fiber = +/- 3 fibers.

PCME Concentration = PCM f/cc x % asbestos  
If % asbestos =0, then PCME = <PCM LOD

**Approved Signatory:** \_\_\_\_\_  
email - vpanariello@mastest.com

The samples were prepared and analyzed in general accordance with NIOSH 7402(MAS SOP MT-016); this method is not accredited under current AIHA-LAP accreditation. This report relates only to items tested as received, and may not be used to claim endorsement by NVLAP or any other U.S. government agency. This report may not be reproduced except in full without the approval of Materials Analytical Services, Inc.(MAS). MAS assumes that samples were collected by qualified personnel using proper procedures. MAS does not assume any responsibility for analyses reported as fibers/cc on samples collected by non-laboratory personnel.

**NVLAP Lab Code 101235-0**

M62498

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096



Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/30/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-073015	Location 1	G1	7:09	15:50	521	6.34	6.34	6.34	3303.1	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetrattech.com paul.prys@tetrattech.com.
WC-AA-L02-073015	Location 2	G2	7:19	16:00	521	6.36	6.11	6.24	3248.4	
WC-AA-L03-073015	Location 3	G3	7:28	16:08	520	6.36	6.23	6.30	3273.4	
WC-AA-L04-073015	Location 4	G4	7:33	16:12	519	6.34	6.23	6.29	3261.9	
WC-FB-01-073015	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-073015	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:		Date/Time:	7/30/15 07:30
Received By:		Date/Time:	7-31-15 10:00
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/30/2015



Shipping Package Inspected By:  
 1. WT Date 7-31-15  
 2. JS Date 7-31-15

**MAS Report of Results  
NIOSH 7402  
Percent Asbestos**



**Tetra Tech EM, Inc.**  
1955 Evergreen Blvd, Building 200  
Suite 300  
Duluth, GA 30096

3945 Lakefield Court  
Suwanee, Georgia 30024  
Ph: 770-866-3200 Fax: 700-866-3259

**Job Name:** Wrigley Charcoal  
**Job Number:** 103X902701026.001F  
**MAS Proj. No:** M62498

**Date Received:** 07/31/15  
**Date Reported:** 08/07/15  
**Analysis Type:** NIOSH 7402

The following summarizes the 7402 analytical results for the samples selected for TEM analysis that were received at MAS LLC facility in Suwanee, GA.

MAS Sample Number	Client Sample Number	Air Volume (L)	# of Grid Opening	Asbestos Fibers Counted (>5.0 µm)	Non Asbestos Fibers Counted (>5.0 µm)	PCM Fiber Conc. (f/cc)	TEM Percent Asbestos Fibers (%)	PCME Concentration (f/cc)
M62498-002	WC-AA-L02-073015	3248.4	40	0	3	0.0033	0	<0.00083
M62498-003	WC-AA-L03-073015	3273.4	40	0	3	0.0060	0	<0.00082
M62498-004	WC-AA-L04-073015	3261.9	40	0	1	0.0033	0	<0.00083

NA - Not Applicable

Note: Poisson statistics state that 1 fiber = +/- 3 fibers.

PCME Concentration = PCM f/cc x % asbestos  
If % asbestos =0, then PCME = <PCM LOD

**Approved Signatory:** \_\_\_\_\_  
email - vpanariello@mastest.com

The samples were prepared and analyzed in general accordance with NIOSH 7402(MAS SOP MT-016); this method is not accredited under current AIHA-LAP accreditation. This report relates only to items tested as received, and may not be used to claim endorsement by NVLAP or any other U.S. government agency. This report may not be reproduced except in full without the approval of Materials Analytical Services, Inc.(MAS). MAS assumes that samples were collected by qualified personnel using proper procedures. MAS does not assume any responsibility for analyses reported as fibers/cc on samples collected by non-laboratory personnel.

**NVLAP Lab Code 101235-0**

M62498

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/30/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-073015	Location 1	G1	7:09	15:50	521	6.34	6.34	6.34	3303.1	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetrattech.com paul.prys@tetrattech.com.
WC-AA-L02-073015	Location 2	G2	7:19	16:00	521	6.36	6.11	6.24	3248.4	
WC-AA-L03-073015	Location 3	G3	7:28	16:08	520	6.36	6.23	6.30	3273.4	
WC-AA-L04-073015	Location 4	G4	7:33	16:12	519	6.34	6.23	6.29	3261.9	
WC-FB-01-073015	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-073015	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By:	<u>[Signature]</u>	Date/Time:	<u>7/30/15 07:30</u>
Received By:	<u>W Thorne</u>	Date/Time:	<u>7-31-15 10:00</u>
Relinquished By:		Date/Time:	
Received By:		Date/Time:	

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/30/2015



Shipping Package Inspected By:  
 1. WT Date 7-31-15  
 2. JS Date 7-31-15

**MAS Report of Results  
NIOSH 7402  
Percent Asbestos**



**Tetra Tech EM, Inc.  
Building 200, Suite 300  
Duluth, GA 30096**

3945 Lakefield Court  
Suwanee, Georgia 30024  
Ph: 770-866-3200 Fax: 700-866-3259

**Job Name:** 103X90271026.001F  
**Job Number:** 103X90271026.001F  
**MAS Proj. No:** M62513

**Date Received:** 08/03/15  
**Date Reported:** 08/17/15  
**Analysis Type:** NIOSH 7402

The following summarizes the 7402 analytical results for the samples selected for TEM analysis that were received at MAS LLC facility in Suwanee, GA.

MAS Sample Number	Client Sample Number	Air Volume (L)	# of Grid Opening	Asbestos Fibers Counted (>5.0 µm)	Non Asbestos Fibers Counted (>5.0 µm)	PCM Fiber Conc. (f/cc)	TEM Percent Asbestos Fibers (%)	PCME Concentration (f/cc)
M62513-002	WC-AA-L02-073115	3323.1	40	0	0	0.0021	0	<0.00081
M62513-003	WC-AA-L03-073115	3317.5	40	0	0	0.0015	0	<0.00081
M62513-004	WC-AA-L04-073115	2931.8	40	0	0	0.0018	0	<0.00092

NA - Not Applicable

Note: Poisson statistics state that 1 fiber = +/- 3 fibers.

PCME Concentration = PCM f/cc x % asbestos  
If % asbestos =0, then PCME = <PCM LOD

**Approved Signatory:** \_\_\_\_\_  
email - vpanariello@mastest.com

The samples were prepared and analyzed in general accordance with NIOSH 7402(MAS SOP MT-016); this method is not accredited under current AIHA-LAP accreditation. This report relates only to items tested as received, and may not be used to claim endorsement by NVLAP or any other U.S. government agency. This report may not be reproduced except in full without the approval of Materials Analytical Services, Inc.(MAS). MAS assumes that samples were collected by qualified personnel using proper procedures. MAS does not assume any responsibility for analyses reported as fibers/cc on samples collected by non-laboratory personnel.

**NVLAP Lab Code 101235-0**

M62513

**MATERIAL ANALYTICAL SERVICES, INC.**

3945 Lakefield Court, Suwanee, GA 30024

Tel: (770) 866-3200 (800) 421-8451

www.mastest.com

**CHAIN OF CUSTODY FORM FOR AIR SAMPLE ANALYSIS**

Client name: Tetra Tech EM, Inc.  
 Address: 1955 Evergreen Blvd, Bldg 200, Suite 300  
Duluth, GA 30096

Contact: Paul Prys  
 Phone: 404-849-7136  
 Fax: 678-775-3138

Project Name/#: 103X902701026.001F  
 Samplers Name: Paul Prys  
 Sampling Date: 7/31/2015

SAMPLE ID	SAMPLE DESCRIPTION (e.g. Locations, Name, etc)	PUMP NUMBER	TIME			FLOW RATE			VOLUME	ANALYSIS REQUESTED/REMARKS
			START	END	TOTAL	INITIAL	FINAL	AVG		
WC-AA-L01-073115	Location 1	G1	6:55	15:49	534	6.32	6.37	6.35	3388.2	Analyze samples by NIOSH Method 7400 for 5 day TAT. For any sample(s) greater than 0.001 f/cc, Tetra Tech will advise whether or not to analyze the sample(s) by NIOSH Method 7402 at a standard TAT. Please e-mail results to the following: jessica.vickers@tetratech.com paul.prys@tetratech.com.
WC-AA-L02-073115	Location 2	G2	7:05	15:55	530	6.36	6.18	6.27	3323.1	
WC-AA-L03-073115	Location 3	G3	7:15	16:02	527	6.35	6.24	6.30	3317.5	
WC-AA-L04-073115	Location 4	G4	7:21	15:06	465	6.33	6.28	6.31	2931.8	
WC-PA-FP01-073115	Personal Sample - Prys	S97011	6:50	15:05	495	2.08	2.11	2.10	1037.0	
WC-FB-01-073115	Field Blank 1	NA	NA	NA	0	NA	NA	0	0	
WC-FB-02-073115	Field Blank 2	NA	NA	NA	0	NA	NA	0	0	

Turnaround Time: Normal (5 days):  3 Days Rush:  2 Days Rush:  Next Day Rush:

Comments: \_\_\_\_\_

Relinquished By: <u>[Signature]</u>	Date/Time: <u>7/31/15 @ 1730</u>
Received By: <u>[Signature]</u>	Date/Time: <u>8-3-15 9:40</u>
Relinquished By:	Date/Time:
Received By:	Date/Time:

Delivered Direct to Lab:  Shipped:   
 Method of Shipment: FedEx  
 Lab Recipient: Sample Receiving  
 Date: 7/31/2015



Shipping Package Inspected By:  
 1. WT Date 8-3-15  
 2. PS Date 8-3-15

July 28, 2015

Jessica Vickers  
Tetra Tech EM Inc.  
1955 Evergreen Blvd. STE 300  
Duluth, GA 30096-1207

RE: CARB 435 PLM Sample Analysis

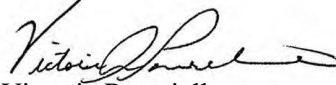
Dear Ms. Vickers:

Enclosed is a summary and the analysis of the 2 samples which were delivered to MAS, LLC. on 7/23/15. It was requested that we analyze these samples using polarized light microscopy (PLM) to determine the percentage of asbestos.

The samples were analyzed in accordance with EPA document 600/R-93/116, 'Method for the Determination of Asbestos in Bulk Building Materials' and State of California Air Resources Board Method 435 Determination of Asbestos Content of Serpentine Aggregate. The analytical results relate only to the specific items analyzed. Any partial reproduction of the Bulk Analysis Report may not be made without the consent of MAS, LLC. This report may not be used to imply product endorsement or certification by MAS, LLC., the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government.

Materials Analytical Services appreciates this opportunity to have been of service to you. We look forward to working with you on future projects.

Sincerely,



Victoria Panariello  
Microscopy Department Manager  
Enc. M62450





MAS, LLC  
 3945 LAKEFIELD COURT  
 SUWANEE, GA 30024  
 (770) 866-3200

**Client:** Tetra Tech, Inc.  
**Job Name:** Wrigley Charcoal Removal Action  
**Job Number:** 103x902701026.001F  
**Reviewer:**  7/28/15

**Summary of Results of analysis by Polarized Light Microscopy (PLM)**

CLIENT #	MAS ID #- SPL #	COMMENTS	MATERIAL	ANALYSIS
WC-AS-L10-072115	M62450-001	Three points of 400 counted fell on Chrysotile asbestos fibers.	SOIL	0.75% Chrysotile Asbestos
WC-AS-L27-072115	M62450-002	Three points of 400 counted fell on Chrysotile asbestos fibers; One point of 400 counted fell on an Amosite Fiber.	SOIL	0.75% Chrysotile Asbestos; 0.25% Amosite Asbestos

The samples were analyzed as requested by the California Air Resources Board Method 435, "Determination of Asbestos Content of Serpentine Aggregate". The method detection limit is 0.25% unless otherwise stated. This report relates only to items tested as received, and may not be used to claim endorsement or certification by MAS, LLC, the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government. This report may not be reproduced except in full without the approval of MAS, LLC, (NVLAP Lab Code 101235-0).




MAS, LLC  
 3945 LAKEFIELD COURT  
 SUWANEE, GA 30024  
 (770) 866-3200



Client: Tetra Tech EM Inc.  
 1955 Evergreen Blvd. STE 300  
 Duluth GA, 30096-1207  
 Job Name: Wrigley Charcoal Removal Action  
 Job Number: 103X902701026.001F  
 Received 7/23/2015

Summary of Results of analysis by Polarized Light Microscopy (PLM)

SAMPLE ID	LOCATION	MATERIAL	MAS ID	ANALYST	DATE	Fibrous	Non-Fibrous	ASBESTOS	% of LAYER
WC-AS-L10-072115								Chrysotile Asbestos	0.75%
	soil		M62450 - 001	Victoria Pannriello	7/28/2015				
		% of Total Sample in Analysis	100				Binder	99.25	
NOTES	Brown powdery silty mass Three points of 400 counted fell on Chrysotile asbestos fibers.								
WC-AS-L26-072115								Chrysotile Asbestos	0.75%
	soil		M62450 - 002	Paul Hess	7/28/2015			Amosite Asbestos	0.25%
		% of Total Sample in Analysis	100				Binder	99	
NOTES	Brown powdery silty mass Three points of 400 counted fell on Chrysotile asbestos fibers. One point of 400 counted fell on an Amosite fiber.								

Approved Signatory:   
 Date: 7/28/2015

Client Sample Containers: 2  
 Total Layers Analyzed: 2

The samples were analyzed in accordance with EPA document 600/R-93/116, "Method for the Determination of Asbestos in Bulk Building Materials" and/or EPA document 600/M4-82-020, "Interim Method for the Determination of Asbestos in Bulk Insulation Samples". The method detection limit is 1% unless otherwise stated. This report relates only to items tested as received, and may not be used to claim endorsement or certification by MAS, LLC, the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government. This report may not be reproduced except in full without the approval of MAS, LLC. (NVLAP Lab Code 101235-0).





August 25, 2015

Jessica Vickers  
Tetra Tech EM Inc.  
1955 Evergreen Blvd. STE 300  
Duluth, GA 30096-1207

RE: CARB 435 PLM Sample Analysis


Dear Ms. Vickers:

Enclosed is a summary and the analysis of the 1 samples which were delivered to MAS, LLC. on 8/21/15. It was requested that we analyze these samples using polarized light microscopy (PLM) to determine the percentage of asbestos.

The samples were analyzed in accordance with EPA document 600/R-93/116, 'Method for the Determination of Asbestos in Bulk Building Materials' and State of California Air Resources Board Method 435 Determination of Asbestos Content of Serpentine Aggregate. The analytical results relate only to the specific items analyzed. Any partial reproduction of the Bulk Analysis Report may not be made without the consent of MAS, LLC. This report may not be used to imply product endorsement or certification by MAS, LLC., the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government.

Materials Analytical Services appreciates this opportunity to have been of service to you. We look forward to working with you on future projects.

Sincerely,



Victoria Panariello  
Microscopy Department Manager  
Enc. M62679





MAS, LLC  
 3945 LAKEFIELD COURT  
 SUWANEE, GA 30024  
 (770) 866-3200

Client: Tetra Tech, Inc.  
 Job Name: Wrigley Charcoal Removal Action  
 Job Number: 103x902701026.001F  
 Reviewer: *Victoria D...* 8/25/15

**Summary of Results of analysis by Polarized Light Microscopy (PLM)**

CLIENT #	MAS ID #- SPL #	COMMENTS	MATERIAL	ANALYSIS
WC-AS-L29-082015	M62679-001	Fifteen points of 400 counted fell on Chrysotile asbestos fibers.	SOIL	3.75% Chrysotile Asbestos

The samples were analyzed as requested by the California Air Resources Board Method 435, "Determination of Asbestos Content of Serpentine Aggregate". The method detection limit is 0.25% unless otherwise stated. This report relates only to items tested as received, and may not be used to claim endorsement or certification by MAS, LLC, the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government. This report may not be reproduced except in full without the approval of MAS, LLC, (NVLAP Lab Code 101235-0).



MAS, LLC  
 3945 LAKEFIELD COURT  
 SUWANEE, GA 30024  
 (770) 866-3200



**Client:** Tetra Tech EM Inc.  
 1955 Evergreen Blvd. STE 300  
 Duluth GA, 30096-1207

**Job Name:** 103X902701026.001F/Wrigley Charcoal Removal  
**Job Number:** 103X902701026.001F  
**Received** 8/21/2015

**Summary of Results of analysis by Polarized Light Microscopy (PLM)**

SAMPLE ID  
 LOCATION  
 MATERIAL

MAS ID	ANALYST	DATE	Fibrous	Non-Fibrous	ASBESTOS	% of LAYER
WC-AS-L29-082015			Cellulose -ribbony X%	Mineral grains X	Chrysotile Asbestos	3.75%
				Organics X		

**Soil**  
 M62679 - 001 Victoria 8/25/2015  
 Panariello

% of Total Sample in Analysis 100

NOTES Brown/Homogeneous/Non-Fibrous X = Materials detected.

**Client Sample Containers:** 1

**Total Layers Analyzed:** 1

**Approved Signatory:** \_\_\_\_\_

**Date:** \_\_\_\_\_ 8/25/2015

The samples were analyzed in accordance with EPA document 600/R-93/116, "Method for the Determination of Asbestos in Bulk Building Materials" and/or EPA document 600/M4-82-020, "Interim Method for the Determination of Asbestos in Bulk Insulation Samples". The method detection limit is 1% unless otherwise stated. This report relates only to items tested as received, and may not be used to claim endorsement or certification by MAS, LLC, the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government. This report may not be reproduced except in full without the approval of MAS, LLC. (NVLAP Lab Code 101235-0).



1010206 (7)

MATERIAL ANALYTICAL SERVICES, INC.

3945 Lakefield Court, Suwanee, GA 30024  
Tel: (770) 866-3200 (800) 421-8451

CHAIN OF CUSTODY

Work Order

Date: 8/20/2015 Page 1 of 1

COMPANY: <b>Tetra Tech, Inc.</b> ADDRESS: <b>1955 Evergreen Blvd, Bldg 200, Suite 300, Duluth, GA 30096</b> PHONE: 404-849-7136 FAX: 678-775-3138 SAMPLED BY: <b>Paul Prys</b> SIGNATURE: <i>[Signature]</i>		ANALYSIS REQUESTED CARB 435 PRESERVATION (See codes) NA X		Visit our website <a href="http://www.aesatlanta.com">www.aesatlanta.com</a> to check on the status of your results, place bottle orders, etc. No # of Containers: 1			
#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	REMARKS
1	WC-AS-L29-082015	8/20/2015	14:30	X	X	SO	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
RELINQUISHED BY: <i>[Signature]</i>	DATE/TIME: 8/20/15 @ 17:30	RECEIVED BY: <i>[Signature]</i>	DATE/TIME: 8-21-15 9:10	PROJECT NAME: <b>Wrigley Charcoal Removal Action</b>			RECEIPT
SPECIAL INSTRUCTIONS/COMMENTS: Also, please email results to paul.prys@tetratech.com		SHIPMENT METHOD: OUT 8/20/15 VIA: Air		PROJECT #: 103X902701026.001F		Total # of Containers: 1	
		IN: CLIENT: <b>FedEx</b> / UPS / MAIL / COURIER / GREYHOUND / OTHER		SITE ADDRESS: 7828 Wrigley Road, Lylics, Tennessee		Turnaround Time Request: <input type="radio"/> Standard 5 Business Days <input checked="" type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other	
		STATE PROGRAM (if any):		SEND REPORT TO: <b>jessica.vickers@tetratech.com</b>		STATE PROGRAM (if any): F-mail? <input checked="" type="checkbox"/> N; Fax? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N DATA PACKAGE: I II III IV	
		QUOTE #:		INVOICE TO: (IF DIFFERENT FROM ABOVE)		Turnaround Time Request: <input type="radio"/> Standard 5 Business Days <input checked="" type="radio"/> 2 Business Day Rush <input type="radio"/> Next Business Day Rush <input type="radio"/> Same Day Rush (auth req.) <input type="radio"/> Other	

SCANNED

Shipping Package Inspected By:  
1. *[Signature]* Date 8-21-15  
2. *[Signature]* Date 8-21-15

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO LAT IS MARKED ON COC AFS WILL PROCEED AS STANDARD TAT. SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)  
PRESERVATIVE CODES: HH1 = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice SM/I = Sodium Bisulfate/Metformin + ice O = Other (specify) NA = None

August 26, 2015

Jessica Vickers  
Tetra Tech EM Inc.  
1955 Evergreen Blvd. STE 300  
Duluth, GA 30096-1207

RE: CARB 435 PLM Sample Analysis

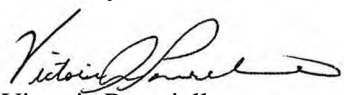
Dear Ms. Vickers:

Enclosed is a summary and the analysis of the 5 samples which were delivered to MAS, LLC. on 8/25/15. It was requested that we analyze these samples using polarized light microscopy (PLM) to determine the percentage of asbestos.

The samples were analyzed in accordance with EPA document 600/R-93/116, 'Method for the Determination of Asbestos in Bulk Building Materials' and State of California Air Resources Board Method 435 Determination of Asbestos Content of Serpentine Aggregate. The analytical results relate only to the specific items analyzed. Any partial reproduction of the Bulk Analysis Report may not be made without the consent of MAS, LLC. This report may not be used to imply product endorsement or certification by MAS, LLC., the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government.

Materials Analytical Services appreciates this opportunity to have been of service to you. We look forward to working with you on future projects.

Sincerely,



Victoria Panariello  
Microscopy Department Manager  
Enc. M62703





**MAS, LLC**  
**3945 LAKEFIELD COURT**  
**SUWANEE, GA 30024**  
**(770) 866-3200**

**Client:** Tetra Tech EM Inc.  
**Job Name:** Wrigley Charcoal Removal Action  
**Job Number:** 103X902701026.001F  
**Reviewer:** *[Signature]* 8/26/15

**Summary of Results of analysis by Polarized Light Microscopy (PLM)**

CLIENT #	MAS ID # - SPL #	COMMENTS	MATERIAL	ANALYSIS
WC-AS-L26A-082415	M62703-001	6 points of 400 landed on chrysotile.	Soil	1.5% Chrysotile Asbestos
WC-AS-L26B-082415	M62703-002	3 points of 400 landed on chrysotile.	Soil	0.75% Chrysotile Asbestos
WC-AS-L26B-082415-DUP	M62703-003	2 points of 400 landed on chrysotile.	Soil	0.5% Chrysotile Asbestos
WC-AS-L03-L09-082415	M62703-004	4 points of 400 landed on chrysotile.	Soil	1% Chrysotile Asbestos
WC-AS-L23-L25-082415	M62703-005	2 points of 400 landed on chrysotile.	Soil	0.5% Chrysotile Asbestos

The samples were analyzed as requested by the California Air Resources Board Method 435, "Determination of Asbestos Content of Serpentine Aggregate". The method detection limit is 0.25% unless otherwise stated. This report relates only to items tested as received, and may not be used to claim endorsement or certification by MAS, LLC, the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government. This report may not be reproduced except in full without the approval of MAS, LLC, (NVLAP Lab Code 101235-0).



MAS, LLC  
 3945 LAKEFIELD COURT  
 SUWANEE, GA 30024  
 (770) 866-3200



Client: Tetra Tech EM Inc.  
 1955 Evergreen Blvd. STE 300  
 Duluth GA, 30096-1207

Job Name: Wrigley Charcoal Removal Action

Job Number: 103X902701026.001F

Received 8/25/2015

Summary of Results of analysis by Polarized Light Microscopy (PLM)

SAMPLE ID  
 LOCATION  
 MATERIAL

MAS ID	ANALYST	DATE	Fibrous	Non-Fibrous	ASBESTOS	% of LAYER
<b>WC-AS-L26A-082415</b>			Cellulose -ribbony	X%	Mineral grains	X Chrysotile Asbestos 1.5%
					Other	X
<b>Soil</b>						
M62703 - 001	Victoria Panariello	8/26/2015				
% of Total Sample in Analysis 100						
NOTES Brown/Fibrous/Homogeneous 6 points of 400 landed on chysotile.						
<b>WC-AS-L26B-082415</b>			Cellulose -ribbony	X%	Mineral grains	X Chrysotile Asbestos 0.75%
					Other	X
<b>Soil</b>						
M62703 - 002	Victoria Panariello	8/26/2015				
% of Total Sample in Analysis 100						
NOTES Brown/Fibrous/Homogeneous 3 points of 400 landed on chysotile.						
<b>WC-AS-L26B-082415-DUP</b>			Cellulose -ribbony	X%	Mineral grains	X Chrysotile Asbestos 0.5%
					Other	X
<b>Soil</b>						
M62703 - 003	Victoria Panariello	8/26/2015				
% of Total Sample in Analysis 100						
NOTES Brown/Fibrous/Homogeneous 2 points of 400 landed on chysotile.						
<b>WC-AS-L03:L09-082415</b>			Cellulose -ribbony	X%	Mineral grains	X Chrysotile Asbestos 1%
			Synthetic -melts	X%	Other	X
<b>Soil</b>						
M62703 - 004	Paul Hess	8/26/2015				
% of Total Sample in Analysis 100						
NOTES Brown/Fibrous/Homogeneous 4 points of 400 landed on chysotile.						
<b>WC-AS-L23:L25-082415</b>			Cellulose -ribbony	X%	Mineral grains	X Chrysotile Asbestos 0.5%
					Other	X
<b>Soil</b>						
M62703 - 005	Victoria Panariello	8/26/2015				
% of Total Sample in Analysis 100						
NOTES Brown/Fibrous/Homogeneous 2 points of 400 landed on chysotile.						

The samples were analyzed in accordance with EPA document 600/R-93/116, "Method for the Determination of Asbestos in Bulk Building Materials" and/or EPA document 600/M4-82-020, "Interim Method for the Determination of Asbestos in Bulk Insulation Samples". The method detection limit is 1% unless otherwise stated. This report relates only to items tested as received, and may not be used to claim endorsement or certification by MAS, LLC, the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government. This report may not be reproduced except in full without the approval of MAS, LLC. (NVLAP Lab Code 101235-0).





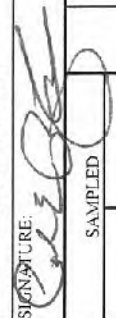
**MATERIAL ANALYTICAL SERVICES, INC.**


3945 Lakefield Court, Suwanee, GA 30024  
Tel: (770) 866-3200 (800) 421-8451

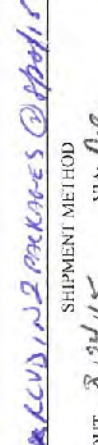
**CHAIN OF CUSTODY**

Work Order: **1762703**

Date: 8/24/2015 Page 1 of 1

COMPANY: <b>Tetra Tech, Inc.</b>		ADDRESS: <b>1955 Evergreen Blvd, Bldg 200, Suite 300, Duluth, GA 30096</b>		ANALYSIS REQUESTED		REMARKS	
PHONE: <b>404-849-7136</b>	FAX: <b>678-775-3138</b>	SIGNATURE: 		PRESERVATION (See codes)		Visit our website <a href="http://www.aesatlanta.com">www.aesatlanta.com</a> to check on the status of your results, place bottle orders, etc.	
#	SAMPLE ID	SAMPLED		Matrix (See codes)	Composite	Grab	REMARKS
		DATE	TIME				
1	WC-AS-L26A-082415	8/24/2015	13:25	SO	X		
2	WC-AS-L26B-082415	8/24/2015	12:55	SO	X		
3	WC-AS-L26B-082415-DUP	8/24/2015	12:55	SO	X		
4	WC-AS-L03-L09-082415	8/24/2015	14:20	SO	X		
5	WC-AS-L23-L25-082415	8/24/2015	15:00	SO	X		
6							
7							
8							
9							
10							
11							
12							
13							
14							

RELINQUISHED BY:  DATE/TIME: **8/24/15 11:30**

RECEIVED BY:  DATE/TIME: **8/24/15 11:30**

PROJECT NAME: **Wrigley Charcoal Removal Action**

PROJECT #: **103X902701026.001F**

SITE ADDRESS: **7828 Wrigley Road, Lyles, Tennessee**

SEND REPORT TO: **jessica.vickers@tetratech.com**

INVOICE TO: **(IF DIFFERENT FROM ABOVE)**

SHIPMENT METHOD: **OUT 8/24/15 VIA: Air**

CLIENT: **FedEx UPS MAIL COURIER**

GREYHOUND OTHER: **RECUVING 2 PACKAGES @ 11:30**

QUOTE #: \_\_\_\_\_ PO#: \_\_\_\_\_

STATE PROGRAM (if any): \_\_\_\_\_ E-mail:  /N; Fax:  /N

DATA PACKAGE:  I  II  III  IV

Total # of Containers: **5**

Standard Time Request:  Standard 5 Business Days  2 Business Day Rush  Next Business Day Rush  Same Day Rush (auth req.)  Other

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT. SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)

PRESERVATIVE CODES: HH = Hydrochloric acid + ice I = Ice only N = Nitric acid SH = Sulfuric acid + ice SM/+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Shipping Package Inspected By: **1. [Signature] Date: 8/24/15 2. [Signature] Date: 8/24/15**

White Copy - Original; Yellow Copy - Client of 5

August 28, 2015

Jessica Vickers  
Tetra Tech EM Inc.  
1955 Evergreen Blvd. STE 300  
Duluth, GA 30096-1207

RE: CARB 435 PLM Sample Analysis

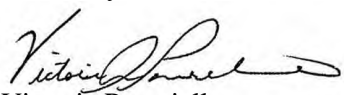
Dear Ms. Vickers:

Enclosed is a summary and the analysis of the 3 samples which were delivered to MAS, LLC. on 8/27/15. It was requested that we analyze these samples using polarized light microscopy (PLM) to determine the percentage of asbestos.

The samples were analyzed in accordance with EPA document 600/R-93/116, 'Method for the Determination of Asbestos in Bulk Building Materials' and State of California Air Resources Board Method 435 Determination of Asbestos Content of Serpentine Aggregate. The analytical results relate only to the specific items analyzed. Any partial reproduction of the Bulk Analysis Report may not be made without the consent of MAS, LLC. This report may not be used to imply product endorsement or certification by MAS, LLC., the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government.

Materials Analytical Services appreciates this opportunity to have been of service to you. We look forward to working with you on future projects.

Sincerely,



Victoria Panariello  
Microscopy Department Manager  
Enc. M62719





MAS, LLC  
 3945 LAKEFIELD COURT  
 SUWANEE, GA 30024  
 (770) 866-3200

Client: Tetra Tech EM Inc.

Job Name: 103X902701026.001F/Wrigley Charcoal Removal

Job Number: 103X902701026.001F

Reviewer: \_\_\_\_\_

Summary of Results of analysis by Polarized Light Microscopy (PLM)

CLIENT #	MAS ID # - SPL #	COMMENTS	MATERIAL	ANALYSIS
WC-AS-L27A-082515	M62719- 001	21 of 400 points landed on chrysotile.	Soil	5.25% Chrysotile Asbestos
WC-AS-L27B-082515	M62719- 002	21 of 400 points landed on chrysotile.	Soil	5.25% Chrysotile Asbestos
WC-AS-L10-082515	M62719- 003	19 of 400 points landed on chrysotile.	Soil	4.75% Chrysotile Asbestos

The samples were analyzed as requested by the California Air Resources Board Method 435, "Determination of Asbestos Content of Serpentine Aggregate". The method detection limit is 0.25% unless otherwise stated. This report relates only to items tested as received, and may not be used to claim endorsement or certification by MAS, LLC, the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government. This report may not be reproduced except in full without the approval of MAS, LLC, (NVLAP Lab Code 101235-0).





August 28, 2015

Jessica Vickers  
Tetra Tech EM Inc.  
1955 Evergreen Blvd. STE 300  
Duluth, GA 30096-1207

RE: CARB 435 PLM Sample Analysis

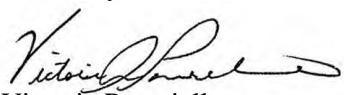
Dear Ms. Vickers:

Enclosed is a summary and the analysis of the 6 samples which were delivered to MAS, LLC. on 8/27/15. It was requested that we analyze these samples using polarized light microscopy (PLM) to determine the percentage of asbestos.

The samples were analyzed in accordance with EPA document 600/R-93/116, 'Method for the Determination of Asbestos in Bulk Building Materials' and State of California Air Resources Board Method 435 Determination of Asbestos Content of Serpentine Aggregate. The analytical results relate only to the specific items analyzed. Any partial reproduction of the Bulk Analysis Report may not be made without the consent of MAS, LLC. This report may not be used to imply product endorsement or certification by MAS, LLC., the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government.

Materials Analytical Services appreciates this opportunity to have been of service to you. We look forward to working with you on future projects.

Sincerely,



Victoria Panariello  
Microscopy Department Manager  
Enc. M62721





MAS, LLC  
 3945 LAKEFIELD COURT  
 SUWANEE, GA 30024  
 (770) 866-3200

Client: Tetra Tech EM Inc.

Job Name: 103X902701026.001F/Wrigley Charcoal Removal

Job Number: 103X902701026.001F

Reviewer: \_\_\_\_\_

Summary of Results of analysis by Polarized Light Microscopy (PLM)

CLIENT #	MAS ID # - SPL #	COMMENTS	MATERIAL	ANALYSIS
WC-AS-L11-082615	M62721- 001	3 of 400 points landed on Chrysotile	Soil	0.75% Chrysotile Asbestos
WC-AS-L12-082615	M62721- 002	9 of 400 points landed on Chrysotile	Soil	2.25% Chrysotile Asbestos
WC-AS-L13-082615	M62721- 003	4 of 400 points landed on Chrysotile	Soil	1% Chrysotile Asbestos
WC-AS-L14-082615	M62721- 004	8 of 400 points landed on Chrysotile	Soil	2% Chrysotile Asbestos
WC-AS-L28-082615	M62721- 005	5 of 400 points landed on Chrysotile	Soil	1.25% Chrysotile Asbestos
WC-AS-L18:L20-082615	M62721- 006	6 of 400 points landed on Chrysotile	Soil	1.25% Chrysotile Asbestos

The samples were analyzed as requested by the California Air Resources Board Method 435, "Determination of Asbestos Content of Serpentine Aggregate". The method detection limit is 0.25% unless otherwise stated. This report relates only to items tested as received, and may not be used to claim endorsement or certification by MAS, LLC, the National Voluntary Laboratory Accreditation Program, EPA, or the U.S. Government. This report may not be reproduced except in full without the approval of MAS, LLC, (NVLAP Lab Code 101235-0).



