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CIVIL & ENVIRONMENTAL ENGINEERS

FINAL REMOVAL ACTION REPORT

BJAT, LLC Superfund Site AOC Removal Action

300 Fisher Street, Franklin, Massachusetts

For submittal to:

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Final Report Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

For BJAT, LLC:

4/8/20
Dated:



Name: Ted Davis
Title: Manager

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ACRONYMS LIST

ABCA	Analysis of Brownfields Cleanup Alternatives
ACM	Asbestos Containing Materials
AUL	Activity and Use Limitation
CAM	Compendium of Analytical Methods
DQI	Data Quality Indicators
DQO	Data Quality Objectives
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
HASP	Health and Safety Plan
LBP	Lead-based paint
LSP	Licensed Site Professional
MassDEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan
MQO	Measurement Quality Objectives
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PARCC	Precision, Accuracy, Representativeness, Completeness and Comparability
PCBs	Polychlorinated Biphenyls
PID	Photoionization detector
QA	Quality Assurance
QAP	Quality Assurance Plan
QAPP	Quality Assurance Project Plan
QC	Quality Control
RAM	Release Abatement Measure
RC	Reportable concentration
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
RPD	Relative Percent Difference
SOP	Standard Operating Procedures
SVOCs	Semivolatile Organic Compounds
TPH	Total Petroleum Hydrocarbons
UNLR	United Neighbors of Lower Roxbury
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

On behalf of BJAT, LLC and Hasco Associates, LP and under the terms of United States Environmental Protection Agency (EPA) Administrative Settlement Agreement and Order on Consent for Removal Action (AOC) (effective Date December 6, 2017), Docket No. 01-2018-0009, CDW Consultants (CDW) prepared this Final Removal Action Report (FRAR) for the BJAT, LLC Superfund Site property, located at 300 Fisher Street, Franklin, Massachusetts (the Site)(Figure 1). The parcel is 18.3 acres and includes upland and wetlands and is bordered by wetlands, commercial properties, railroad tracks beyond which are residential properties, Interstate 495, and by wetland parcels owned by the Town of Franklin. The parcel has been vacant since at least 1985.

The FRAR documents sampling, cleanup, and restoration activities at the Site. Pursuant to Paragraph 30 of the AOC, actions documented herein include development of a site-specific Health and Safety Plan, site preparation, clearing and grubbing the work area, excavation, sampling, staging and covering of drums and other containers, waste and approximately 2,114 tons of contaminated soil; treatment of excavated soil on-site; placement of high visibility fence at the bottom of excavated areas as a defining layer, excavation of a limited number of test pits; air monitoring; and shipment of waste, excavated soil, and other contaminated items for off-site disposal, treatment, re-use or recycling. Pursuant to Paragraph 38 of the AOC, the FRAR was developed following applicable United States Environmental Protection Agency protocols outlined in 300.165 of the National Contingency Plan "OSC Reports." As described in August 2, 2017 Action Memorandum, the purpose of the removal action was to excavate soil, obtain confirmatory soil samples and to remove a limited number of drums on the surface. The soil "hotspots" and drums were previously identified in the Preliminary Assessment/Site Inspection (PA/SI) conducted by EPA contractor Weston START in April 2016.

The drums, waste, and contaminated soil subject to this removal action are from historic industrial uses of the upland portion of the parcel, adjacent to the wetland. Industrial uses date back to the 1800s included the Franklin Beet Sugar Refinery, the Saylor Rubber Company, the F.H. Appleton & Son Rubber Manufacturers, a/k/a Appleton Rubber Company, Max Joseph's Poultry Marking, Inc. and the Electroformex Labs.

Previous investigations identified contaminants in soil, sediment and surface water associated with these past industrial operations and include concentrations exceeding Massachusetts Contingency Plan (MCP) Reportable Concentrations for S-1 soil standards for barium, lead and arsenic. Elevated levels of other contaminants include zinc, antimony, chromium, and polycyclic aromatic hydrocarbons (PAHs). Groundwater samples indicated concentrations of antimony, cadmium, lead and zinc above the MCP Method 1 GW-1 groundwater standards.

The Removal Action (RA) was performed between August 17, 2018 and April 14, 2019. During the RA, 30 (thirty) drums, some containing residues of paint, rubber or resins, were removed and disposed of. Approximately 2,000 tons of contaminated soil from previously identified "hot spots" was excavated, treated on-site and transported for disposal. Air monitoring was conducted during all excavation and no exceedances were identified. Upon completion, high visibility fencing was laid horizontally within the excavated area, prior to backfilling, to the limits of excavated areas as a marker for future reference. The excavated areas were then filled with clean soil and/or stone from

an off-site borrow source and compacted in accordance with industry standards. Jute matting was placed on top of the soil and logs and silt fencing was removed. Finally, fencing removed for our work was reinstalled, as was fencing removed by EPA's contractor.

This FRAR lists all completed, required activities and includes; copies of all shipping papers and waste manifests, and any other disposal documents; endpoint soil sampling data, summary of all waste shipped or treated, documentation showing site conditions at commencement of site work, final site conditions, and an estimate of the Respondents' costs incurred.

1.0 SUMMARY OF EVENTS

1.1 Site Description and Location

The BJAT LLC property is located at 300 Fisher Street, Franklin, Norfolk County, Massachusetts. The geographic coordinates of the Site, as measured from its approximate center, are 42° 4' 27.93" north latitude and 71° 24' 38.26" west longitude. The Site is approximately 18.3 acres and is identified by the Town of Franklin Tax Assessor as Lot Parcel ID 296-210. The Site property is bordered by commercial properties to the northeast; railroad tracks beyond which are residential properties to the east and southeast; Interstate 495 to the southwest; and several parcels owned by the Town of Franklin, consisting of open water, wetlands, and recreational areas, to the northwest. The Site property has been vacant since 1985 and is currently owned by BJAT, LLC. The specific location of the Site is shown on Figure 1.

The Site property includes an upland area, which formally contained a dilapidated 27,000-square foot building which was demolished and removed in 2016 pursuant to a Release Abatement Measure Plan. The ground surface south and west of the building slopes downward from the upland area to wetlands located throughout the western portions of the property. According to previous reports, historical dumping of industrial process materials and wastes, including 55-gallon drums, plastic and metal debris, slag, and rubber by-products are located on portions of the sloped area. Mine Brook flows onto the property and through wetlands from the southwest corner of the property and flows north through an unnamed surface water body and into Beaver Pond, located approximately 1,800 feet northwest of the Site property.

Previous investigations of the Site property included a Phase I Environmental Site Assessment (ESA) completed by Corporate Environmental Advisors (CEA) in December 2005; a Phase I Site Assessment in September 2006; a Limited Subsurface Investigation (LSI) completed by PES Associates, Inc. (PES) in September 2006; a second LSI completed by PES in December 2007; a Phase I Initial Site Investigation (Phase I SI) completed by Norfolk Ram Group, LLC (Norfolk) in May 2008; a Phase II Comprehensive Site Assessment (Phase II CSA) completed by Norfolk in August 2012; a Site Inspection (SI) conducted by Weston START in August 2013 and a Preliminary Assessment/Site Investigation (PA/SI) conducted by Weston START in July 2016.

On October 23, 2006, PES received the results of the laboratory analysis from the LSI, indicating that three soil samples from the Site contained metals (lead, barium, chromium and cadmium) that exceeded the Massachusetts Contingency Plan (MCP) RCS-1 Reportable Concentrations. On May 7, 2007, the Massachusetts Department of Environmental Protection (MassDEP) was notified of a release of metals associated with historic fill located at the Site. The MassDEP issued RTN 2-16683.

The May 13, 2008 Phase I SI prepared by Norfolk RAM Group noted that the Site has been vacant since at least 1985 and concluded that historical uses included plastics manufacturing, a poultry market, rubber manufacturing and a beet sugar refinery. Surficial and subsurface fill at the Site contains elevated concentrations of arsenic, barium, cadmium, chromium, lead, and or zinc at concentrations that exceed the applicable MassDEP MCP Method 1 Soil Standards. Norfolk completed a NRS Scoresheet for the Site and it was classified as a Tier IC disposal site.

As part of Phase II Comprehensive Site Assessment Activities, on May 11, 2010, Norfolk Ram collected soil, wetland soil and surface water samples at the Site for laboratory analysis to further delineate the extent of impacts from the historical industrial uses of the Site. The analytical results indicated that pursuant to the MCP, arsenic and lead were present in a soil sample collected in the upland near the building, and from a soil sample collected in the wetland, at concentrations that pose an Imminent Hazard (IH) Condition. Norfolk concluded that the lead concentrations detected in soil samples in the upland and the wetland represented an IH. Norfolk prepared and submitted an IRA Plan to the MassDEP on July 19, 2010. The IRA consisted of: Installation/repair of security fencing and posting of warning signs to protect trespassers from exposure to IH conditions; maintenance and repair of the fencing and warning signs; and additional assessment to delineate the extent of IH conditions at the Site.

The MassDEP subsequently approved IRA activities. A second RTN 2-17879 was assigned by the MassDEP. The IH conditions triggered the Tier Classification to be upgraded to a Tier IA. The second RTN was linked to the primary RTN. IRA Status reports were submitted to the MassDEP per MCP Scheduled requirements.

At EPA's direction, as part of the SI conducted by Weston START in August 2013, START personnel conducted an on-site/off-site sampling event, including soil/source sampling, installation and sampling of temporary groundwater monitoring wells, sampling of permanent, previously-installed groundwater wells, and sampling along the downstream surface water pathway. Soil sampling results indicated 25 semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and 21 total metals. Eleven SVOC compounds were detected at levels exceeding the MCP Method 1 Soil S-1/GW-1 Standards.

Ten total metals including antimony, arsenic, barium, cadmium, chromium, lead, mercury, nickel, vanadium 4,230, and zinc were detected at concentrations exceeding their respective MCP Method 1 Soil S-1/GW-1 Standards. In addition, arsenic and cadmium were detected above their respective MCP IH Standards. Arsenic was detected above its MCP IH Standard in samples collected from the upland contaminated soil, process waste pile, sloped debris pile, and lowland contaminated Soil sources; while cadmium was detected above the MCP IH Standard in only the lowland contaminated soil source. Refer to the Site Plan, prepared by Weston, in Appendix A, for the sample locations and concentrations.

The Site was added to the National Priorities List (NPL), referred to as the EPA Superfund list, in September 2015. In December 2015 EPA responded to a fire in the vacant building. No asbestos fibers were detected, and no metals were detected above the laboratory reporting limit.

In order to eliminate the attractive nuisance presented by the vacant building and to reduce the potential for exposure to hazards materials at the site, BJAT consulted with MassDEP, EPA and the Town of Franklin and on August 22, 2016, BJAT submitted a Release Abatement Measure (RAM) Plan to the MassDEP that outlined procedures to (1) remove potential safety hazards and hazardous materials from the existing condition of the Site while preventing disturbance of impacted soils that are subject to further investigation and (2) eliminate the potential for further deterioration of above ground improvements that may increase the complexity of further investigation and potentially have an adverse effect on contaminant concentrations in the groundwater.

Following review of the initial RAM Plan by MassDEP and the EPA, a modified RAM Plan was submitted to MassDEP on October 4, 2016. The modified RAM Plan added details regarding the demolition sequence, details regarding waste materials management and estimated volumes of waste and an updated implementation schedule.

The Modified RAM Plan was approved by MassDEP on October 13, 2016. The Modified RAM plan outlined: set up of Site controls and signage, initiation of the Non-Traditional Asbestos Abatement Work Plan, abatement of asbestos containing materials (ACM), remediation and management of PCB containing materials, building demolition activities and Site restoration activities. On June 29, 2017, BJAT submitted a RAM Completion Report to the MassDEP that summarized all RAM activities, sampling, analytical results and disposal documentation. After the RAM, the building was demolished down to a concrete slab which was left in place and used as a staging area for further response actions.

EPA completed a Preliminary Assessment/Site Investigation in July 2016 and issued an Action Memorandum dated August 2, 2017 which was the basis of this Removal Action. The purpose of the Action Memorandum was to conduct a time-critical removal action to abate hazardous substances present in drum waste and soil at the Site. In December 2017 Respondents entered into the AOC in order to implement the Removal Action discussed in the Action Memorandum and resulting Scope of Work.

1.2 Location of Hazardous Substances

The objective of the AOC was to, excavate soil from “hotspots” identified in the Site Inspection (SI) conducted by EPA contractor Weston START and obtain confirmatory soil samples and to excavate, manage and dispose of drums identified in the SI, and manage and dispose of the materials as appropriate.

The Action Memorandum and Scope of Work identified 23 sample grid locations where the concentration of lead exceeded EPA's Removal Management Level (RML) and the MCP S-2 standard for several hazardous substances, including antimony, arsenic, barium, cadmium, lead, and zinc. Additionally, drums were visible on a wooded slope that descends from the former building to a wetland. The Scope of Work also identified two accessible drums sampled and tested by Weston START which indicated that hazardous substances were present, including but not limited to cadmium and lead. The location of the drums and soil to be excavated was identified on the Site map prepared by Weston START and included in the Action Memorandum, attached hereto as Appendix A.

1.3 Cause of Release or Discharge

The releases are the result of historical property uses from various industries that operated at the Site property dating back to the late 1800s. The industries included the Franklin Beet Sugar Refinery, which began operations in 1884; the Saylor Rubber Company beginning in 1899; the F.H. Appleton & Son, Rubber Manufacturers (later Appleton Rubber Company) from approximately 1904 to 1949; and Max Joseph's Poultry Market, Inc. from 1949 to 1958. In 1958 the property was occupied by The Electroformex Labs, which used the main building to manufacture plastic goods until 1985. Neither Hasco Associates, LP (which acquired the property in 1985) nor BJAT LLC

(which acquired the property in 2006) ever operated at the site which has been unoccupied since before Hasco Associates, LP's acquisition.

According to a December 12, 2005, ASTM Phase I Environmental Site Assessment report by CEA, several recognized environmental conditions (RECs) at the Site were identified attributed to the historical industrial uses of the Site, which included use of floor drains and trenches in the building, and extensive solid waste disposal, including discarded drums, aboveground storage tanks (ASTs), automobiles, and automobile tires.

These historical uses occurred adjacent to a wetland and are the source of contaminants of concern (COCs) identified through investigations of soil, sediments, surface water and groundwater.

Previous response actions are presented in the below table.

Date	Party	Action
December 2005	Site Owner	Phase I Environmental Site Assessment
September 2006	Site Owner	Limited Subsurface Investigation (LSI)
December 2007	Site Owner	Second LSI
Spring 2008	Site Owner	Phase I Sampling
May 2010	Site Owner	Phase II Sampling Exceeded Imminent Hazard Standard
Summer 2010	Site Owner	Immediate Response Action (IRA) Fence and Signs
August 2012	Site Owner	Phase II Comprehensive Site Assessment
July 2014	EPA	Remedial Site Inspection
September 2015	EPA	Placed on National Priorities List
December 2015	EPA	Emergency Response to Building Fire
Autumn 2016	Site Owner	Release Abatement Measure Plan (RAM), Asbestos Abatement, Building Demolition, RAM Plan Completion

The property owner has performed several investigations over many years pursuant to state regulations, as outlined above. Due to increasing costs the current owner did not conduct further response actions and MassDEP referred the site for inclusion on the NPL. The Action Memorandum represents the EPA selected removal action for the Site.

The Action Memorandum implemented by Respondents pursuant to the AOC concluded that conditions at the Site met the NCP Section 300.415 (b) criteria for a removal action based on the following factors:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants [§300.415(b)(2)(i)];

Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release [§300.415(b)(2)(iii)];

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate [000.415(b)(2)(iv)] ;

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released 1§300.415(b)(2)(01. and,

The availability of other appropriate Federal or State response mechanisms to respond to the release [§300.415(b)(2)(vii)].

1.4 Response Organization, Including State and Municipal Participation

The Removal Action was implemented by Respondents through their EPA approved consultants, identified below. EPA Region 1 was the lead agency overseeing the Response Action (RA). Throughout the RA, Respondents worked closely with EPA and other stakeholder agencies, including the MassDEP. The cleanup work was performed by Respondent's contractors, NRC Corporation of Franklin, Massachusetts and the general contractor, Site Specific of Providence, Rhode Island. CDW was onsite to assist with dust monitoring, drum removal documentation and soil sampling. Eurofins Spectrum Analytical, an EPA Contract Laboratory, under subcontract to CDW, performed the laboratory analyses for metals in soil samples. NRC collected samples of soil from stockpiles and drum contents for disposal. Contact information for involved entities is listed below.

EPA On Scene Coordinator: Richard Haworth was designated in the AOC oversee the project for EPA until he retired in December 2018. Mr. Mike Cofsky became the designated On-Scene coordinator at the end of January 2019.

Respondents BJAT LLC and Hasco Associates LP: Respondent's approved prime contractor was represented by James Cole of Site Specific, LLC, responsible for managing the administrative obligations of the Administrative Consent Order. The approved subcontractor was NRC.

Respondent's Project Coordinator: Respondent's approved Project Coordinator was Bill Betters, LSP of CDW, responsible for oversight of the cleanup and close-out activities performed at the Site by Site Specific, LLC and NRCC, and to provide reporting deliverables to EPA and MassDEP.

Personnel involved with this project site and their roles in the remedial activities are listed below.

1. EPA On-Scene Coordinator

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7. Respondent's Approved Project Coordinator

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Respondent's met with the Town of Franklin Permit Committee and the Conservation Commission before, during and after performing the RA in order to provide them with updates regarding the Removal Action. EPA's Community Involvement Coordinator, Zanetta Purnell, met with Town officials separately.

1.5 Summary of Work Plan/Quality Assurance Project Plan (QAPP)

The removal action was conducted pursuant to the AOC, Action Memorandum and Scope of Work (SOW) and the following documents approved by EPA pursuant to the AOC:

- Health and Safety Plan
- Sampling & Analysis Plan/Field Sampling Plan
- Transportation & Disposal Plan
- Monthly Progress Reports
- Weekly Progress Reports

The work completed at the Site includes as follows:

Site Preparation:

Heavy equipment and chainsaws were used to clear and grub trees and undergrowth in and around contaminated areas, as necessary, to establish a staging area for excavated materials. The concrete slab where the former building was located and the adjacent cleared areas resulting from building demolition were used as a command post and clean zone. Staging areas were lined with a minimum of 6-milimeter (mil) polyethylene sheeting with an underlying “surround” of straw wattles to maintain a raised containment berm. Common borrow was ultimately used as backfill and was temporarily used to stabilize the ground surface on which the excavator was positioned to allow access to the excavation area.

An office trailer, storage units, and sanitary facilities were established on Site. Silt fence, hay bales, or other similar measures were installed to limit or avoid further impact to the wetland adjacent to contaminated areas. The fence was monitored and repaired as needed and additional warning signs were posted. Temporary fence, caution tape, and/or signs were used to identify work areas. Storm drain or other catch basins located within or near the work area were protected with filter fabric drop inlet protection throughout construction until disturbed areas were stabilized.

Soil Excavation:

The estimated amount of soil to be addressed by the AOC was 2,114 tons, in areas depicted on the site map included in the Action Memorandum and Scope of Work, a copy of which is attached hereto as Appendix A. The work area was limited to the contaminated area identified by the removal site evaluation to the northwest of the recently demolished building. Excavation was generally limited to 3.5 feet or groundwater, vertically. Laterally, excavation was extended further west into the wetland to address localized contaminated soil with EPA approval. Respondents contractors managed cleared material that came into contact with contaminated material by incorporating it with an existing stockpile of “like” (i.e., contaminated) materials. Similarly, roots and root balls from within contaminated areas and that were grubbed, were incorporated into an existing stockpile of “like” materials. Tree stumps were chipped prior to incorporation and/or at the time of loading, transportation, and disposal.

Phase I

Between October 1 and October 17, 2018, subsurface soil samples were collected from areas of concern delineated by the Site Inspection. These areas are depicted in Weston Solutions Figure 6, “Soil Sample Results Map” included as Appendix A. Soils were excavated to a depth of 3.5 feet in areas where the highest concentrations of metals were detected during the SI. Confirmatory samples were collected from the excavation and submitted to an EPA Contract Laboratory Program (CLP) Laboratory for analysis of RCRA 8 Metals, antimony and cyanide. Soil samples were expedited to determine if the endpoint concentrations met MassDEP S-2 standards. See Table 1 and Figure 2 for results and locations of samples.

Phase II

Between October 18 and October 23, 2018, a second phase of excavation occurred to the west and southwest, where COCs were detected above the S-2 Standards. These excavations are identified in Figure 2 as Phase II excavation. Upon completion of the phase II excavation along the west and southwest portion of the area of concern, confirmatory samples were collected and analyzed. These samples are identified as CDW-S50A, CDW-S50B, CDW-S49A, CDW-S49B, CDW-S49A Dup, CDW-S51A, CDW-S51B, CDW-S52A, CDW-S52B, CDW-S53A, CDW-S53B, CDW-S54A, CDW-S54B, CDW-S55A, CDW-S55B, CDW-S56, CDW-S56 Dup, CDW-S57, CDW-S57 Dup, CDW-S58, CDW-S58 Dup, CDW-S59, CDW-S59 Dup . Analytical Results from this phase are shown on Tables 1.

Phase III

Upon review of these data completing the Phase II area of excavation, a 3rd phase of excavation occurred in targeted areas between 2/20/19 through 2/22/19 (Found on figure 2 in green as Targeted Excavation). These targeted areas were selected based on the high concentrations found in the Phase II confirmatory results along the west-southwest side and based on the localized topography as shallow areas subject to focused runoff from the upland sides of the property were likely areas of deposition. Phase III sampling (not to be confused with the phase II confirmatory samples described above) occurred in these targeted areas on November 11, 2018 in advance of additional soil removal to precharacterize the extent of lead in the soil. These samples are identified as CDW-S62A, CDW-S62B, CDW-S63A, CDW-S63B, CDW-S64A, CDW-S64B, CDW-S65A, and CDW-S65B. These results of these samples were reported significantly lower than the nearest previously collected Phase II samples that defined the boundary after the Phase II removal. For example, samples CDW-S62B and S63B yielded concentrations of 25.7 mg/Kg and 12.3 mg/Kg of lead, respectively, whereas the nearby samples CDW-S53A and B were reported at concentrations of 9210 and 5120 mg/kg, respectively. Similarly, Phase II samples S-55A and B were reported 25800 and 1280 mg/Kg, respectively.

Therefore, based on the substantially lower concentrations identified in Phase III samples CDW-S62A, CDW-S62B, CDW-S63A, CDW-S63B, CDW-S64A, CDW-S64B, CDW-S65A, and CDW-S65B and their location outside of the Phase II samples that exhibited higher concentrations, targeted removal beyond the Phase II sample locations was conducted. Given the low concentration in the Phase III sample set and the fact that these areas were dug laterally just beyond the actual Phase III

sample location and to the bottom of the sample depth (approximately 3.5 feet), the “B” series of the Phase III samples (S-62B, S-63B, S-64B, and S-65B) are considered limit samples, with the presumption that any future sampling at or beyond the new limits of excavation or may occur (Table 1).

Soil samples were collected along the centerline (a line approximately bisecting the long axis of the Original Excavation) at the maximum vertical extent (depth) of the excavated area at 25-foot intervals. The sidewall and endwall samples were sampled at 25-foot intervals, except that a minimum of three endwall samples were collected, one to correspond to the centerline of the excavation (middle of the endwall), and one at the intersection with each sidewall. Sidewall and endwall samples were also collected in vertical composites as outlined below.

Excavation Depth (feet bgs)	Lower Vertical Sample Segment (feet bgs)	Upper Vertical Sample Segment (feet bgs)
4.0	4.0 to 2.0	2.0 to surface
3.5	3.5 to 1.5	1.5 to surface
3.0	3.0 to 1.5	1.5 to surface
2.5	2.5 to 1.0	1.0 to surface
2.0 or less	One sample of entire length	

The samples as described above, were collected from the excavation, logged, preserved and prepared for delivery. The locations of all confirmatory samples were maintained with grade stakes. Photographic documentation was made of each sample area pre-and post-excavation throughout the duration of the work. A hand-held Trimble GPS was later used to geo-locate the samples. The sample coordinates are presented in Appendix B.

Because of the shallow depth, CDW collected grab samples from the bottoms of each excavation using a pre-cleaned hand trowel with disposable plastic liner and decontaminated the trowel between each sample. No field screening was done, due to the nature of the COCs (metals). Samples placed in the transport containers (e.g., coolers) were packed to prevent breakage and to maintain a temperature of 4°C (± 2 °C). The chain-of-custody remained with the samples at all times during transport to CDW’s sample storage refrigerator, pick up by the laboratory courier, and transport by the courier to the laboratory. When the courier picked up the samples, an infrared thermometer was used to measure the temperature of the samples and the information was recorded on the chain-of-custody.

Drum Excavation:

NRC focused on and located existing drums and other containers previously identified by EPA and its contractor Weston (START) as being located at Sample IDs DM-01 through DM-06 (i.e., drum and waste samples), NRC managed other encountered drums/containers in a similar fashion. These

included drums within the vertical and lateral extent of the proposed/completed excavation (i.e., north of the concrete slab) and totaled thirty drums.

Drum/containers were removed with hand tools and heavy equipment as appropriate and were secured by placing them into sealed over-pack containers and then relocating them to the staging area. Drum/containers that could not be over-packed were relocated to the staging area and secured on and covered with polyethylene sheeting to control runoff from anticipated precipitation until they were characterized for proper disposal.

Upon characterization, the results were used to determine one or more suitable off-site disposal facilities. After profiling, manifesting, and end facility approval, NRC consolidated wastes as appropriate, then containerized, removed, and properly disposed of the wastes. Transportation and disposal were conducted after notifying the EPA.

Close-Out/Finish Work:

Decontamination of sampling equipment was performed regularly to assure the quality of samples collected. All equipment that came into contact with potentially contaminated soil was decontaminated. Disposable equipment intended for one-time use was not decontaminated but was packaged for appropriate disposal. Decontamination occurred prior to and after each use of a piece of equipment. All sampling devices used, including trowels and bowls were decontaminated according to the following procedures.

- Non-phosphate detergent and tap water wash, using a brush if necessary
- Tap-water rinse
- 0.1 N nitric acid rinse

Decontamination fluids generated in the sampling event consisted of deionized water, residual contaminants, and water with non-phosphate detergent and diluted nitric acid. The fluids were placed directly into a 55-gallon drums that were temporarily stored on-site pending receipt of analytical results.

Upon completion of all excavation, high visibility fencing was laid horizontally within the excavated area as a marker for future reference, and then the excavated areas were filled with clean imported fill. The area was further covered with wood chips along the eastern side and the entire excavated area was finished with Jute matting.

2.0 CHRONOLOGICAL NARRATIVE OF RESPONSE ACTIONS

2.1 Summary Week ending 8/17/18

No onsite work by the removal team had begun during this period. Richard Haworth reported on work performed by the EPA Remedial Program contractor. Test pits were dug, thereby reducing the number of test pits. A single drum of liquid was uncovered and is described as follows:

“Drum type is a 55-gallon steel with approximately 40 gallons of an unknown red, thick liquid. PID reading was 1 ppm. An estimated 3 gallons maximum spilled. The drum was placed in an 85-gallon steel over pack drum. 3-4 shovels of combined spilled liquid/surface soil from cleaning up the spill were placed in the over pack drum. Approximately 15 2’x2’ spill pads used to soak up remnants were placed in the over pack drum. The over pack drum was transported to the drum

storage area on the upland portion of Site.”

2.2 Summary Week Ending 9/14/2018

CDW walked the drum area sites that were marked with grade stakes and took GPS coordinates with a Trimble hand-held GPS. The locations are depicted in Figure 3. All coordinates are provided in Appendix B.

Drum Area	Northing	Easting
DM-1	869401.92	207435.56
DM-2	869381.48	207391.07
DM-3	869375.46	207386.35
DM-4	869379.60	207382.85
DM-5	869358.39	207369.87
DM-6	869285.32	207343.85
DM-7	869267.6	207348.07
DM-8	869255.8	207347.5
DM-9	869244.5	207342.9
Note DM-10 was not discovered until 10/9/2018		

2.3 Summary Week Ending 9/21/2018

Tree removal was conducted by NRC's subcontractor, Vinagro, so heavy equipment could mobilize to the proposed excavation area. NRC removed surficial metal scrap from the work area. On September 18, 2019, Paul Callahan of Weston Solutions visited the Site to observe activities. Work was suspended at 11:45 am due to heavy rain, flooding and lightning overhead. On September 19, 2019, drum removal occurred in Areas DM-2, DM-6, DM-7 and DM-8 (Figure 3). A total of five drums were found intact and were overpacked. One drum was empty with no residue and was placed in the metal scrap dumpster. Contents appeared to be paint/pigments, resin, or tar and one contained plastic toys. A multi-gas meter, photoionization detector (PID) and DustTrax were used to measure potentially hazardous conditions from drums. All meters were calibrated to manufacturers' specifications prior to use. The drum contents and air meter readings are listed below:

Drum Area	PID (ppmv)	% Combustion	CO (ppm)	H2S	Dust Trax (mg/m3)	Notes
DM-2	0.0	0.0	0.0	0.0	0.005	1 Drum removed with remnant green paint, 2 drums removed with white waxy material
DM-6	0.0	0.0	0.0	0.0	0.010	Drum removed with tar
DM-7	0.2	0.0	0.0	0.0	0.006	Drum empty-scrap

Drum Area	PID (ppmv)	% Combustion	CO (ppm)	H2S	Dust Trax (mg/m3)	Notes
DM-8	0.0	0.0	0.0	0.0	0.006	Drum of plastic toys and metal scrap

ppmv = parts-per-million by volume

CO = Carbon monoxide

H2S = Hydrogen Sulfide Mg/m3=Milligrams per meter cubed of air.

On September 20, 2019, NRC mobilized all heavy equipment to the site, including an extended-reach excavator. The drum contents and air meter readings are listed below:

Drum Area	PID (ppmv)	% Combustion	CO (ppm)	H2S	Dust Trax (mg/m3)	Notes
DM-1	0.0	0.0	0.0.	0.0	0.005	Removed 1 drum with orange paint, 2 drums with closed tops, 1 drum full of purple soil, 1 drum full of waxy solid, 3 drums were empty

Removed = Overpacked as RCRA waste

NRC utilized a long stick excavator to lift salvage drums to the staging area and clean out rough debris to prepare excavation mark out. On September 21, 2018, CDW inspected the area around DM-5, and found large chunks of asphaltic rubber on the surface. NRC continued scrap and waste clearing and removal. Additionally, the solid contents of a broken plastic waste container were hand shoveled into a 17H drum and staged. The site was inspected, and the northern half of the soil excavation area was delineated with grade stakes. NRC determined additional trees needed to be removed at the south west portion of excavation area.

No sampling or laboratory analyses were performed during this period. Dust monitoring was performed during drum removal. Due to prior rainfall and wet soil conditions, very low measurements were observed, approximately 0.005 to 0.007 mg/m3. No dust particulate action levels of 0.1 mg/m3 were exceeded during the week ending September 21, 2018. Personal air monitors and level C PPE were used by NRC during all drum removal and rubber removal activities.

2.4 Summary Week ending 9/28/18

On September 24, 2018, NRC cleaned up visual asphaltic rubber on the surface in the vicinity of DM-5 with a mini excavator. The rubber was placed in drums and overpacked. Additional metal scrap was also removed from this area and placed in the scrap metal canister. One drum was extracted from the hillside in DA-2. The drum contents and air meter readings are listed below:

Drum Area	PID (ppmv)	% Combustion	CO (ppm)	H2S	Dust Trax (mg/m3)	Notes
DM-2	0.0	0.0	0.0.	0.0	0.005	Removed 1 drum, drum was empty with a large hole and no residue and was placed into the metal scrap container

CDW noted one newer drum with gray slurry was left onsite from well drilling activities by AECOM. This drum was adjacent to the AE-MW-03 well triplet.

On September 25 and 26, 2018, NRC conducted additional tree removal at the southwest corner of the dig area and prepared for soil excavation. On September 27, 2018, NRC removed rubber chunks on the surface with a mini excavator near DM-6 and NRC began excavation from the southern end of the dig area. Dust monitors were deployed outside of the exclusion zone between the excavation and surrounding receptors.

On September 28, 2018, a front-end loader was mobilized to the Site. Excavation occurred at the northern one-third of the dig area. Excavated soil was saturated and was temporarily staged within the eastern side of the dig area to drain. The hotspot area surrounding Weston sample F080 (refer to the figure in Appendix A) was excavated and staged discretely. Continuous light rain during the day resulted in water filling the excavated areas.

Sampling and Analysis

Dust monitoring was performed on Thursday, September 27, 2018 at the four corners of the Site, with two monitors placed to the east, between the work area and the residential neighborhood. Readings ranged from 0.000 mg/m3 to 0.044 mg/m3. Due to rainfall, dust monitors were not deployed on Friday September 28, 2018. No dust particulate action levels of 0.1 mg/m3 were exceeded during the week ending September 28, 2018. Personal air monitors and level C PPE were used by NRC during excavation.

2.5 Summary Week Ending 10/5/18

On October 1, 2018, NRC continued with the removal action by initiating soil excavation along the north east side of the excavation. Due to rain, dust monitors were not deployed. Ten confirmatory soil samples and one duplicate (CDW-1A, CDW-S1B, CDW-S2A, CDW-S2B, CDW-S3A, CDW-S3B, CDW-S4A, CDW-S4B, CDW-S5A, CDW-S5B, CDW-S5AD) were collected at the northern end of the dig area, corresponding to endwall, side wall and centerline of excavation. Refer to Figure 2 for the soil sample locations and Table 1 for sample results. Samples designated "A" are composites from 0-1.5 feet in depth from ground surface, and samples designated "B" are composites from 1.5 to 3.5 feet in depth from ground surface. Samples with no A or B label are grab samples from the bottom of the excavation. Duplicates were designated with a "D" or "Dup". The soil samples were collected in accordance with the QAPP, summarized in Section 1.5 of this report. The soil samples were placed in the transport cooler on ice under a chain-of-custody, transported by

the sampler to CDW's sample storage refrigerator, picked up by the laboratory courier, and transported by the courier to the laboratory for analysis of RCRA 8 Metals, antimony and cyanide. On October 2, 2018, no soil excavation was performed.

On October 3, 2018, NRC excavated along the central portion of the dig area and around large tree stumps along the western edge. No dust monitors were deployed due to rainfall occurring that day and two days prior. The hotspot area along the west-central portion of the dig area (Weston sample G100 and H080) was excavated and staged discretely with soil from area F080. AECOM and Geosearch were onsite drilling next to the railroad tracks.

On October 4, 2018, excavation continued in the central portion of the dig area. Soil sampling was conducted along the northern side and centerline. On October 5, 2018, NRC continued excavation along the eastern slope of the dig area. Three additional buried drums were encountered on the northeast slope, labeled as drum area 10 (DM-10), see Figure 3. Dust monitoring was performed during drum removal. Due to prior rainfall and wet soil conditions, very low measurements were observed: approximately 0.010 to 0.006 mg/m³. No dust particulate action levels of 0.1 mg/m³ were exceeded during the week ending October 5, 2018. Personal air monitors and level C PPE were used by NRC during all drum removal and soil excavation activities. A Multi-gas meter and PID were used to measure potentially hazardous conditions from drums, listed below.

Drum Area	PID (ppmv)	% Combustion	CO (ppm)	H2S	Dust Trax (mg/m³)	Notes
DM-10	0.2	0.0	0.0	0.0	0.006	One drum containing pink paint was overpacked for removal
DM-10	0.0	0.0	0.0	0.0	0.006	One drum containing mauve paint was overpacked for removal
DM-10	0.0	0.0	0.0	0.0	0.010	One drum containing white waxy resin was overpacked for removal

GPS coordinates of DM-10 were recorded: 869380.71 N and 207397.31 E

Richard Haworth of EPA conducted a site visit. Mr. Haworth requested:

- Stumps in the middle of the excavation be excavated and disposed of in a manner similar to soil
- Gave verbal approval of some backfilling to occur to access other areas. The site conditions (wet, saturated soil) wouldn't support the machine's weight.

Sampling and Analysis

On October 3, 2018, six confirmatory soil samples and one duplicate (CDW-6A, CDW-S6B, CDW-S7A, CDW-S7B, CDW-S8A, CDW-S8AD, CDW-S8B) were collected at the northeastern end of the dig area on the hillside, corresponding to side wall samples. On October 4, 2018, 10 confirmatory soil samples and one duplicate were collected (CDW-S9, CDW-S10, CDW-S11, CDW-S13A, CDW-S13B, CDW-S14A, CDW-S14B, CDW-S15A, CDW-S15B, CDW-DA-6, CDW-DA-6 Dup. Refer to figure 2 for the soil sample locations, and Table 1 for results. The soil samples were collected in accordance with the QAPP, summarized in Section 1.5 of this report. The soil samples were placed in the transport cooler on ice under a chain-of-custody, transported by the sampler to CDW's sample storage refrigerator, picked up by the laboratory courier, and transported by the courier to the laboratory for analysis of RCRA 8 Metals, antimony and cyanide.

2.6 Summary Week Ending 10/12/18

On October 8, 2018, no work occurred at the Site. On October 9, 2018, five additional buried drums were identified and removed from the northeast corner in approximately the same location as the three drums found on Friday, October 5, 2018. Visual inspection noted the following: two drums containing a white/gray wax-like resin, one drum containing a dark red paint/pigment and two drums containing a reddish-pink paint/pigment. Personal air monitors and level C PPE were used by NRC during the drum removal. A Multi-gas meter and PID were used to measure potentially hazardous conditions from drums, listed below.

Drum Area	PID (ppmv)	% Combustion	CO (ppm)	H2S	Dust Trax (mg/m3)	Notes
DM-10	0.0	0.0	0.0	0.0	0.006	One drum containing dark red paint was overpacked for removal
DM-10	0.0	0.0	0.0	0.0	0.006	One drum containing waxy resin was overpacked for removal
DM-10	0.0	0.0	0.0	0.0	0.010	One drum containing waxy resin was overpacked for removal
DM-10	0.0	0.0	0.0	0.0	0.010	One drum containing mauve paint was overpacked for removal
DM-10	0.0	0.0	0.0	0.0	0.010	One drum containing mauve paint was overpacked for removal

On October 10, 2018, excavation occurred at the northern side of the dig area, extending the excavation by approximately 20-feet with a 20-foot width. NRC removed trash, scrap metal and waste plastic along the northeast slope and conducted general housekeeping.

On October 11, 2018, NRC began backfilling the south side. CDW Collected soil samples at the northern most dig area and geolocated sample points: On October 12, 2018, NRC continued backfilling along the northern side of the excavation.

Sampling and Analysis

Confirmatory soil samples (CDW-S16A, CDW-S16B, CDW-S17A, CDW-S17B, CDW-S18A, CDW-S18B, CDW-S19, CDW-S20A, CDW-S20B, CDW-S21A, CDW-S21B, CDW-S21B Dup, CDW-S22A, CDW-S22B, CDW-S23A, CDW-S23B, CDW-S24A, CDW-S24B, CDW-S25A, CDW-S25B, CDW-S26A, CDW-S26B, CDW-S26 Dup, CDW-S27A, CDW-S27B, CDW-S28A, CDW-S28B, CDW-S29A, CDW-S29B, CDW-S30, CDW-S31, CDW-S32, CDW-S33, CDW-S34, CDW-S35, CDW-S36A, CDW-S36B, CDW-S37, CDW-S37 Dup, CDW-S38A, CDW-S38B, CDW-S39, CDW-S40A, CDW-S40B, CDW-S41, CDW-S42A, CDW-S42B, CDW-S43A, CDW-S43B, CDW-S44A, CDW-S44B, CDW-S45A, CDW-S45B, CDW-S46A, CDW-S46B, CDW-S47A, CDW-S47B, CDW-S48A, CDW-S48 Dup) were collected along the sidewalls and centerline. Refer to Figure 2 and Table 1 for results. The soil samples were collected in accordance with the QAPP, summarized in Section C of this report. The soil samples were placed in the transport cooler on ice under a chain-of-custody, transported by the sampler to CDW's sample storage refrigerator, picked up by the laboratory courier, and transported by the courier to the laboratory for analysis of RCRA 8 Metals, antimony and cyanide. Dust monitoring was performed at four corners of the Site, with two monitors placed to the east, between the work area and the residential neighborhood. Readings ranged from 0.000 mg/m³ to 0.002 mg/m³. No dust particulate action levels of 0.1 mg/m³ were exceeded during the week ending October 12, 2018. Dust monitors were not deployed on days that were raining/drizzling (October 9, 11 and 12, 2018).

2.7 Summary week ending 10/19/18

On October 15, 2018, NRC conducted backfilling of portions of the Phase I excavation area and general housekeeping.

On October 16, 2018, three additional buried drums were identified and removed from the northeast corner in approximately the same location as the five drums found on October 5 and 9, 2018. Visual inspection noted the following: two drums containing a white/gray wax-like resin, and one drum contained white paint/pigment. Personal air monitors and level C PPE were used by NRC during the drum removal. A Multi-gas meter and PID were used to measure potentially hazardous conditions from drums, listed below.

Drum Area	PID (ppmv)	% Combustion	CO (ppm)	H2S	Dust Trax (mg/m3)	Notes
DM-10	0.0	0.0	0.0	0.0	0.001	One drum containing waxy resin was overpacked for removal

DM-10	0.0	0.0	0.0	0.0	0.001	One drum containing waxy resin was overpacked for removal
DM-10	0.0	0.0	0.0	0.0	0.010	One drum containing white paint was overpacked for removal

The drums were over packed and stored in the drum area behind the trailer. The team reviewed some of the preliminary lead results from the western side of the excavation. The results indicated further removal was required along the western side.

On October 17, 2018, excavation occurred at the west central portion of the excavation. This was the first area over-dug based on the Phase I results. Removal extended approximately 10 feet west of the Original Excavation's western boundary, to what is now sample location 50, 49, 51 and 51 (Figure 2-Phase II). Nine soil samples (CDW-S49A through CDW-S52B) were collected for laboratory analysis. Refer to Figure 2 for sample locations and Table 1 for a summary of the results.

On October 18, 2018, backfilling of the main excavation area occurred. Additional excavation continued along the western boundary in a southerly direction. The south-western end of the excavation was marked for additional soil removal based on Phase I results. On October 19, 2018, excavation continued into the southwestern portion of the wetland to remove additional soils as delineated on October 18, 2018.

Sampling and Analysis

Confirmatory soil samples (CDW-S49A, CDW-S49B, CDW-S49A Dup, CDW-S50A, CDW-S50B, CDW-S51A, CDW-S51B, CDW-S52A, CDW-S52B, CDW-S53A, CDW-S53B, CDW-S54A, CDW-S54B, CDW-S55A, CDW-S55B, CDW-S56, CDW-S56 Dup, CDW-S57, CDW-S57 Dup, CDW-S58, CDW-S58 Dup, CDW-S59, CDW-S59 Dup) were collected from the western side of the excavation, labeled in blue as Phase II excavation on Figure 2, in accordance with the QAPP, summarized in Section 1.5 of this report. Sample locations from CDW-S49A through CDW-S52B were recorded with a hand-held Trimble GPS. CDW collected additional endpoint soil samples (CDW-S53A through CDW-S59) from the extended excavation. Soils collected from the bottom of the southwestern side were observed to contain a high clay content.

The soil samples were placed in the transport cooler on ice under a chain-of-custody, transported by the sampler to CDW's sample storage refrigerator, picked up by the laboratory courier, and transported by the courier to the laboratory for analysis of RCRA 8 metals, antimony and cyanide. The results are located in Table 1.

Dust monitoring was performed at four corners of the Site, with two monitors placed to the east, between the work area and the residential neighborhood. Readings ranged from 0.000 mg/m³ to 0.003 mg/m³. Dust monitors were not deployed on days that were raining/drizzling (October 16,

2018). No dust particulate action levels of 0.1 mg/m³ were exceeded during the week ending October 19, 2018.

2.8 Summary week Ending 10/26/18

On October 22, 2018, an AECOM Contractor was onsite removing swamp mats. The mats were stacked up in the southwest corner of the pad. NRC backfilled portions of the excavation with clean soil. CDW sampled the first Phase III overdig area, where they collected samples CDW-S60A and CDW-S60B (Figure 2 – Targeted Excavation: Sample 60).

On October 23, 2018, the large tree stump area, located across from soil sample location CDW-S59 in the south-central portion of the excavation area was removed. NRC backfilled overdug areas. The stumps were scraped clean of all soil and were buried in place after soil removal. Due to deep water in the area, an excavator bucket was used to collect soil under the excavated stumps). The soil appeared to be gray colored native silt with fine sand. CDW viewed the area where swamp mats were removed at DM-6 and noted remnant metal drum carcasses present. NRC conducted general housekeeping and sweeping of the pad. From October 24 to 26, 2018, NRC continued to backfill the excavation and removed the balance of excavated soil that was staged to drain.

Sampling and Analysis

Confirmatory samples were collected October 22 and 23, 2018, from the extended excavation westward into the wetlands. Soil samples CDW-S60A, CDW-S60B, CDW-S61A, and CDW-S61Dup, were collected in accordance with the QAPP, summarized in Section 1.5 of this report. The soil samples were placed in the transport cooler on ice under a chain-of-custody, transported by the sampler to CDW's sample storage refrigerator, picked up by the laboratory courier, and transported by the courier to the laboratory for analysis of RCRA 8 Metals, antimony and cyanide. See Figure 2 for location and Table 1 for analytical results. Dust monitoring was performed at four corners of the Site, with two monitors placed to the east, between the work area and the residential neighborhood. Readings ranged from 0.000 mg/m³ to 0.002 mg/m³. No dust particulate action levels of 0.1 mg/m³ were exceeded during the week ending October 26, 2018. Dust monitors were not deployed on days that were raining/drizzling (October 23 and 24 2018).

2.9 Summary Week Ending 11/3/18

On October 29 and 30, 2018, NRC finished housekeeping and demobilization of all equipment and the roll-off can of metal scrap. One container of metal scrap that was removed from the surface of the Site was loaded and transported offsite. A second container was filled with a mix of metal that was collected from both the surface and metal that was excavated. The scrap metal was inspected, and if impacted with soil, was dry decontaminated by scraping and brushing clean prior to removal. From October 31 to November 2, 2018, no onsite activities occurred.

2.10 Summary Week Ending 11/10/2018

On November 6, 2018, BJAT Team members John Thompson, Chris Manlove, Ken Mcloughlin, and Bill Betters met on-site and reviewed confirmatory data collected to date. The excavation area

was viewed, and a discussion was held concerning the extent and quantity of material removed. Based on the imported backfill, the quantity of material removed substantially exceeded the quantity stipulated in the AOC. The actual quantity was determined upon review of the weigh slips, once it was disposed of. A discussion was also held concerning the utility of collecting additional samples beyond the perimeter of the excavated area to provide more data pursuant to the existing MCP IRA condition. It was resolved to propose to collect additional soil samples in selected areas. These areas are identified on Figure 2 as samples S62 through S65.

Thursday, 11/8

Soil disposal facilities were identified, and non-hazardous facilities were approved by EPA.

2.11 Summary Week Ending 11/17/2018

No onsite activities occurred during the week.

2.12 Summary Week Ending 11/24/2018

Sampling and Analysis

Samples were collected Monday 11/19/2018. A total of eight samples: CDW-S62A, CDW-S62B, CDW-S63A, CDW-S63B, CDW-S64A, CDW-S64B, CDW-S65A, CDW-S65B were collected from four locations: four shallow (0-1.5) and four deep (1.5-3.5). Locations are shown on Figure X and results are listed on Table 2XX. The samples were collected approximately 10 feet beyond the western extent of the excavated area. The field sampling methodology included the use of a bucket hand-auger. The samples were submitted for analysis of total lead, arsenic, and antimony, which are the primary metal COCs identified in the sample set along the west and southwest side. These samples were intended to assess whether COCs were reduced in areas beyond the phase II excavation confirmatory samples identified as S53A, 53B, 54A, 54B, 55A, 55B, 58A, 58DUP, 60A, and 60B.

The soil samples were collected in accordance with the QAPP, summarized in Section 1.5 of this report. The soil samples were placed in the transport cooler on ice under a chain-of-custody, transported by the sampler to CDW's sample storage refrigerator, picked up by the laboratory courier, and transported by the courier to the laboratory.

2.13 Summary Week Ending December 1, 2018

Thursday 11/29 - Friday 11/30 - NRC mobilized to the Site to stabilize soil stockpiles that failed TCLP Lead results.

2.14 Summary Week Ending December 8, 2018

NRC competed stabilization of the soil stockpile (excavated from the central portion of the site) that contained high concentrations of metals.

2.15 Summary Weeks Ending December 15, 2018 Through 1/11/2019

No onsite activities occurred.

2.16 Summary week ending 1/19/2019

Soil loading and transportation of most but not all of the bulk waste occurred during the week. Refer to Appendices E and F of this report for details.

2.17 Summary week ending 1/19/2019

Soil loading and transportation of the remaining bulk waste soil and the eight 1-cubic yard T-pack containers of “drum waste” occurred between 1/22-1/24/2018. A shipping container was delivered to the Site to temporarily house the drums/containerized waste, pending approval. Off-Site rule requests for the containerized waste were attached. Refer to Appendix E of this report for details.

2.18 Summary week ending 1/19/2019

No onsite activities occurred this week. The drummed waste was stored in a secure Conex box.

2.19 Summary week ending 2/8/2019

With the exception of a site visit on Wednesday, 2/6/2019, no onsite activities occurred this week. The drummed waste was stored in a secure Conex box. It was noted during the Site visit that the drums of waste generated from ongoing EPA Remedial Investigation activities appeared vulnerable; several were bulging and corroding and there was no secondary containment.

2.20 Summary week ending 2/15/2019

No onsite activities occurred.

2.21 Summary Week Ending 2/22/2019

Phase III - Approximately 150 to 200 cubic yards of additional targeted over-digging and backfilling to the west and southwest of the initial excavation was performed based on the results of samples as shown on Table 1. Grading and covering the slope with clean fill along the east side of the excavation occurred. No soil sampling occurred.

2.22 Summary Week Ending 3/1/19

2/25/2019

NRC backfilled the western side of the excavation area and grading and covering of the eastern slope was completed.

2/27/2019

A final geolocating of the samples was performed. A final aerial photograph was taken.

2.23 Summary of activities 3/8/19 to 3/29/2019

No onsite activities occurred during these weeks.

2.24 Summary week ending 4/6/2019

Soil loading and transportation occurred. All the estimated 150 to 200 cubic yards of soil excavated from the Targeted Excavation Area targeted areas was hauled offsite. See Appendices E and F of this report for copies of the Off-site rule requests and waste manifests. One drum of decontamination waste remained onsite pending removal. Jute matting was set down across approximately 70% of the excavated and backfilled area.

3.0 SOIL ANALYTICAL RESULTS

Confirmatory soil samples were collected along the centerline of the maximum vertical extent of the excavated area, at approximately 25-foot intervals. The sidewalls and end walls were sampled also at 25-foot intervals, except that a minimum of three endwall samples were collected, one at the centerline, and one at the intersection with each sidewall. Sidewall and end wall samples were collected as vertical composites at depths of 0'-1.5' and 1.5'-3.5'. Centerline samples were grabs from the bottom of the excavation, approximately 3.5'.

The soil samples were collected from the excavation and submitted to the EPA Contract Lab Eurofins Spectrum Analytical of Agawam, Massachusetts for analysis of RCRA 8 Metals, antimony and cyanide. Soil sample analytical results were compared to MassDEP S-2 standards. In general, the analytical results indicate that excavation resulted in a general reduction of the concentrations of constituents of concern to below Massachusetts Contingency Plan Method 1 Risk Characterization category S2 soils at the limits of the excavation in the following areas:

To the North:

Fourteen samples and one duplicate were reported below the S2 Standard; (samples: CDW-S1A, CDW-S2B, CDW-S3A, CDW-S3B, CDW-S43A, CDW-S43B, CDW-S44A, CDW-S44B, CDW-S45A, CDW-S45B, CDW-S46A, CDW-S46B, CDW-S47A, CDW-S48A, CDW-S48 Dup).

Eight samples were reported above the S2 standard (samples: CDW-S1B, CDW-S2A, CDW-S5A, CDW-6A, CDW-S6B, CDW-S9, CDW-S10, CDW-S47B).

To the South:

Three samples were reported below the S2 Standard; (samples: CDW-S26B, CDW-S28A, CDW-S31).

Eleven samples and one duplicate were reported above the S2 standard (samples: CDW-S24A, CDW-S24B, CDW-S25A, CDW-S25B, CDW-S26A, CDW-S26 Dup, CDW-S27A, CDW-S27B, CDW-S28B, CDW-S29A, CDW-S29B, CDW-S30).

To the West:

Seventeen samples and three duplicates were reported below the S2 standard (samples: CDW-S4B, CDW-S15B, CDW-S49B, CDW-S50B, CDW-S51B, CDW-S52B, CDW-S54A, CDW-S54B, CDW-S56, CDW-S56 Dup, CDW-S57, CDW-S57 Dup, CDW-S61A, and CDW-S61 Dup, CDW-S62B, CDW-S63A, CDW-S63B, CDW-S64B, CDW-S65A, CDW-S65B).

Thirty samples and four duplicates were reported above the S2 standard (samples: CDW-S4A, CDW-S5B, CDW-S5AD, CDW-S14A, CDW-S14B, CDW-S15A, CDW-S16A, CDW-S16B, CDW-S17A, CDW-S17B, CDW-S18A, CDW-S18B, CDW-S20A, CDW-S20B, CDW-S21A, CDW-S21B, CDW-S21B Dup, CDW-S22A, CDW-S22B, CDW-S49A, CDW-S49A Dup, CDW-S50A, CDW-S51A, CDW-S52A, CDW-S53A, CDW-S53B, CDW-S55A, CDW-S55B, CDW-S58, CDW-S58 Dup, CDW-S60A, CDW-S60B, CDW-S62A, CDW-S64A).

To the East:

Two samples and one duplicate were reported below the S2 standard (samples: CDW-S7A, CDW-S8A, CDW-S8AD).

Twelve samples were reported above the S2 Standard (samples: CDW-S7B, CDW-S8B, CDW-S13A, CDW-S13B, CDW-S36A, CDW-S36B, CDW-S38A, CDW-S38B, CDW-S40A, CDW-S40B, CDW-S42A, CDW-S42B).

Along the centerline:

Six samples and one duplicate were reported below the S2 standard (samples: CDW-S32, CDW-S33, CDW-S34, CDW-S39, CDW-S41, CDW-S59, CDW-S59 Dup).

Six samples and one duplicate were reported above the S2 standard (samples: CDW-S11, CDW-S19, CDW-S23A, CDW-S23B, CDW-S35, CDW-S37, CDW-S37 Dup).

3.1 Soil Sample Data QC Summary

The soil samples were collected, logged and preserved on ice inside the transport cooler. The chain-of-custody always remained with the samples, as the samples were transported by the sampler to CDW's sample storage refrigerator, picked up by the laboratory courier, and transported by the courier to the laboratory. All sample containers were packed to maintain a temperature of 4°C (\pm 2 °C) and all temperatures were recorded on the chain of custody.

The EPA Contract Laboratory, Eurofins Spectrum Analytical, conducted internal Precision, Accuracy, Representativeness, Completeness, and Comparability (PARCC) of all aspects of the data

analysis process. A summary of the laboratory data quality control is provided below. Refer to the laboratory analytical reports in Appendix C for the complete summaries.

QC Definitions

- **Laboratory Control Sample (LCS):** A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.
- **LCSD Matrix Duplicate:** An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.
- **Matrix Spike:** An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.
- **Method Blank:** An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.
- **Method Detection Limit (MDL):** The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
- **Reportable Detection Limit (RDL):** The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Note that “A” designations are vertical composites collected from 0’-1.5’ and “B” designations are for vertical composites collected from 1.5’ to 3.5’.

3.2 Batch QC Observations

Laboratory Report – SC50776, 10/5/18 (Soil Samples)

The following non-conformances were noted for samples:

- Sample dilution required for high concentration of target analytes to be within the

instrument calibration range. This affected mercury for samples CDW-S1A, CDW-S1B, CDW-S2A, CDW-S2B, CDW-S3B, CDW-S4A, CDW-S5A, CDW-S5B, and CDW-S5AD. The data was reported from dilution (qualifier D), Sample dilution required for high concentration of target analytes to be within the instrument calibration range (qualifier GS1), and the RPD and/or percent recovery for QC spike samples cannot be accurately calculated due to the high concentration of analyte inherent in the sample (qualifier QM4), and therefore may be biased low.

- The reporting limits for this analysis are elevated due to sample foaming. This affected mercury for samples CDW-S3A and CDW-S4B.

Due to noted non-homogeneity of the QC sample matrix, the MS/MSD and/or PS did not provide reliable results for accuracy and precision. High moisture content and organic matter contributed to the non-homogeneity. Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.

Laboratory Report – SC50777, 10/5/18 (Soil Samples)

The following non-conformances were noted for samples:

- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected mercury for samples CDW-S-1, CDW-S-1, CDW-S-2, CDW-S-3, CDW-S-5, CDW-S-5, CDW-S-6, CDW-S-8, and CDW-S-10.

Laboratory Report – SC50884, 10/11/18 (Soil Samples)

The following non-conformances were noted for samples:

- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Barium for samples CDWS-6A, CDWS-6B, CDWS-7B, CDWS-8B, CDWS-9, CDWS-10, CDWS-14A and CDWS-15A. The RPDs were out of acceptance range. The batch was accepted based upon LCS and/or LCSD recovery.
- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected lead for samples CDWS-14A, CDWS-14B, CDWS-15A, and CDW-DA-6. The RPDs were out of acceptance range. The batch was accepted based upon LCS and/or LCSD recovery.
- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected mercury for samples CDWS-6A, CDWS-6B, CDWS-7B, CDWS-8AD, CDWS-8B, CDWS-9, CDWS-10, CDWS-13A, CDWS-13B, CDWS-14A, CDWS-15A, CDW-DA-6, and CDW-DA-6 DUP.

Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.

Laboratory Report – SC50960, 10/15/18 (Soil Samples)

The following non-conformances were noted for samples:

- The Reporting Limit has been raised to account for matrix interference. This affected Barium for samples CDW-S16B and CDW-S19.
- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Lead for sample CDW-S19.
- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Mercury for samples CDW-S16A, CDW-S16B, CDW-S19, CDW-S21B, CDW-S21B-Dup, CDW-S22A, and CDW-S22B.

The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.

Laboratory Report – SC50962, 10/15/18 (Soil Samples)

The following non-conformances were noted for samples:

- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected mercury for samples CDW-S24A, CDW-S24B, CDW-S25A, CDW-S25B, CDW-S26A, CDW-S26B, CDW-S27A, CDW-S27B, CDW-S28A, CDW-S28B, CDW-S29A, CDW-S29B, CDW-S30, CDW-S26B Dup.

Laboratory Report – SC51047, 10/19/18 (Soil Samples)

The following non-conformances were noted for samples:

- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Barium for samples CDW-S35, CDW-S38A, and CDW-S38B. The batch was accepted based upon acceptable PS and /or LCS recovery.
- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Lead for samples CDW-S35, CDW-S36A, CDW-S36B, CDW-S38A, CDW-S38B, and CDW-S40A. Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.

- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Mercury for samples CDW-S34, CDW-S35, CDW-S36A, CDW-S36B, CDW-S37, CDW-S37 Dup, CDW-S38A, CDW-S38B, CDW-S40A, CDW-S40B, CDW-S42A, CDW-S42B, CDW-S43A, CDW-S43B, CDW-S44A, CDW-S44B, CDW-S45A, CDW-S45B, CDW-S46A, CDW-S46B, CDW-S47A, and CDW-S47B.

Laboratory Report – SC51219, 10/23/18 (Soil Samples)

The following non-conformances were noted for samples:

- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected mercury for samples CDW-S49A, CDW-S49AD, CDW-S50A, CDW-S51A, and CDW-S52B. The RPD exceeded the QC control limits; however, precision is demonstrated with acceptable RPD values for MS/MSD.

Laboratory Report – SC51315, 10/29/18 (Soil Samples)

The following non-conformances were noted for samples:

- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Lead for samples CDW-S53A and CDW-S55A. The batch was accepted based upon LCS and/or LCSD recovery.
- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Mercury for samples CDW-S53A, CDW-S53B, CDW-S55A, CDW-S58, and CDW-S58 Dup. The RPD and/or percent recovery for this QC spike sample could not be accurately calculated due to the high concentration of analyte inherent in the samples. The RPD of the duplicate spike is 113, which is higher than the precision limit of 20 and are not acceptable.

Laboratory Report – SC51341, 10/29/18 (Soil Samples)

The following non-conformances were noted for samples:

- Sample dilution required for high concentration of target analytes to be within the instrument calibration range. This affected Mercury for samples CDW-S60A and CDW-S60B.

Laboratory Report – SC51382, 10/29/18 (Soil Samples)

The following non-conformances were noted for samples:

- MRL raised to correlate to batch QC reporting limits. This affected lead for samples CDW-S61 and CDW-S61Dup.

Laboratory Report – SC52101, 12/18/18 (Soil Samples)

The following non-conformances were noted for samples:

- Lead percent recoveries are outside individual acceptance criteria, but within overall method allowances. This applies to samples CDW-S62A, CDW-S62B, CDW-S63A, CDW-S63B, CDW-S64A, CDW-S64B, CDW-S65A and CDW-S65B.

4.0 REMOVED MATERIALS SUMMARY

4.1 Drum Removal

The drums discovered on site, either through previous investigations or through completion of the removal activities, were removed using available equipment, placed into sealed over-pack containers, and relocated to the drum staging areas. Soil and materials surrounding the drums or containers that appeared to be similar to the drum contents or exposed to the drum contents were excavated and placed in the over-pack containers. The drums and other materials that could not be placed in overpack containers were placed in the drum staging area and stored using polyethylene sheeting to prevent the spread of contaminants. The drums and contained materials were then characterized for disposal as described in the Sampling and Analysis Plan (SAP).

Several of the drums identified in previous investigations were located in the “Drum Removal Area” (Figure 3). During the removal activities, additional drums were discovered in the “S2 Soil Excavation Area”, the “Drum Removal Area”, and in excavated test pits. The drums removed from the Site are described below:

- A drum of liquid was discovered by the EPA Remedial Program Contractor (AECOM) during completion of test pits during the week ending 8/17/18. The drum was constructed of steel with a 55-gallon capacity. Upon discovery, it contained 40 gallons of an unknown thick red liquid. The headspace in the drum had a PID reading of 1ppm. Approximately 3 gallons of the contents had spilled outside of the drum. The drum was removed to an 85-gallon steel over-pack drum along with the spilled liquid and adjacent soils. Approximately 15 2-foot by 2-foot spill pads were used to soak up the remaining spilled material and disposed of in the over-pack drum. This was transported to the drum storage area for staging and disposal.
- During the week ending 9/14/18, 8 areas were identified for drum removal activities.

- From Tuesday 9/18/18 to Thursday 9/20/18, drums were removed from areas DM-1 through DM-6. A total of ten drums were found intact and were removed in over-pack containers. Five of these drums were from Area DM-1, four were from DM-2 and MD-3, and one was from DM-6. The contents of these drums appeared to be paint, pigments, resins, or tar.
- On Friday 9/21/18, another drum was removed from DM-2. A broken plastic waste container was discovered and removed in an over-pack drum along with the solid contents that had fallen out.
- Thursday 9/27 overpack and removal of one drum from DM-2
- Friday 10/5 discovered 3 buried drums on the northeast slope of the excavation. Two contained a paint-like material. One contained a wax-like resin. The drums were stored in the drum staging area behind the office trailer.
- Tuesday 10/9 Five buried drums were discovered and removed from the northeast corner of the excavation in a similar location to the 3 drums found there previously. Two drums contained a white/gray wax-like resin. One drum contained dark red paint/pigment. Two contained a reddish-pink paint/pigment. The drums were stored in the drum staging area behind the office trailer.

Tuesday 10/16/18 Three drums were discovered and removed from the northeast corner from the same area as the previous 8 drums. Two drums contained a white/gray wax-like resin. One drum contained a white paint/pigment. The drums were overpacked and stored in the drum area behind the office trailer.

Drum ID Letter	Manifest ID	Material inside 55-Gallon Drum
A	003821726 GBF	Light green liquid and solid mix
B	003821730 GBF	Light green solid
C	003821730 GBF	White/yellow mix of solid and liquid
D	003821729 GBF	Red liquid
E	003821730 GBF	PPE
F	003821726 GBF	Pink liquid
G	003821727 GBF	Black solid
H	003821727 GBF	White solid

Drum ID Letter	Manifest ID	Material inside 55-Gallon Drum
I	003821729 GBF	White solid
J	003821727 GBF	Pink solid
K	003821726 GBF	Decon water
L	003821727 GBF	Pink solid
M	003821730 GBF	PPE
N	003821726 GBF	Decon water
O	003821729 GBF	Pink liquid
P	003821727 GBF	Black solid
Q	003821727 GBF	Green solid
R	003821726 GBF	Red liquid
S	003821727 GBF	White solid
T	003821727 GBF	Pink solid
U	003821727 GBF	Black solid
V	003821727 GBF	Black liquid solid mix
W	003821730 GBF	White solid
X	003821730 GBF	Black solid
Y	003821729 GBF	Red liquid solid mix
Z	003821729 GBF	Light pink liquid solid mix
AA	003821729 GBF	Red liquid
BB	003821730 GBF	PPE
CC	003821730 GBF	PPE
DD	003821730 GBF	PPE

4.2 Bulk Wastes & Debris

To access and manage the drum removal, soil excavation, and other removal activities, the Contractor removed a variety of bulk wastes including metal debris, wood, and plastics. These materials were excavated, sampled as required in the SAP, and staged prior to disposal. Materials that may have been in contact with contaminated materials were decontaminated as applicable or disposed of as hazardous waste. The bulk wastes removed from the Site are described below:

- Friday 9/21/18 continued removing scrap and debris and bulk wastes from drum removal area DM-2.
- Monday 9/24/18 cleanup of bulk waste from DM-5 and DM-6
- Thursday 9/27/18 additional rubber removal at DM-6
- Wednesday 10/10/18 Removal of trash, scrap, and waste along the northeast slope of the excavation and general housekeeping.

4.3 Soil Excavation

Soils were discovered during previous investigations with concentrations of metals above the EPA's RML HQ=3 Industrial Standards and the Massachusetts Contingency Plan (MCP) Method 1 S-2 Soil Standards. These soils were excavated based on previously collected analytical data, additional sampling conducted during the removal activities, and observations made in the field. The initial excavation area was located to the north of the former building foundation and included previous sample locations: E100, F080, G100, H080, and H120 (Appendix A). The Phase I excavation was expanded to include soils west to the edge of water, and halfway to the nearest sample location in the other directions that did not exhibit metals concentrations exceeding the EPA and MCP soil standards. Soils were excavated to approximately 3.5 feet bgs, which corresponded to the change from loose, organic rich sediment and fill to medium to coarse sand. The excavation extents were expanded laterally based on observations made in the field regarding the color, odor, texture, or other characteristics of the soil.

Additional excavation of the contaminated soils was completed based on the results of confirmatory sampling conducted following completion of the original excavations. In the instances where the confirmatory samples exceeded the EPA RML HQ-3 Industrial Standards or the MCP Method 1 S-2 Soil Standards, additional soils in that location were removed to the extent practicable. The Second line of confirmatory samples located along the western side of the excavation, are identified in Figure 2, in blue, as Phase II Excavation (samples: CDW-S50A, CDW-S50B, CDW-S49A, CDW-S49B, CDW-S49 Dup, CDW-S51A, CDW-S51B, CDW-S52A, CDW-S52B, CDW-S53A, CDW-S53B, CDW-S54A, CDW-S54B, CDW-S55A, CDW-S55B, CDW-S56, CDW-S56 Dup, CDW-S57, CDW-S57 Dup, CDW-S58, CDW-S58 Dup, CDW-S59, CDW-S59 Dup). Confirmatory sampling was completed in accordance with the QAPP-SAP. All soil in excess of the S2 Standards

was not removed within the defined scope of work and budget. The complete list of remaining samples is identified in Table 1. The summary of lead results, both shallow and deep, are presented in Figure 4.

In the instances that drums, containers, or other bulk wastes and debris were encountered during excavation, the materials were managed as described in the previous sections. The excavation area is depicted in Figure 2. The depth of excavation in all areas is approximately 3.5 +/- feet below the original grade, coincident with encountering what appears to be undisturbed, native soil. Specific phases of excavation are highlighted in the figure as well as the geographic areas referenced. The geographic coordinates of samples are presented in Appendix A. The soils removed from the Site are further described below:

- Thursday 9/27/18 begin excavation from southern end of the dig area
- Friday 9/28/18 excavation of northern third of the dig area. Hotspot area surrounding Weston Sample F080 was excavated and staged discretely. Excavated soil was saturated and was temporarily staged within the eastern side of dig area to drain.
- Monday 10/1/18 continued soil excavation on northeast side of excavation
- Wednesday 10/3/18 excavated along central portion of excavation area and around large tree stumps on edge of excavation. The hotspot area along the west central portion of the dig area (Weston Sample G100 and H080) was excavated and staged separately from the other soils.
- Thursday 10/4/18 excavated in the central portion of the dig area.
- Friday 10/5/18 continued excavation along the eastern slope of the dig
- Wednesday 10/10/18 Excavation at the northern side of the dig area. Extended the excavation by approximately 20 feet long and 20 feet wide at the north end.
- Wednesday 10/17/18 further removal required based on sample results. Phase 2 excavation occurred at the west central portion of the excavation. This area extended approximately 10 feet west of the initial excavation western boundary.
- Thursday 10/18/18 Additional excavation continued along the western boundary, extending towards the southern end of the excavation.
- Friday 10/19/18 Continued excavation into the southwestern portion of the wetlands
- Tuesday 10/23/18 Large tree stump area in south central portion of excavation area was excavated. Stumps were scraped clear of soils before backfilling.
- 2/20/19 – 2/22/19 excavation was overdug to the west and southwest of the initial dig. Approximately 200 CY of material was removed.

Test pits were excavated in support of the EPA efforts for further site characterization.

- Test pits were excavated by the EPA remedial contractor during the week ending 8/17/18. Following completion of these test pits, the remaining planned test pits within the boundaries of the excavation area were not completed as the data and observations acquired during the excavation were sufficient to characterize the area.

4.4 Soil Staging and Stabilization

Materials generated during the remedial activities were staged, stockpiled, and covered in the staging area prior to disposal. Materials encountered which were not pre-characterized were stockpiled separately from the other generated materials pending characterization. The soil staging and stabilization activities are described below:

Initially the materials removed from the middle of the excavation and the north/south areas of the excavation were kept in separate stockpiles. The soils from the middle of the excavation area were expected to have hazardous characteristics based on the previous sampling. The north/south soils were not expected to have hazardous characteristics, but in post-excavation sampling the soils failed the TCLP requirements. Therefore, the two different stockpiles were combined, and all were mixed with a binding agent to stabilize the hazards. The binding agent used was Type I/II Portland Cement. It was mixed into the soils at an average of 7% by mass.

Stabilization occurred on November 29th and 30th, 2018 on the North/South excavation soils after they failed the TCLP requirements. Stabilization of the soils from the middle of the excavation with higher concentrations than the other soils was performed on December 7th, 2018.

4.5 Backfill & Restoration

Upon confirmation by the Technical Project Manager, high visibility fencing was placed on top of the excavated areas as a marker for future reference. The excavated areas were then filled with clean soil and/or stone from an off-site borrow source and compacted in accordance with industry standards. Prior to import, the material was sampled at one sample per 1,000 tons of backfill material and analyzed for the following:

- Total Priority Pollutant (13) Metals,
- Total mercury,
- Total petroleum hydrocarbons,
- Total polychlorinated biphenyls,
- Semi-volatile organic compounds,
- Volatile organic compounds, and
- Conductivity

The results were provided to the Technical Project Manager for review and approval prior to use of the material. Following backfill, the areas were covered with jute matting which was left in-situ for repopulation by native species. The restoration objective was to stabilize the disturbed areas as there might be future remedial actions performed at the site. NRC removed and disposed of silt fencing and straw wattles that were unnecessary for site stabilization and restoration.

The backfill and restoration activities are described below:

- Thursday 10/11/18 Began backfilling excavation at the south side.
- Friday 10/12/18 Continued backfilling along the northern side of the excavation.
- Monday 10/15/18 Backfilled portions of the excavation.

- Thursday 10/18/18 Backfilling of the main excavation area occurred.
- Monday 10/22/18 Backfilling main excavation area.
- Tuesday 10/23/18 Backfilled overdug areas. Stumps were scraped clean of all soils and were buried in place of their original excavation (at Sample location S61) after soil removal.
- Wednesday – Friday 10/24-10/26 continued backfilling. Consolidated soils from temporary stockpiles into main soil stockpile.
- 2/20/19 – 2/22/19 & 2/25/19 overdug area to west and southwest of initial excavation was backfilled with approximately 200CY of material.
- 4/13/19 site restoration continued. Wood chips from brush, branches, and limbs during the initial site clearing and grubbing were spread over backfilled areas, logs from downed trees were removed and transported offsite, silt fencing was removed, and jute matting was placed around the restored areas.
- 4/14/19 The permanent fencing was reinstalled along the east to southeast side of the excavation area.

5.0 TRANSPORTATION AND DISPOSAL

5.1 Drums

The drums, containers, materials, and soil generated during drum removal were temporarily marked with a unique identifier which indicates the original location from where it was removed. 30 (thirty) drums were excavated, each individually identified with labels from A to DD. The drums were shipped as follows:

Drum Identifier	No. Drums	Waste Characteristics	Disposal Location
B, C, W	3	Liquids/Solids. Characteristic Hazard D006	EQ Detroit, MI
X	1	Liquid	EQ Detroit, MI
E, M, BB, CC, DD	5	PPE	EQ Detroit, MI
D, I, O, Y, Z, AA	6	Liquids/Sludge	Tradebe, East Chicago, IN
A, F	2	Liquids/Solids, Characteristic Hazards D006, D040, D043	Tradebe, Meriden, CT
K, N	2	Liquid	Tradebe, Meriden, CT
R	1	Decon Water, Characteristic Hazards D006	Tradebe, Meriden, CT
G, H, J, L, P, S, T, U, V	9	Solids, Characteristic Hazards D006, D008	Stablex, Blainville, QC, CA
Q	1	Solids, Characteristic Hazards D006, D008 Rejected at Stablex and being re-routed to Deer Park.	Stablex, Blainville, QC, CA Clean Harbors Deer Park, LaPort, TX

The drums were shipped offsite on February 20th, 2019. One drum was rejected at Stablex due to PCBs, and was rerouted to Clean Harbors, Deer Park, LaPort, Texas.

5.2 Soil

There were approximately 2,500 tons of soils removed from the excavations and transported for disposal. Some of the soils originally exhibited characteristic hazardous concentrations and were mixed with a binding agent to immobilize the contaminants. This allowed all the soils to be disposed of as non-hazardous waste. The soils were transported to the NEWS landfill in Coventry, VT or Turnkey in Rochester, NH. These soils were shipped by dump trailer beginning January 16th, 2019.

The additional excavated materials generated during the week of February 20th, 2019 (Phase III) failed the TCLP requirements and were transported to Stablex for disposal as there was not enough material to feasibly treat onsite. The approximately 150 to 200 CY of material was transported starting March 29th, 2019.

5.3 Bulk Wastes & Debris

Metal scrap was generated during the removal activities. Much of the scrap consisted of metal drum carcasses. The scrap was decontaminated by using scraping and dry brushing to remove the soils and other materials. The metal scrap and debris were collected in two roll-off containers and transported off-site to Allied Recycling Center in Walpole, MA. A description of the scrap metals is as follows:

- 09/18/19 – 250 pounds of #1 HSM (heavy melting steel), unprepared with rubber contamination
- 09/25/19 – 4040 pounds of #1 HSM (heavy melting steel) unprepared with tires
- 09/28/19 – 6780 pounds of mixed load
- 10/29/19 – 5400 pounds of #1 HSM (heavy melting steel), prepared

During removal of the drums from the “drum removal area”, approximately 12 tons of vulcanized rubber and debris was discovered and removed. This material was sampled and characterized as hazardous waste. It was placed in T-packs and shipped to Stablex in Blainville, QC, CA.

6.0 EFFECTIVENESS OF THE REMOVAL ACTIONS

6.1 Actions Taken by the PRPs

The removal actions were effective in reducing the overall mass of contamination within the shallow subsurface soils at the Site. Approximately 1928 tons of impacted soil was removed from an area delineated by EPA to contain elevated levels of metals, predominantly lead, at the edge and within the wetlands resource area along the western side of the property. The removal action resulted in the reduction of the concentrations of constituents of concern to below Massachusetts Contingency Plan Method 1 Risk Characterization category S2 soils of 600 mg/kg at the limits of the excavation to the north, south and a significant portion of the western boundary. Elevated levels remain along slope at the eastern side of the excavation, nearest the former building concrete floor.

Excavation activities were focused within the area demarked as “Drum, Waste, S2 Soil Excavation Area” by EPA in a Site map included in the AOC. The EPA delineated soil excavation area was identified as solely at the foot of the slope from the former building location and extended westward, bisecting the mapped wetland. As sample analyses were reviewed during the excavation activities, it was evident that further removal beyond the estimated area was appropriate in an effort to approach the Massachusetts MCP Method 1 S2 soil standards. The excavation effort was extended principally westward for the following reasons:

- 1) The wetland area was mapped by EPA to be removed (Refer to Figures 6A and 6B),
- 2) Soil excavation was presented in the BJAT work plan that was approved by EPA and included additional soil removal laterally if the S2 standards were not met at the limits of the initial excavation,

- 3) The Town of Franklin Administrator was notified of the commencement of work on August 31, 2018. On September 26, 2018, a presentation was made to the Town of Franklin Technical Review Committee. The Committee includes the Conservation agent. At that time, the scope of the project was discussed, and Site plans were shared and reviewed with the committee.
- 4) The high concentrations and the overall mass of COCs beneath the water table are likely more available for leaching and mobilization than COCs contained in unsaturated soil upland to the east and,
- 5) Human exposure to the COCs present in the upland area that is contributing to an Imminent Hazard Condition is readily mitigated by covering and revegetating.

The total cost to comply with the AOC and complete the Removal Action is \$1.81 million.

6.2 Difficulties Encountered

- 1) The placement of groundwater monitoring well clusters by the EPA Remedial Investigation team within the proposed excavated area prior to excavation. This caused delays due to the additional care required to work around the wells. As discussed, and agreed to on August 26th, 2018 at an onsite meeting between BJAT, and EPA representatives, as memorialized by Rich Haworth:

“As discussed at the meeting on site Tuesday August 28th, monitoring wells are now present in soil that may require excavation. As this condition did not exist when the scope of work was developed, this is a modification to the scope of work I understand we agreed to, for the purpose of avoiding damage to wells.

During tree cutting: Wells will be clearly marked. Markings may include but are not limited to high visibility paint, fence, caution tape. All tree removal personnel will be escorted to all wells and their importance emphasized prior to beginning any cutting.

During tree grubbing: Well markings shall be maintained. Tree roots in the vicinity of wells shall not be grubbed out if doing so would damage wells. This will be determined on a case by case basis by Mr. Schkuta, or his designated on-site

remedial representative(s). Please document a discussion on this subject between you and the remedial contractor (Andrew Schkuta) with an email copied to me and Kim White. Include another relevant points of agreement, especially coordination efforts moving forward.

During excavation: Well markings shall be maintained. Soil in close proximity to wells shall not excavated. I estimate three feet should be a sufficiently protective

buffer, unless Mr. Schkuta thinks a different size buffer is required. Please include this in the discussion and subsequent email documentation. “

- 2) Unseasonably high rainfall during excavation: The total rainfall for September 2018 was over 7-inches in the Greater Boston Area. This caused substantial flooding during the excavation phase which, in turn caused extended time and additional effort managing soil and collecting samples. In fact, the middle and northern sections of the excavation were flooded for most of the excavation effort. The flooding made sample collection difficult, due to the lack of solid footing and sinking into the mud. Additionally, the unstable ground would not support the excavator weight, and ramps had to be built with clean fill to operate the excavator.
- 3) Stop Work order issued by EPA on September 10, 2018. This was due to a misunderstanding between EPA and BJAT contractors regarding the sequencing of drum removal and tree clearing. The adjusted schedule was also done to accommodate EPA's Site contractor AECOM's performing onsite investigation activities. A response by BJAT was provided to EPA on September 12, 2018, restating the meeting minutes memorializing the notification and sequencing as agreed. Authorization to resume was granted on September 13 and remobilization occurred on September 17, 2018.
- 4) On two occasions, BJAT failed to adhere to the “daylight working hours rule” applicable to the Site. This occurred on September 17 when a piece of heavy equipment was mobilized at 3 am and again on January 15 at 6:30 am. These incidents were addressed with the team and not repeated.
- 5) EPA OSC, Rich Haworth retired as of December 31, 2018 and the Federal Government shutdown occurred during the month of January 2019. While this result in additional effort redirecting communications, EPA personnel continued to be available to assist BJAT to the extent possible.
- 6) A Stop Work Order was issued by EPA on February 20, 2019 for a continuation of excavation within the wetlands in the AOC. This was discussed as it related to the original direction of the executed AOC and work was resumed on February 22, 2019.

6.3 Intergovernmental Coordination Issues

EPA OSC, Rich Haworth retired as of December 31, 2018 and the Federal Government shutdown occurred during the month of January 2019. While this resulted in additional effort redirecting communications, EPA personnel were exceptionally cooperative, organized and prepared which made preparation and implementation of the RA an efficient and effective process. The EPA issued a Stop Work Order on February 20, 2019 for a continuation of excavation within the wetlands. This was discussed as it related to the original direction of the executed AOC and work was resumed on February 22, 2019.

6.4 Recommended Actions:

A. Means to Prevent a Recurrence of the Release

There has been no industrial activity and the Site has been unoccupied since 1985. Building demolition and removal of hazardous building materials occurred in 2016. There is no remaining primary source or release mechanism and the contaminant mass has been significantly reduced thereby minimizing or eliminating secondary source release conditions.

B. Means to Improve Response Actions

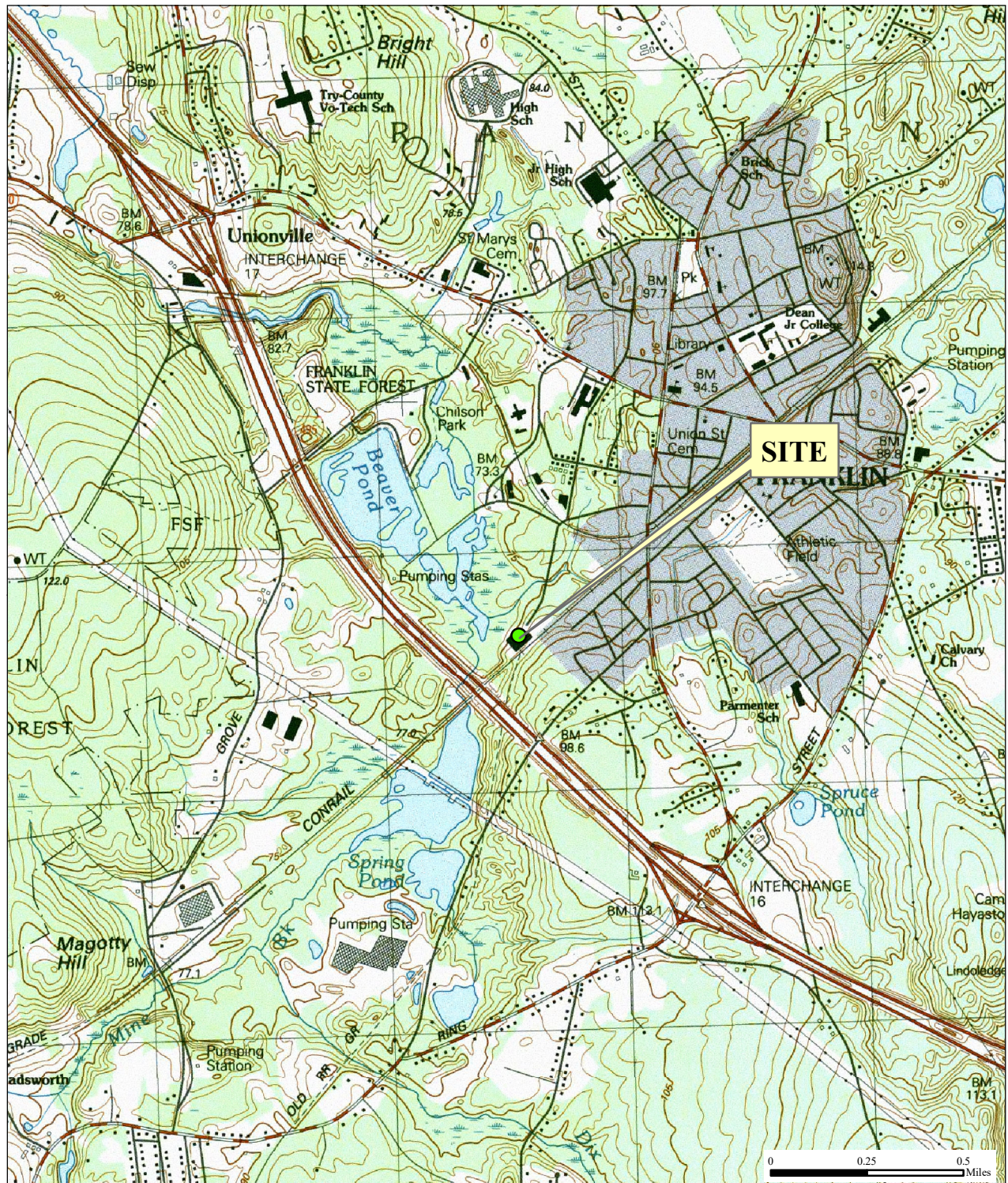
Were future removal actions to occur, they should be performed at seasonally dry periods, including winter months, as opposed to a period of unseasonably high precipitation.

C. Proposals for Changes in Regulations and Response Plans.

None are noted at this time.

D. A groundwater and surface water monitoring program should be implemented to evaluate potential leaching of remaining COCs to these resources. Additionally, ecological risk assessment evaluations to determine the potential harm to the health of aquatic or sediment boring fauna exist.

FIGURES



CDW CONSULTANTS, INC.

300 FISHER STREET
FRANKLIN, MA 02038

Figure 1 - Site Location Map

SOURCE: MASSGIS

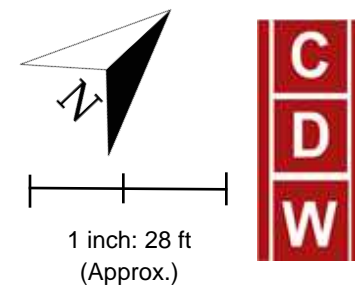
SCALE: 1 inch = 2,083 feet





- Legend
- Original Excavation
 - Phase II Excavation
 - Targeted Excavation
- *All Locations Approximate

Figure 2
Excavation and Sampling Plan
300 Fisher St, Franklin MA
November 7, 2019







Legend

White shaded Values:

"A", 0-1.5ft., "B" 1.5-3.5ft. composite

Yellow Shaded Values: 3.5 foot grab

Concentrations are in milligrams per kilogram

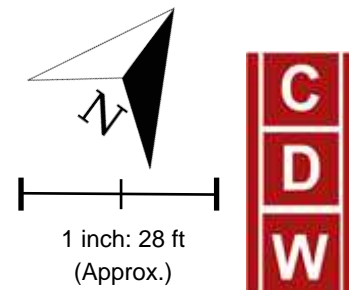
— Original Excavation

— Phase II Excavation

— Targeted Excavation

*All Locations Approximate

Figure 5
Other Contaminants of Concern above S2 Standards
300 Fisher St, Franklin MA
November 7, 2019



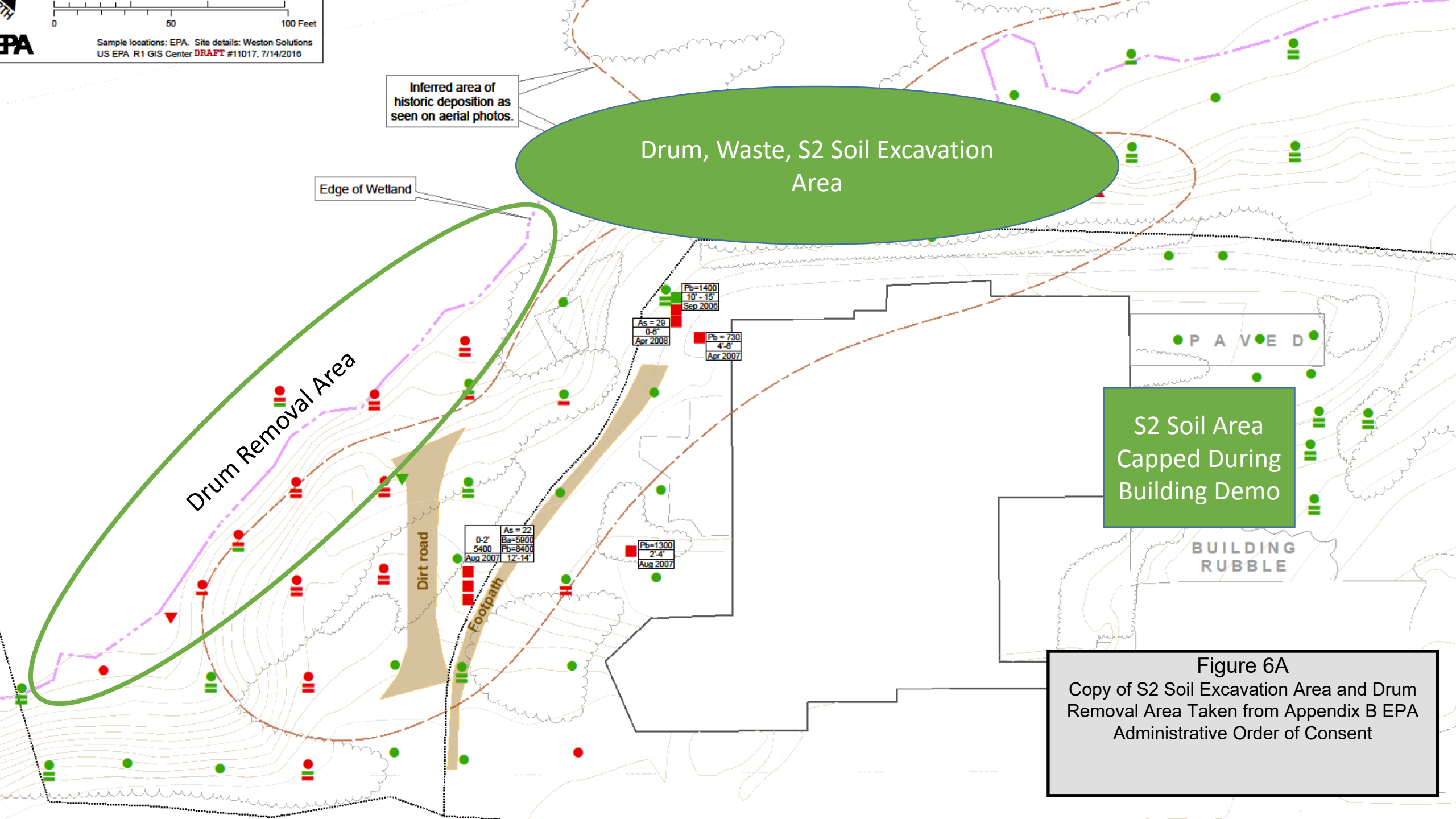


Figure 6A
Copy of S2 Soil Excavation Area and Drum Removal Area Taken from Appendix B EPA Administrative Order of Consent

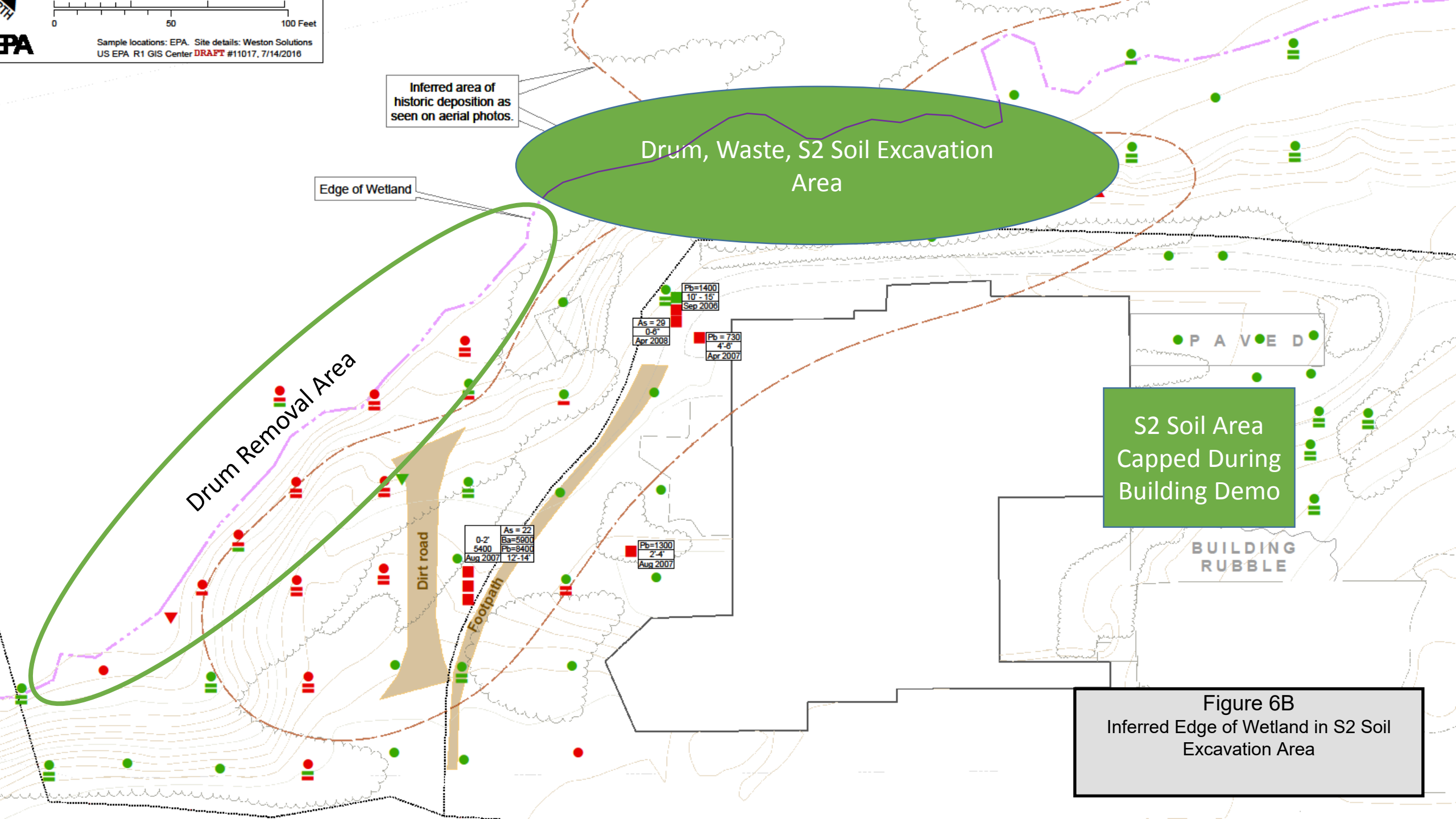


Figure 6B
Inferred Edge of Wetland in S2 Soil
Excavation Area

TABLES

Table 1: Summary of Confirmatory Soil Sample Results
for AOC Removal Action Docket Docket No. 01-2018-0009
BJAT, LLC Superfund Site 300 Fisher St. Franklin, MA

Parameter	S-2/GW-1	SAMPLING LOCATION												
		CDW- S1A	CDW- S1B	CDW- S2A	CDW- S2B	CDW- S3A	CDW- S3B	CDW- S4A	CDW- S4B	CDW- S5A	CDW- S5B	CDW- S5AD	CDW- S6A	CDW- S6B
Sampling Date		10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018	10/3/2018	10/3/2018
Sample Depth		0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	0-1.5'	1.5-3.5'
Type		Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite
SW-846 6010C-D (mg/Kg dry) Metals Digestion														
SILVER	200	<1.80	<2.02	<2.34	<2.51	<1.84	<2.11	<11.1	<2.43	22.8	<2.02	<4.65	8.09	<1.93
ARSENIC	20	14.4	4.79	5.26	5.76	2.2	2.7	12.9	3.26	1970	4.51	25.6	6.24	13.3
BARIUM	3000	253	239	717	290	33.5	93.3	2620	101	7.4	551	2820	11000	8290
CADMIUM	100	0.872	0.946	1.54	1.14	<0.612	<0.704	23.9	<0.809	17	1.91	7.82	9.95	12.8
CHROMIUM	200	10.2	5.96	8.13	8.03	6.94	7.45	12.8	8.72	17.0	5.35	18.2	14.4	20
MERCURY	30	12	96.3	2.31	2.63	0.256	3.87	9.15	0.294	12.9	1.55	16.8	3.41	7.34
LEAD	600	572	435	681	334	176	513	4720	61.8	8440	2050	9230	1540	602
ANTIMONY	30	<6.01	<6.74	<7.78	<8.73	<6.12	<7.04	63.4	<8.09	52.1	7.54	60.9	18.9	12.8
SELENIUM	700	<1.80	<2.02	<2.34	<2.51	<1.84	<2.11	14.7	<2.43	<4.18	<2.02	<4.65	<2.02	<1.93
SM 2540G (% Wt)														
% Solids	~	79.1	69.4	61.0	58.9	80.0	69.1	12.9	56.3	<4.18	73.8	30.1	72.2	72.1
SW-846 9014 (mg/Kg)														
REACTIVE CYANIDE	~	<0.303	<.373	<0.484	<0.481	<0.307	<0.370	12.9	<0.459	<0.7553	<0.354	<1.15	0.728	<0.510

Parameter	S-2/GW-1	SAMPLING LOCATION												
		CDW- S7A	CDW- S7B	CDW- S8A	CDW- S8AD	CDW- S8B	CDW- S9	CDW- S10	CDW- S11	CDW- S13A	CDW- S13B	CDW- S14A	CDW- S14B	CDW- S15A
Sampling Date		10/3/2018	10/3/2018	10/3/2018	10/3/2018	10/3/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018
Sample Depth		0-1.5'	1.5-3.5'	0-1.5'	0-1.5'	1.5-3.5'	3.5'	3.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'
Type		Composite	Composite	Composite	Composite	Composite	Grab	Grab	Grab	Composite	Composite	Composite	Composite	Composite
SW-846 6010C-D (mg/Kg dry) Metals Digestion														
SILVER	200	<2.18	19.9	<1.89	<1.81	<1.72	<2.31	4.99	<1.88	<1.98	<1.96	<3.04	<2.16	<3.40
ARSENIC	20	<2.18	24.6	<1.89	<1.81	3.92	5.05	9.05	2.07	19.8	24.2	104	26.7	87
BARIUM	3000	1600	13600	519	172	3690	5550	9160	144	2260	2830	9450	3260	7330
CADMIUM	100	<0.728	33.8	<0.630	<0.603	2.3	3.38	10.9	2.37	3.94	22.5	18.3	5.01	58.8
CHROMIUM	200	7.27	37.6	5.26	6.15	9.2	14.4	16.5	7.55	10.3	7.58	23	11.6	46.3
MERCURY	30	0.277	5.4	0.167	3.88	2.01	2.14	8.97	0.359	7.17	11.6	23.7	0.289	184
LEAD	600	120	2860	142	70.1	1400	1950	585	663	4630	4270	40100	12800	153000
ANTIMONY	30	<7.28	228	<6.30	<6.03	21.3	28.2	7.63	<6.28	10.7	27.5	147	21.7	213
SELENIUM	700	<2.18	<2.20	<1.89	<1.81	<1.72	<2.13	<2.11	<1.88	<1.98	<1.96	<3.4	<2.16	3.41
SM 2540G (% Wt)														
% Solids	~	65.3	62.5	77.9	77.3	82	63.7	66.1	74.2	71.1	75.1	47.4	64.2	40.4
SW-846 9014 (mg/Kg)														
REACTIVE CYANIDE	~	<0.352	0.842	<0.414	<0.333	0.327	1.84	0.432	<0.474	<0.383	<0.402	1.32	<0.459	<0.709

- 1.. Bolded values exceed the S-2/ GW-1 concentrations
2. Grey columns are samples taken from soil that has been excavated
3. ~ = No Method 1 Standard or UCL available
4. NT - Not Tested

Table 1: Summary of Confirmatory Soil Sample Results
for AOC Removal Action Docket Docket No. 01-2018-0009
BJAT, LLC Superfund Site 300 Fisher St. Franklin, MA

Parameter		SAMPLING LOCATION													
	S-2/GW-1	CDW- S15B	CDW- DA-6	CDW- DA-6 DUP	CDW- S16A	CDW- S16B	CDW- S17A	CDW- S17B	CDW- S18A	CDW- S18B	CDW- S19	CDW- S20A	CDW- S20B	CDW- S21A	
Sampling Date		10/4/2018	10/4/2018	10/4/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	
Sample Depth		1.5-3.5'			0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-3.5'	0-1.5'	1.5-3.5'	0-1.5'	
Type		Composite	Grab	Grab	Composite	Composite	Composite	Composite	Composite	Composite	Grab	Composite	Composite	Composite	
SW-846 6010C-D (mg/Kg dry) Metals Digestion															
SILVER	200	<2.97	<2.27	<2.06	<4.43	<2.64	<3.59	<6.20	<2.67	<3.99	<2.66	<10.2	<9.41	<8.57	
ARSENIC	20	7.03	44.6	47	69.2	26.9	52.8	59.1	16.9	16.4	99.2	10.6	<9.41	<8.57	
BARIUM	3000	137	2090	1540	2230	1860	3020	1220	760	777	6560	727	926	1010	
CADMIUM	100	<0.989	13.2	8.21	32.5	12.5	8.32	14.2	2.39	3.18	32.5	33.2	29.9	8.45	
CHROMIUM	200	12.6	18	13.5	19.7	13.6	85.9	27.4	4.58	7.02	280	10.1	11.8	11.3	
MERCURY	30	0.266	2.49	2.27	6.04	5.04	1.64	1.13	0.910	0.790	2.79	1.41	0.719	1.04	
LEAD	600	157	10200	5180	5140	5090	7930	3100	3290	2470	30800	748	845	998	
ANTIMONY	30	<9.89	56.6	15.4	57.2	33.6	24.5	34.3	14.5	<13.3	41.1	54.7	45.3	<28.6	
SELENIUM	700	<2.97	<2.27	2.61	<4.43	<2.64	<3.59	<6.20	<2.67	<3.99	<2.66	<10.2	<9.41	<8.57	
SM 2540G (% Wt)															
% Solids	~	47.2	63	66.4	31.4	52.3	40	23.2	51.9	35.2	54.3	14.3	14.9	16.7	
SW-846 9014 (mg/Kg)															
REACTIVE CYANIDE	~	<0.702	1.88	5.46	<0.885	<0.546	<0.780	<1.20	<0.526	<0.789	1.57	<1.93	<1.65	<1.73	

Parameter		SAMPLING LOCATION													
	S-2/GW-1	CDW- S21B	CDW- S21B-Dup	CDW- S22A	CDW- S22B	CDW- S23A	CDW- S23B	CDW- S24A	CDW- S24B	CDW- S25A	CDW- S25B	CDW- S26A	CDW- S26B	CDW- S26Dup	
Sampling Date		10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	
Sample Depth		1.5-3.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	1.5-3.5'	
Type		Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	
SW-846 6010C-D (mg/Kg dry) Metals Digestion															
SILVER	200	<3.61	<6.24	<3.27	<2.34	<1.73	<2.03	<1.77	<1.75	<1.91	<2.02	<1.77	<1.75	<1.80	
ARSENIC	20	19	38.2	23.5	11.0	19.7	6.02	8.28	5.4	9.14	8.94	10.3	10.1	19.5	
BARIUM	3000	1050	2350	1140	822	679	496	451	484	660	750	756	648	651	
CADMIUM	100	3.79	6.59	1.11	0.851	3.33	<0.676	<0.590	<0.585	0.896	0.810	<0.589	<0.584	<0.599	
CHROMIUM	200	10.8	24.2	10.6	6.34	15.2	4.95	6.87	5.87	7.01	7.78	4.83	3.41	3.74	
MERCURY	30	29.1	10.9	4.05	4.92	0.938	0.395	2.42	3.85	3.28	2.90	2.68	0.968	0.959	
LEAD	600	5800	15600	3300	2770	960	770	3040	1020	1740	1160	1140	484	1470	
ANTIMONY	30	13.5	35.9	13.6	13.3	6.4	<6.76	6.67	<5.85	<6.36	<6.72	<5.89	<5.84	<5.99	
SELENIUM	700	<3.61	<6.24	<3.27	<2.34	<1.73	<2.03	<1.77	<1.75	<1.91	<2.02	<1.77	<1.75	<1.80	
SM 2540G (% Wt)															
% Solids	~	39.0	23.2	45.3	59.3	80.9	72.9	84.1	79.0	77.1	74.0	84.7	79.1	81.1	
SW-846 9014 (mg/Kg)															
REACTIVE CYANIDE	~	<0.707	<1.40	<0.571	<0.449	<0.369	<0.347	<0.311	<0.357	<0.342	<0.494	<0.309	<0.288	<0.369	

- 1.. Bolded values exceed the S-2/ GW-1 concentrations
2. Grey columns are samples taken from soil that has been excavated
3. ~ = No Method 1 Standard or UCL available
4. NT - Not Tested

Table 1: Summary of Confirmatory Soil Sample Results
for AOC Removal Action Docket Docket No. 01-2018-0009
BJAT, LLC Superfund Site 300 Fisher St. Franklin, MA

Parameter		SAMPLING LOCATION													
	S-2/GW-1	CDW- S27A	CDW- S27B	CDW- S28A	CDW- S28B	CDW- S29A	CDW- S29B	CDW- S30	CDW- S31	CDW- S32	CDW- S33	CDW- S34	CDW- S35	CDW- S36A	
Sampling Date		10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	
Sample Depth		0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	3.5'	3.5'	3.5'	3.5'	3.5'	3.5'	0-1.5'	
Type		Composite	Composite	Composite	Composite	Composite	Composite	Grab	Grab	Grab	Grab	Grab	Grab	Composite	
SW-846 6010C-D (mg/Kg dry) Metals Digestion															
SILVER	200	<1.74	<1.90	<1.78	<1.78	<1.95	<1.67	<2.33	<1.93	<2.01	<1.79	<2.16	<4.39	<2.20	
ARSENIC	20	8.65	21.1	10.5	11.1	11.6	15.3	17.1	6.4	<2.01	2.23	3.08	46.3	28.0	
BARIUM	3000	856	1980	603	559	877	599	921	147	72.5	259	2870	10800	3140	
CADMIUM	100	0.669	2.33	<0.594	<0.593	1.07	0.787	<0.777	<0.644	<0.669	0.647	2.36	21.3	8.65	
CHROMIUM	200	3.65	8.06	6.11	5.57	7.56	7.34	7.11	5.54	8.32	7.44	11.4	43.8	12.2	
MERCURY	30	3.18	3.02	1.77	2.73	2.11	1.65	4.61	0.0957	0.0716	0.263	2.37	62.9	13.5	
LEAD	600	954	2490	597	646	1140	929	2680	403	12.8	568	547	34100	12200	
ANTIMONY	30	<5.82	40.1	<5.94	7.75	8.02	10.3	17.0	<6.44	<6.69	<5.96	<7.20	37.3	16.9	
SELENIUM	700	<1.74	<1.90	<1.78	<1.78	<1.95	<1.67	<2.33	<1.93	<2.01	<1.79	<2.16	<4.39	<2.20	
SM 2540G (% Wt)															
% Solids	~	84.2	75.7	81.0	80.0	75.9	82.8	63.1	73.6	74.4	80.1	68.6	31.7	63.1	
SW-846 9014 (mg/Kg)															
REACTIVE CYANIDE	~	<0.314	6.94	<0.321	<0.330	<0.592	0.453	<0.504	<0.393	<0.338	<0.369	<0.436	<0.839	<0.402	

Parameter		SAMPLING LOCATION													
	S-2/GW-1	CDW- S36B	CDW- S37	CDW- S37Dup	CDW- S38A	CDW- S38B	CDW- S39	CDW- S40A	CDW- S40B	CDW- S41	CDW- S42A	CDW- S42B	CDW- S43A	CDW- S43B	
Sampling Date		10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/9/2018	10/11/2018	10/11/2018	
Sample Depth		1.5-3.5'	3.5'	3.5'	0-1.5'	1.5-3.5'	3.5'	0-1.5'	1.5-3.5'	3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	
Type		Composite	Grab	Grab	Composite	Composite	Grab	Composite	Composite	Grab	Composite	Composite	Composite	Composite	
SW-846 6010C-D (mg/Kg dry) Metals Digestion															
SILVER	200	<2.42	<2.11	<2.12	<1.97	<1.91	<2.22	<3.55	<1.89	<1.74	<2.02	<1.89	<2.08	<2.37	
ARSENIC	20	35.4	18.1	3.25	36.0	38.2	<2.22	54.8	8.98	<1.74	18.3	16.4	8.90	6.04	
BARIUM	3000	3640	454	967	9350	7940	51.2	3150	1140	34.2	1090	854	293	308	
CADMIUM	100	15.5	3.48	0.82	11.0	13.5	<0.741	4.68	2.14	<0.581	1.92	1.73	2.95	1.68	
CHROMIUM	200	13.6	8.25	4.97	26.1	22.1	9.29	32.9	8.42	5.23	12.9	12.7	10.8	11.1	
MERCURY	30	10.3	11.4	15.1	30.8	27.3	0.160	41.0	9.55	0.131	2.85	2.14	10.9	7.8	
LEAD	600	14700	2620	3070	16800	12500	42.2	86400	4640	96.6	2230	1700	515	312	
ANTIMONY	30	15.8	<7.05	<7.07	18.4	20.1	<7.41	627	15.2	<5.81	<6.72	<6.29	<6.93	<7.90	
SELENIUM	700	<2.42	<2.11	<2.12	<1.97	<1.91	<2.22	<3.55	<1.89	<1.74	<2.02	<1.89	<2.08	<2.37	
SM 2540G (% Wt)															
% Solids	~	61.8	67.0	68.9	73.2	77.6	66.6	38.5	75.0	83.0	73.5	78.0	69.5	60.0	
SW-846 9014 (mg/Kg)															
REACTIVE CYANIDE	~	<0.387	<0.416	<0.397	<0.342	<0.441	<0.4260	8.69	<0.339	<0.351	<0.341	<0.383	<0.365	<0.448	

- 1.. Bolded values exceed the S-2/ GW-1 concentrations
2. Grey columns are samples taken from soil that has been excavated
3. ~ = No Method 1 Standard or UCL available
4. NT - Not Tested

Table 1: Summary of Confirmatory Soil Sample Results
for AOC Removal Action Docket Docket No. 01-2018-0009
BJAT, LLC Superfund Site 300 Fisher St. Franklin, MA

Parameter	S-2/GW-1	SAMPLING LOCATION												
		CDW- S44A	CDW- S44B	CDW- S45A	CDW- S45B	CDW- S46A	CDW- S46B	CDW- S47A	CDW- S47B	CDW- S48A	CDW- S48Dup	CDW- S49A	CDW- S49B	CDW- S49ADup
Sampling Date		10/11/2018	10/11/2018	10/11/2018	10/11/2018	10/11/2018	10/11/2018	10/11/2018	10/11/2018	10/11/2018	10/11/2018	10/17/2018	10/17/2018	10/17/2018
Sample Depth		0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	3.5'	3.5'	0-1.5'	1.5-3.5'	0-1.5'
Type		Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Grab	Grab	Composite	Composite	Composite
SW-846 6010C-D (mg/Kg dry) Metals Digestion														
SILVER	200	<2.24	<1.91	<1.80	<2.12	<1.64	<1.92	<1.71	<1.85	<1.94	<2.12	<2.56	<2.89	<2.01
ARSENIC	20	3.23	3.16	9.81	3.47	2.84	4.37	2.21	5.23	2.24	2.52	7.77	3.20	7.1
BARIUM	3000	80.4	70.7	427	140	492	216	1210	1680	56.7	60.2	1180	149	516
CADMIUM	100	<0.745	<0.637	<0.598	<0.706	1.53	<0.641	1.36	4.85	<0.647	<0.708	5.33	<0.963	2.94
CHROMIUM	200	10.5	12.3	6.8	7.76	5.38	6.72	5.95	10.8	7.02	7.81	9.58	13.0	6.63
MERCURY	30	1.86	1.16	4.23	1.81	1.79	2.69	1.04	3.98	0.363	0.574	2.23	0.349	56.4
LEAD	600	84.4	36.6	435	91.4	221	335	394	632	67.5	82.7	851	39.2	894
ANTIMONY	30	<7.45	<6.37	7.39	<7.06	<5.48	<6.41	20.8	14.9	<6.47	<7.08	29.0	<9.63	19.8
SELENIUM	700	<2.24	<1.91	<1.80	<2.12	<1.64	<1.92	<1.71	<1.85	<1.94	<2.12	<2.56	<2.89	<2.01
SM 2540G (% Wt)														
% Solids	~	64.7	71.4	81.6	69.6	86.2	77.4	81.7	74.8	73.1	70.3	54.0	50.5	68.6
SW-846 9014 (mg/Kg)														
REACTIVE CYANIDE	~	<0.401	<0.358	<0.309	<0.408	0.317	<0.338	<0.318	<0.387	<0.346	<0.485	<0.503	<0.561	<0.445

Parameter	S-2/GW-1	SAMPLING LOCATION												
		CDW- S50A	CDW- S50B	CDW- S51A	CDW- S51B	CDW- S52A	CDW- S52B	CDW- S53A	CDW- S53B	CDW- S54A	CDW- S54B	CDW- S55A	CDW- S55B	CDW- S56
Sampling Date		10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/17/2018	10/19/2018	10/19/2018	10/19/2018	10/19/2018	10/19/2018	10/19/2018	10/19/2018
Sample Depth		0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-3.5'
Type		Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite
SW-846 6010C-D (mg/Kg dry) Metals Digestion														
SILVER	200	<1.75	<3.29	<1.98	<1.80	<1.87	<2.88	<2.84	<2.26	<1.77	<1.99	<6.35	<2.18	<2.04
ARSENIC	20	4.83	<3.29	6.18	<1.80	13.8	3.27	12.4	11.2	<1.77	2.25	65.1	3.02	<2.04
BARIUM	3000	671	132	416	38.7	203	118	916	709	49.4	32.9	7670	314	72.9
CADMIUM	100	1.4	<1.10	2.97	<0.601	4.01	<0.961	3.46	5.73	<0.589	<0.662	14.0	<0.726	<0.680
CHROMIUM	200	5.72	11.7	6.35	6.30	6.75	15.5	17.1	19.2	6.87	9.70	22.6	6.38	15.9
MERCURY	30	5.28	0.833	3.08	0.0903	0.46	8.05	39.5	6.52	0.0570	<0.0385	20.1	0.626	0.158
LEAD	600	830	365	1020	65.7	1320	147	9210	5120	74.9	50.8	25800	1280	26.8
ANTIMONY	30	9.7	<11.0	11.5	<6.01	8.24	<9.61	21.9	17.8	<5.89	<6.62	112	<7.26	<6.80
SELENIUM	700	3.05	<3.29	<1.98	<1.80	<1.87	<2.88	<2.84	<2.26	<1.77	<1.99	<6.35	<2.18	<2.04
SM 2540G (% Wt)														
% Solids	~	79.3	44.2	70.7	82.1	76.9	49.1	51.0	63.3	78.3	70.3	21.7	68.6	69.9
SW-846 9014 (mg/Kg)														
REACTIVE CYANIDE	~	<0.318	<0.756	<0.343	<0.435	<0.331	<0.769	<0.615	<0.473	<0.414	<0.457	<1.66	<0.409	<0.534

- 1.. Bolded values exceed the S-2/ GW-1 concentrations
2. Grey columns are samples taken from soil that has been excavated
3. ~ = No Method 1 Standard or UCL available
4. NT - Not Tested

Table 1: Summary of Confirmatory Soil Sample Results
for AOC Removal Action Docket Docket No. 01-2018-0009
BJAT, LLC Superfund Site 300 Fisher St. Franklin, MA

Parameter	S-2/GW-1	SAMPLING LOCATION												
		CDW- S56 Dup	CDW- S57	CDW- S57 Dup	CDW- S58	CDW- S58 Dup	CDW- S59	CDW- S59 Dup	CDW- S60A	CDW- S60B	CDW- S61A	CDW- S61 Dup	CDW- S62A	CDW- S62B
Sampling Date		10/19/2018	10/19/2018	10/19/2018	10/19/2018	10/19/2018	10/19/2018	10/19/2018	10/22/2018	10/22/2018	10/23/2018	10/23/2018	11/19/2018	11/19/2018
Sample Depth		0-3.5'	0-3.5'	0-3.5'	0-3.5'	0-3.5'	0-3.5'	0-3.5'	0-1.5'	1.5-3.5'	3.5'	3.5'	0-1.5'	1.5-3.5'
Type		Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Grab	Grab	Composite	Composite
SW-846 6010C-D (mg/Kg dry) Metals Digestion														
SILVER	200	<2.12	<1.66	<1.68	<3.98	<5.05	<2.27	<2.55	<4.85	<2.07	<1.64	<1.76	NT	NT
ARSENIC	20	2.12	<1.66	<1.68	15.7	25.8	<2.27	<2.55	23.6	6.36	<1.64	<1.76	NT	NT
BARIUM	3000	101	48.5	54.9	1880	1470	37.2	71.3	1290	142	28.9	24.3	NT	NT
CADMIUM	100	<0.707	<0.554	<0.559	3.61	4.73	<0.756	<0.851	8.88	<0.689	<0.546	<0.586	NT	NT
CHROMIUM	200	21.9	10.0	11.2	14.7	20.0	7.87	8.77	19.4	24.8	8.11	9.27	NT	NT
MERCURY	30	0.0940	<0.0343	<0.0315	7.18	5.66	<0.0474	0.0928	11.7	1.38	<0.0328	<0.0313	NT	NT
LEAD	600	23.6	8.19	10.9	9430	13100	29.2	242	13300	1300	33.3	36.2	3560	25.7
ANTIMONY	30	<7.07	<5.54	<5.59	18.7	27.2	<7.56	<8.51	30.6	<6.89	<5.46	<5.86	<26.7	<6.25
SELENIUM	700	<2.12	<1.66	<1.68	<3.98	<5.05	<2.27	<2.55	<4.85	<2.07	<1.64	<1.76	NT	NT
SM 2540G (% Wt)														
% Solids	~	68.1	85.3	82.9	37.4	29.5	61.3	56.0	30.6	66.4	88.1	84.0	16.8	77.6
SW-846 9014 (mg/Kg)														
REACTIVE CYANIDE	~	<0.584	<0.375	<0.382	<1.07	<1.13	<0.563	<0.617	<1.25	<0.464	<0.362	<0.339	33.2	<0.324

Parameter	S-2/GW-1	SAMPLING LOCATION					
		CDW- S63A	CDW- S63B	CDW- S64A	CDW- S64B	CDW- S65A	CDW- S65B
Sampling Date		11/19/2018	11/19/2018	11/19/2018	11/19/2018	11/19/2018	11/19/2018
Sample Depth		0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'	0-1.5'	1.5-3.5'
Type		Composite	Composite	Composite	Composite	Composite	Composite
SW-846 6010C-D (mg/Kg dry) Metals Digestion							
SILVER	200	NT	NT	NT	NT	NT	NT
ARSENIC	20	NT	NT	NT	NT	NT	NT
BARIUM	3000	NT	NT	NT	NT	NT	NT
CADMIUM	100	NT	NT	NT	NT	NT	NT
CHROMIUM	200	NT	NT	NT	NT	NT	NT
MERCURY	30	NT	NT	NT	NT	NT	NT
LEAD	600	162	12.3	7160	12	350	3.55
ANTIMONY	30	<8.65	<5.69	<10.8	<5.89	<11.3	<5.76
SELENIUM	700	NT	NT	NT	NT	NT	NT
SM 2540G (% Wt)							
% Solids	~	55.4	84.14	45.8	83.5	42.4	80.1
SW-846 9014 (mg/Kg)							
REACTIVE CYANIDE	~	<0.473	<0.341	<0.725	<0.364	<0.610	<0.386

- 1.. Bolded values exceed the S-2/ GW-1 concentrations
2. Grey columns are samples taken from soil that has been excavated
3. ~ = No Method 1 Standard or UCL available
4. NT - Not Tested

Table 2: Summary of Characterization Soil Sample Results
for AOC Removal Action Docket Docket No. 01-2018-0009
BJAT, LLC Superfund Site 300 Fisher St. Franklin, MA

Sample Location	Drum Waste	N/S Waste	Mid Soil
Sample Date	10/4/2018	10/4/2018	10/4/2018
Associated Sample Locations	DM-1 through DM- 6	E100 H120	F080 G100 H080
Approved Volume	8 cubic yards	750 tons	200 tons
Facility	Stablex as haz in tPacks	Treated and sent to News and Turnkey	Treated and sent to News and Turnkey
VOCs SW8260C (ug/kg)			
1,1,1,2-Tetrachloroethane	<1900	<370	<330
1,1,1-Trichloroethane	<1900	<370	<330
1,1,2,2-Tetrachloroethane	<1200	<220	<200
1,1,2-Trichloroethane	<1900	<370	<330
1,1-Dichloroethane	<1900	<370	<330
1,1-Dichloroethene	<1900	<370	<330
1,1-Dichloropropene	<1900	<370	<330
1,2,3-Trichlorobenzene	<1900	<370	<330
1,2,3-Trichloropropane	<1900	<370	<330
1,2,4-Trichlorobenzene	<1900	<370	<330
1,2,4-Trimethylbenzene	<1900	<370	<330
1,2-Dibromo-3-chloropropane	<1900	<370	<330
1,2-Dibromoethane	<1900	<370	<330
1,2-Dichlorobenzene	<1900	<370	<330
1,2-Dichloroethane	<1900	<370	<330
1,2-Dichloropropane	<1900	<370	<330
1,3,5-Trimethylbenzene	<1900	<370	<330
1,3-Dichlorobenzene	<1900	<370	<330
1,3-Dichloropropane	<1900	<370	<330
1,4-Dichlorobenzene	<1900	<370	<330
2,2-Dichloropropane	<1900	<370	<330
2-Chlorotoluene	<1900	<370	<330
2-Hexanone	<9600	<1800	<1600
4-Chlorotoluene	<1900	<370	<330
4-Methyl-2-pentanone	<9600	<1800	<1600
Acetone	<96000	<18000	<16000
Acrylonitrile	<1900	<370	<330
Benzene	<1900	<370	<330
Bromobenzene	<1900	<370	<330
Bromochloromethane	<1900	<370	<330
Bromodichloromethane	<1900	<370	<330
Bromoform	<1900	<370	<330
Bromomethane	<1900	<370	<330
Carbon Disulfide	<1900	<370	<330
Carbon tetrachloride	<1900	<370	<330
Chlorobenzene	<1900	<370	<330
Chloroethane	<1900	<370	<330
Chloroform	<1900	<370	<330
Chloromethane	<1900	<370	<330
cis-1,2-Dichloroethene	<1900	<370	<330
cis-1,3-Dichloropropene	<1900	<370	<330
Dibromochloromethane	<1200	<220	<200
Dibromomethane	<1900	<370	<330
Dichlorodifluoromethane	<1900	<370	<330
Ethylbenzene	<1900	<370	<330
Hexachlorobutadiene	<1900	<370	<330
Isopropylbenzene	<1900	<370	<330
m&p-Xylene	<1900	<370	<330
Methyl Ethyl Ketone	<12000	<2200	<2000
Methyl t-butyl ether (MTBE)	<3800	<740	<660
Methylene chloride	<3800	<740	<660
Naphthalene	<1900	<370	<330
n-Butylbenzene	<1900	<370	<330
n-Propylbenzene	<1900	<370	<330
o-Xylene	<1900	<370	<330
p-Isopropyltoluene	<1900	<370	<330
sec-Butylbenzene	<1900	<370	<330
Styrene	<1900	<370	<330
tert-Butylbenzene	<1900	<370	<330
Tetrachloroethene	<1900	<370	<330
Tetrahydrofuran (THF)	<3800	<740	<660
Toluene	<1900	<370	<330
Total Xylenes	<1900	<370	<330
trans-1,2-Dichloroethene	<1900	<370	<330
trans-1,3-Dichloropropene	<1900	<370	<330
trans-1,4-dichloro-2-butene	<3800	<740	<660
Trichloroethene	<1900	<370	<330
Trichlorofluoromethane	<1900	<370	<330
Trichlorotrifluoroethane	<3800	<740	<660
Vinyl chloride	<1900	<370	<330

Sample Location	Drum Waste	N/S Waste	Mid Soil
Sample Date	10/4/2018	10/4/2018	10/4/2018
Associated Sample Locations	DM-1 through DM- 6	E100 H120	F080 G100 H080
Approved Volume	8 cubic yards	750 tons	200 tons
Facility	Stablex as haz in tPacks	Treated and sent to News and Turnkey	Treated and sent to News and Turnkey
VOCs SW8260C (OXY) (ug/kg)			
1,4-Dioxane	<38000	<7400	<6600
Diethyl ether	<1900	<370	<330
Di-isopropyl ether	<1900	<370	<330
Ethyl tert-butyl ether	<1900	<370	<330
tert-amyl methyl ether	<1900	<370	<330
Total Metals SW846 6010C (mg/kg)			
Antimony	375	<6.04	33
Arsenic	37.3	9.56	28
Beryllium	<0.913	<0.604	<0.714
Cadmium	111	3.34	12.2
Chromium	8.11	8.7	13.3
Copper	350	91	149
Lead	2910	701	9990
Mercury	4.51	1.1	18.4
Nickel	6.79	12.2	5.59
Selenium	<2.74	<1.81	<2.14
Silver	<2.74	<1.81	<2.14
Thallium	<5.48	<3.62	<4.28
Zinc	76200	672	9270
SW846 1311 (N/A)			
TCLP Extraction	Completed	Completed	Completed
Final pH of leachate	4.89	4.92	5.03
TCLP Metals SW846 1311/6010C (mg/l)			
Cadmium	0.0546		
Lead	6.49	1.69	40.6
PCBs (ug/kg)			
Aroclor-1016	<39.2	<25.6	<28.7
Aroclor-1221	<39.2	<25.6	<28.7
Aroclor-1232	<39.2	<25.6	<28.7
Aroclor-1242	<39.2	<25.6	<28.7
Aroclor-1248	<39.2	<25.6	<28.7
Aroclor-1254	<39.2	<25.6	<28.7
Aroclor-1260	<39.2	-	-
Aroclor-1260 [2C]	-	215	39.9
Aroclor-1262	<39.2	<25.6	<28.7
Aroclor-1268	<39.2	<25.6	<28.7
EPH SW846 8100Mod. (mg/kg)			
Gasoline	<516	<69.4	<377
Fuel Oil #2	<516	<69.4	<377
Fuel Oil #4	<516	<69.4	<377
Fuel Oil #6	<516	<69.4	<377
Motor Oil	<516	<69.4	<377
Ligroin	<516	<69.4	<377
Aviation Fuel	<516	<69.4	<377
Hydraulic Oil	<516	<69.4	<377
Dielectric Fluid	<516	<69.4	<377
Unidentified	12200	678	4840
Other Oil	Calculated as	Calculated as	Calculated as
Total Petroleum Hydrocarbons	12200	678	4840

Table 2: Summary of Characterization Soil Sample Results
for AOC Removal Action Docket Docket No. 01-2018-0009
BJAT, LLC Superfund Site 300 Fisher St. Franklin, MA

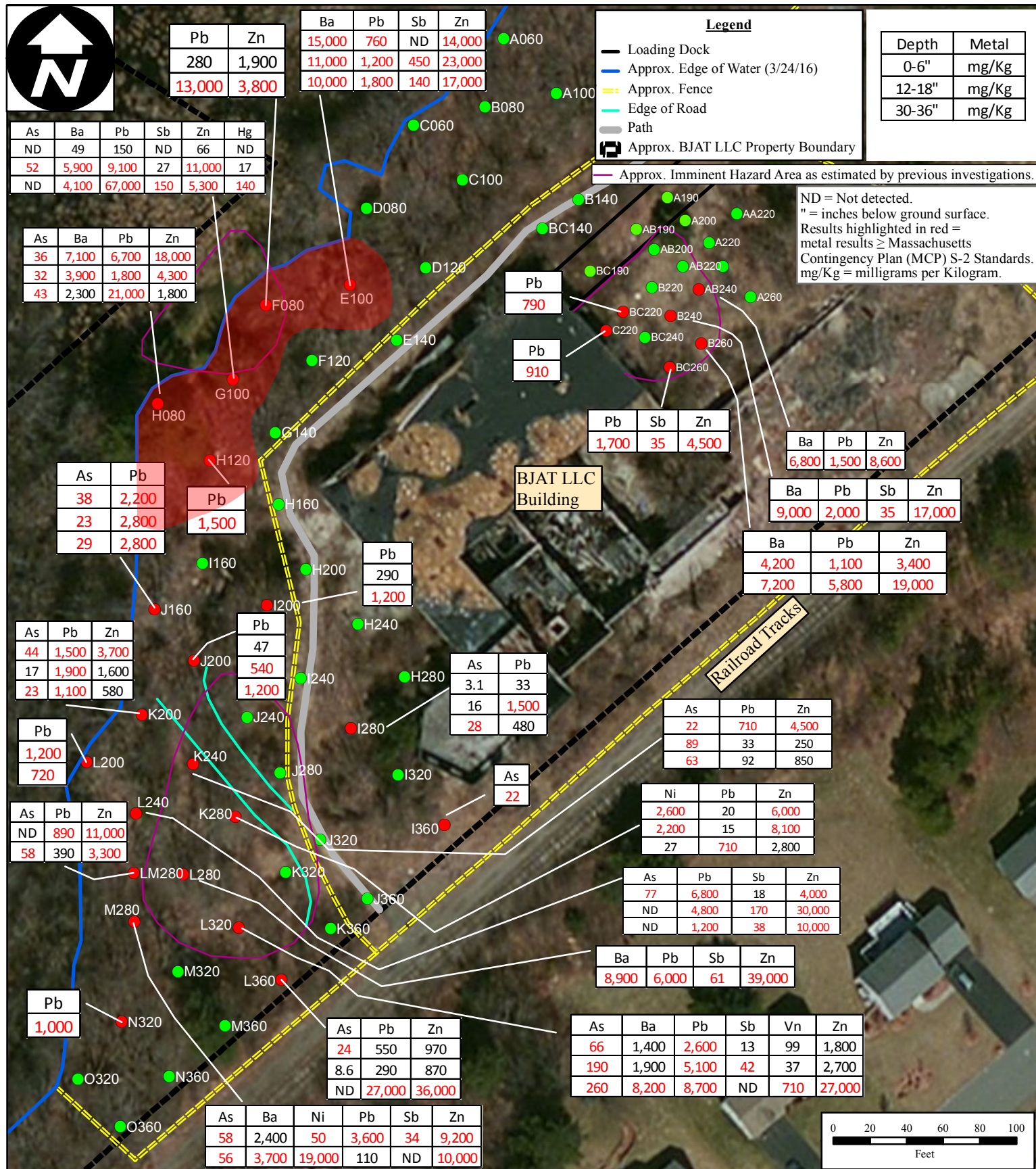
Sample Location	Drum Waste	N/S Waste	Mid Soil
Sample Date	10/4/2018	10/4/2018	10/4/2018
Associated Sample Locations	DM-1 through DM- 6	E100 H120	F080 G100 H080
Approved Volume	8 cubic yards	750 tons	200 tons
Facility	Stablex as haz in tPacks	Treated and sent to News and Turnkey	Treated and sent to News and Turnkey
SVOCs SW846 8270D (µg/kg)			
Acenaphthene	<658	<438	<484
Acenaphthylene	<658	<438	<484
Aniline	<3260	<2170	<2390
Anthracene	<658	<438	<484
Azobenzene/Diphenyldiazene	<3260	<2170	<2390
Benidine	<6510	<4340	<4790
Benzo (a) anthracene	1140	1280	<484
Benzo (a) pyrene	<658	1580	<484
Benzo (b) fluoranthene	1190	1170	<484
Benzo (g,h,i) perylene	<658	1640	<484
Benzo (k) fluoranthene	1580	1810	<484
Benzoic acid	<3260	<2170	<2390
Benzyl alcohol	<3260	<2170	<2390
Bis(2-chloroethoxy)methane	<3260	<2170	<2390
Bis(2-chloroethyl)ether	<1650	<1100	<1210
Bis(2-chloroisopropyl)ether	<1650	<1100	<1210
Bis(2-ethylhexyl)phthalate	<1650	<1100	<1210
4-Bromophenyl phenyl ether	<3260	<2170	<2390
Butyl benzyl phthalate	<3260	<2170	<2390
Carbazole	<1650	<1100	<1210
4-Chloro-3-methylphenol	<3260	<2170	<2390
4-Chloroaniline	<1650	<1100	<1210
2-Chloronaphthalene	<3260	<2170	<2390
2-Chlorophenol	<1650	<1100	<1210
4-Chlorophenyl phenyl ether	<3260	<2170	<2390
Chrysene	2170	1360	<484
Dibenzo (a,h) anthracene	<658	<438	<484
Dibenzofuran	<1650	<1100	<1210
1,2-Dichlorobenzene	<3260	<2170	<2390
1,3-Dichlorobenzene	<3260	<2170	<2390
1,4-Dichlorobenzene	<3260	<2170	<2390
3,3'-Dichlorobenzidine	<3260	<2170	<2390
2,4-Dichlorophenol	<1650	<1100	<1210
Diethyl phthalate	<3260	<2170	<2390
Dimethyl phthalate	<3260	<2170	<2390
2,4-Dimethylphenol	<3260	<2170	<2390
Di-n-butyl phthalate	<3260	<2170	<2390
4,6-Dinitro-2-methylphenol	<3260	<2170	<2390
2,4-Dinitrophenol	<3260	<2170	<2390
2,4-Dinitrotoluene	<1650	<1100	<1210
2,6-Dinitrotoluene	<1650	<1100	<1210
Di-n-octyl phthalate	<3260	<2170	<2390
Fluoranthene	1840	2140	689
Fluorene	<658	<438	<484
Hexachlorobenzene	<1650	<1100	<1210
Hexachlorobutadiene	<1650	<1100	<1210
Hexachlorocyclopentadiene	<1650	<1100	<1210
Hexachloroethane	<1650	<1100	<1210
Indeno (1,2,3-cd) pyrene	<658	1600	<484
Isophorone	<1650	<1100	<1210
2-Methylnaphthalene	<658	<438	<484
2-Methylphenol	<3260	<2170	<2390
3 & 4-Methylphenol	<3260	<2170	<2390
Naphthalene	<658	<438	<484
2-Nitroaniline	<3260	<2170	<2390
3-Nitroaniline	<3260	<2170	<2390
4-Nitroaniline	<1650	<1100	<1210
Nitrobenzene	<1650	<1100	<1210
2-Nitrophenol	<1650	<1100	<1210
4-Nitrophenol	<13000	<8670	<9570
N-Nitrosodimethylamine	<1650	<1100	<1210
N-Nitrosodi-n-propylamine	<1650	<1100	<1210
N-Nitrosodiphenylamine	<3260	<2170	<2390
Pentachlorophenol	<3260	<2170	<2390
Phenanthrene	<658	924	<484
Phenol	<3260	<2170	<2390
Pyrene	1860	1380	<484
Pyridine	<3260	<2170	<2390
1,2,4-Trichlorobenzene	<3260	<2170	<2390
1-Methylnaphthalene	<658	<438	<484
2,4,5-Trichlorophenol	<3260	<2170	<2390
2,4,6-Trichlorophenol	<1650	<1100	<1210
Pentachloronitrobenzene	<3260	<2170	<2390
1,2,4,5-Tetrachlorobenzene	<3260	<2170	<2390

Sample Location	Drum Waste	N/S Waste	Mid Soil
Sample Date	10/4/2018	10/4/2018	10/4/2018
Associated Sample Locations	DM-1 through DM- 6	E100 H120	F080 G100 H080
Approved Volume	8 cubic yards	750 tons	200 tons
Facility	Stablex as haz in tPacks	Treated and sent to News and Turnkey	Treated and sent to News and Turnkey
SW846 9045D (pH Units)			
pH	7.47	7.54	7.2
SW846 9095B (N/A)			
Free Liquid	Absent	Absent	Absent
SW846 Ch. 7.3 (mg/kg)			
Reactive Cyanide	<23.8	<24.2	<24.3
Reactive Sulfide	<47.5	<48.4	<48.5
SM22 2510B (uS/cm)			
Specific Conductance (EC)	143	107	100
SM2540 G (11) Mod. (%)			
% Solids	50.7	76.1	68.9
SW846-%Solid (%)			
Percent Solid	49	85	69
SW846 1010A (°F)			
Flashpoint	>200	>200	>200
SW846 1311/6010C (N/A)			
Preservation	Lab Preserved	Lab Preserved	Lab Preserved

Table 3: Summary of Overdig Soil Sample Results
for AOC Removal Action Docket Docket No. 01-2018-0009
BJAT, LLC Superfund Site 300 Fisher St. Franklin, MA

Sample Location	Overdig - 001	Overdig - 002	Overdig - 003	Overdig - 004
Sample Date	2/21/2019	2/21/2019	2/21/2019	2/21/2019
Associated Sample Locations				
Approved Volume				
Facility	Stablex as haz in tPacks	Stablex as haz in tPacks	Stablex as haz in tPacks	Stablex as haz in tPacks
TCLP Lead (mg/L)	3.58	6.55	24.7	4.86

APPENDIX A



APPENDIX B

Sample	State Plane X Y Meters zone 2001				UTM zone 19T	
	m East	m North	Latitude	Longitude	mE	mN
1	207435.56	869401.92	42.0749859	-71.410145	300625.93	4660912.71
2	207391.07	869381.48	42.0748023	-71.4106829	300580.86	4660893.58
3	207386.35	869375.46	42.0747481	-71.41074	300575.96	4660887.70
4	207382.85	869379.60	42.0747854	-71.4107823	300572.58	4660891.94
5	207369.87	869358.39	42.0745946	-71.4109394	300558.99	4660871.11
6	207397.38	869379.68	42.074786	-71.4106067	300587.11	4660891.59
7	207396.24	869377.89	42.0747699	-71.4106205	300585.92	4660889.84
8	207386.53	869372.02	42.0747171	-71.4107379	300578.04	4660884.25
9	207388.06	869381.83	42.0748054	-71.4107193	300577.86	4660894.01
10	207383.79	869377.61	42.0747675	-71.4107709	300573.47	4660889.92
11	207377.10	869374.09	42.0747359	-71.41085180	300566.67	4660886.60
13	207381.03	869369.18	42.0746916	-71.4108044	300570.46	4660881.57
14	207369.04	869368.98	42.0746899	-71.4109493	300558.47	4660881.72
15	207364.44	869364.92	42.0746534	-71.4110049	300553.75	4660877.8
16	207361.11	869358.18	42.0745928	-71.4110453	300550.22	4660871.16
17	207352.65	869356.52	42.0745779	-71.4111475	300541.72	4660869.75
18	207346.77	869351.49	42.0745327	-71.4112186	300535.69	4660864.89
19	207349.35	869345.46	42.0744784	-71.4111875	300538.1	4660858.79
20	207342.62	869345.29	42.0744769	-71.4112689	300531.36	4660858.81
21	207347.20	869339.72	42.0744267	-71.4112136	300535.78	4660853.11
22	207352.56	869333.97	42.0743749	-71.4111489	300540.97	4660847.21
23	207356.46	869325.08	42.0742948	-71.4111019	300544.61	4660838.21
23	207357.46	869328.87	42.0743289	-71.4110897	300545.72	4660841.97
24	207356.74	869319.60	42.0742455	-71.4110986	300544.73	4660832.72
25	207354.65	869313.14	42.0741873	-71.4111239	300542.45	4660826.32
26	207358.33	869313.12	42.0741871	-71.4110794	300546.13	4660826.19
27	207360.09	869311.53	42.0741728	-71.4110582	300547.84	4660824.55
28	207361.23	869322.40	42.0742706	-71.4110443	300549.30	4660835.39
29	207360.10	869328.58	42.0743263	-71.4110578	300548.35	4660841.60
30	207354.89	869317.68	42.0742282	-71.4111209	300542.82	4660830.85
31	207357.59	869329.55	42.0743350	-71.4110882	300545.87	4660842.64
32	207371.87	869369.35	42.0746932	-71.4109151	300561.31	4660882.01
33	207368.21	869365.00	42.0746541	-71.4109594	300557.52	4660877.77
34	207364.72	869361.33	42.0746211	-71.4110016	300553.93	4660874.20
35	207360.01	869357.15	42.0745835	-71.4110586	300549.09	4660870.16
36	207378.97	869367.27	42.0746744	-71.4108293	300568.34	4660879.72
37	207356.30	869352.07	42.0745378	-71.4111035	300545.24	4660865.19
38	207370.82	869356.53	42.0745778	-71.4109279	300559.88	4660869.23
39	207351.83	869348.51	42.0745058	-71.4111575	300540.66	4660861.76
40	207371.03	869350.91	42.0745272	-71.4109255	300559.93	4660863.60
41	207350.32	869347.37	42.0744955	-71.4111758	300539.12	4660860.67
42	207352.34	869339.85	42.0744278	-71.4111515	300540.92	4660853.09
43	207393.22	869389.52	42.0748746	-71.4106568	300583.24	4660901.55
44	207394.69	869386.79	42.0748500	-71.4106391	300584.63	4660898.78
45	207397.13	869386.66	42.0748488	-71.4106096	300587.07	4660898.58
46	207399.93	869385.11	42.0748349	-71.4105758	300589.82	4660896.95

Sample	State Plane X Y Meters zone 2001				UTM zone 19T	
	m East	m North	Latitude	Longitude	mE	mN
47	207398.41	869382.18	42.0748085	-071.4105942	300588.21	4660894.06
48	207392.61	869384.28	42.0748275	-71.4106643	300582.48	4660896.33
49	207375.75	869382.86	42.0748148	-71.410868	300565.58	4660895.4
50	207370.81	869378.48	42.0747754	-71.4109278	300560.52	4660891.17
51	207366.18	869374.52	42.0747398	-71.4109838	300555.77	4660887.35
52	207360.89	869370.53	42.0747040	-71.4110478	300550.37	4660883.51
53	207360.31	869368.30	42.0746839	-71.4110548	300549.72	4660881.3
54	207355.86	869363.24	42.0746384	-71.4111086	300545.12	4660876.37
55	207355.05	869359.52	42.0746049	-71.4111185	300544.21	4660872.68
56	207340.95	869345.56	42.0744793	-71.411289	300529.70	4660859.13
57	207339.64	869341.49	42.0744427	-71.4113049	300528.27	4660855.1
58	207343.43	869336.66	42.0743992	-71.4112592	300531.92	4660850.16
59	207350.37	869334.39	42.0743787	-71.4111753	300538.79	4660847.69
60	207342.79	869349.22	42.0745123	-71.4112668	300531.65	4660862.74
61	207349.35	869345.46	42.0744784	-71.4111875	300538.1	4660858.79
Drum Area 1	207435.56	869401.92	42.0749859	-71.410145	300625.93	4660912.71
Drum Area 2	207391.07	869381.48	42.0748023	-71.4106829	300580.86	4660893.58
Drum Area 3	207386.35	869375.46	42.0747481	-71.41074	300575.96	4660887.7
Drum Area 4	207382.85	869379.6	42.0747854	-71.4107823	300572.58	4660891.94
Drum Area 5	207369.87	869358.39	42.0745946	-71.4109394	300558.99	4660871.11
Drum Area 6	207343.85	869285.32	42.073937	-71.4112548	300530.84	4660798.83
Drum Area 7	207348.07	869267.6	42.0737774	-71.411204	300534.54	4660780.99
Drum Area 8	207347.5	869255.8	42.0736711	-71.411211	300533.62	4660769.21
Drum Area 9	207342.9	869244.5	42.0735694	-71.4112667	300528.69	4660758.05