

**REMOVAL PROGRAM
AFTER ACTION REPORT
FOR THE
DANVERSPORT EXPLOSION SITE
DANVERS, ESSEX COUNTY, MASSACHUSETTS
22 NOVEMBER 2006 THROUGH 9 MARCH 2007**

Prepared For:

U.S. Environmental Protection Agency
Region I
Emergency Planning and Response Branch
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1.0 INTRODUCTION

The following report, entitled *Removal Program After Action Report for the Danversport Explosion Site, Danvers, Essex County, Massachusetts, 22 November 2006 through 9 March 2007*, is a chronological summary of the response actions taken by the U.S. Environmental Protection Agency (EPA), Region I, Emergency Planning and Response Branch (EPRB). The report details the situation as it developed, actions taken, and resources committed.

Site activities included establishing an exclusion zone (EZ), contamination reduction zone (CRZ), and clean zone (CZ); relocating or removing non-hazardous debris to access work and equipment staging areas; conducting perimeter air monitoring and sampling; installing erosion/siltation control devices; procuring laboratory services for sample analysis; collecting and staging drums, vats, totes, and small containers; transferring liquids from aboveground storage tanks (ASTs), underground storage tanks (USTs), vats, totes, and bulk tanks for transportation and disposal; conducting hazardous categorization (HazCat) of material and debris for disposal; documenting and photodocumenting site conditions; excavating soil from areas where materials had been staged; coordinating the disposal of contaminated materials at EPA-approved facilities; performing site restoration; and demobilizing personnel and equipment.

2.0 SITE CONDITIONS AND BACKGROUND

2.1 Site Location and Description

The Danversport Explosion site (the site) is located at 126 Water Street in Danvers, Essex County, Massachusetts, and is comprised of a former industrial facility which housed two companies: Chemical Adhesives and Inks, Inc. (CAI), which manufactured inks, solvents, and coatings for plastics; and the Arnel Company (Arnel), which manufactured paints and surface coatings. The geographic coordinates, as measured from the approximate center of the former industrial facility, are 42° 32' 51.4" north latitude and 70° 55' 10.5" west longitude [see Appendix A – Figures; Figure 1 – Site Location Map]. The site is bordered to the north by residential properties and Bates Street, to the east and south by Liberty Marina and the Waters River, and to the west by Water Street and industrial facilities [see Appendix A – Figures; Figure 2 – Site Diagram]. The site is located in a high-density, mixed residential and industrial area, and is identified on Danvers Assessor's Map No. 64 as Lot No. 62.

2.2 Site History/Previous Actions

At approximately 0250 hours on 22 November 2006, a catastrophic explosion and fire occurred at the site that entirely destroyed the on-site industrial facility. In addition, the Liberty Marina and approximately 250 residential homes in the surrounding neighborhood were damaged (some severely). More than 300 residents were believed to be at home at the time of the explosion; 10 people reportedly suffered minor injuries. In addition, 300 commercial and passenger vehicles and approximately 100 boats from Liberty Marina were damaged. The energy released from the explosion was felt by residents up to 25 miles away.

Approximately 20,000 gallons of various solvents, including raw materials and finished products, were stored or used at the site. In addition, three USTs, several fuel oil ASTs, a propane AST, and several trailers containing nitrocellulose drums had been observed on site [see Appendix A – Figures; Figure 3 – Facility Diagram].

By the evening of 22 November 2006, the fire was limited to some smoldering and periodic flare-ups, and a United States Coast Guard (USCG) clean-up contractor constructed a sand berm between the former on-site industrial facility and the Waters River, to contain runoff generated as a result of firefighting activities and rain events. USCG monitored the bermed area through 23 November 2006, and pumped, as necessary, water that had accumulated against the berm.

This site is in USCG jurisdiction. EPA was initially tasked by the Incident Commander (IC) to perform air and water sampling, and to assist in preventing hazardous material migration, which could result from fire suppression activities and/or expected heavy rains. EPA requested that the Agency for Toxic Substance and Disease Registry (ATSDR) aid in the assessment of potential health risks posed by contaminants in the air. Additionally, USCG and EPA jointly notified the National Oceanographic and Atmospheric Administration (NOAA) of impacts to the water and requested that NOAA perform an environmental impact assessment for NOAA resources (*i.e.* impacted waterways). Local fire department hazardous materials (HAZMAT) teams, in coordination with Federal and State agencies, investigated the scene and sampled several drums/containers encountered in the building debris.

On 23 November 2006, the USCG transferred jurisdictional authority to EPA. The EPA, Massachusetts Department of Environmental Protection (MassDEP), Town of Danvers, and the U.S. Chemical Safety and Hazard Investigation Board (CSB) formed Unified Command for the environmental cleanup and subsequent investigations. By the evening of 23 November 2006, the fire was completely extinguished.

3.0 **SUMMARY OF FEDERAL RESPONSE ACTIONS**

3.1 **Organization of the Response**

ORGANIZATION OF THE RESPONSE		
Organization	Representatives	Responsibilities
U.S. Environmental Protection Agency (EPA) Emergency Planning and Response Branch (EPRB) One Congress Street, Suite 1100 Boston, MA 02114-2023 (617) 918-1268	Mike Nalipinski Ted Bazenas Dan Wainberg Cathy Young	EPA On-Scene Coordinators (OSCs) responsible for the initiation, oversight, and completion of all removal activities. The OSCs coordinated with U.S. Chemical Safety Board (CSB), State, and local officials.
U.S. Coast Guard (USCG) Sector Boston 427 Commercial Street Boston, MA 02109 (617) 223-3025	Lt. CDR Claudia Gelzer Lt. Kevin Collins	USCG Sector Boston Contacts.

ORGANIZATION OF THE RESPONSE

Organization	Representatives	Responsibilities
Atlantic Strike Team (ATST) Fort Dix, NJ (609) 439-3216	David Wojciechowski Neil Gibb Jason McDonnell Michael Ingrassia	USCG ATST personnel responsible for daily operations support, documentation, and site safety.
Weston Solutions, Inc. Superfund Technical Assessment and Response Team (START) 3 Riverside Drive Andover, MA 01810 (978) 552-2100	Bonnie Mace Tim Benton Ryan Manderbach Dan Muzrall Kyle Brennan	START Site Leaders that provided the OSCs with technical assistance, sampling support, analytical support, site documentation, cost tracking, site health and safety monitoring, air monitoring, and draft and final report preparation.
Shaw Environmental & Infrastructure (Shaw) Emergency Rapid Response Services (ERRS) 88C Elm Street Hopkinton, MA 01748-1656 (508) 435-9561	Mike Blodgett	Response Manager (RM) for the ERRS contractor that performed removal activities. The RM was responsible for oversight and organization of mobilization, demobilization, and waste removal.
	Gary Benham Barry Taggart	ERRS transportation and disposal coordinator responsible for categorizing hazardous materials for disposal.
Massachusetts Department of Environmental Protection (MassDEP) One Winter Street Boston, MA 02108 (978) 661-7702	John Fitzgerald Kingsly Ndi	State organization responsible for conducting residential air monitoring, sampling, and analysis.
U.S. Chemical Safety and Hazard Investigation Board (CSB) 2175 K. Street, NW, Suite 400 Washington, DC 20037-1809 (202) 261-7600	John Vorderbrueggen, PE	Federal organization responsible for the explosion investigation.
Chemical Adhesives and Inks, Inc. (CAI) 7 Martel Way Georgetown, MA 01833 (978) 352-4510	John Sartorelli	CAI property owner and operator.
Arnel Company (Arnel) 126 Water Street Danvers, MA		Arnel property owner and operator.
DeMers Associates Fire Protection Consultants 42 Highland Street Lunenburg, MA 01462 (978) 582-4816	Dave DeMers, PE	Investigators for Arnel.
Exponent 21 Strathmore Road Natick, MA 01760 (508) 652-8500	Scott Davis	Investigator for CAI.
GZA GeoEnvironmental One Edgewater Drive Norwood, MA 02062 (781) 278-3700	Garen Sahagin	Environmental consultants for CAI that performed site monitoring, conducted soil boring and monitoring well installation, and conducted soil gas and monitoring well sampling.

ORGANIZATION OF THE RESPONSE		
Organization	Representatives	Responsibilities
Fleet Environmental Services LLC (Fleet) 500 Four Rod Road Berlin, CT 06037 (860) 828-5069		ERRS subcontractor that was responsible for the 120-122 Water Street building asbestos abatement, and provided ERRS with additional equipment operators.
ENPRO Services, Inc. 12 Mulliken Way Newburyport, MA 01950 (978) 465-1595	Gary Murphy	ERRS subcontractor responsible for decontaminating equipment prior to demobilization, vacuuming stormwater runoff from the building footprint following rain events, decontaminating the baker tank, and for the transportation and disposal of the nitrocellulose material from the site.
Capital Environmental, Inc. 15C Trolley Square Wilmington, DE 19806 (302) 652-8999	Bruce Hillman	ERRS subcontractor responsible for transportation and disposal of liquid, flammable liquid, and flammable solid material from the site.
American Waste Management Services, Inc. One American Way Warren, OH 44484 (978) 304-1239	Rudy Streng	ERRS subcontractor responsible for transportation and disposal of flammable liquid (acetone) and inert solid material from the site.
General Chem/Clean Venture 133-138 Leland Street Framingham, MA 01702 (508) 872-5000	Mike Wedge	ERRS subcontractor responsible for transportation and disposal of the bulk materials, and personal protective equipment (PPE) from the site.
Global Remediation Services, Inc. 200 Main Street Glen Gardner, NJ 08826 (617) 364-0012		ERRS subcontractor responsible for transportation and disposal of wastewater from the site.

3.2 Mobilization and Site Preparation

The site-specific removal health and safety plan (HASP) was reviewed and signed by all site personnel before any site work commenced. In addition, emergency telephone numbers and directions to the hospital were posted, and site work zones were delineated. All site activities were performed in appropriate personal protective equipment (PPE) in accordance with the HASP. The site HASP was prepared by START personnel as a separate document, entitled *Health and Safety Plan for the Danvers (MA) Emergency Response Site, Danvers, Essex County, Massachusetts*. On 22 November 2006, START and EPA mobilized to the site to respond to the initial emergency. On 27 November 2006, the mobilization and staging of ERRS equipment was initiated.

Site preparation activities conducted by Emergency Rapid Response Services (ERRS) personnel consisted of clearing and grubbing the work zone and command post areas, and conducting demolition of the second story of the pizzeria/bakery building and of the two buildings (120 and 122 Water Street) located adjacent to the pizzeria/bakery building.

3.3 Chronology of Emergency Response Activities

Week Ending Friday, 24 November 2006

On 22 November 2006, EPA and START mobilized to the site in response to a chemical plant explosion and fire. START conducted air monitoring along the perimeter of the fire to determine if the release of hazardous substances posed a threat to public health and the environment. All air monitoring activities were performed in accordance with pre-approved Standard Operating Procedures (SOPs) for emergency responses. Air monitoring locations were established at the following areas: perimeter locations to the northeast, northwest, and southwest of the site; in residential areas north of the site; at Liberty Marina southeast of the site; and at industrial properties west of the site. Each day, RAE Systems AreaRAEs were deployed at these locations for the remainder of emergency response and removal activities to collect air monitoring data for lower explosive limit (LEL), oxygen (O₂), volatile organic compounds (VOC), carbon monoxide (CO), and hydrogen sulfide (H₂S).

START and EPA collected four mini-Summa canisters for VOC analysis. The samples were collected from four locations located along the residential areas north of the site. The samples were delivered to EPA's Office of Environmental Measurement and Evaluation (OEME) Laboratory located in North Chelmsford, Massachusetts.

On 23 November 2006 at approximately 1015 hours, jurisdiction was transferred from USCG Sector Boston to EPA.

On 23 November 2006, after USCG and EPA consulted with NOAA, START collected three surface water samples for VOC, semivolatile organic compounds (SVOC), and metals analyses, and alcohol screening. The samples were collected from the outfall pipes along the dockside of the marina and from run-off puddles that were located within the boom area [see Appendix A – Figures; Figure 4 – Surface Water Sample Location Map]. All samples were delivered to OEME [see Appendix B – Tables and Spreadsheets; Analytical Results, Surface Water Samples (Tables 1 - 4)]. In addition, START collected six surface water samples with MassDEP and their subcontractor from locations in the various rivers surrounding the site. All samples were delivered to a MassDEP Laboratory for VOC analysis [see Appendix B – Tables and Spreadsheets; Table 5 – VOC Analytical Results, Surface Water Samples (MassDEP)].

Starting on 24 November 2006, the CSB investigation team arrived on site to begin an assessment of the explosion. Prior to the CSB's arrival, the Danvers Fire Department, the State Fire Marshall, the Massachusetts State Police (MASP), and the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) had initiated their investigation looking for the cause and origin of the incident.

The CSB is an independent federal agency charged with investigating industrial chemical accidents. The CSB conducts root cause investigations of chemical accidents at fixed industrial facilities. The agency does not issue fines or citations, but does make recommendations to plants, regulatory agencies such as the Occupational Safety and Health Administration (OSHA) and EPA, industry organizations, and labor groups.

On 24 November 2006, START collected six sediment samples for VOC and metals analyses. The samples were collected from locations adjacent to the outfall pipes along the dockside of the marina that were within the boom area. In addition, START collected six surface water samples for VOC and metals analyses [see Appendix A – Figures; Figure 5 – Sediment and Surface Water Sample Locations]. Three sample locations were established outside the boom area; and at each sample location, two samples were co-located. All samples were delivered to OEME [see Appendix B – Tables and Spreadsheets; Tables 6 - 9 – Analytical Results, Surface Water and Sediment Samples].

START photodocumented sample locations and site activities for the duration of the project (see Appendix C – Photodocumentation Log).

Additional agencies on site during the initial emergency response included MassDEP, Massachusetts Emergency Management Agency (MEMA), USCG [Sector Boston, Atlantic Strike Team (ATST), and Investigative Services], Red Cross, 10 local Fire departments, City of Danvers personnel, Criminal Investigation Division (CID) staff from EPA, OSHA, MA Taskforce Search and Rescue (SAR) teams, the State Fire Marshall, ATF, Massachusetts Environmental Police, and the U.S. Small Business Administration (SBA).

3.4 Chronology of Removal Activities

Week Ending Friday, 1 December 2006

Site activities for the week included demolition of the second floor of the pizzeria/bakery building; securing drums and tanks with polyethylene sheeting; improving/maintaining surface water runoff containment; CSB home evaluations; installation of erosion control measures (silt fences and hay bales); containment of the marina and its buildings; CSB video-documentation of site conditions; perimeter air monitoring and sampling; and demolition of the two buildings (120 and 122 Water Street) located next to the pizzeria/bakery building.

On 25 November 2006, under warrant authority, the EPA On-Scene Coordinator (OSC) mobilized an ERRS contractor representative to conduct a site walk and initiate planning and equipment procurement for clean-up operations.

On 26 November 2006, ERRS Response Manager (RM) Mike Blodgett was on site to meet with EPA to review removal site activities.

On 27 November 2006, ERRS personnel mobilized to the site to assist with emergency response activities. This included surface water containment and drum staging.

On 27 and 28 November 2006, EPA and START collected five mini-Summa canisters for VOC analysis. The samples were collected at the perimeter locations determined by OSC Ted Bzenas. All samples were delivered to OEME for VOC analysis.

On 29 November 2006, the incident was transferred from the State Fire Marshall to EPA.

On 29 November 2006, EPA coordinated demolition at 120/122 Water Street with the Massachusetts State Historical Preservation Officer (SHPO).

On 30 November 2006, START collected 20 air samples from four locations along the perimeter of the site. Air samples were collected using Gilian GilAir 5 pumps to determine/identify amines, ketones, and aldehydes in perimeter air. START also collected six mini-Summa canisters for VOC analysis at the perimeter locations determined by OSC Dan Wainberg. Air samples were shipped to Galson Laboratories, located in East Syracuse, New York, and the Summa canister samples were delivered to OEME.

On 1 December 2006, after obtaining written access/approval, EPA demolished the second floor of the pizza/bakery building and the buildings at 120/122 Water Street. MassDEP provided oversight during the demolition activities to address any issues concerning asbestos-containing materials (ACM).

Additional personnel on site included MA HAZMAT entry teams, USCG personnel, CSB personnel, City of Danvers personnel, the State Fire Marshall, MASP, ATF, OSHA, SBA, FBI, EPA Health and Safety Officer (HSO) Tony Honnellio, and Liberty Marina representatives.

Week Ending Friday, 8 December 2006

Site activities for the week included conducting area air monitoring; video-documenting, which was conducted by CSB personnel; backfilling the basements of the two demolished buildings (120 and 122 Water Street); conducting drum inventory; and segregating, staging, and securing drums.

On 2 December 2006, EPA and START provided safety briefings and monitoring support for CSB, CAI, and Arnel investigators to access the EZ to obtain photographs, etc.

On 3 December 2006, EPA and START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Cathy Young [see Appendix A – Figures; Figure 6 – Air Sample Location Map]. Summa canister samples were delivered to OEME for VOC analysis.

On 4 December 2006, EPA concluded emergency response activities at the site and transitioned into a Time-Critical Removal Action. EPA's public affairs office finalized a public outreach plan.

On 5 December 2006, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis. In addition, START personnel collected a total of 30 product samples from three USTs located in the footprint of the former CAI building. Ten samples were collected from each UST. The samples were distributed to five different groups and used for evidentiary purposes. Samples were relinquished to the following parties on 5 December 2006: EPA investigator Ray Dinardo; ERRS Transportation and Disposal (T&D); CSB; CAI, Inc.; and Arnel [see the EPA site file for copies of chain-of-custody (COC) forms].

On 5 December 2006, START and EPA warehouse personnel set up a weather station.

On 6 December 2006, two office trailers were delivered to the site. An evidence area was established for investigators to store items of interest.

On 6 December 2006, START began perimeter air monitoring (per the draft Air Sampling Plan, which was finalized 7 December 2006) at four locations surrounding the site perimeter. The air monitoring locations were labeled: AreaRAE No. 1 (Perimeter Southwest), AreaRAE No. 2 (Perimeter Southeast), AreaRAE No. 3 (Perimeter Northwest), and AreaRAE No. 4 (Perimeter Northeast). RAE Systems AreaRAEs were deployed at these locations for the remainder of removal site activities to collect air monitoring data for LEL, O₂, VOC, CO, and H₂S. The Ambient Air Sampling and Monitoring Plan established a VOC action level of 5 parts per million (ppm) above background levels for an instantaneous reading, or an average reading of 1 ppm above background levels over a 15-minute time period. Exceeding an AreaRAE Screening Action Level at the perimeter of the work area would result in an evaluation of VOC concentration levels in downwind areas, which could in turn trigger the need to obtain a grab air sample via Summa canister for off-site analysis. In the event that an AreaRAE unit exceeded its Action Level, START would immediately conduct air monitoring in residential or other public areas downwind of the specific AreaRAE producing the elevated reading, using a hand held PhotoIonization Detector (PID); if the PID produced an instantaneous reading of 1 ppm or greater above background, EPA would quickly conduct an evaluation of potential interferences. If no interferences could be identified, START would collect a grab air sample using the 400-milliliter (ml) Summa canister for analysis at OEME.

To augment and complement EPA's efforts, and to allow for immediate on-site chromatographic analysis of ambient air samples, MassDEP established a field laboratory at the site in a trailer deployed by the Town of Danvers at the intersection of Water and Riverside Streets. This laboratory contained an SRI Instruments Model 8610B gas chromatograph with dual in-series photoionization and dry Electrolytic Conductivity Detectors (GC/PID/ELCD). The GC was calibrated via a 4-point calibration curve, in accordance with long-standing MassDEP protocols. Each day, a blank and a mid-level calibration check standard were analyzed to establish and document adequate operational conditions. Grab air samples were obtained by pumping ambient air into a 40-ml volatile organic analysis (VOA) vial. The Reporting Limits for analytes of interest via this sampling technique were approximately 20 parts per billion per volume (ppb/V). A MassDEP chemist collected grab air samples periodically throughout each workday, in areas downwind of the work site, and/or in areas within the Bates and Riverside Street neighborhood. An effort was made to collect these samples in areas where site-related odors were discernable. If an AreaRAE Screening Action Level was exceeded, START would notify MassDEP personnel, who would then collect a grab sample at or downwind of the unit of interest, and immediately analyze the sample on site via GC/PID/ELCD. If a MassDEP Ambient Air Action Level was exceeded, MassDEP would immediately request that EPA modify or terminate those work activities that were generating the vapor emissions of concern.

On 7 December 2006, HASP Amendment No. 1 was issued to revise the Level C PPE Action Level to 25 ppm for VOCs. The amendment also specified that either polycoated Tyvek or Saranex™ would be worn.

On 7 December 2006, the site Ambient Air Sampling and Monitoring Plan was finalized. The site Ambient Air Sampling and Monitoring Plan was prepared by EPA personnel as a separate document, entitled *Ambient Air Sampling and Monitoring Plan for the CAI, Inc Removal Action, Danvers, Essex County, Massachusetts*.

On 7 December 2006, a man-lift (rented by Exponent, the investigator for CAI) was delivered to the site to access and investigate the five tanks within the building footprint.

On 7 December 2006, CAI investigator representative (Exponent) was on site with CAI environmental consultant, GZA GeoEnvironmental (GZA) and their drilling subcontractor, to review a course of action for collecting soil gas samples.

On 8 December 2006, START and ERRS personnel utilized the man-lift to investigate and to sample the five tanks within the building footprint. START collected two product samples for VOC and Oil Identification analysis. The samples were collected from CAI Vat No. 3 at two depths. Samples were relinquished to the following parties: OEME; ERRS T&D; CAI, Inc.; and Arnel (see the site file for copies of the COC forms).

Additional representatives on site included USCG, CSB, MA Environmental Police, SBA, MEMA, MassDEP, CAI subcontractor (Exponent), Arnel subcontractor (Dave DeMers), OSHA, the *Boston Globe*, and EPA Warehouse (Eagle) personnel.

Week Ending Friday, 15 December 2006

Site activities for the week included area air monitoring; CSB evidence retrieval; conducting drum inventory; sampling drums for HazCat analysis; and segregating, staging, and securing drums.

On 9 December 2006, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis. In addition, START personnel collected eight asbestos samples from the eight perimeter locations predetermined by OSC Young, using Gilian GilAir 5 pumps and cartridges containing a 0.8- micrometer (μm) methylcellulose ester (MCE) filter. The pumps were set at the appropriate flow rate per the specific National Institute for Occupational Safety and Health (NIOSH) method and were run for approximately 8 hours. Air samples were delivered to EMSL Analytical, Inc (EMSL) located in Woburn, Massachusetts on 11 December 2006 for asbestos analysis.

On 9 December 2006, ERRS personnel removed five propane cylinders, one oxygen cylinder, one acetylene cylinder, and one vat from a storage container and waste debris pile and staged them in the CSB designated evidence area.

On 10 December 2006, UST access ports were cleared of debris, and grounding points were established.

On 11 December 2006, subcontractors began demolishing damaged homes on Bates Street. As per EPA's request, START conducted particulate air monitoring utilizing DataRAM particulate meters during the residential demolition. START continued to run particulate meters during any building demolition. MassDEP provided oversight of these demolitions activities to address any ACM issues.

Beginning on 12 December 2006, daily operations of the MassDEP on-site laboratory began and continued for 6 days per week until 31 January 2007. During that time period, 260 ambient air grab samples were obtained in 40-ml VOA vials. All samples were analyzed by a MassDEP chemist within 90 minutes of collection; typically, within 10 minutes of collection. The exact sample

locations varied on a daily basis, based upon wind direction, odor conditions, and readings from the AreaRAE units stationed at the work site perimeter. Despite elevated AreaRAE concentrations on 2 days (8 and 13 January 2007), ambient air concentration values within the downwind/residential areas did not exceed MassDEP Ambient Air Action Levels.

On 12 December 2006, HASP Amendment No. 2 was issued to document soil gas sampling to be conducted by CAI subcontractor, GZA.

On 12 December 2006, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis. START personnel also collected eight asbestos samples from the eight perimeter locations predetermined by OSC Young, using Gilian GilAir 5 pumps and cartridges containing a 0.8- μ m MCE filter. The pumps were set at the appropriate flow rate per the specific NIOSH method and were run for approximately 8 hours. Air samples were delivered to EMSL, located in Woburn, Massachusetts, for asbestos analysis.

On 12 December 2006, two tanker trucks were on site to pump out the contents of the three USTs. Approximately 7,450 gallons were pumped from the USTs, and the contents consisted of the following: 2,700 gallons of toluene; 1,850 gallons of n-butyl acetate; and 2,900 gallons of acetone [see Appendix B – Tables and Spreadsheets; Table 10 – Waste Disposal Summary Table].

On 13 December 2006, GZA personnel were on site to conduct soil gas sampling.

On 13 December 2006, a man-lift (rented by ERRS) was delivered to the site to conduct process line tank sampling operations. A total of four samples were collected for HazCat analysis, and were provided to interested parties as split samples. Split samples were provided to EPA investigator Dinardo, CSB, CAI via Exponent/GZA, and Arnel via Dave DeMerris (see the EPA site file for copies of COC forms). Vat No. 2 contained solids beginning at approximately 3.25 feet below the top of the tank. Vat No. 3 contained a liquid layer approximately 2.5 feet deep, beginning at approximately 3.5 feet below the top of the tank, and a sludge layer approximately 3 feet deep below the liquid. It is estimated that Vat No. 3 contained approximately 720 gallons of liquid and approximately 115 cubic feet of sludge. Vat No. 4 contained solids beginning at approximately 4 feet from the top of the tank. It is estimated that Vat No. 4 contained approximately 116 cubic feet of solids. Vat No. 5 contained an opaque “jelly-like”, viscous material beginning at approximately 4 feet from the top of the tank [see Appendix A – Figures; Figures 7 - 20 – Vat Diagrams (Nos. 1 - 14)]. The vats were covered with tarps once sampling was completed.

On 14 December 2006, demolition of the on-site pizzeria/bakery building commenced. Demolition was initiated by pizzeria/bakery building representatives.

On 15 December 2006, ERRS personnel utilized the man-lift to collect additional samples for T & D purposes from the on-site vats.

On 15 December 2006, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis.

On 15 December 2006, ERRS subcontractor Enpro Services Inc. (Enpro) was on site with a vacuum truck to pump liquids from the four on-site vats. Enpro pumped liquids from Vat Nos. 2, 3, and 8. The total volume pumped from each vat is as follows— Vat No. 2: 23.4 gallons; Vat No. 3: 532.9 gallons; Vat No. 8: 121.6 gallons; and Vat No. 2 bucket: 9.0 gallons.

Additional representatives on site included CAI subcontractor, GZA personnel; OSHA personnel; USCG - ATST; Reliable Security personnel; EPA Warehouse (Eagle) personnel; EPA IT support; MASP; SBA; MassDEP; MA Environmental Police; and Holden Propane personnel, who were on site to retrieve five propane cylinders and transport them off site.

Week Ending Friday, 22 December 2006

Site activities for the week included area air monitoring; CSB evidence retrieval; demolition of the on-site pizzeria/bakery building; demolition of the yellow building southwest of the site; demolition of the marina buildings; cutting/shearing of scrap metal; conducting drum inventory; sampling drums for HazCat analysis; and segregating, staging, and securing drums.

On 16 December 2006, A-Best Abatement, Inc., on behalf of the pizzeria/bakery building, began the asbestos abatement of the former pizzeria/bakery building. MassDEP monitored abatement activities.

On 16 December 2006, START, EPA, and USCG personnel began disassembling the EPA command shelter. Once the command shelter was secured, the parts were stored in the EPA storage tent until EPA Warehouse (Eagle) personnel could return it to the warehouse. Once the command shelter was disassembled, OSC Nalipinski relieved the EPA of obligations regarding the demolition of the on-site pizzeria/bakery building, and requested that ERRS move the site fence to exclude the pizzeria/bakery building from the site.

On 18 December 2006, Arnel representatives conducted a survey of the building footprint. During the survey of the footprint, approximately 3 to 4 pounds of suspected nitrocellulose in the remnants of a fiber drum were observed near Vat No. 7. The nitrocellulose was to be wetted with dihydrous monoxide (DHM), collected using plastic scoops into a container, and covered with DHM to stabilize the nitrocellulose.

On 19 December 2006, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis.

On 19 December 2006, ERRS personnel identified additional nitrocellulose and containerized the material. A total of five 5-gallon plastic buckets were filled with a combination of nitrocellulose and tap water. The tap water was used to reduce the fire/explosion hazard and to stabilize the nitrocellulose. The contents of the 5-gallon pails containing hydrated nitrocellulose were transferred to a 55-gallon drum.

On 19 December 2006, two trucks arrived on site to load out drums containing solids. A total of 181 drums were loaded for T&D, with each truck carrying an estimated 15 tons of solid drums.

On 19 December 2006, an excavator equipped with hydraulic shears began cutting metal debris and the metal superstructure.

On 19 December 2006, after EPA coordinated with the property owner, Liberty Marina began transporting boats from the Liberty Marina property.

On 20 December 2006, Fleet Environmental arrived on site to remove the ACM that was removed from the buildings (120-122 Water Street) during demolition. A total of seven bags and one package of ACM were removed for disposal.

On 20 December 2006, ERRS and USCG personnel removed the temporary fence from Bates Street in preparation of re-opening the road.

On 21 December 2006, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis.

On 22 December 2006, USCG personnel demobilized from the site. The USCG involvement with the site was complete as of 22 December 2006.

On 22 December 2006, ERRS personnel conducted general housekeeping of the site in preparation for the Christmas holiday weekend. All personnel demobilized the site until Wednesday, 27 December 2006.

Additional personnel on site included CSB personnel, CAI representatives (GZA and Exponent personnel), OSHA personnel, EPA OEME personnel, EPA Warehouse (Eagle personnel), MassDEP Regional Director Jack Chaplin, MASP, ATSDR personnel, City of Danvers personnel, and Reliable Security personnel.

Week Ending Friday, 29 December 2006

Site activities for the week included area air monitoring; CSB evidence retrieval; demolition of the on-site pizzeria/bakery building; evaluation of the tipped vats; cutting/shearing scrap metal; conducting drum inventory; sampling drums for HazCat analysis; and segregating, staging, and securing drums. A total of 449 drums were recovered from the EZ.

On 23 and 24 December 2006, OSC Nalipinski, ERRS, and Enpro personnel were on site to pump stormwater runoff from the footprint of the building. Approximately 700 gallons were removed from the footprint of the building and stored in the baker tank.

On 26 December 2006, EPA, START, and GZA personnel were on site. GZA personnel were on site to install 11 soil borings to collect soil gas samples and to install three groundwater monitoring wells using a GeoProbe Unit. START personnel conducted air, health and safety monitoring during the installation. Danvers Department of Public Works (DPW) personnel were on site with an electromagnetometer to determine the water line location. Radar Solutions personnel were also on site to conduct a ground penetrating radar (GPR) survey.

On 27 December 2006, START noted a natural gas odor near the blue CSB evidence storage container (northwest corner of CRZ, near stone wall by former bakery). Multiple personnel confirmed the odor. START did not observe any elevated readings on the MultiRAE unit. OSC Wainberg and START notified Keyspan representative Gary Richardson, who was operating on Bates Street. Mr. Richardson indicated that all gas mains were still operational, that several small leaks were known to exist on Bates Street, and that there were multiple joint leaks on Water Street. Mr. Richardson monitored the area, and confirmed the presence of gas up to 100 ppm using a Detecto-Pak 4 (DP4) gas detector. Mr. Richardson indicated that there was no immediate danger/hazard, but notified a supervisor. No elevated readings were detected by the combustible gas indicator/oxygen (CGI/O₂) or LEL meters used by Keyspan or START. Additional Keyspan personnel arrived on site, and confirmed the readings. However, Keyspan personnel felt that the odor was more likely residual propane (source was the propane tank removed from the pizzeria/bakery building), rather than natural gas. A Keyspan supervisor arrived on site, and concurred that the odor was most likely residual propane and not natural gas. The supervisor requested that Eastern Propane send a technician to investigate the odor, since Eastern Propane was the company that removed the tank. Eastern Propane supervisors Don Howe and Jim Blake arrived on site and stated that the odor didn't smell like propane, although it could have been a residual odor from the former propane supply line. They also suggested that the odor could be associated with either the chemical plant, from the White Fuels site, or possible organic decomposition. They assured OSC Wainberg that there was no immediate danger, and stated that they would have someone come back later in the day to investigate the inactive underground supply line. A short time later, Eastern Propane personnel arrived on site to investigate the underground propane supply line. The supply line was a 0.75-inch-diameter black metal pipe in relatively good condition, located approximately 18 inches below ground surface. No increased gas odors were noted by Eastern Propane or START personnel. After showing the pipe to OSC Wainberg, the hole was backfilled, with no further action.

On 28 December 2006, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis.

On 28 December 2006, CAI representatives (GZA personnel) entered the EZ to collect the dimension measurement of Vat No. 4. In addition, GZA personnel collected Vat samples (V4-01B) from Vat No. 4. GZA personnel collected a total of five split samples from the Vat. GZA personnel also collected splits of the sample for CSB personnel. START personnel conducted air monitoring during sample collection activities, which were performed in Level C PPE. START personnel generated a COC for the samples (see the site file for copies of COC forms).

On 28 December 2006, General Chemical was on site to load out the roll-off containing used PPE for disposal.

On 29 December 2006, HASP Amendment No. 3 was issued to add/document a task to include HazCat on-site analysis for the categorization of drums and containers with unknown contents. HazCat analysis would be conducted by personnel in an enclosed trailer equipped with a laboratory hood, and wearing Level D PPE, safety glasses, and nitrile gloves to conduct the analysis.

On 29 December 2006, CAI representatives (GZA personnel) were on site to collect soil gas samples from the installed soil borings. START personnel conducted air and health and safety monitoring during the sampling.

On 29 December 2006, CAI representatives were on site to retrieve the dust collection system and associated equipment. EPA escorted CAI personnel through the EZ during the retrieval of the equipment.

On 29 December 2006, ERRS personnel retrieved a manhole cover missing from the northeastern portion of the EZ. The manhole cover was placed back on the manhole, and investigators were informed of the findings.

On 30 December 2006, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis.

On 30 December 2006, ERRS and START personnel began the collection of tote samples from seven of the on-site totes. Seven tote samples (Nos. 6, 7, 10, 11, 17, 18, and 19) were collected by ERRS personnel, while START personnel conducted air monitoring. All samples were collected in Level C PPE. Split samples were collected and relinquished to ERRS for T&D analysis, CAI representatives (GZA personnel), and EPA Investigator Dinardo (see EPA site file for COC forms).

On 30 December 2006, CAI representatives (Exponent personnel) entered the EZ with START personnel to observe the totes located within the zone. In addition, Exponent personnel collected two tote samples (Nos. 2 and 3) and collected split samples for EPA Investigator Dinardo, (see the site file for COC forms).

On 30 December 2006, START personnel entered the EZ to record the geographic coordinates, using a Global Positioning System (GPS) unit, to mark the position where the manhole cover was discovered on 29 December 2006. The GPS coordinates where the manhole cover was discovered are as follows: 42° 32' 52.0" North latitude and 70° 55' 10.8" West longitude. The coordinates of the manhole location are as follows: 42° 32' 51.9" North latitude and 70° 55' 10.7" West longitude.

On 30 December 2006, ERRS personnel conducted general housekeeping of the site in preparation for the New Year holiday weekend. All personnel demobilized from the site until Tuesday, 2 January 2007.

Additional personnel on site included MassDEP, CAI representatives (GZA personnel), ERRS T&D personnel, General Chemical personnel, Enviro-Safe personnel, OSHA personnel, CAI personnel, Keyspan personnel, Eastern Propane personnel, and Reliable Security personnel.

Week Ending Friday, 5 January 2007

Site activities for the week included area conducting air monitoring; pumping stormwater runoff from the building footprint; consolidating materials in the building footprint; segregating and staging scrap metal; sampling drums for HazCat analysis; overpacking liquid drums; transferring materials from Vat Nos. 5 and 12 into drums for disposal; and staging and securing drums .

On 1 January 2007, ERRS personnel were on site to pump stormwater runoff from the footprint of the building.

On 2 January 2007, CAI personnel were on site to collect vat measurements and samples from Vat No. 15, which was located adjacent to the CSB evidence container. START personnel monitored activities and generated a COC for the samples.

On 2 January 2007, Enpro personnel were on site with a vacuum truck to pump stormwater runoff from the building footprint. Materials were transferred to and stored in the baker tank.

On 2 January 2007, a truck delivered overpack drums for use by ERRS in overpacking liquid drums.

On 2 January 2007, CAI representatives (GZA personnel) entered the EZ to measure well water levels in the monitoring wells. START personnel monitored entry activities.

On 3 January 2007, a Verizon representative was on site to obtain the number from the utility pole that used to service the marina.

On 5 January 2007, ERRS personnel collected samples from Vat Nos. 5 and 12. All samples were collected in Level C PPE. Split samples were collected and relinquished to ERRS for T & D, CAI representatives (GZA personnel), and EPA Investigator Dinardo (see site file for COC forms).

On 5 January 2007, the Beverly Fire Department Dive Team conducted a grid search of the Waters River. No materials observed from the explosion were located in the river.

Additional personnel on site included MassDEP personnel, a South Essex Sewer District representative, Beverly Fire Department Dive Team members, MASP, CAI representatives (GZA personnel), ERRS T&D personnel, CAI personnel, a Clean Harbors representative, START member Mark Hall, and Reliable Security personnel.

Week Ending Friday, 12 January 2007

Site activities for the week included conducting area air monitoring; pumping stormwater runoff from the building footprint; consolidating materials in the building footprint; segregating and staging scrap metal; sampling drums for HazCat analysis; overpacking liquid drums; transferring materials from Vat Nos. 3, 4, 5, 11, 12, 13, and 14 into drums for disposal; transferring material from totes into drums for disposal; removing debris from the southern border of the site to allow for utility installation to the marina; and staging and securing drums.

On 6 January 2007, AreaRAE No. 2 had several readings greater than 1.0 ppm for VOCs. EPA and START collected one mini-summa sample labeled Summa-94 from the southern portion of 11 Bates Street adjacent to the porch stairs at the rear of the residence. EPA and START also collected another mini-summa sample labeled Summa-95 from the southwestern portion of the UST area in the EZ. MassDEP was also notified of the elevated VOC readings.

On 6 January 2007, two drums of visually similar content were observed by ERRS personnel to be emitting smoke; one drum caught fire and was immediately extinguished by ERRS. Three drums were promptly segregated; the additional drum appeared to contain the same type of material. Handheld MultiRAE readings obtained from the smoke were as follows: CO– 1,071 ppm; VOC– 49 ppm; LEL– 22%; H₂S– 0 ppm; O₂– 20.9 ppm.

On 8 January 2007, an Enpro representative arrived on site to load and dispose of the nitrocellulose drum.

On 8 January 2007, CAI representative John Sartorelli, H&S Tank, and Turner Trucking Inc. (Turner) representatives were on site to meet with RM Blodgett to inspect the scrap steel pile for load out.

On 9 January 2007, Freehold Cartage Inc. (FCI) was on site with a truck to load out the flammable solid drums for disposal. A total of 60 flammable solid drums were loaded out for disposal.

On 10 January 2007, Town of Danvers, Danvers Electric, and Verizon representatives were on site to meet with OSC Wainberg regarding replacing utility poles along the marina road and restoring electrical power to Liberty Marina. Arnel representative Dave Demers was on site to inspect and photodocument the scrap steel pile that CAI planned to load out.

On 10 January 2007, FCI was on site with a truck to load out the flammable liquid/organic drums for disposal. A total of 60 flammable liquid/organic drums were loaded out for disposal.

On 11 January 2007, EPA and START collected two 6-liter Summa canisters located at the Marina and Perimeter Northeast air sample locations previously established for the site. Summa canister samples were delivered to OEME for VOC analysis.

On 11 January 2007, EPA Investigation Team members Dinardo, Joe Canzano, Dave Oberhauser, Jeff Ulman, and Bob Golden arrived to inspect the site. The EPA Investigation Team and START member Hall entered the EZ to investigate the site; EPA investigation team members were escorted by START while in the EZ.

On 12 January 2007, CAI representatives (GZA personnel) and Exponent personnel were on site. GZA personnel conducted soil gas sampling, while Exponent personnel obtained measurements from Vat Nos. 3, 4, and 5. START escorted both GZA and Exponent personnel while in the EZ.

On 12 January 2007, Turner was on site to begin delivery of 40-cubic-yard roll-off containers for scrap steel for disposal. Turner was contracted by CAI to perform removal of scrap steel.

On 12 January 2007, MASP personnel were on site to investigate the EZ. START escorted MASP while in the exclusion zone.

Additional personnel on site included MassDEP personnel, CAI representatives (GZA personnel), ERRS T&D personnel, CAI personnel, a Clean Harbors representative, START member Hall, and Reliable Security personnel.

Week Ending Friday, 19 January 2007

Site activities for the week included conducting area air monitoring; pumping stormwater runoff from the building footprint; consolidating materials in the building footprint; segregating, staging, and loading out scrap metal; performing HazCat analysis; transferring materials from Vat Nos. 13 and 14 into drums for disposal; transferring material from totes into drums for disposal; overpacking liquid and solid drums; loading bulk materials from the building footprint into roll-off containers; removing debris from the southern border of the site for utility installation to the marina; staging and securing drums; and material load out.

On 13 January 2007, AreaRAE No. 2 had several readings greater than 1 ppm (maximum reading of 12.7 ppm). EPA and START monitored the area downwind of AreaRAE No. 2 (east toward the Marina) and recorded a maximum reading of 3.1 ppm on the handheld MultiRAE unit. It was noted that the location was downwind and downgradient of the southeastern portion of the building footprint. Building debris and small containers were being segregated at the approximate time of the exceedences. START collected a mini-summa grab sample labeled Summa-98 approximately 30 feet downwind to the east of AreaRAE No. 2. A reading of 2.0 ppm was observed on the handheld MultiRAE unit at the time of sample collection. EPA requested that ERRS cease the segregation of bulk contaminated debris in the southeastern portion of the site and cover the debris in response to elevated readings on AreaRAE No. 2. START also collected a mini-summa grab sample labeled Summa-99 approximately 150 feet downwind to the east of AreaRAE No. 2. A reading of 0.2 ppm was observed on the handheld MultiRAE unit at the time of sample collection. EPA reported the readings above 1.0 ppm (maximum of 14.5 ppm) on AreaRAE No. 2 to MassDEP and also reported engineering controls applied to site activities to address elevated readings on AreaRAE No. 2. Subsequently, EPA and START performed air monitoring using the handheld MultiRAE in the downwind vicinity of AreaRAE No. 2, and no readings above background were observed. START recorded the sample locations with a GPS unit, and the Summa canister samples were delivered to OEME for VOC analysis.

On 16 January 2007, Page ETC, Inc. (Page) was on site with four dump trailers to load out inert solid materials and drums containing inert solids for disposal. A total of 121 drums, bagged polyethylene, soil/debris, and crushed drums were loaded out for disposal.

On 17 January 2007, CAI personnel and their representatives (GZA), Arnel representatives, MassDEP personnel, and an EPA attorney arrived on site to attend a meeting held by OSC Nalipinski. EPA reviewed site activities that had been accomplished so far, what needed to be completed, and how the transition between EPA and the property owners (CAI and Arnel) would take place.

On 18 January 2007, Danvers Electric personnel were on site to install a guy-wire between the telephone pole located at the entrance to the EZ and the telephone pole located adjacent to AreaRAE No. 1 (perimeter southwest).

On 18 January 2007, CAI representatives (GZA personnel) entered the EZ to conduct soil sampling activities. START personnel monitored entry activities.

On 19 January 2007, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis.

Additional personnel on site included MassDEP personnel, CAI representatives (GZA personnel), ERRS T&D personnel, CAI personnel, and Reliable Security personnel.

Week Ending Friday, 26 January 2007

Site activities for the week included conducting area air monitoring; pumping stormwater runoff from the building footprint; consolidating materials in the building footprint; segregating, staging, and loading out scrap metal; overpacking liquid and solid drums; loading bulk materials from the building footprint into roll-off containers; relocating the CSB evidence material to within the CAI property; sampling soil; excavating soil; staging and securing drums; and loading out material.

On 20 January 2007, FCI was on site to load out a total of 75 liquid drums for disposal.

On 21 January 2007, Danvers Electric representatives were on site to remove and replace electrical wires from the utility poles along the marina road. Verizon representatives were also on site to conduct utility pole replacement. EPA monitored all site activities. A total of two utility poles were replaced (including wires), and a total of three street lights were installed on utility poles (two on the new poles and one on an existing pole).

On 22 January 2007, Clean Venture/General Chemical was on site to load out bulk material from the building footprint. A total of four roll-off containers were loaded out for disposal.

On 22 January 2007, New England Disposal Technologies, Inc. (NEDT) was on site to load out liquid drums. A total of 28 drums were loaded out for disposal.

On 23 January 2007, START personnel collected eight 6-liter Summa canisters at the perimeter locations determined by OSC Young. Summa canister samples were delivered to OEME for VOC analysis.

On 23 January 2007, Clean Venture/General Chemical was on site to load out bulk material from the building footprint. A total of three roll-off containers were loaded out for disposal.

On 24 January 2007, HASP Amendment No. 4 was issued to include confined space entry (CSE) activities, not included in the original HASP. All CSE would be conducted in accordance with 29 CFR 1910.146, including completion of a confined space entry permit (CSEP), and appropriate training, air monitoring (both prior to and during CSE), and rescue components. CSE activities would be conducted in either Level C or Level B PPE, depending on results of air monitoring.

On 24 January 2007, Turner was on site to pick up the final load of scrap steel; a total of 13 40-yard roll-off containers were loaded off site.

On 24 January 2007, Page was on site to load out inert solid materials for disposal. A total of three trucks were loaded out for disposal.

On 24 January 2007, NEDT was on site to load out the flammable solid drums. A total of 67 drums were loaded out for disposal.

On 24 January 2007, Clean Venture/General Chemical was on site to load out bulk material from the building footprint. A total of five roll-off containers were loaded out for disposal.

On 24 January 2007, EPA and START conducted surface soil sampling from a 20-foot by 20-foot sampling grid contained within a 115- by 80-foot area on the western portion of the site, west of the building footprint and adjacent to the site office trailers (the 120-122 Water Street property). Soil samples were delivered to OEME for VOC and SVOC analyses.

On 25 January 2007, CAI representatives (GZA personnel) entered the EZ to conduct soil gas sampling activities, which were performed in Level D PPE. START personnel monitored entry activities.

On 25 January 2007, Clean Venture/General Chemical was on site to load out bulk material from the building footprint. A total of four roll-off containers were loaded out for disposal.

On 25 January 2007, Danvers Water Department personnel were on site to shut off the water supply to the CAI facility to restore water to the marina.

On 26 January 2007, FCI was on site to load out flammable liquid and flammable solid drums. A total of 118 flammable liquid and two flammable solid drums were loaded out for disposal.

On 26 January 2007, Clean Venture/General Chemical was on site to load out bulk material from the building footprint. A total of one roll-off container was loaded out for disposal.

Additional personnel on site included MassDEP personnel, CAI representatives (GZA personnel), ERRS T&D personnel, Danvers Water Department personnel, CAI personnel, and Reliable Security personnel.

Week Ending Friday, 2 February 2007

Site activities for the week included area air monitoring; moving all equipment and containers onto CAI property; loading bulk materials from the building footprint into roll-off containers; performing soil excavation; conducting post-excitation soil sampling; and conducting material load out.

On 29 January 2007, Clean Venture/General Chemical was on site to load out bulk material from the building footprint. One roll-off container was loaded out; a total of 17 roll-off containers were loaded off site.

On 30 January 2007, START member Hall was on site to demobilize the weather station.

On 30 and 31 January 2007, START collected post-excitation soil samples from a 20- by 20-foot sampling grid contained within a 115- by 80-foot area on the western portion of the site, west of the building footprint and adjacent to the site office trailers (the 120-122 Water Street property). Soil samples were delivered to MitKem Corp. for VOC and SVOC analyses.

On 31 January 2007, HASP Amendment No. 5 was issued to add/document a task to include excavation and removal of approximately 6 inches of soil in the former staging area.

On 31 January 2007, Fleet personnel demobilized the Bobcat.

On 1 February 2007, Global Remediation Services (Global) was on site to pump the contents of the baker tank. A total of 9,700 gallons of decontamination (decon) water was pumped from the baker tank for disposal.

On 1 February 2007, CAI personnel were on site to meet with H&H Tank regarding moving debris to facilitate fence installation, and with Parker Fence representatives regarding fence location and installation.

On 1 February 2007, Fleet personnel were on site to demobilize the sweeper and drum grappler attachments for the Bobcat.

On 2 February 2007, Enpro personnel arrived on site to decontaminate the baker tank. START and Enpro conducted air monitoring prior to and during the CSE into the baker tank. START obtained a copy of the CSEP. A total of 20 drums of decon water were generated.

On 2 February 2007, CAI representatives (GZA personnel) entered the EZ to conduct soil gas sampling activities. START personnel monitored entry activities.

On 2 February 2007, CAI representatives were on site to remove equipment and supplies from the on-site CAI trailer.

On 3 February 2007, Enpro personnel completed the decontamination of the baker tank. A total of 31 drums of decon water were generated from the baker tank decon.

Additional personnel on site included MASP, MassDEP personnel, Arthur Siasios (120-122 Water Street property owner), CAI representatives (GZA personnel), SBA member Mary Anne Schafer, ERRS T&D personnel, Global personnel, Abbey Fence personnel, Parker Fence personnel, CAI personnel, MitKem personnel, EPA Warehouse (Eagle) personnel, and Reliable Security personnel.

Week Ending Friday, 9 February 2007

Site activities for the week included decontamination of ERRS equipment (excavator grapple attachment); equipment/supplies demobilization; demobilization of the baker tank; removal of ERRS temporary fence; installation of CAI permanent fence; and consolidation of the temporary fence.

On 5 February 2007, CAI representative John Sartorelli and Exponent (CAI subcontractor) member Scott Davis were on site to inspect areas of the site. START accompanied CAI and Exponent though the building footprint.

On 5 February 2007, CAI representative Paul Sartorelli and SBA member Schafer were on site to review the site for a possible SBA loan.

On 5 February 2007, CAI representatives were on site to remove additional equipment and supplies from the on-site CAI trailer.

On 6 February 2007, EPA Investigation Team members Dinardo, Joe Canzano, Dave Oberhauser, Jeff Ulman, and Bob Golden arrived on site to inspect the site. The EPA Investigation Team and START member Mark Hall entered the exclusion zone in Level D PPE to tour the site, and to inspect the contents of the evidence storage container, and the vats.

On 6 February 2007, the baker tank was demobilized from the site.

On 7 February 2007, representatives from the Massachusetts Department of Natural Resources (Mass DNR) toured the site, evaluating the deposition into the 100-year flood plain.

On 7 February 2007, MassDEP members Chris Bresnahan, Kyle MacAfee, and John McCauly toured the site to evaluate GZA's 21(e) Work Plan and to compare the work plan with the site conditions.

On 7 February 2007, CAI representatives (H&H) delivered an excavator to the site. H&H would move debris to facilitate fence installation.

On 7 February 2007, the ERRS storage container was demobilized from the site.

On 8 February 2007, Enpro was on site to load out a total of 31 drums of decon water.

On 8 February 2007, Parker Fence personnel were on site to begin installation of fence surrounding the CAI property.

On 8 February 2007, CAI, CSB, and approximately 35 investigators from various insurance companies were on site to tour the site and to interview EPA and CSB.

On 9 February 2007, CSB personnel were on site to take final photographs; General Chemical was on site to load out the roll-off containing used PPE for disposal; and the ERRS front-end loader and excavator were demobilized from the site.

On 9 February 2007, Parker Fence completed fence installation. The original personnel fence in the northwest corner of the property remained, and two additional truck gates were installed along the southern side of the property. CAI and Arnel representatives were on site to install locks on the gates. An Arnel lock was placed on the northwest corner personnel gate, and two CAI locks were placed on the two southern truck gates. All CAI materials, including the CSB evidence container, were placed within the fenced property. EPA transitioned the site CRZ to CAI/Arnel.

On 9 February 2007, all personnel demobilized the site until the load out of the excavated soil could be scheduled. All site office trailers were secured and private security was no longer on site.

Additional personnel on site included Gas Safety Inc. member Bob Ackley, Mass DNR, MassDEP personnel, MASP, ATF, CSB, Town of Danvers personnel, Keyspan personnel, and Reliable Security personnel.

Week Ending Friday, 16 February 2007

There were no site activities for the week.

Week Ending Friday, 23 February 2007

There were no site activities for the week.

Week Ending Friday, 2 March 2007

There were no site activities for the week.

Week Ending Friday, 9 March 2007

Site activities for the week included performing load out of the stockpiled excavated soils for disposal, and demobilizing all equipment and personnel.

On 8 March 2007, AmeriTech Environmental Services was on site to load out a total of 15 dump trailers of soil for disposal.

On 9 March 2007, AmeriTech Environmental Services was on site to load out a total of five dump trailers of soil for disposal.

On 9 March 2007, all site activities were completed, and all equipment and personnel were demobilized from the site.

4.0 ESTIMATED COSTS OF THE REMOVAL ACTION

EPA resources committed under this Removal Action, conducted from 22 November 2006 through 9 March 2007, are summarized below:

Extramural Costs

Regional Allowance Costs	
ERRS Contractor	\$ 1,000,000
USCG Interagency Agreement	\$ 50,000
START	<u>\$ 289,670</u>
Subtotal, Extramural Costs	\$ 1,339,670
Extramural Contingency (20%)	\$ 280,000
Total, Removal Action Ceiling	\$ 1,619,670

This accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

Appendices

Appendix A

Figures

- Figure 1 – Site Location Map
- Figure 2 – Site Diagram
- Figure 3 – Facility Diagram
- Figure 4 – Surface Water Sample Location Map
- Figure 5 – Surface Water and Sediment Sample Location Map
- Figure 6 – Air Sample Location Map
- Figures 7–20 – Vat Diagrams (Nos. 1–14)

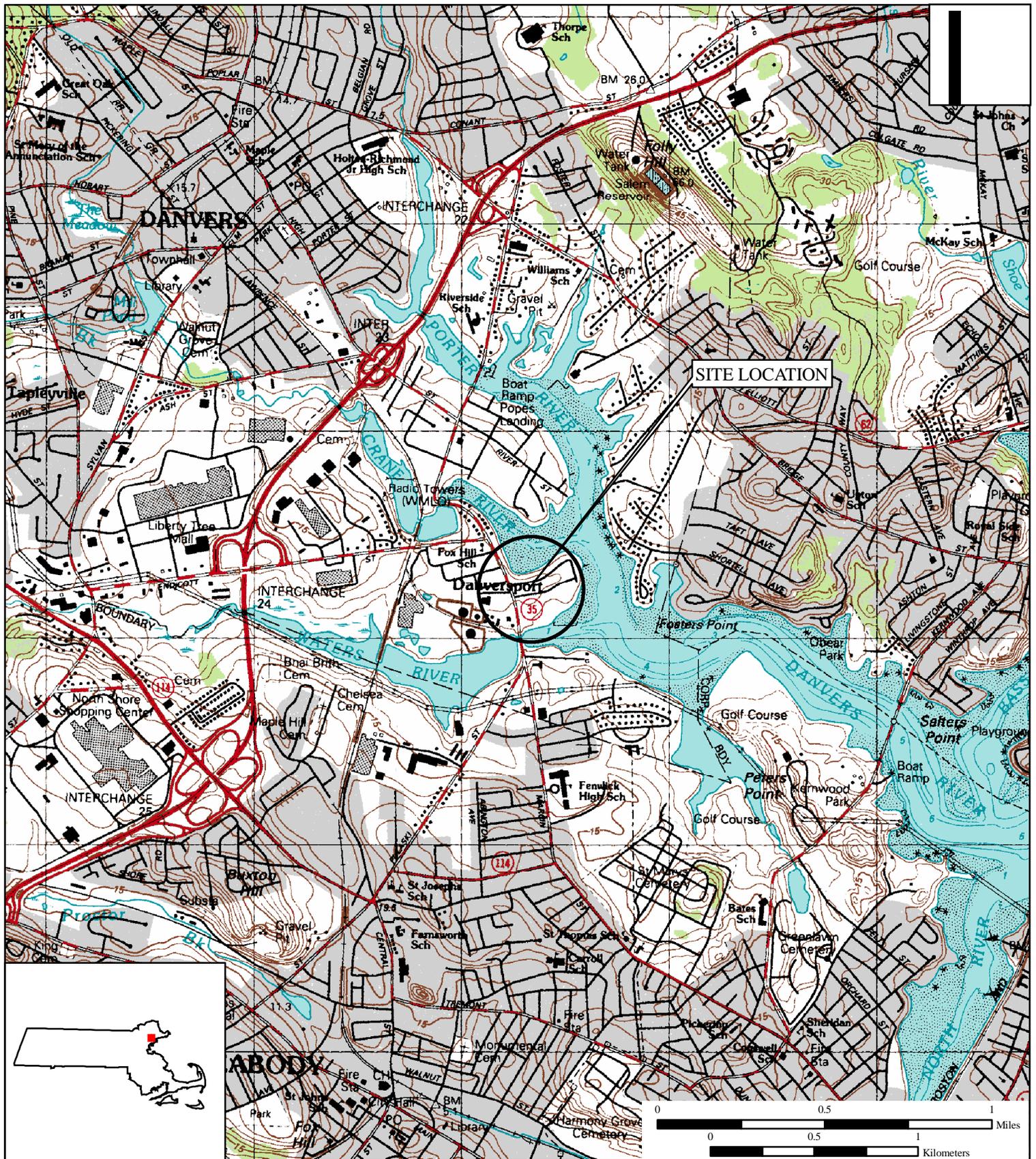


Figure 1

SITE LOCATION MAP

**DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 06-11-0007
 Created by: B. MACE
 Created on: 14 FEBRUARY 2007
 Modified by:
 Modified on:

Data Sources:
 Topos: MicroPath/USGS
 Quadrangle Name(s):
 MARBLEHEAD NORTH, MA (1980)





Figure 2

SITE DIAGRAM

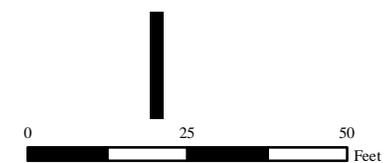
**DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 06-11-0007
Created by: D. MUZRALL
Created on: 14 DECEMBER 2006
Modified by: B. MACE
Modified on: 14 FEBRUARY 2007

LEGEND

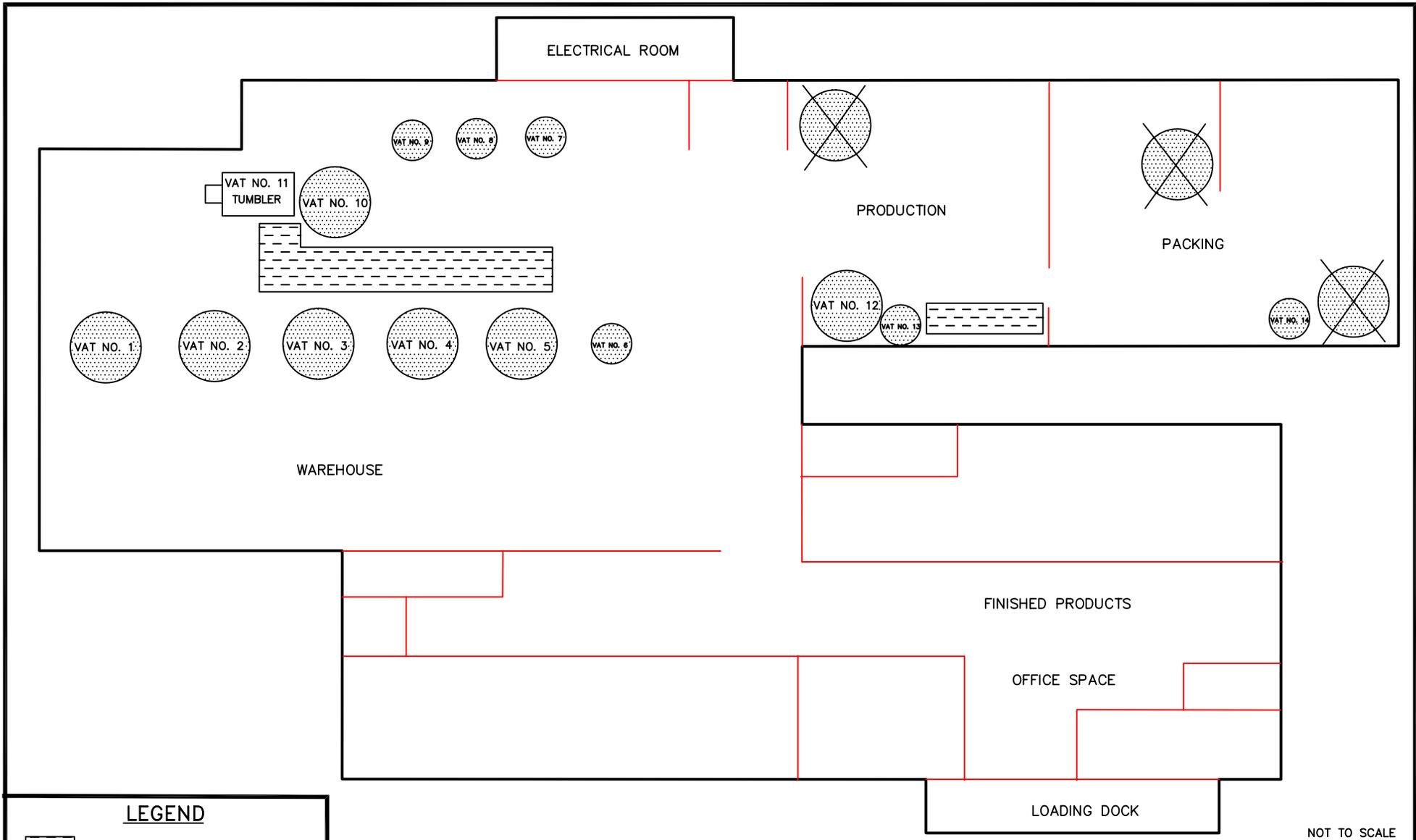
-  CAI Building Footprint
-  Office Trailer
-  Drum Staging Area
-  Steel Staging Area
-  UST Pad Area
-  Hot Zone Entrance
-  Decon Line
-  Fence
-  Silt Fence
-  Berm



Data Sources:

Imagery: MASS GIS
Topos: MicroPath
All other data: START





LEGEND

-  MEZZANINE
-  BUILDING FOOTPRINT
-  FACILITY WALLS
-  FORMER VAT LOCATION
-  EXISTING VAT LOCATION

FACILITY DIAGRAM

DANVERSPORT EXPLOSION SITE
 126 WATER STREET
 DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD # 06-11-0007	DRAWN BY: T. BENTON	DATE Updated: on 2/15/07
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FILE NAME: R:\06110007\Figures\
 Fig 3_Facility Diagram.dwg

FIGURE 3

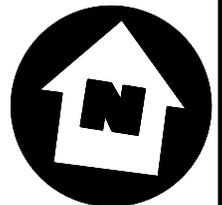




Figure 4
11/22/06
SURFACE WATER
SAMPLE LOCATION MAP
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042
TDD Number: 06-11-0007
Created by: D. MUZRALL
Created on: 14 DECEMBER 2006
Modified by: B. MACE
Modified on: 23 FEBRUARY 2007

LEGEND

Surface Water
 Sample Locations

Data Sources:
 Imagery: MASS GIS
 Topos: MicroPath
 All other data: START



Figure 5
11/24/06
SURFACE WATER AND SEDIMENT
SAMPLE LOCATION MAP
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS

EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042
TDD Number: 06-11-0007
Created by: D. MUZRALL
Created on: 14 DECEMBER 2006
Modified by: B. MACE
Modified on: 23 FEBRUARY 2007

LEGEND

- # Sediment Sample Location
- (Surface Water Sample Location
- CAI Building Footprint
- - - - Fence
- · - · Silt Fence


 0 12.5 25 50 75 100 Feet

Data Sources:
 Imagery: MASS GIS
 Topos: MicroPath
 All other data: START





Figure 6

AIR SAMPLE LOCATION MAP

**DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 06-11-0007

Created by: D. MUZRALL

Created on: 14 DECEMBER 2006

Modified by: B. MACE

Modified on: 23 FEBRUARY 2007

LEGEND

\$ Air Sampling Locations

□ CAI Building Footprint

--- Fence

--- Silt Fence

0 12.5 25 50 75 100 Feet

Data Sources:

Imagery: MASS GIS

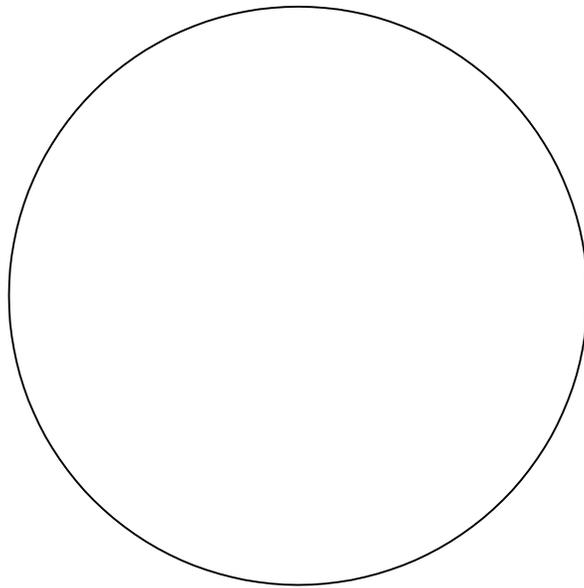
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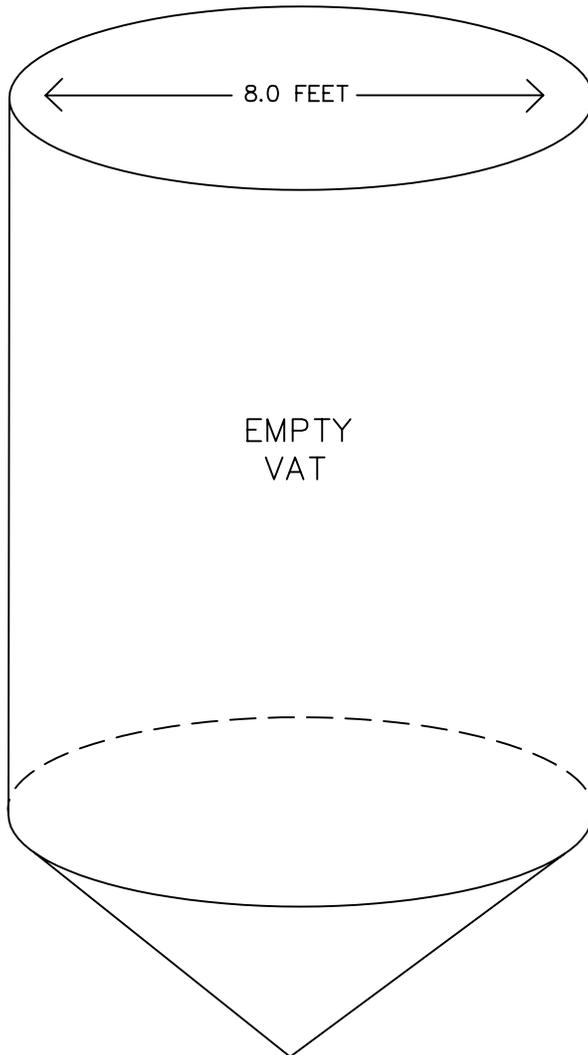
Restoring Resource Efficiency

PLAN VIEW



NO IMAGE
AVAILABLE

CROSS
SECTION



8.0 FEET

VAT NO. 1 DESCRIPTION

VAT NO. 1 IS AN APPROXIMATELY 3,000 GALLON VAT. A RECONNAISSANCE OF THE VAT INDICATED THAT IT WAS EMPTY.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 1 DIAGRAM
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

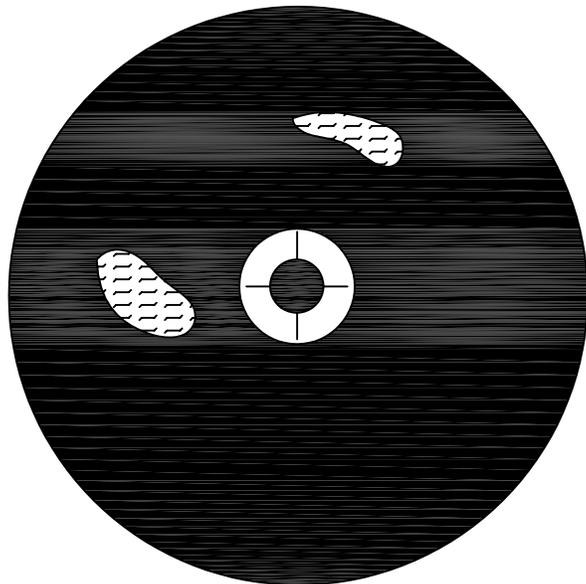
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T. BENTON

DATE:
Updated on: 12/27/06

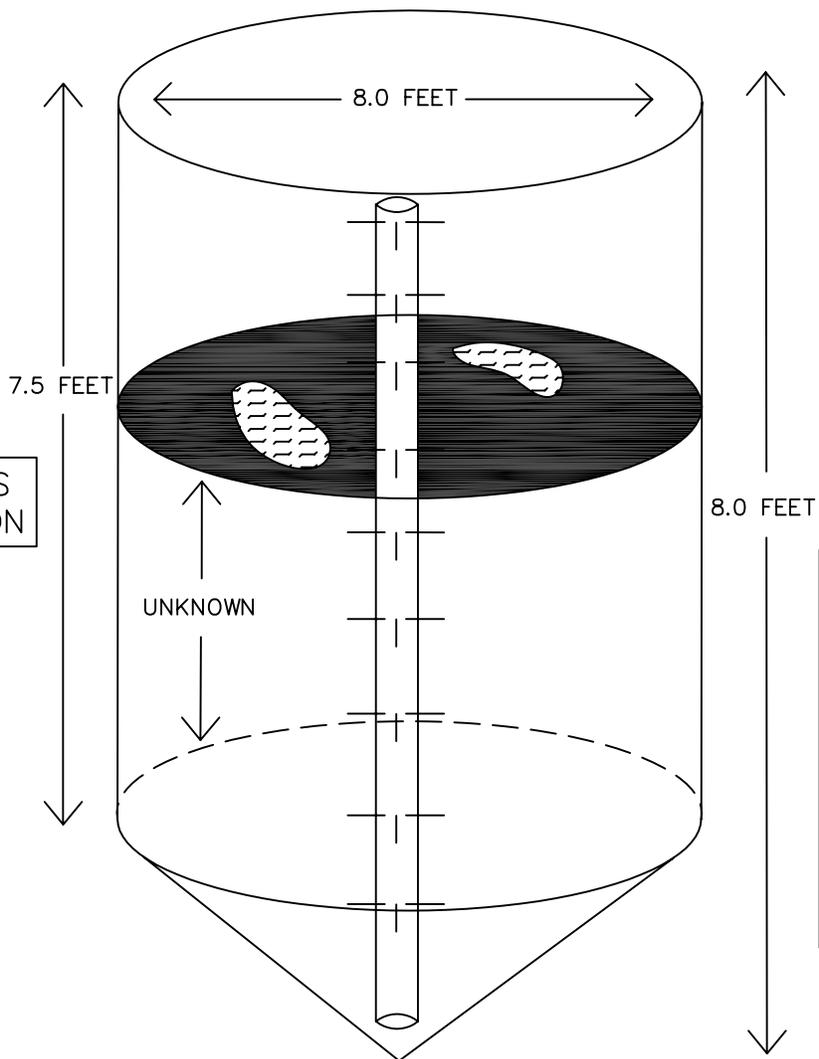
FILE NAME: R:\06110007\Figures\CAD VAT Figures\
Fig 7_Vat No. 1.dwg

FIGURE 7

PLAN VIEW



CROSS SECTION



VAT NO. 2 DESCRIPTION

VAT NO. 2 IS AN APPROXIMATELY 3,000 GALLON VAT. A RECONNAISSANCE OF THE VAT INDICATED WATER PUDDLED ON TOP OF A HARDENED BLACK SKIN. CONTENTS BELOW THE HARDENED BLACK SKIN ARE UNKNOWN. ON 12/15/06 APPROXIMATELY 32 GALLONS OF LIQUID WAS PUMPED FROM THE TOP OF THE HARDENED BLACK SKIN.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 2 (03-6000) DIAGRAM

DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

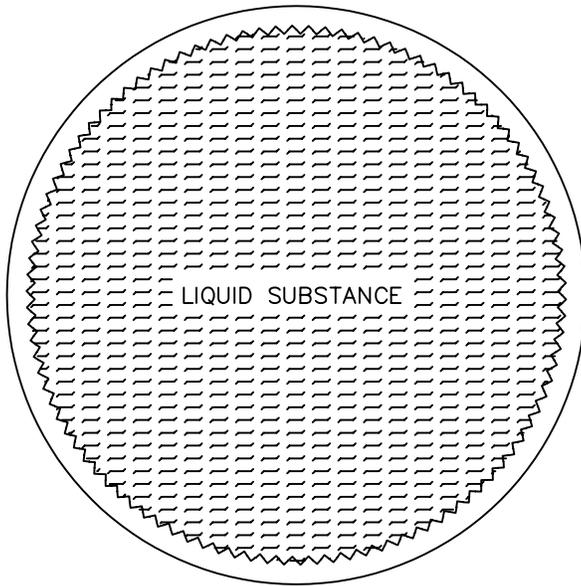
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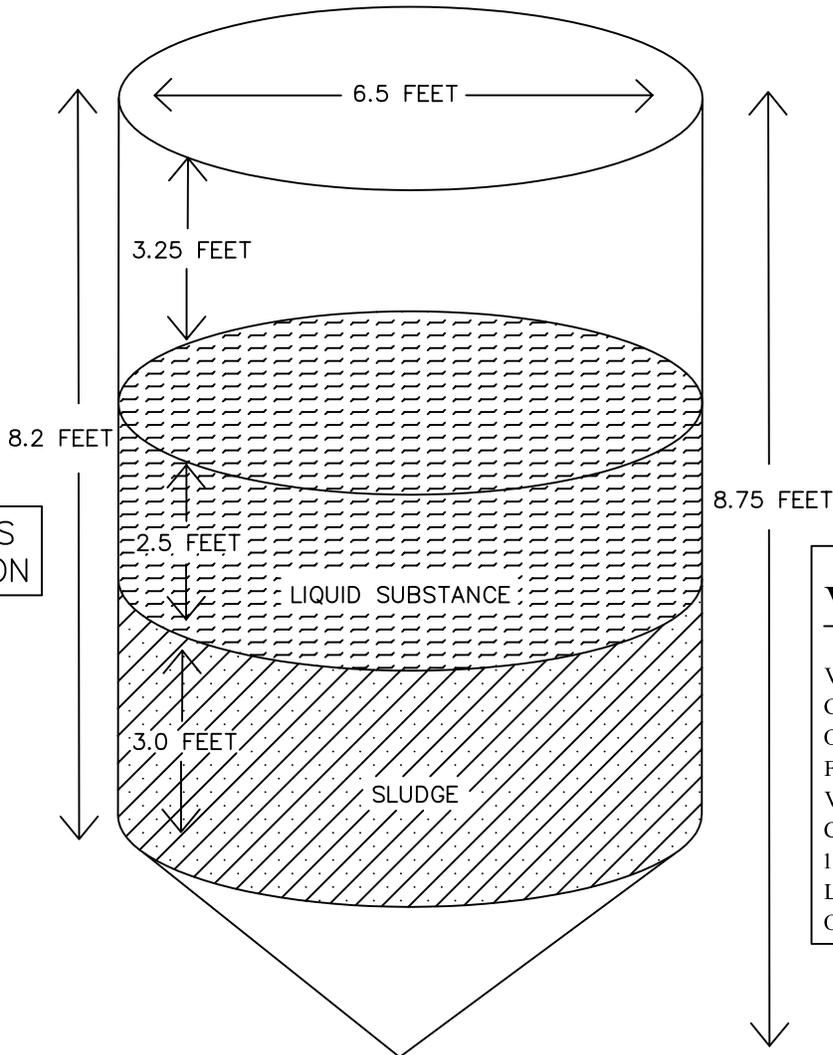
FILE NAME: R:\0611007\Figures\CAD VAT Figures\
Fig 8_Vat No 2.dwg

FIGURE 8

PLAN VIEW



CROSS SECTION



VAT NO. 3 DESCRIPTION

VAT NO. 3 IS AN APPROXIMATELY 2,000 GALLON VAT (APPROXIMATELY 720 GALLONS OF LIQUID AND APPROXIMATELY 115 CUBIC FEET OF SLUDGE). A RECONNAISSANCE OF THE VAT INDICATED FREE OPAQUE LIQUID WITH A CRUST ALONG THE EDGE OF THE VAT. ON 12/15/06 APPROXIMATELY 533 GALLONS OF LIQUID WAS PUMPED FROM THE TOP PORTION OF THE VAT.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 3 (03-1103) DIAGRAM

DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

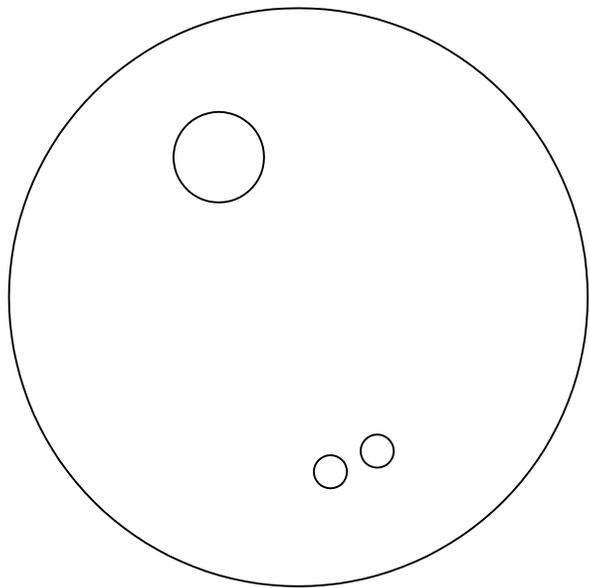
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T. BENTON

DATE
Updated on: 12/27/06

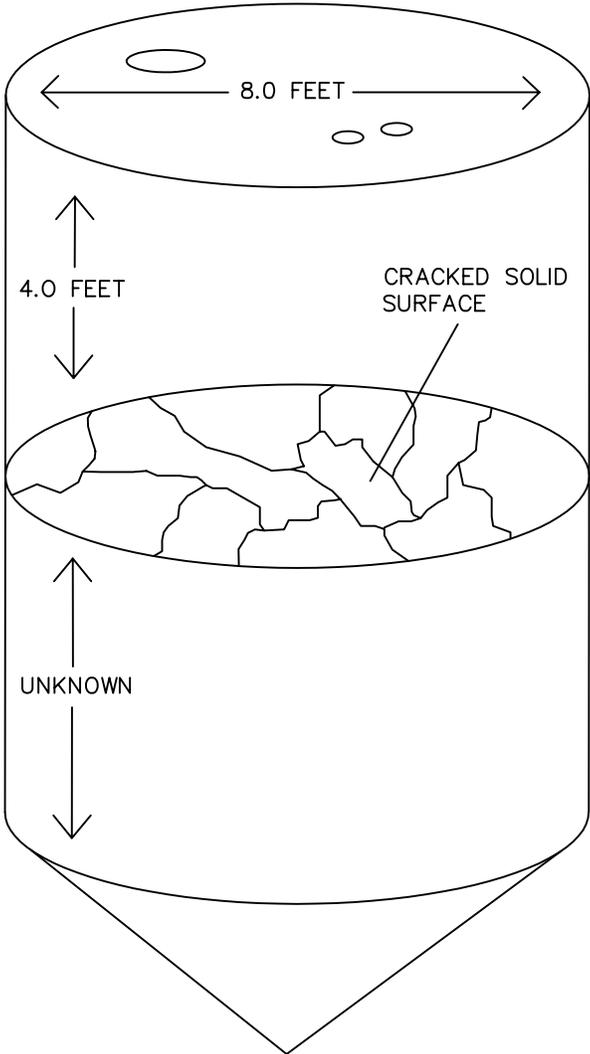
FILE NAME: R:\0611007\Figures\CAD VAT Figures\
Fig 9_Vat No 3.dwg

FIGURE 9

PLAN VIEW



CROSS SECTION



9.0 FEET

VAT NO. 4 DESCRIPTION

VAT NO. 4 IS AN APPROXIMATELY 3,000 GALLON VAT (APPROXIMATELY 116 CUBIC FEET OF SOLID). A RECONNAISSANCE OF THE VAT INDICATED A TAN-COLORED SOLID SUBSTANCE WITH CRACKS.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 4 (01-1038) DIAGRAM

DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

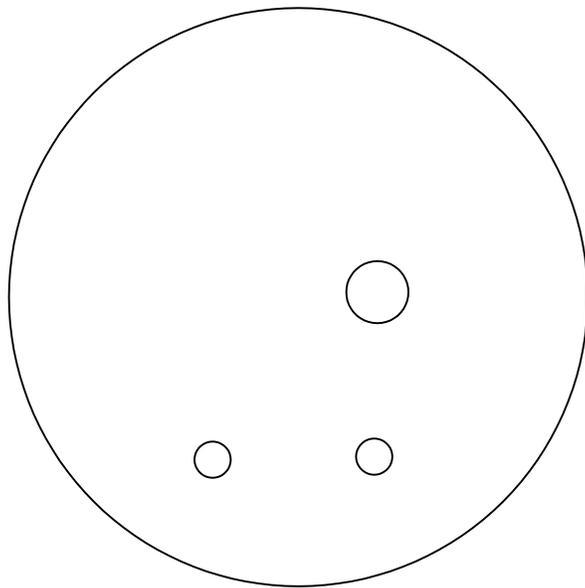
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T. BENTON

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Updated on: 12/27/06

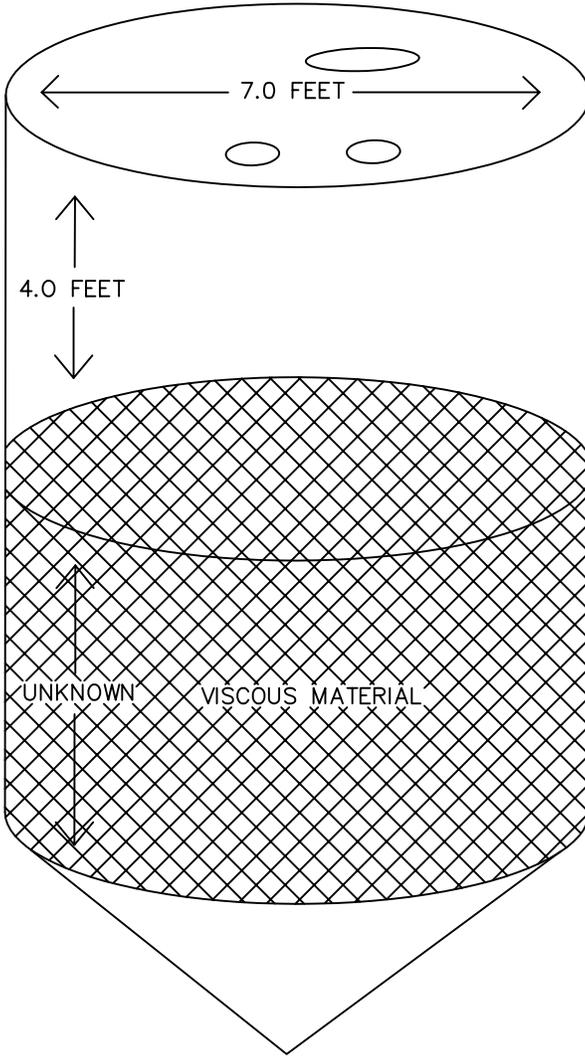
FILE NAME: R:\0611007\Figures\CAD VAT Figures\
Fig 10_Vat No 4.dwg

FIGURE 10

PLAN VIEW



CROSS SECTION



10.0 FEET

VAT NO. 5 DESCRIPTION

VAT NO. 5 IS AN APPROXIMATELY 2,500 GALLON VAT. A RECONNAISSANCE OF THE VAT INDICATED A VISCOUS MATERIAL WITH AN OPAQUE SKIN ON TOP.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 5 (03-8600) DIAGRAM

DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

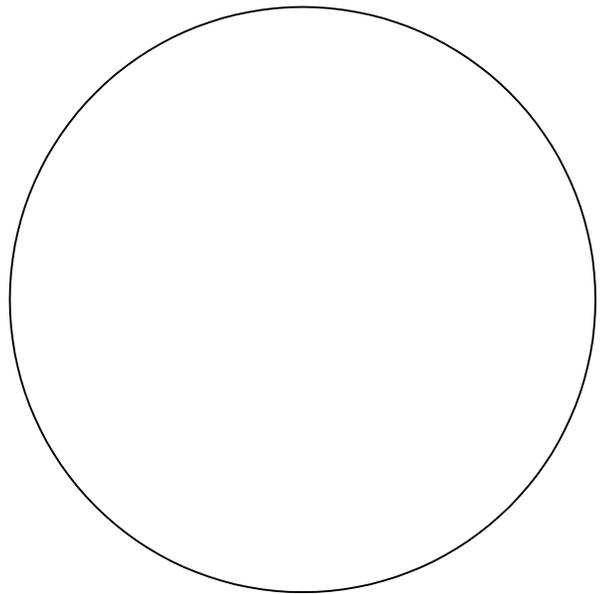
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T. BENTON

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Updated on: 12/27/06

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Fig 11_Vat No 5.dwg

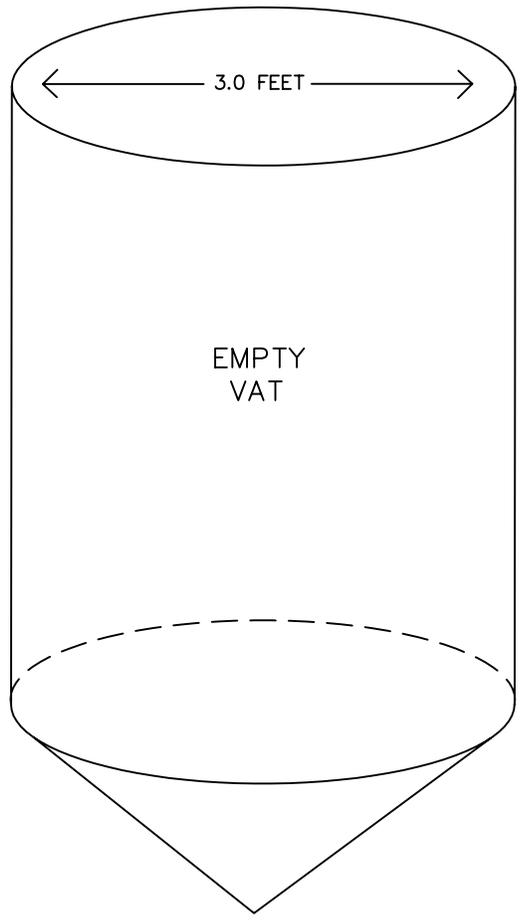
FIGURE 11

PLAN VIEW



NO IMAGE
AVAILABLE

CROSS
SECTION



3.0 FEET

VAT NO. 6 DESCRIPTION
VAT NO. 6 IS AN APPROXIMATELY 300 GALLON
VAT. A RECONNAISSANCE OF THE VAT
INDICATED THAT IT WAS EMPTY.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 6 DIAGRAM
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



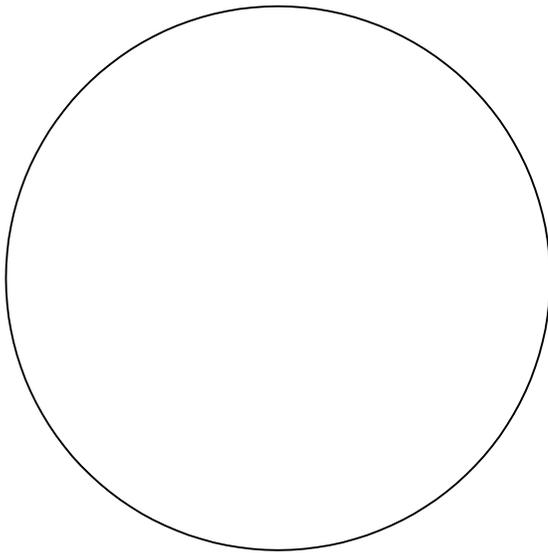
REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD # 06-11-0007\	DRAWN BY: T. BENTON	DATE Updated on: 12/27/06
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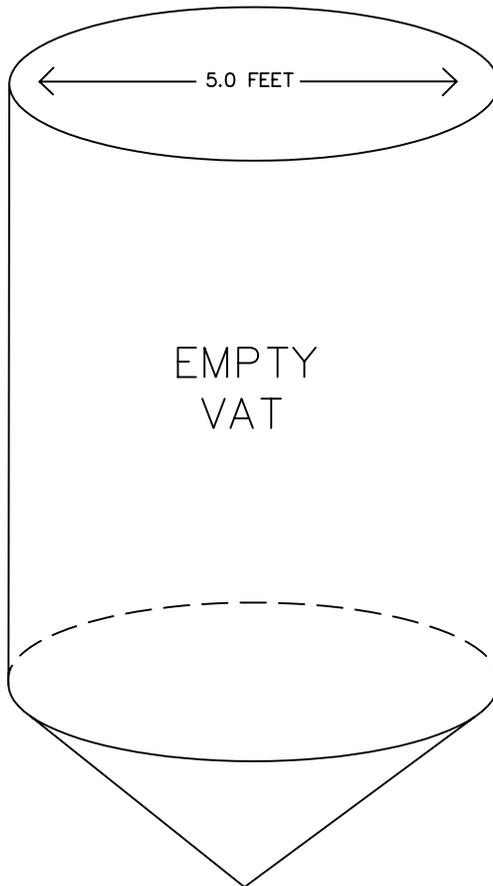
FILE NAME: R:\0611007\Figures\CAD VAT Figures\
Fig 12_Vat No 6.dwg

FIGURE 12

PLAN VIEW



CROSS SECTION



VAT NO. 7 DESCRIPTION

VAT NO. 7 IS AN APPROXIMATELY 400 GALLON VAT. A RECONNAISSANCE OF THE VAT INDICATED THAT IT WAS EMPTY.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 7 DIAGRAM
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

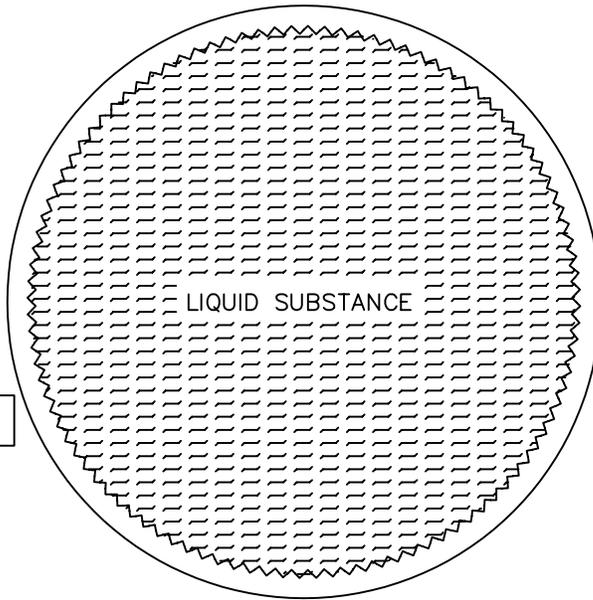
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T. BENTON

DATE
Updated on: 12/27/06

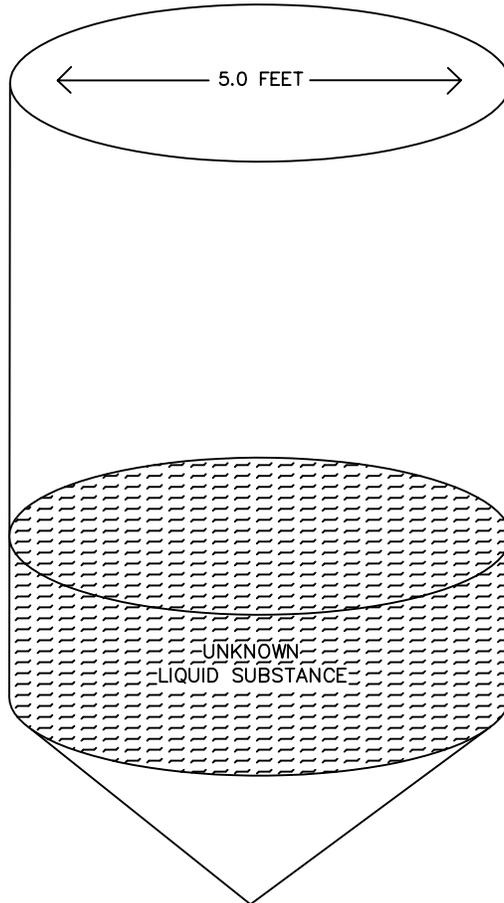
FILE NAME: R:\0611007\Figures\CAD VAT Figures\
Fig 13_Vat No 7.dwg

FIGURE 13

PLAN VIEW



CROSS SECTION



VAT NO. 8 DESCRIPTION

VAT NO. 8 IS AN APPROXIMATELY 400 GALLON VAT (APPROXIMATELY 125 GALLONS OF LIQUID). A RECONNAISSANCE OF THE VAT INDICATED AN UNKNOWN LIQUID IN THE VAT. ON 12/15/06 APPROXIMATELY 122 GALLONS OF LIQUID WAS PUMPED FROM THE VAT.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 8 DIAGRAM
 DANVERSPORT EXPLOSION SITE
 126 WATER STREET
 DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
 06-11-0007

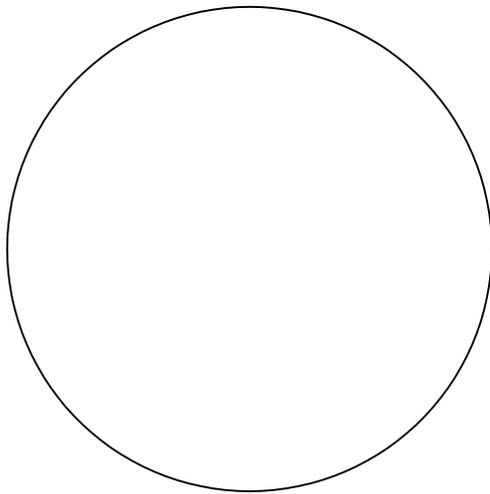
DRAWN BY:
 T. BENTON

DATE
 Updated on: 12/27/06

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 Fig 14_Vat No 8.dwg

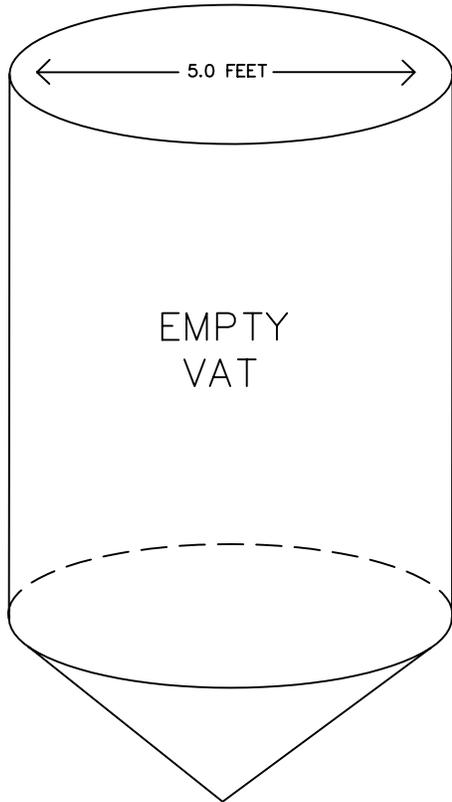
FIGURE 14

PLAN VIEW



NO IMAGE
AVAILABLE

CROSS
SECTION



5.0 FEET

VAT NO. 9 DESCRIPTION

VAT NO. 9 IS AN APPROXIMATELY 400 GALLON
VAT. A RECONNAISSANCE OF THE VAT
INDICATED THAT IT WAS EMPTY.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 9 DIAGRAM
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

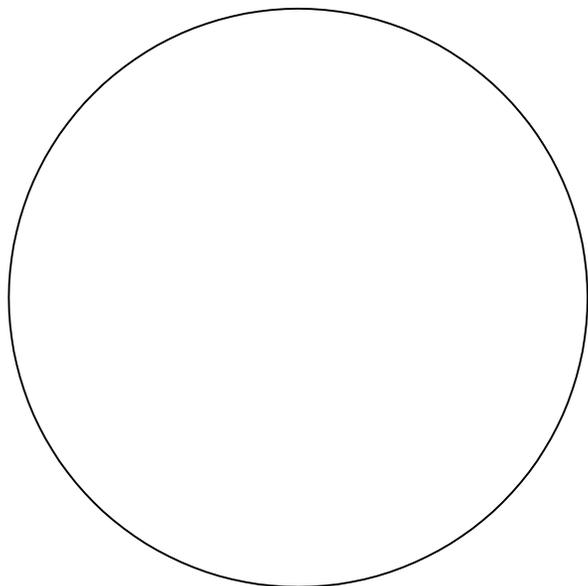
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T. BENTON

DATE
Updated on: 12/27/06

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Fig 15_Vat No 9.dwg

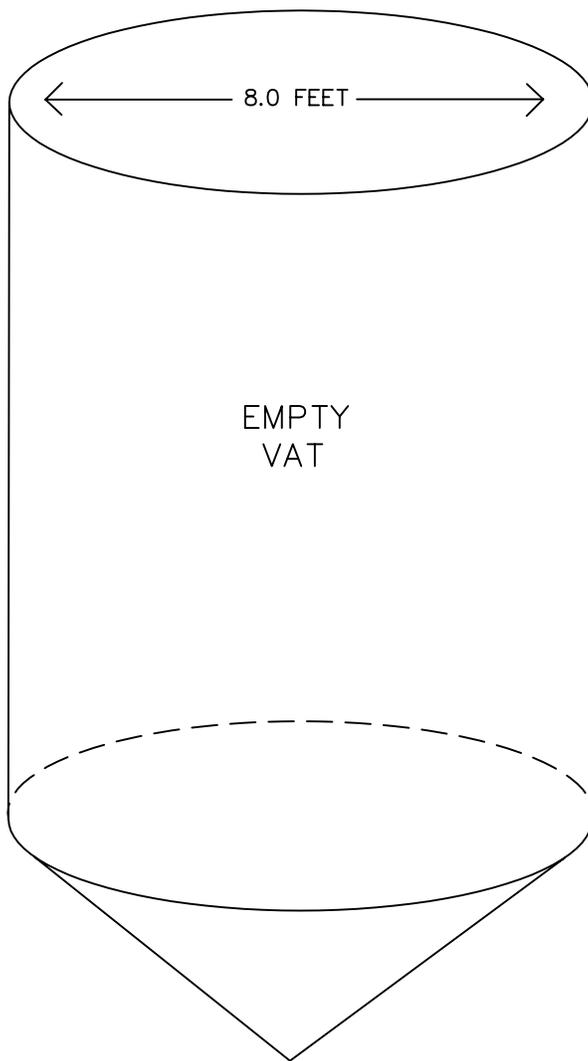
FIGURE 15

PLAN VIEW



NO IMAGE
AVAILABLE

CROSS
SECTION



8.0 FEET

VAT NO. 10 DESCRIPTION

VAT NO. 10 IS AN APPROXIMATELY 3,000 GALLON VAT. A RECONNAISSANCE OF THE VAT INDICATED THAT IT WAS EMPTY.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 10 DIAGRAM
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

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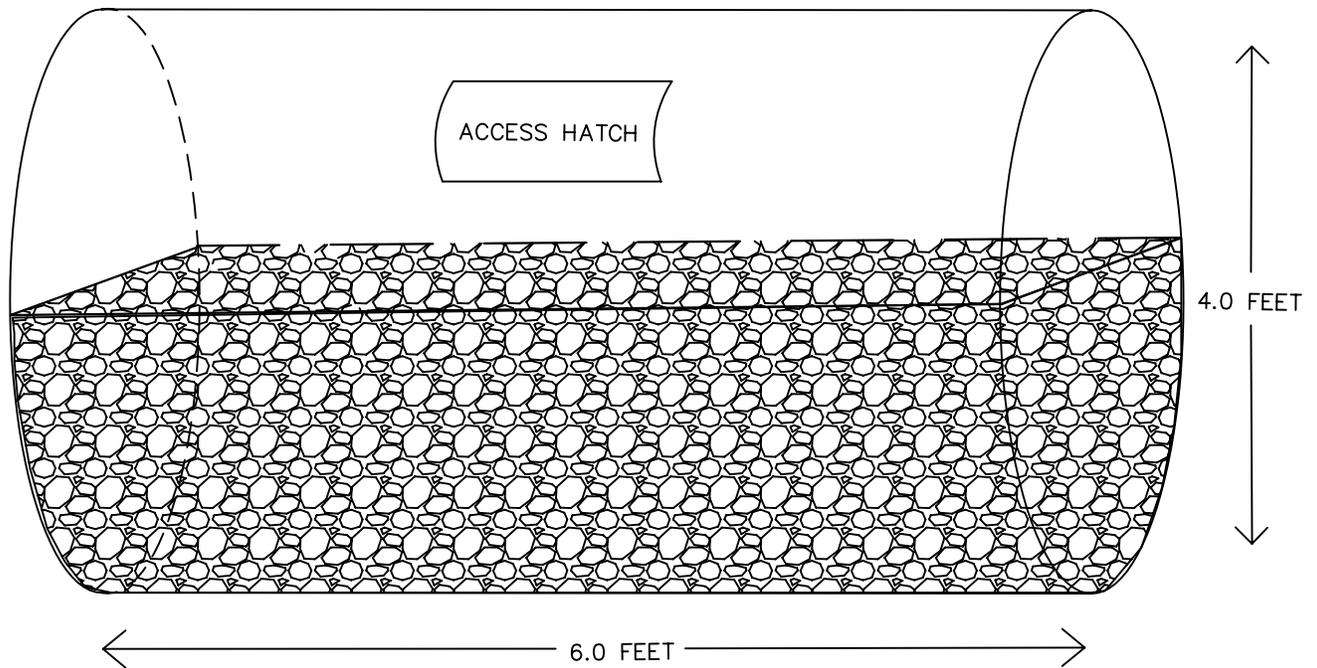
DATE
Updated on: 12/27/06

FILE NAME: R:\0611007\Figures\CAD VAT Figures\
Fig 16_Vat No 10.dwg

FIGURE 16

VAT NO. 11 DESCRIPTION

VAT NO. 11 IS AN APPROXIMATELY 250 GALLON PEBBLE TUMBLER. A RECONNAISSANCE OF THE VAT INDICATED THE VAT WAS APPROXIMATELY HALF FULL OF SMOOTH 1-INCH STONE.



NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 11 DIAGRAM
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

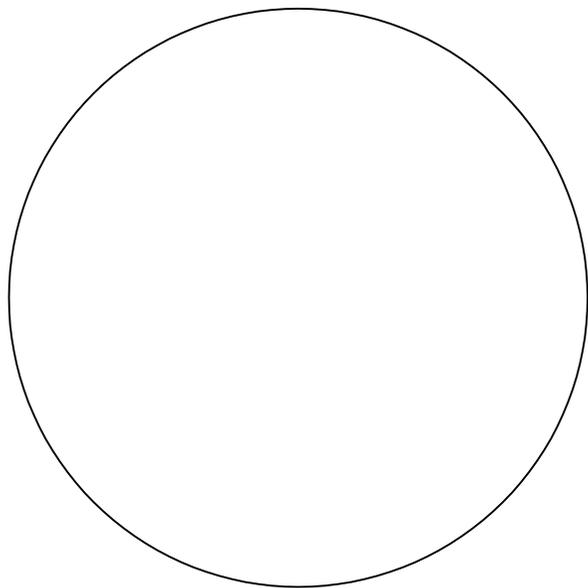
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K. BRENNAN

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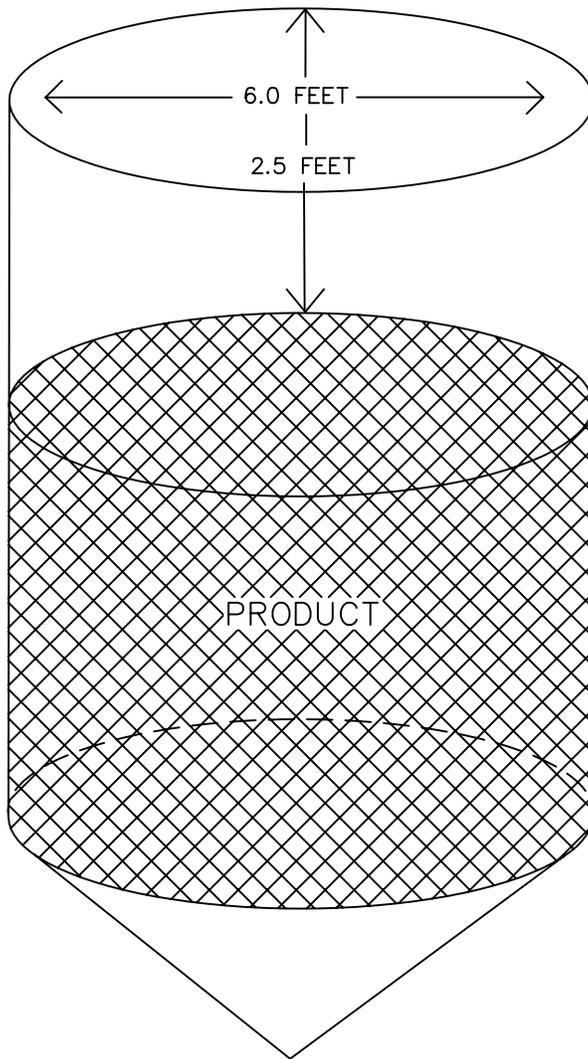
FILE NAME: R:\06110007\Figures\CAD VAT Figures\
Fig 17_Vat No 11.dwg

FIGURE 17

PLAN VIEW



CROSS SECTION



VAT NO. 12 DESCRIPTION

VAT NO. 12 IS AN APPROXIMATELY 5,000 GALLON VAT. A RECONNAISSANCE OF THE VAT INDICATED A BROWN VISCOUS, OIL-LIKE PRODUCT PRESENT 2.5 FEET BELOW THE TOP OF THE VAT.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 12 DIAGRAM
DANVERSPORT EXPLOSION SITE
126 WATER STREET
DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
06-11-0007

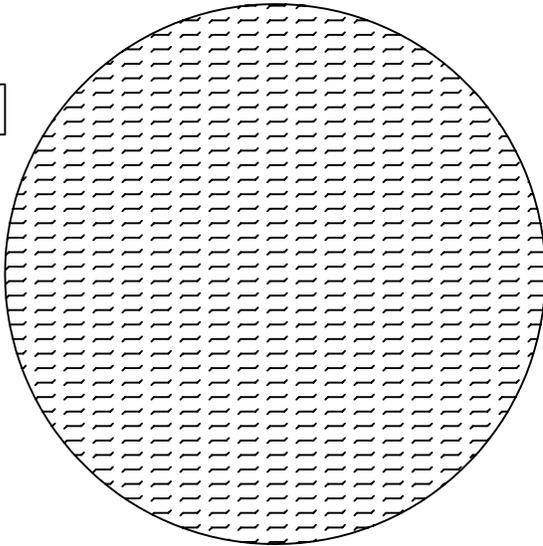
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T. BENTON

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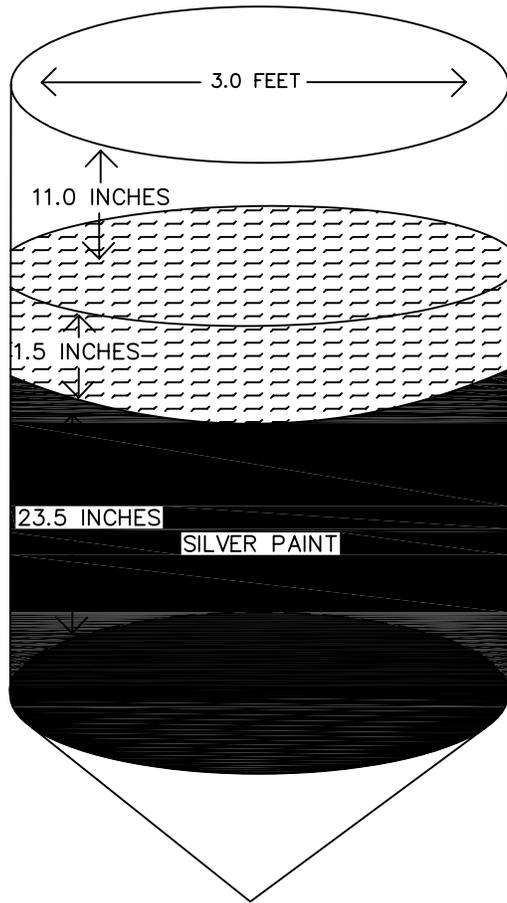
FILE NAME: R:\0611007\Figures\CAD VAT Figures\
Fig 18_Vat No 12.dwg

FIGURE 18

PLAN VIEW



CROSS SECTION



3.0 FEET

VAT NO. 13 DESCRIPTION

VAT NO. 13 IS AN APPROXIMATELY 300 GALLON VAT. A RECONNAISSANCE OF THE VAT INDICATED THAT 1.5 INCHES OF WATER IS PRESENT 11 INCHES BELOW THE TOP OF THE VAT WITH THE REMAINDER BEING FULL OF A SILVER COLORED PAINT.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 13 DIAGRAM
 DANVERSPORT EXPLOSION SITE
 126 WATER STREET
 DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD #
 06-11-0007

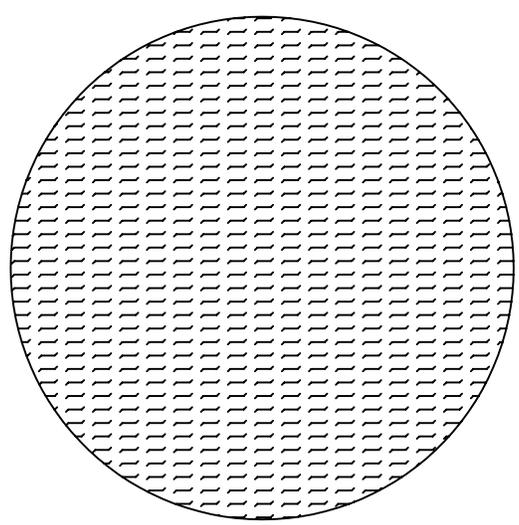
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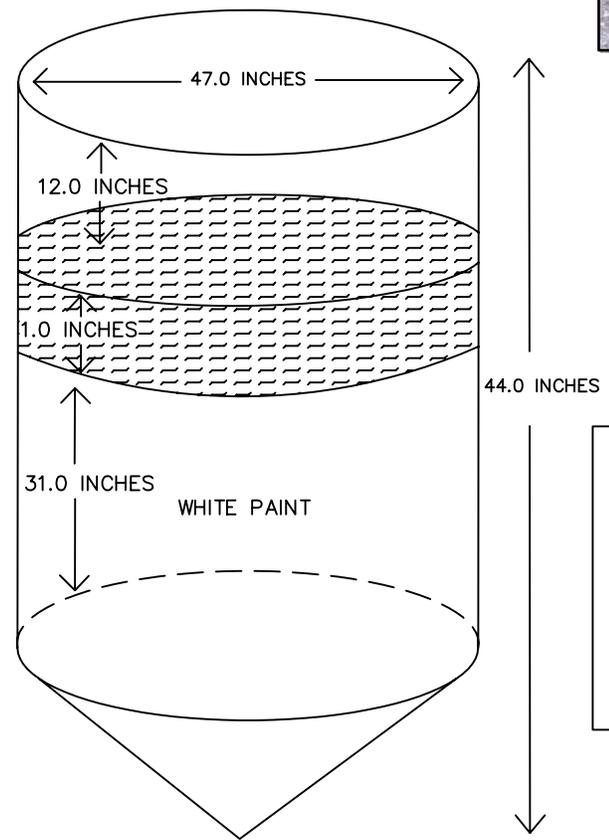
FILE NAME: R:\0611007\Figures\CAD VAT Figures\
 Fig 19_Vat No 13.dwg

FIGURE 19

PLAN VIEW



CROSS SECTION



VAT NO. 14 DESCRIPTION

VAT NO. 14 IS AN APPROXIMATELY 330 GALLON VAT. A RECONNAISSANCE OF THE VAT INDICATED THAT 1.0 INCH OF WATER IS PRESENT 12 INCHES BELOW THE TOP OF THE VAT WITH THE REMAINDER BEING FULL OF A WHITE COLORED PAINT.

NOTE: MEASUREMENTS ARE APPROXIMATE

VAT NO. 14 DIAGRAM
 DANVERSPORT EXPLOSION SITE
 126 WATER STREET
 DANVERS, MASSACHUSETTS



REGION I SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM

TDD # 06-11-0007	DRAWN BY: T. BENTON	DATE Updated on: 12/27/06
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FILE NAME: R:\0611007\Figures\CAD VAT Figures\Fig 20_Vat No 14.dwg

FIGURE 20

Appendix B

Tables and Spreadsheets

Table 1 – Volatile Organic Compounds Analytical Results, Surface Water Samples – 22 November 2006

Table 2 – Semivolatile Organic Compounds Analytical Results, Surface Water Samples – 22 November 2006

Table 3 – Metals Analytical Results, Surface Water Samples – 22 November 2006

Table 4 – Alcohols Analytical Results, Surface Water Samples – 22 November 2006

Table 5 – Volatile Organic Compounds Analytical Results, Surface Water Samples (MassDEP) – 22 November 2006

Table 6 – Volatile Organic Compounds Analytical Results, Surface Water Samples – 24 November 2006

Table 7 – Metals Analytical Results, Surface Water Samples – 24 November 2006

Table 8 – Volatile Organic Compounds Analytical Results, Sediment Samples – 24 November 2006

Table 9 – Metals Analytical Results, Sediment Samples – 24 November 2006

Table 10 – Waste Disposal Summary Table

Table 1

Volatile Organic Compounds Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006

Station Location:	CAI-001	CAI-002	CAI-003
Scribe Number:	0262-0001	0262-0002	0262-0003
Time Collected:	13:17	13:31	13:50
Date Collected:	11/22/2006	11/22/2006	11/22/2006

Analyte	MDL	Result	MDL	Result	MDL	Result
Chloromethane	10	ND	1,000	ND	200	ND
Vinyl Chloride	10	ND	1,000	ND	200	ND
Bromomethane	10	ND	1,000	ND	200	ND
Chloroethane	10	ND	1,000	ND	200	ND
Trichlorofluoromethane	10	ND	1,000	ND	200	ND
Ethyl Ether	10	ND	1,000	ND	200	ND
2-Propanone (acetone)	1,000	11,000 J	1,000	8,308	200	2,961 J
1,1,2-Trichloro-1,2,2-Trifluoroethane	10	ND	1,000	ND	200	ND
1,1-Dichloroethylene	10	ND	1,000	ND	200	ND
Carbon Disulfide	10	ND	1,000	ND	200	ND
Dichlorodifluoromethane	10	ND	1,000	ND	200	ND
Methylene Chloride	10	ND	1,000	ND	200	ND
Acrylonitrile	10	ND	1,000	ND	200	ND
Methyl-t-Butyl Ether	10	ND	1,000	ND	200	ND
Trans-1,2-Dichloroethylene	10	ND	1,000	ND	200	ND
1,1-dichloroethane	10	ND	1,000	ND	200	ND
Vinyl Acetate	10	ND	1,000	ND	200	ND
2-Butanone (MEK)	1,000	120,000 E	1,000	79,839	200	33,059 E
2,2-Dichloropropane	10	ND	1,000	ND	200	ND
cis-1,2-Dichloroethylene	10	ND	1,000	ND	200	ND
Chloroform	10	ND	1,000	ND	200	ND
Bromochloromethane	10	ND	1,000	ND	200	ND
Tetrahydrofuran	10	ND	1,000	ND	200	ND
1,1,1-Trichloroethane	10	ND	1,000	ND	200	ND
1,2-Dichloroethane	10	ND	1,000	ND	200	ND
Carbon tetrachloride	10	ND	1,000	ND	200	ND
Benzene	10	ND	1,000	ND	200	ND
c-1,3-dichloropropene	10	ND	1,000	ND	200	ND
Toluene	10	563	1,000	ND	200	271.7
t-1,3-Dichloropropene	10	ND	1,000	ND	200	ND
1,1,2-Trichloroethane	10	ND	1,000	ND	200	ND
Dibromochloromethane	10	ND	1,000	ND	200	ND
Chlorobenzene	10	ND	1,000	ND	200	ND
1,1-Dichloropropene	10	ND	1,000	ND	200	ND
Trichloroethylene	10	ND	1,000	ND	200	ND
1,2-Dichloropropane	10	ND	1,000	ND	200	ND
Bromodichloromethane	10	ND	1,000	ND	200	ND
Dibromomethane	10	ND	1,000	ND	200	ND
4-Methyl-2-Pentanone(MIBK)	1,000	3,300	1,000	2,667	200	910
1,3-Dichloropropane	10	ND	1,000	ND	200	ND
Tetrachloroethylene	10	ND	1,000	ND	200	ND
1,2-Dibromoethane	10	ND	1,000	ND	200	ND

Table 1

**Volatile Organic Compounds Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006**

Station Location:	CAI-001	CAI-002	CAI-003
Scribe Number:	0262-0001	0262-0002	0262-0003
Time Collected:	13:17	13:31	13:50
Date Collected:	11/22/2006	11/22/2006	11/22/2006

Analyte	MDL	Result	MDL	Result	MDL	Result
2-Hexanone	10	ND	1,000	2,626	200	901.5
1,1,1,2-Tetrachloroethane	10	ND	1,000	ND	200	ND
Ethylbenzene	10	267	1,000	ND	200	ND
M/P Xylene	20	426.4	2,000	ND	400	ND
Ortho Xylene	10	108	1,000	ND	200	ND
Styrene	10	ND	1,000	ND	200	ND
Bromoform	10	ND	1,000	ND	200	ND
1,1,2,2-Tetrachloroethane	10	ND	1,000	ND	200	ND
Isopropylbenzene	10	ND	1,000	ND	200	ND
Bromobenzene	10	ND	1,000	ND	200	ND
1,2,3-Trichloropropane	10	ND	1,000	ND	200	ND
N-Propylbenzene	10	ND	1,000	ND	200	ND
2-Chlorotoluene	10	ND	1,000	ND	200	ND
4-Chlorotoluene	10	ND	1,000	ND	200	ND
Tert-Butylbenzene	10	ND	1,000	ND	200	ND
1,3,5-Trimethylbenzene	10	ND	1,000	ND	200	ND
1,2,4-Trimethylbenzene	10	ND	1,000	ND	200	ND
Sec-Butylbenzene	10	ND	1,000	ND	200	ND
1,3-Dichlorobenzene	10	ND	1,000	ND	200	ND
Para-Isopropyltoluene	10	ND	1,000	ND	200	ND
1,4-Dichlorobenzene	10	ND	1,000	ND	200	ND
1,2-Dichlorobenzene	10	ND	1,000	ND	200	ND
N-Butylbenzene	10	ND	1,000	ND	200	ND
1,2-Dibromo-3-Chloropropane	10	ND	1,000	ND	200	ND
1,2,4-Trichlorobenzene	10	ND	1,000	ND	200	ND
Hexachlorobutadiene	10	ND	1,000	ND	200	ND
Naphthalene	10	ND	1,000	ND	200	ND
1,2,3-Trichlorobenzene	10	ND	1,000	ND	200	ND

Notes: Samples collected by the Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START). Samples were submitted to U.S. Environmental Protection Agency (EPA) Office of Environmental Measurement and Evaluation (OEME).

All results reported in micrograms per liter (µg/L) [equivalent to parts per billion (ppb)].

VOCs - Volatile Organic Compounds.

ND - Not detected.

J - Estimated value.

E - Estimated value.

MDL - Method detection limit.

MEK - Methyl ethyl ketone.

MIBK - Methyl isobutyl ketone.

Table 2

Semivolatile Organic Compounds Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006

Station Location:	CAI-001	CAI-002	CAI-003
Scribe Number:	0262-0001	0262-0002	0262-0003
Time Collected:	13:17	13:31	13:50
Date Collected:	11/22/2006	11/22/2006	11/22/2006

Analyte	MDL	Result	MDL	Result	MDL	Result
N-nitrosodimethylamine	100	ND	100	ND	5	ND
Pyridine	100	ND	100	ND	5	ND
Methyl methanesulfonate	100	ND	100	ND	5	ND
Ethyl methanesulfonate	100	ND	100	ND	5	ND
Phenol	100	ND	100	ND	5	ND
Aniline	100	ND	100	ND	5	ND
Bis(2-Chloroethyl)ether	100	ND	100	ND	5	ND
2-Chlorophenol	100	ND	100	ND	5	ND
1,3-Dichlorobenzene	100	ND	100	ND	5	ND
1,4-Dichlorobenzene	100	ND	100	ND	5	ND
Benzyl alcohol	100	3,100 E	100	4,462 E	5	118 E
1,2-Dichlorobenzene	100	ND	100	ND	5	ND
2-Methylphenol	100	ND	100	ND	5	ND
2,2'-oxybis(1-chloropropane)	100	ND	100	ND	5	ND
Acetophenone	100	100	100	273	5	ND
3&4-Methylphenol	200	ND	200	ND	10	ND
N-nitroso-di-n-propylamine	100	ND	100	ND	5	ND
Hexachloroethane	100	ND	100	ND	5	ND
Nitrobenzene	100	ND	100	ND	5	ND
Isophorone	100	ND	100	ND	5	ND
2-Nitrophenol	100	ND	100	ND	5	ND
2,4-dimethylphenol	200	ND	200	ND	10	ND
bis(-2-Chloroethoxy)methane	100	ND	100	ND	5	ND
Benzoic acid	100	570	100	ND	5	ND
2,4-Dichlorophenol	100	ND	100	ND	5	ND
1,2,4-Trichlorobenzene	100	ND	100	ND	5	ND
Naphthalene	100	ND	100	ND	5	ND
2,6-Dichlorophenol	100	ND	100	ND	5	ND
4-Chloroaniline	100	ND	100	ND	5	ND
Hexachloropropene	100	ND	100	ND	5	ND
Hexachlorobutadiene	100	ND	100	ND	5	ND
4-Chloro-3-methylphenol	100	ND	100	ND	5	ND
Isosafrole	100	ND	100	ND	5	ND
2-Methylnaphthalene	100	ND	100	ND	5	ND
1-Methylnaphthalene	100	ND	100	ND	5	ND
Hexachlorocyclopentadiene	100	ND	100	ND	5	ND
1,2,4,5-Tetrachlorobenzene	100	ND	100	ND	5	ND
2,4,6-Trichlorophenol	100	ND	100	ND	5	ND
2,4,5-Trichlorophenol	100	ND	100	ND	5	ND
Safrole	100	ND	100	ND	5	ND

Table 2

**Semivolatile Organic Compounds Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006**

Station Location:	CAI-001	CAI-002	CAI-003
Scribe Number:	0262-0001	0262-0002	0262-0003
Time Collected:	13:17	13:31	13:50
Date Collected:	11/22/2006	11/22/2006	11/22/2006

Analyte	MDL	Result	MDL	Result	MDL	Result
2-Chloronaphthalene	100	ND	100	ND	5	ND
2-Nitroaniline	100	ND	100	ND	5	ND
1,4-Naphthoquinone	100	ND	100	ND	5	ND
Dimethyl phthalate	100	ND	100	ND	5	ND
1,3-Dinitrobenzene	100	ND	100	ND	5	ND
2,6-Dinitrotoluene	100	ND	100	ND	5	ND
Acenaphthylene	100	ND	100	ND	5	ND
3-Nitroaniline	100	ND	100	ND	5	ND
Acenaphthene	100	ND	100	ND	5	ND
2,4-Dinitrophenol	100	ND	100	ND	5	ND
4-Nitrophenol	100	ND	100	ND	5	ND
Pentachlorobenzene	100	ND	100	ND	5	ND
Dibenzofuran	100	ND	100	ND	5	ND
2,4-Dinitrotoluene	100	ND	100	ND	5	ND
2,3,4,6-Tetrachlorophenol	100	ND	100	ND	5	ND
Diethylphthalate	100	ND	100	ND	5	ND
Fluorene	100	ND	100	ND	5	ND
4-Chlorophenyl-phenylether	100	ND	100	ND	5	ND
4-Nitroaniline	100	ND	100	ND	5	ND
4,6-Dinitro-2-methylphenol	100	ND	100	ND	5	ND
N-Nitrosodiphenylamine	100	ND	100	ND	5	ND
Azobenzene	100	ND	100	ND	5	ND
Phenacetin	100	ND	100	ND	5	ND
4-Bromophenyl-phenylether	100	ND	100	ND	5	ND
Hexachlorobenzene	100	ND	100	ND	5	ND
Pentachlorophenol	100	ND	100	ND	5	ND
Pentachloronitrobenzene	100	ND	100	ND	5	ND
Dinoseb	100	ND	100	ND	5	ND
Phenanthrene	100	ND	100	99.47 L	5	ND
Anthracene	100	ND	100	ND	5	ND
Carbazole	100	ND	100	ND	5	ND
Di-n-butylphthalate	100	ND	100	268	5	11.28
4-nitroquinoline-1-oxide	200	ND	200	ND	10	ND
Isodrin	100	ND	100	ND	5	ND
Fluoranthene	100	ND	100	ND	5	ND
Benzidine	100	ND	100	ND	5	ND
Pyrene	100	ND	100	ND	5	ND
Aramite	100	ND	100	ND	5	ND
Chlorobenzilate	100	ND	100	ND	5	ND
Butylbenzylphthalate	100	130	100	ND	5	ND

Table 2

**Semivolatile Organic Compounds Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006**

Station Location:	CAI-001	CAI-002	CAI-003
Scribe Number:	0262-0001	0262-0002	0262-0003
Time Collected:	13:17	13:31	13:50
Date Collected:	11/22/2006	11/22/2006	11/22/2006

Analyte	MDL	Result	MDL	Result	MDL	Result
3,3'-Dichlorobenzidine	100	ND	100	ND	5	ND
Benzo(a)anthracene	100	ND	100	ND	5	ND
Chrysene	100	ND	100	ND	5	ND
Kepon	100	ND	100	ND	5	ND
Bis(2-ethylhexyl)phthalate	100	ND	100	ND	5	ND
Di-n-octyl phthalate	100	ND	100	ND	5	ND
Benzo(b)fluoranthene	100	ND	100	ND	5	ND
Benzo(k)fluoranthene	100	ND	100	ND	5	ND
Benzo(a)pyrene	100	ND	100	ND	5	ND
3-Methylcholanthrene	100	ND	100	ND	5	ND
Indeno(1,2,3-cd)pyrene	100	ND	100	ND	5	ND
Dibenz(a,h)anthracene	100	ND	100	ND	5	ND
Benzo(g,h,i)perylene	100	ND	100	ND	5	ND

Notes: Samples collected by the Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START). Samples were submitted to U.S. Environmental Protection Agency (EPA) Office of Environmental Measurement and Evaluation (OEME).

All results reported in micrograms per liter (ug/L) [equivalent to parts per billion (ppb)].

ND - Not detected.

L - Estimated value.

E - Estimated value.

MDL - Method detection limit.

Table 3

**Metals Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006**

Station Location:	CAI-001	CAI-002	CAI-003
Scribe Number:	0262-0001	0262-0002	0262-0003
Time Collected:	13:17	13:31	13:50
Date Collected:	11/22/2006	11/22/2006	11/22/2006

Analyte	MDL	Result	MDL	Result	MDL	Result
Silver	300	ND	300	ND	300	ND
Arsenic	1000	ND	1000	ND	1000	ND
Barium	300	ND	300	361	300	ND
Cadmium	300	ND	300	ND	300	ND
Chromium	300	ND	300	ND	300	ND
Lead	1000	ND	1000	ND	1000	ND
Selenium	1000	ND	1000	ND	1000	ND

Note: Samples collected by Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START). Samples were submitted to U.S. Environmental Protection Agency (EPA) Office of Environmental Measurement and Evaluation (OEME).

All results reported in milligrams per liter (mg/L) [equivalent to parts per million (ppm)].

ND - Not detected.

Table 4

**Alcohols Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006**

Station Location:	CAI-001	CAI-002	CAI-003
Scribe Number:	0262-0001	0262-0002	0262-0003
Time Collected:	13:17	13:31	13:50
Date Collected:	11/22/2006	11/22/2006	11/22/2006

Analyte	MDL	Result	MDL	Result	MDL	Result
Methanol	0.5	180	0.5	313	0.5	130
Isopropanol	0.5	274	0.5	417	0.5	179
Ethanol	0.5	159	0.5	241	0.5	156

Note: Samples collected by Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START). Samples were submitted to U.S. Environmental Protection Agency (EPA) Office of Environmental Measurement and Evaluation (OEME).

All results reported in milligrams per liter (mg/L) [equivalent to parts per million (ppm)].

ND - Not detected.

MDL - Method Detection Limit.

Table 5

Volatile Organic Compounds Analytical Results (MassDEP)
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006

Station Location	CAI-04	CAI-05	CAI-06	CAI-07	CAI-08	CAI-09	
Time Collected	14:48 hours	15:03 hours	15:15 hours	15:25 hours	15:35 hours	15:40 hours	
Date Collected	11/22/2006	11/22/2006	11/22/2006	11/22/2006	11/22/2006	11/22/2006	
Scribe Number	0262-0009	0262-0010	0262-0011	0262-0012	0262-0013	0262-0014	

Analyte	Reporting Limit	CAI-04	CAI-05	CAI-06	CAI-07	CAI-08	CAI-09	Method
Dichlorodifluoromethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Chloromethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Vinyl Chloride	0.002	ND	ND	ND	ND	ND	ND	8260B
Bromomethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Chloroethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Acetone	0.05	ND	ND	ND	ND	ND	ND	8260B
Trichlorofluoromethane	0.002	ND	ND	ND	ND	ND	ND	8260B
1,1-Dichloroethene	0.002	ND	ND	ND	ND	ND	ND	8260B
Carbon Disulfide	0.002	ND	ND	ND	ND	ND	ND	8260B
Methylene Chloride	0.002	ND	ND	ND	ND	ND	ND	8260B
Freon-113	0.002	ND	ND	ND	ND	ND	ND	8260B
trans-1,2-Dichloroethene	0.002	ND	ND	ND	ND	ND	ND	8260B
Methyl tert-Butyl Ether	0.002	ND	ND	ND	ND	ND	ND	8260B
1,1-Dichloroethane	0.002	ND	ND	ND	ND	ND	ND	8260B
2-Butanone	0.02	0.125	0.11	0.05	0.06	0.027	0.065	8260B
Chlorobromomethane	0.002	ND	ND	ND	ND	ND	ND	8260B
2,2-Dichloropropane	0.002	ND	ND	ND	ND	ND	ND	8260B
cis-1,2-Dichloroethene	0.002	ND	ND	ND	ND	ND	ND	8260B
Chloroform	0.002	ND	ND	ND	ND	ND	ND	8260B
1,1,1-Trichloroethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Carbon Tetrachloride	0.002	ND	ND	ND	ND	ND	ND	8260B
1,1-Dichloropropene	0.002	ND	ND	ND	ND	ND	ND	8260B
Benzene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,2-Dichloroethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Trichloroethene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,2-Dichloropropane	0.002	ND	ND	ND	ND	ND	ND	8260B
Dibromomethane	0.002	ND	ND	ND	ND	ND	ND	8260B

Table 5

Volatile Organic Compounds Analytical Results (MassDEP)
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006

Station Location	CAI-04	CAI-05	CAI-06	CAI-07	CAI-08	CAI-09	
Time Collected	14:48 hours	15:03 hours	15:15 hours	15:25 hours	15:35 hours	15:40 hours	
Date Collected	11/22/2006	11/22/2006	11/22/2006	11/22/2006	11/22/2006	11/22/2006	
Scribe Number	0262-0009	0262-0010	0262-0011	0262-0012	0262-0013	0262-0014	

Analyte	Reporting Limit	CAI-04	CAI-05	CAI-06	CAI-07	CAI-08	CAI-09	Method
Bromodichloromethane	0.002	ND	ND	ND	ND	ND	ND	8260B
cis-1,3-Dichloropropene	0.002	ND	ND	ND	ND	ND	ND	8260B
MIBK	0.02	0.013	0.012	0.0051	0.0067	0.0025	0.007	8260B
Toluene	0.002	0.007	0.0049	0.0026	0.0027	0.001	0.0025	8260B
trans-1,3-Dichloropropene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,1,2-Trichloroethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Tetrachloroethene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,3-Dichloropropane	0.002	ND	ND	ND	ND	ND	ND	8260B
Dibromochloromethane	0.002	ND	ND	ND	ND	ND	ND	8260B
1,2-Dibromoethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Chlorobenzene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,1,1,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND	ND	8260B
Ethylbenzene	0.002	0.0015	0.0011	0.00066	0.00062	ND	0.00056	8260B
Xylene (Total)	0.004	0.0035	0.00254	0.0021	0.00133	ND	0.0012	8260B
Styrene	0.002	ND	ND	ND	ND	ND	ND	8260B
Bromoform	0.002	ND	ND	ND	ND	ND	ND	8260B
Isopropylbenzene	0.002	ND	ND	ND	ND	ND	ND	8260B
Bromobenzene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND	ND	8260B
1,2,3-Trichloropropane	0.002	ND	ND	ND	ND	ND	ND	8260B
n-Propylbenzene	0.002	ND	ND	ND	ND	ND	ND	8260B
2-Chlorotoluene	0.002	ND	ND	ND	ND	ND	ND	8260B
4-Chlorotoluene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,3,5-Trimethylbenzene	0.002	ND	ND	ND	ND	ND	ND	8260B
tert-Butylbenzene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,2,4-Trimethylbenzene	0.002	ND	ND	ND	ND	ND	ND	8260B
sec-Butylbenzene	0.002	ND	ND	ND	ND	ND	ND	8260B
1,3-Dichlorobenzene	0.002	ND	ND	ND	ND	ND	ND	8260B

Table 5

**Volatile Organic Compounds Analytical Results (MassDEP)
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
22 November 2006**

Station Location	CAI-04	CAI-05	CAI-06	CAI-07	CAI-08	CAI-09	
Time Collected	14:48 hours	15:03 hours	15:15 hours	15:25 hours	15:35 hours	15:40 hours	
Date Collected	11/22/2006	11/22/2006	11/22/2006	11/22/2006	11/22/2006	11/22/2006	
Scribe Number	0262-0009	0262-0010	0262-0011	0262-0012	0262-0013	0262-0014	
Analyte	Reporting Limit						Method
4-Isopropyltoluene	0.002	ND	ND	ND	ND	ND	8260B
1,4-Dichlorobenzene	0.002	ND	ND	ND	ND	ND	8260B
1,2-Dichlorobenzene	0.002	ND	ND	ND	ND	ND	8260B
n-Butylbenzene	0.002	ND	ND	ND	ND	ND	8260B
1,2-Dibromo-3-chloropropan	0.002	ND	ND	ND	ND	ND	8260B
1,2,4-Trichlorobenzene	0.002	ND	ND	ND	ND	ND	8260B
Hexachlorobutadiene	0.002	ND	ND	ND	ND	ND	8260B
Naphthalene	0.002	ND	ND	ND	ND	ND	8260B
1,2,3-Trichlorobenzene	0.002	ND	ND	ND	ND	ND	8260B
TIC*		< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8260B

Note: Samples collected by Weston Solutions, Inc. Superfund Technical Assessment and Response Team (START). High Tide was at approximately 1200 hrs. All samples were collected on the outgoing tide.

Samples were submitted to Massachusetts Department of Environmental Protection (Mass DEP) laboratory for analysis.

* TIC = Tentatively Identified Compounds. These results have an estimated quantitation; the analytes are not included in the initial instrument calibration.

All results reported in parts per million (ppm).

ND - Not Detected.

Table 6

Volatile Organic Compounds Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
24 November 2006

Station Location:	CAI-10	CAI-11	CAI-12	CAI-13	CAI-14	CAI-15
Scribe Number:	0262-0015	0262-0016	0262-0017	0262-0018	0262-0019	0262-0020
Time Collected:	10:15	10:15	10:22	10:22	10:30	10:30
Date Collected:	11/24/2006	11/24/2006	11/24/2006	11/24/2006	11/24/2006	11/24/2006

Analyte	RL	Result	Result	Result	Result	Result	Result
1,1,1,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-Trifluoroetha	1	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	1	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	1	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	1	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	1	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	1	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	1	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	1	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	1	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	1	16	15	13	12	11	9.2
2-Chlorotoluene	1	ND	ND	ND	ND	ND	ND
2-Hexanone	1	ND	ND	ND	ND	ND	ND
2-Propanone (acetone)	1	13 J	12 J	11 J	9.5 J	8.4 J	8.2 J
4-Chlorotoluene	1	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	1	ND	ND	ND	ND	ND	ND
Acrylonitrile	1	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
Bromobenzene	1	ND	ND	ND	ND	ND	ND
Bromochloromethane	1	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	ND	ND	ND	ND	ND	ND

Table 6

**Volatile Organic Compounds Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
24 November 2006**

Station Location:	CAI-10	CAI-11	CAI-12	CAI-13	CAI-14	CAI-15
Scribe Number:	0262-0015	0262-0016	0262-0017	0262-0018	0262-0019	0262-0020
Time Collected:	10:15	10:15	10:22	10:22	10:30	10:30
Date Collected:	11/24/2006	11/24/2006	11/24/2006	11/24/2006	11/24/2006	11/24/2006

Analyte	RL	Result	Result	Result	Result	Result	Result
Bromoform	1	ND	ND	ND	ND	ND	ND
Bromomethane	1	ND	ND	ND	ND	ND	ND
Carbon Disulfide	1	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1	ND	ND	ND	ND	ND	ND
Chlorobenzene	1	ND	ND	ND	ND	ND	ND
Chloroethane	1	ND	ND	ND	ND	ND	ND
Chloroform	1	ND	ND	ND	ND	ND	ND
Chloromethane	1	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	ND	ND	ND	ND	ND	ND
Dibromomethane	1	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	1	ND	ND	ND	ND	ND	ND
Ethyl Ether	1	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	ND	ND	ND	ND	ND	ND
Isopropylbenzene	1	ND	ND	ND	ND	ND	ND
M/P Xylene	2	ND	ND	ND	ND	ND	ND
Methyl-t-Butyl Ether	1	ND	ND	ND	ND	ND	ND
Methylene Chloride	1	ND	ND	ND	ND	ND	ND
N-Butylbenzene	1	ND	ND	ND	ND	ND	ND
N-Propylbenzene	1	ND	ND	ND	ND	ND	ND
Naphthalene	1	ND	ND	ND	ND	ND	ND
Ortho Xylene	1	ND	ND	ND	ND	ND	ND
Para-Isopropyltoluene	1	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	1	ND	ND	ND	ND	ND	ND
Styrene	1	ND	ND	ND	ND	ND	ND
Tert-Butylbenzene	1	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1	ND	ND	ND	ND	ND	ND
Tetrahydrofuran	1	ND	ND	ND	ND	ND	ND
Toluene	1	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethylene	1	ND	ND	ND	ND	ND	ND
Trichloroethylene	1	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	ND	ND	ND	ND	ND	ND
Vinyl Acetate	1	ND	ND	ND	ND	ND	ND

Table 6

**Volatile Organic Compounds Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
24 November 2006**

Station Location:	CAI-10	CAI-11	CAI-12	CAI-13	CAI-14	CAI-15
Scribe Number:	0262-0015	0262-0016	0262-0017	0262-0018	0262-0019	0262-0020
Time Collected:	10:15	10:15	10:22	10:22	10:30	10:30
Date Collected:	11/24/2006	11/24/2006	11/24/2006	11/24/2006	11/24/2006	11/24/2006

Analyte	RL	Result	Result	Result	Result	Result	Result
Vinyl Chloride	1	ND	ND	ND	ND	ND	ND
c-1,3-dichloropropene	1	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethylene	1	ND	ND	ND	ND	ND	ND
t-1,3-Dichloropropene	1	ND	ND	ND	ND	ND	ND

Notes: Samples collected by the Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START). Samples were submitted to U.S. Environmental Protection Agency (EPA) Office of Environmental Measurement and Evaluation (OEME).

All results reported in micrograms per liter (µg/L) [equivalent to parts per billion (ppb)].

ND - Not detected.

J - Estimated value.

RL - Reporting limit.

MEK - Methyl ethyl ketone.

MIBK - Methyl isobutyl ketone.

Table 7

**Metals Analytical Results
Surface Water Samples
Danversport Explosion Site
Danvers, Massachusetts
24 November 2006**

Station Location:	CAI-10	CAI-11	CAI-12	CAI-13	CAI-14	CAI-15
Scribe Number:	0262-0015	0262-0016	0262-0017	0262-0018	0262-0019	0262-0020
Time Collected:	10:15	10:15	10:22	10:22	10:30	10:30
Date Collected:	11/24/2006	11/24/2006	11/24/2006	11/24/2006	11/24/2006	11/24/2006

Analyte	RL	Result	Result	Result	Result	Result	Result
Arsenic	1,000	ND	ND	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND	ND	ND
Cadmium	500	ND	ND	ND	ND	ND	ND
Chromium	1,000	ND	ND	ND	ND	ND	ND
Lead	1,000	ND	ND	ND	ND	ND	ND
Selenium	1,000	ND	ND	ND	ND	ND	ND
Silver	500	ND	ND	ND	ND	ND	ND

Notes: Samples collected by the Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START). Samples were submitted to U.S. Environmental Protection Agency (EPA) Office of Environmental Measurement and Evaluation (OEME).

All results reported in micrograms per liter (µg/L) [equivalent to parts per billion (ppb)].

ND - Not detected.

RL - Reporting limit.

Table 8

Volatile Organic Compounds Analytical Results
Sediment Samples
Danversport Explosion Site
Danvers, Massachusetts
24 November 2006

Station Location:	CAI-016	CAI-017	CAI-018	CAI-019
Scribe Number:	0262-0021	0262-0022	0262-0023	0262-0024
Time Collected:	8:30	9:20	8:55	8:55
Date Collected:	11/24/2006	11/24/2006	11/24/2006	11/24/2006

Analyte	RL	Result	Result	Result	Result
1,1,1,2-Tetrachloroethane	50	ND	ND	ND	ND
1,1,1-Trichloroethane	50	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	50	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-Trifluoroetha	50	ND	ND	ND	ND
1,1,2-Trichloroethane	50	ND	ND	ND	ND
1,1-Dichloroethylene	50	ND	ND	ND	ND
1,1-Dichloropropene	50	ND	ND	ND	ND
1,1-dichloroethane	50	ND	ND	ND	ND
1,2,3-Trichlorobenzene	50	ND	ND	ND	ND
1,2,3-Trichloropropane	50	ND	ND	ND	ND
1,2,4-Trichlorobenzene	50	ND	ND	ND	ND
1,2,4-Trimethylbenzene	50	ND	ND	170 J	ND
1,2-Dibromo-3-Chloropropane	50	ND	ND	ND	ND
1,2-Dibromoethane	50	ND	ND	ND	ND
1,2-Dichlorobenzene	50	ND	ND	ND	ND
1,2-Dichloroethane	50	ND	ND	ND	ND
1,2-Dichloropropane	50	ND	ND	ND	ND
1,3,5-Trimethylbenzene	50	ND	ND	92 J	ND
1,3-Dichlorobenzene	50	ND	ND	ND	ND
1,3-Dichloropropane	50	ND	ND	ND	ND
1,4-Dichlorobenzene	50	ND	ND	ND	ND
2,2-Dichloropropane	50	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	100 J	62 J
2-Chlorotoluene	50	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND
2-Propanone (acetone)	50	ND	ND	170 J	73 J
4-Chlorotoluene	50	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	50	ND	ND	ND	ND
Acrylonitrile	50	ND	ND	ND	ND
Benzene	50	ND	ND	ND	ND
Bromobenzene	50	ND	ND	ND	ND
Bromochloromethane	50	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND
Bromomethane	50	ND	ND	ND	ND
Carbon Disulfide	50	ND	ND	ND	ND
Carbon tetrachloride	50	ND	ND	ND	ND
Chlorobenzene	50	ND	ND	ND	ND
Chloroethane	50	ND	ND	ND	ND
Chloroform	50	ND	ND	ND	ND
Chloromethane	50	ND	ND	ND	ND
Dibromochloromethane	50	ND	ND	ND	ND
Dibromomethane	50	ND	ND	ND	ND
Dichlorodifluoromethane	50	ND	ND	ND	ND
Ethyl Ether	50	ND	ND	ND	ND
Ethylbenzene	50	ND	ND	940 J	210 J
Hexachlorobutadiene	50	ND	ND	ND	ND
Isopropylbenzene	50	ND	ND	ND	ND
M/P Xylene	100	ND	ND	1,900 J	330 J
Methyl-t-Butyl Ether	50	ND	ND	ND	ND
Methylene Chloride	50	ND	ND	ND	ND

Table 8

**Volatile Organic Compounds Analytical Results
Sediment Samples
Danversport Explosion Site
Danvers, Massachusetts
24 November 2006**

Station Location:	CAI-016	CAI-017	CAI-018	CAI-019
Scribe Number:	0262-0021	0262-0022	0262-0023	0262-0024
Time Collected:	8:30	9:20	8:55	8:55
Date Collected:	11/24/2006	11/24/2006	11/24/2006	11/24/2006

Analyte	RL	Result	Result	Result	Result
N-Butylbenzene	50	ND	ND	ND	ND
N-Propylbenzene	50	ND	ND	ND	ND
Naphthalene	50	ND	ND	50 J	ND
Ortho Xylene	50	ND	ND	410	68 J
Para-Isopropyltoluene	50	ND	ND	ND	ND
Sec-Butylbenzene	50	ND	ND	ND	ND
Styrene	50	ND	ND	170 J	95 J
Tert-Butylbenzene	50	ND	ND	ND	ND
Tetrachloroethylene	50	ND	ND	ND	ND
Tetrahydrofuran	50	ND	ND	ND	ND
Toluene	50	ND	ND	870 J	250 J
Trans-1,2-Dichloroethylene	50	ND	ND	ND	ND
Trichloroethylene	50	ND	ND	ND	ND
Trichlorofluoromethane	50	ND	ND	ND	ND
Vinyl Acetate	50	ND	ND	ND	ND
Vinyl Chloride	50	ND	ND	ND	ND
c-1,3-dichloropropene	50	ND	ND	ND	ND
cis-1,2-Dichloroethylene	50	ND	ND	ND	ND
t-1,3-Dichloropropene	50	ND	ND	ND	ND

Notes: Samples collected by the Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START). Samples were submitted to U.S. Environmental Protection Agency (EPA) Office of Environmental Measurement and Evaluation (OEME).

All results reported in micrograms per liter (µg/L) [equivalent to parts per billion (ppb)].

ND - Not detected.

J - Estimated value.

RL - Reporting limit.

MEK - Methyl ethyl ketone.

MIBK - Methyl isobutyl ketone.

Table 9

**Metals Analytical Results
Sediment Samples
Danversport Explosion Site
Danvers, Massachusetts
24 November 2006**

Station Location:	CAI-016	CAI-017	CAI-018	CAI-019
Scribe Number:	0262-0021	0262-0022	0262-0023	0262-0024
Time Collected:	8:30	9:20	8:55	8:55
Date Collected:	11/24/2006	11/24/2006	11/24/2006	11/24/2006

Analyte	MDL	Result	MDL	Result	MDL	Result	MDL	Result
Arsenic	5.9	14	4.4	16	16	16	20	ND
Barium	5.9	25	4.4	63	16	450	20	1,400
Cadmium	3	ND	2.2	ND	8	ND	9.8	ND
Chromium	5.9	95	4.4	230	16	400	20	380
Lead	5.9	71	4.4	230	16	260	20	600
Selenium	5.9	ND	4.4	ND	16	ND	20	ND
Silver	3	ND	2.2	ND	8	ND	9.8	ND

Note: Samples collected by Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START). Samples were submitted to U.S. Environmental Protection Agency (EPA) Office of Environmental Measurement and Evaluation (OEME).

All results reported in milligrams per kilogram (mg/kg) [equivalent to parts per million (ppm)].

ND - Not detected.

Table 10

**Waste Disposal Summary Table
Danversport Explosion Site
Danvers, Massachusetts**

Date of Shipment	Manifest/ Document No.	Description	Containers		Total Quantity	Transporter	Destination
			No.	Type			
12/12/06	000044008 UIS	RQ, Flammable Liquid NOS, (Acetone), (Butanol), 3, UN1993, PGII	1	TT	2,900 Gallons	United Industrial Services 441 R Canton St Stoughton, MA	Norlite Corporation 628 South Saratoga St Cohoes, NY 12047
12/12/06	000154515 GBF	RQ, Flammable Liquid NOS, (Acetone), (Butanol), 3, UN1993, PGII	1	TT	4,600 Gallons	United Industrial Services 441 R Canton St Stoughton, MA	Norlite Corporation 628 South Saratoga St Cohoes, NY 12047
12/15/06	000093500 GBF	RQ Waste Flammable Liquid, NOS, 3, UN 1993, PG II (Ethyl Acetate, Propyl Acetate)	1	TT	687 Gallons	ENPRO Services, Inc 106 Main Street South Portland, ME 04106	ENPRO Services, Inc 106 Main Street South Portland, ME 03108
12/19/06	12191	Non-regulated Material	1	DT	15 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172
12/19/06	12192	Non-regulated Material	1	DT	15 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172
12/20/06	227232	RQ Asbestos, 9, NA, 2122, PG III	8	BA	8	Fleet Environmental Services 75 York Ave Randolph, MA	A&L Salvage Inc. 11225 S. R. 45, PO BOX 333 Lisbon, OH 44432
12/28/06	62760A	Non DOT, Non RCRA material (Used PPE)	1	CM	25 Yards	Clean Venture 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/8/07	000197121 GBF	Waste Nitrocellulose with water, 4.1, UN2555, PGII	1	DM	300 Pounds	ENPRO Services, Inc 106 Main Street South Portland, ME 04106	Northland Environmental, Inc. 275 Allens Avenue Providence, RI 02905
1/9/07	000294907 JJK	RQ, Waste Flammable Solids, Organic, 4.1, UN1325, PGIII (Paint Shellac)	60	DM	18,000 Pounds	Freehold Cartage Inc. P.O. Box 5010 Freehold, NJ 07728	Ross Incineration Services, Inc. 36790 Giles Road Grafton, OH 44044
1/10/07	000294908 JJK	RQ, Waste Paint Mixture, 3, UN1263, PGII	60	DM	18,000 Pounds	Freehold Cartage Inc. P.O. Box 5010 Freehold, NJ 07728	Marisol, Inc. 125 Factory Lane Middlesex, NJ
1/16/07	01161	Non-regulated Material	1	DT	23 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172

Table 10

**Waste Disposal Summary Table
Danversport Explosion Site
Danvers, Massachusetts**

Date of Shipment	Manifest/ Document No.	Description	Containers		Total Quantity	Transporter	Destination
			No.	Type			
1/16/07	01162	Non-regulated Material	1	DT	22 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172
1/16/07	01163	Non-regulated Material	1	DT	22 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172
1/16/07	01164	Non-regulated Material	1	DT	22 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172
1/20/07	01201	Non RCRA, Non DOT Regulated Material (Liquids/Sludges)	75	DM	15,000 Pounds	Freehold Cartage Inc. P.O. Box 5010 Freehold, NJ 07728	Vexor Technology, Inc. 955 West Smith Road Medina, OH 44256
1/22/07	30416	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/22/07	50418	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/22/07	50419	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/22/07	50356	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/22/07	01222	Non RCRA, Non DOT Regulated Material (Liquids/Sludges)	28	DM	8,400 Pounds	New England Disposal Technology, Inc. One Polito Drive Shrewsbury, MA 01545	Vexor Technology, Inc. 955 West Smith Road Medina, OH 44256
1/23/07	50420	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/23/07	50421	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702

Table 10

**Waste Disposal Summary Table
Danversport Explosion Site
Danvers, Massachusetts**

Date of Shipment	Manifest/ Document No.	Description	Containers		Total Quantity	Transporter	Destination
			No.	Type			
1/23/07	50422	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/24/07	00294995 JJK	RQ, Waste Flammable Solids, Organic, 4.1, UN1325, PGIII (Paint Shellac)	67	DM	7,500 Pounds	New England Disposal Technology, Inc. One Polito Drive Shrewsbury, MA 01545	Ross Incineration Services, Inc. 36790 Giles Road Grafton, OH 44044
1/24/07	01241	Non-regulated Material	1	DT	18 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172
1/24/07	01242	Non-regulated Material	1	DT	18 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172
1/24/07	01243	Non-regulated Material	1	DT	22 Tons	Page ETC Inc. 2758 Trumbley Rd Weedsport, NY 13116	Heritage Industrial Waste LNFL FP#67-04 4370 W CR 1275N Roachdale, IN 46172
1/24/07	50423	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/24/07	50440	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/24/07	50442	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/24/07	50443	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/24/07	50441	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/25/07	50439	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702

Table 10

**Waste Disposal Summary Table
Danversport Explosion Site
Danvers, Massachusetts**

Date of Shipment	Manifest/ Document No.	Description	Containers		Total Quantity	Transporter	Destination
			No.	Type			
1/25/07	50434	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/25/07	50435	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/25/07	50436	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
1/25/07	000294994 JJK	RQ, Waste Paint Mixture, 3, UN1263, PGII	68	DM	27,200 Pounds	Freehold Cartage Inc. P.O. Box 5010 Freehold, NJ 07728	Marisol, Inc. 125 Factory lane Middlesex, NJ
1/25/07	000294993 JJK	RQ, Waste Paint Mixture, 3, UN1263, PGII	50	DM	12,500 Pounds	Freehold Cartage Inc. P.O. Box 5010 Freehold, NJ 07728	Marisol, Inc. 125 Factory lane Middlesex, NJ
1/25/07	000294996 JJK	RQ, Waste Flammable Solids, Organic, 4.1, UN1325, PGIII (Paint Shellac)	2	DM	800 Pounds	Freehold Cartage Inc. P.O. Box 5010 Freehold, NJ 07728	Ross Incineration Services, Inc. 36790 Giles Road Grafton, OH 44044
1/29/07	50437	Non RCRA, Non DOT Regulated Paint Solids	1	CM	25 Yards	Clean Venture, Inc. 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
2/1/07	02011	Non-RCRA/Non-DOT Regulated Liquids (Decon Water)	1	TT	5,000 Gallons	Global Remediation Services 200 Main Street Glen Gardner, NJ 08826	Semass/Covanta 141 Cranberry Highway W. Wareham, MA 02576
2/1/07	02012	Non-RCRA/Non-DOT Regulated Liquids (Decon Water)	1	TT	4,700 Gallons	Global Remediation Services 200 Main Street Glen Gardner, NJ 08826	Semass/Covanta 141 Cranberry Highway W. Wareham, MA 02576
2/8/07	NHZ00105227	Non DOT, Non RCRA Regulated Material	31	DM	1,550 Gallons	ENPRO Services, Inc 106 Main Street South Portland, ME 04106	Enpro Services of Maine, Inc. 106 Main Street South Portland, ME 04106
2/9/07	NA	Non DOT, Non RCRA material (Used PPE)	1	CM	25 Yards	Clean Venture 133 Leland Street Framingham, MA 01702	General Chemical Corporation 133 Leland Street Framingham, MA 01702
3/8/07	30801	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903

Table 10

**Waste Disposal Summary Table
Danversport Explosion Site
Danvers, Massachusetts**

Date of Shipment	Manifest/ Document No.	Description	Containers		Total Quantity	Transporter	Destination
			No.	Type			
3/8/07	30802	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30803	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30804	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30805	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30806	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30807	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30808	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30809	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30810	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30811	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30812	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30813	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903

Table 10

**Waste Disposal Summary Table
Danversport Explosion Site
Danvers, Massachusetts**

Date of Shipment	Manifest/ Document No.	Description	Containers		Total Quantity	Transporter	Destination
			No.	Type			
3/8/07	30814	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/8/07	30815	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/9/07	30901	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/9/07	30902	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/9/07	30903	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/9/07	30904	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903
3/9/07	30905	Non-Haz, Non RCRA, Non DOT Regulated Solid (Urban Fill)	1	DT	30 Tons	AmeriTech Environmental Services 393 Harold L. Dow Highway Eliot, ME 03903	Aggregate Recycling Corporation 434 Dow Highway Eliot, ME 03903

TT - Cargo tanks (tank trucks)
 DT - Dump truck
 BA - Burlap, cloth, paper, or plastic bags
 CM - Metal boxes, cartons, cases (including roll-offs)
 DM - Metal drums, barrels, kegs
 RCRA - Resource Conservation Recovery Act
 DOT - Department of Transportation
 PPE - Personal Protective Equipment

MA - Massachusetts
 ME - Maine
 IN - Indiana
 NY - New York
 OH - Ohio
 NJ - New Jersey
 PG - Packing group
 RQ - Reportable quantity
 NOS - Not otherwise specified

Appendix C

Photodocumentation Log

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the smoke plume emanating from the site. Photograph taken facing northwest.

DATE: 22 November 2006

TIME: Not recorded.

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22



SCENE: View of the blast damaged windows at the Massachusetts School for the Deaf. Photograph taken facing south.

DATE: 22 November 2006

TIME: Not recorded.

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the smoke plume and facility building. Photograph taken facing northeast.

DATE: 22 November 2006

TIME: Not recorded.

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22



SCENE: View of the location of surface water sample CAI-001, which was collected from an outfall pipe. Photograph taken facing southeast.

DATE: 22 November 2006

TIME: Not recorded.

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the location of surface water sample CAI-002, which was collected from runoff water east of the Liberty Marina building (marina building). Photograph taken facing northeast.

DATE: 22 November 2006

TIME: Not recorded.

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22



SCENE: View of the marina building. Photograph taken facing northwest.

DATE: 22 November 2006

TIME: Not recorded.

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the location of surface water sample CAI-003, which was collected from runoff water south of the marina building. Photograph taken facing south.

DATE: 22 November 2006

PHOTOGRAPHER: T. Benton

TIME: Not recorded.

CAMERA: HP Photosmart M22



SCENE: View of the damaged pizza/bakery business on Water Street. Photograph taken facing west.

DATE: 22 November 2006

PHOTOGRAPHER: T. Benton

TIME: Not recorded.

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the location of surface water sample CAI-004, which was collected from the Waters River south of the marina. Photograph taken facing west.

DATE: 22 November 2006

PHOTOGRAPHER: T. Benton

TIME: Not recorded.

CAMERA: HP Photosmart M22



SCENE: View of the location of surface water sample CAI-005, which was collected from the Waters River south of the marina. Photograph taken facing north.

DATE: 22 November 2006

PHOTOGRAPHER: T. Benton

TIME: Not recorded.

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the location of surface water sample CAI-006, which was collected from the Waters River north of the site. Photograph taken facing northwest.

DATE: 22 November 2006

PHOTOGRAPHER: T. Benton

TIME: Not recorded.

CAMERA: HP Photosmart M22



SCENE: View of the location of surface water sample CAI-007, which was collected from the Waters River northeast of the site. Photograph taken facing northwest.

DATE: 22 November 2006

PHOTOGRAPHER: T. Benton

TIME: Not recorded.

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the location of surface water sample CAI-008, which was collected from the Waters River southeast of the marina. Photograph taken facing southeast.

DATE: 22 November 2006

PHOTOGRAPHER: T. Benton

TIME: Not recorded.

CAMERA: HP Photosmart M22



SCENE: View of the location of surface water sample CAI-009, which was collected from the Waters River southeast of the marina. Photograph taken facing southeast.

DATE: 22 November 2006

PHOTOGRAPHER: T. Benton

TIME: Not recorded.

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



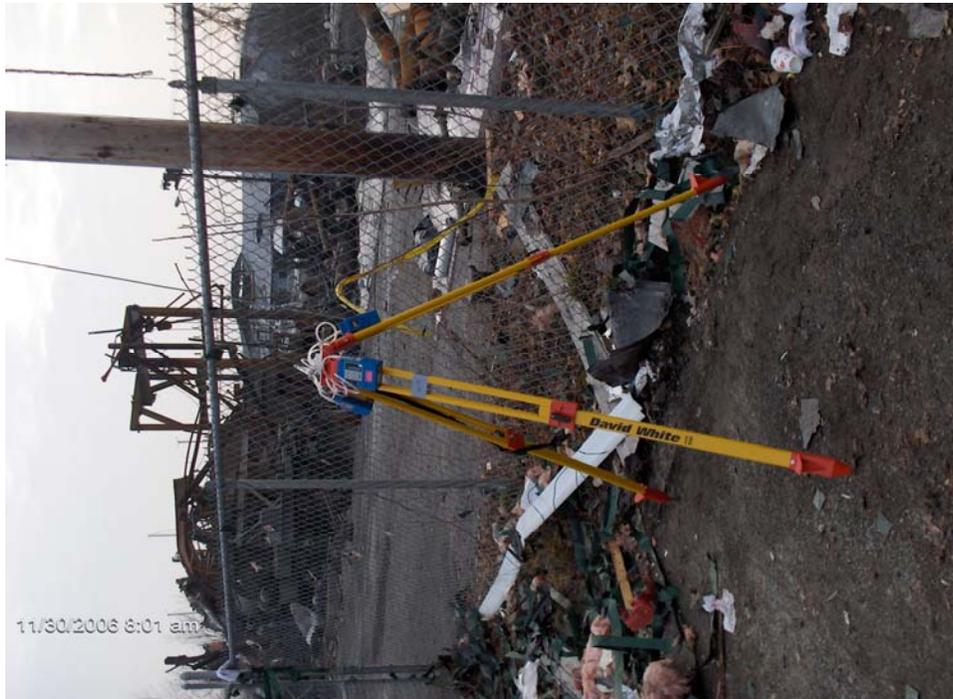
SCENE: View of AreaRAE air monitoring station AreaRAE-01 that was located south of the marina building. Photograph taken facing north.

DATE: 22 November 2006

TIME: Not recorded.

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22



TOP

SCENE: View of Gilian Air Sampling station 3 located to the northwest of the site building, outside of the exclusion zone. Photograph taken facing southeast.

DATE: 30 November 2006

TIME: 08:01 hours

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the rear of houses located on Bates Street. Photograph taken facing west.

DATE: 30 November 2006

TIME: 08:16 hours

PHOTOGRAPHER: T. Benton

CAMERA: HP Photosmart M22



SCENE: View of the center fill port of the n-butyl acetate underground storage tank (UST).

DATE: 30 November 2006

TIME: 13:44 hours

PHOTOGRAPHER: J. Kelly

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the eastern fill port of the n-butyl acetate UST.

DATE: 30 November 2006
PHOTOGRAPHER: J. Kelly

TIME: 13:44 hours
CAMERA: HP Photosmart M22



SCENE: View of the western fill port of the acetone UST.

DATE: 30 November 2006
PHOTOGRAPHER: J. Kelly

TIME: 13:45 hours
CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the center fill port of the acetone UST.

DATE: 30 November 2006
PHOTOGRAPHER: J. Kelly

TIME: 13:45 hours
CAMERA: HP Photosmart M22



SCENE: View of the eastern fill port of the toluene UST.

DATE: 30 November 2006
PHOTOGRAPHER: J. Kelly

TIME: 13:45 hours
CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the eastern fill port of the acetone UST.

DATE: 30 November 2006
PHOTOGRAPHER: J. Kelly

TIME: 13:45 hours
CAMERA: HP Photosmart M22



SCENE: View of potential evidence staged on polyethylene sheeting in the UST area. Photograph taken facing east.

DATE: 30 November 2006
PHOTOGRAPHER: J. Kelly

TIME: 13:46 hours
CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of a damaged fire hydrant at the southeast border of the property adjacent to the marina access road. Photograph taken facing east.

DATE: 30 November 2006

PHOTOGRAPHER: J. Kelly

TIME: 14:01 hours

CAMERA: HP Photosmart M22



SCENE: View of drums and drum rings on the eastern side of the building footprint. Photograph taken facing west.

DATE: 30 November 2006

PHOTOGRAPHER: P. Callahan

TIME: 14:12 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of debris and tanks within the building footprint. Photograph taken facing north.

DATE: 30 November 2006

TIME: 14:13 hours

PHOTOGRAPHER: P. Callahan

CAMERA: HP Photosmart M22



SCENE: View of debris, drums, totes, and tanks within the building footprint. Photograph taken facing north.

DATE: 30 November 2006

TIME: 14:13 hours

PHOTOGRAPHER: P. Callahan

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of drums located in the southwest corner of the building footprint. Photograph taken facing east.

DATE: 30 November 2006

TIME: 14:14 hours

PHOTOGRAPHER: P. Callahan

CAMERA: HP Photosmart M22



SCENE: View of the northwest corner of the pizzeria/bakery building. Photograph taken facing east-southeast.

DATE: 01 December 2006

TIME: 08:54 hours

PHOTOGRAPHER: G. Hornok

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the demolition of the upper level of the pizzeria/bakery building. Photograph taken facing northeast.

DATE: 01 December 2006

TIME: 10:33 note: timestamp is incorrect

PHOTOGRAPHER: G. Hornok

CAMERA: Nikon CoolPix 3100

TOP



SCENE: View of the property owner's safe that was removed from the pizzeria/bakery building.

DATE: 01 December 2006

TIME: 12:12 note: timestamp is incorrect

PHOTOGRAPHER: G. Hornok

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the Danversport Barbeque Gas Inc. (Danversport BBQ) building. Photograph taken facing southeast.

DATE: 01 December 2006

TIME: 14:19 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of the demolition of the Danversport BBQ building. Photograph taken facing southwest.

DATE: 01 December 2006

TIME: 15:56 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the Abbey Fence building. Photograph taken facing southeast.

DATE: 01 December 2006

TIME: 14:22 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of the Perimeter Northeast Summa air sampling station located northeast of the site. Photograph taken facing southwest.

DATE: 03 December 2006

TIME: 10:19 hours

PHOTOGRAPHER: J. Kelly

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the Bates Street Summa air sampling station located at 26 Bates Street. Photograph taken facing north-northwest.

DATE: 03 December 2006

TIME: 10:24 hours

PHOTOGRAPHER: J. Kelly

CAMERA: HP Photosmart M22



SCENE: View of the Riverside 1 Summa air sampling station located on Riverside Drive. Photograph taken facing north.

DATE: 03 December 2006

TIME: 10:29 hours

PHOTOGRAPHER: J. Kelly

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the Riverside 2 Summa air sampling station located on Riverside Drive. Photograph taken facing north.

DATE: 03 December 2006
PHOTOGRAPHER: J. Kelly

TIME: 10:33 hours
CAMERA: HP Photosmart M22

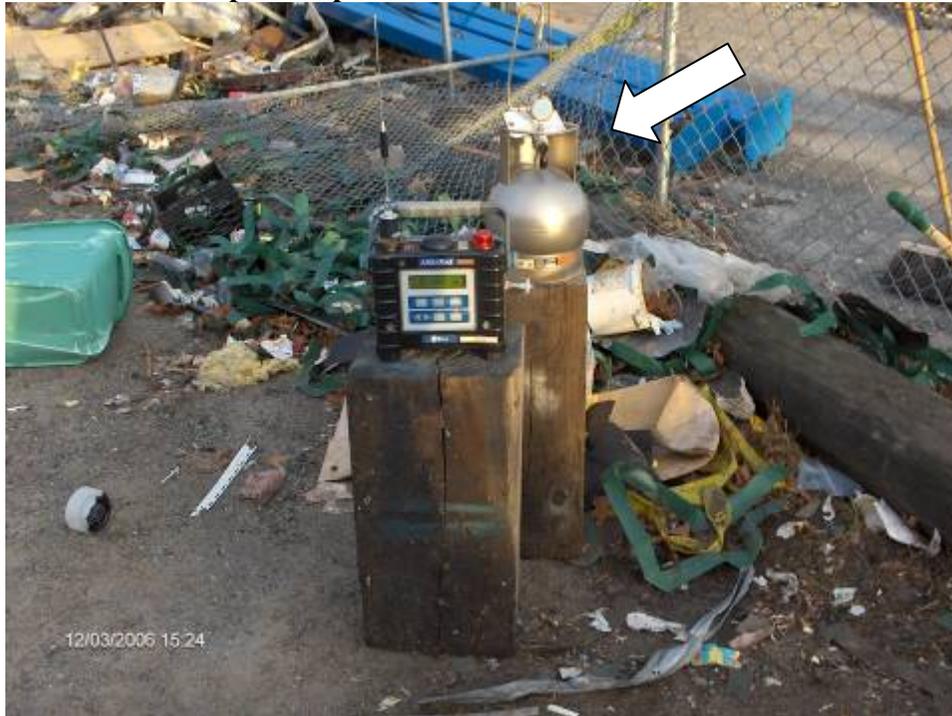


SCENE: View of the Harvey Summa air sampling station located east of the site at Harvey Industries. Photograph taken facing southwest.

DATE: 03 December 2006
PHOTOGRAPHER: K. Brennan

TIME: 10:38 hours
CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the Perimeter Northwest Summa air sampling station located northwest of the site. Photograph taken facing southwest.

DATE: 03 December 2006

TIME: 15:24 hours

PHOTOGRAPHER: K. Brennan

CAMERA: HP Photosmart M22



SCENE: View of the Perimeter Southwest Summa air sampling station located southwest of the site. Photograph taken facing south-southeast.

DATE: 03 December 2006

TIME: 15:28 hours

PHOTOGRAPHER: K. Brennan

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the Marina Summa air sampling station located southeast of the site at the Liberty Marina. Photograph taken facing southeast.

DATE: 03 December 2006

TIME: 15:34 hours

PHOTOGRAPHER: K. Brennan

CAMERA: HP Photosmart M22



SCENE: View of the building and equipment remains within the building footprint. Photograph taken facing southwest.

DATE: 07 December 2006

TIME: 08:00 hours

PHOTOGRAPHER: E. Ackerman

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



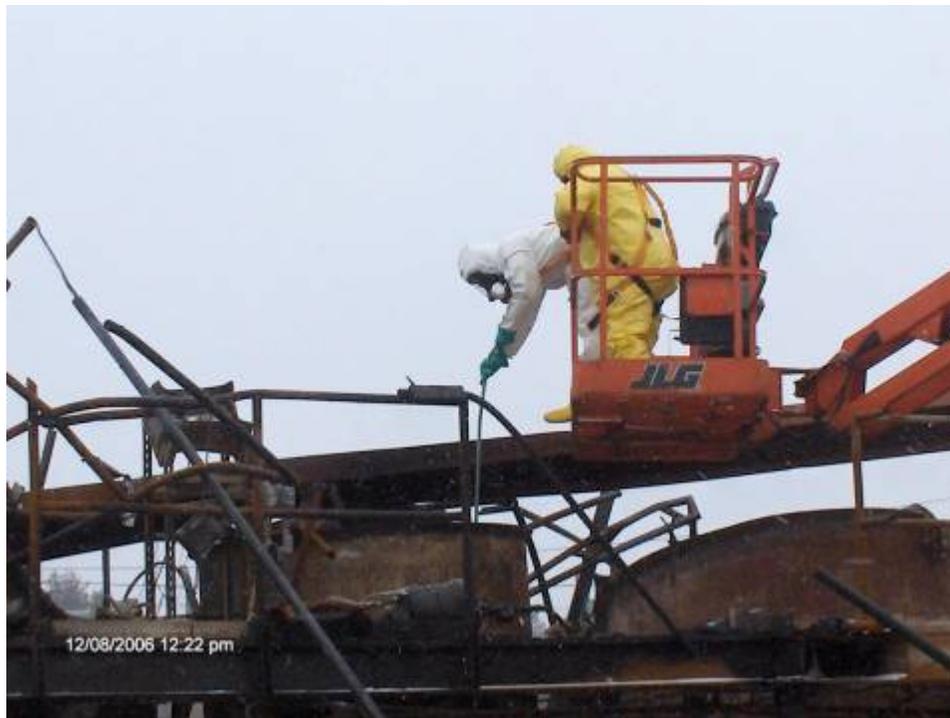
SCENE: View of the building and equipment remains within the building footprint. Photograph taken facing east.

DATE: 07 December 2006

TIME: 08:23 hours

PHOTOGRAPHER: E. Ackerman

CAMERA: HP Photosmart M22



SCENE: View of Vat No. 3 sample collection activities. Photograph taken facing southeast.

DATE: 08 December 2006

TIME: 12:22 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of tank removal from the building footprint. Photograph taken facing east-southeast.

DATE: 08 December 2006
PHOTOGRAPHER: J. Kelly

TIME: 09:01 hours
CAMERA: HP Photosmart M22



SCENE: View of tank staging in the CSB evidence area. Photograph taken facing north.

DATE: 08 December 2006
PHOTOGRAPHER: J. Kelly

TIME: 09:10 hours
CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of drum removal from the building footprint. Photograph taken facing east.

DATE: 08 December 2006

TIME: 10:50 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of drums containing liquids being placed into overpack drums. Photograph taken facing south.

DATE: 08 December 2006

TIME: 10:56 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of drums being staged on polyethylene sheeting following their removal from the building footprint. Photograph taken facing southwest.

DATE: 08 December 2006

TIME: 10:44 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of the re-staging of the Connex Box. Photograph taken facing southwest.

DATE: 11 December 2006

TIME: 12:50 hours

PHOTOGRAPHER: E. Ackerman

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of tote removal and staging. Photograph taken facing southeast.

DATE: 11 December 2006

TIME: 14:26 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of a vacuum truck pumping solvents from the USTs for disposal. Photograph taken facing west-northwest.

DATE: 12 December 2006

TIME: 10:55 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of drum removal from the building footprint. Photograph taken facing southwest.

DATE: 13 December 2006

TIME: 11:41 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of vat sampling utilizing the man-lift. Photograph taken facing northwest.

DATE: 13 December 2006

TIME: 11:44 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the excavator shear cutting vats. Photograph taken facing east.

DATE: 20 December 2006

TIME: 10:14 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of the building footprint. Photograph taken facing north.

DATE: 20 December 2006

TIME: 15:22 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of Vat Nos. 3, 4, and 5. Photograph taken facing northwest.

DATE: 20 December 2006

TIME: 15:22 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of vats within the building footprint. Photograph taken facing northeast.

DATE: 20 December 2006

TIME: 15:23 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of stacked tote containers within the building footprint. Photograph taken facing northwest.

DATE: 20 December 2006

TIME: 15:26 hours

PHOTOGRAPHER: G. Hornok

CAMERA: HP Photosmart M22



SCENE: View of CAI subcontractors from GZA utilizing a GeoProbe unit to install soil gas sampling points and monitoring wells. Photograph taken facing east.

DATE: 26 December 2006

TIME: 08:00 hours, note: time/date stamp is incorrect

PHOTOGRAPHER: C. Dupree

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of stormwater runoff within the building footprint. Photograph taken facing north.

DATE: 26 December 2006

PHOTOGRAPHER: C. Dupree

TIME: 08:15 hours, note: time/date stamp is incorrect

CAMERA: HP Photosmart M22



SCENE: View of the paint marks delineating the ground penetrating radar (GPR) grid. Photograph taken facing northwest.

DATE: 26 December 2006

PHOTOGRAPHER: C. Dupree

TIME: 10:13 hours

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of Enpro Services utilizing a vacuum truck to remove the stormwater runoff from within the building footprint. Photograph taken facing northeast.

DATE: 26 December 2006

TIME: 11:48 hours

PHOTOGRAPHER: C. Dupree

CAMERA: HP Photosmart M22



SCENE: View of stormwater runoff within the building footprint. Photograph taken facing east.

DATE: 26 December 2006

TIME: 12:19 hours

PHOTOGRAPHER: C. Dupree

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the building footprint following the removal of the stormwater runoff. Photograph taken facing south.

DATE: 26 December 2006

TIME: 13:32 hours

PHOTOGRAPHER: C. Dupree

CAMERA: HP Photosmart M22



SCENE: View of a monitoring well installed by GZA. Photograph taken facing west.

DATE: 26 December 2006

TIME: 14:39 hours

PHOTOGRAPHER: C. Dupree

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the CAI dust collection system. Photograph taken facing northeast.

DATE: 29 December 2006

TIME: 10:02 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22



SCENE: View of Vat Nos. 3 and 4. Photograph taken facing northeast.

DATE: 29 December 2006

TIME: 10:03 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of Vat Nos. 5 and 12. Photograph taken facing north.

DATE: 29 December 2006

TIME: 10:04 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22



SCENE: View of the totes. Photograph taken facing north.

DATE: 29 December 2006

TIME: 13:34 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the stacked totes being moved. Photograph taken facing northwest.

DATE: 29 December 2006

TIME: 13:35 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22



SCENE: View of the stacked totes being moved. Photograph taken facing northeast.

DATE: 29 December 2006

TIME: 13:36 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the ERRS crew decontaminating the excavator with the shears prior to demobilization. Photograph taken facing east.

DATE: 29 December 2006

TIME: 13:37 hours

PHOTOGRAPHER: B. Mace

CAMERA: HP Photosmart M22



SCENE: View of the staged tote containers. Photograph taken facing northeast.

DATE: 30 December 2006

TIME: 12:04 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the staged totes. Photograph taken facing southeast.

DATE: 30 December 2006

TIME: 12:07 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the western portion of the building footprint. Photograph taken facing west.

DATE: 30 December 2006

TIME: 12:07 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of southwestern portion of the building footprint. Photograph taken facing southwest.

DATE: 30 December 2006

TIME: 12:07 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of southeastern portion of the building footprint. Photograph taken facing southeast.

DATE: 30 December 2006

TIME: 12:07 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of drums staged on the northwestern portion of the site. Photograph taken facing west.

DATE: 30 December 2006

TIME: 12:08 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the scrap steel and crushed drum piles. Photograph taken facing southwest.

DATE: 30 December 2006

TIME: 12:08 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of staged drums on the southern portion of the site. Photograph taken facing east.

DATE: 30 December 2006

TIME: 12:10 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the southern portion of the site along the marina road. Photograph taken facing east.

DATE: 30 December 2006

TIME: 12:10 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of drum overpacking. Photograph taken facing northeast.

DATE: 03 January 2007
PHOTOGRAPHER: B. Mace

TIME: 08:49 hours
CAMERA: Nikon CoolPix 3100



SCENE: View of hazardous categorization (HazCat) sampling. Photograph taken facing southwest.

DATE: 03 January 2007
PHOTOGRAPHER: B. Mace

TIME: 08:50 hours
CAMERA: Nikon Coolpix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts

TOP



SCENE: View of Vat No. 12, with pipe system set up for product transfer. Photograph taken facing southeast.

DATE: 05 January 2007
PHOTOGRAPHER: B. Mace

TIME: 09:35 hours
CAMERA: Nikon CoolPix 3100



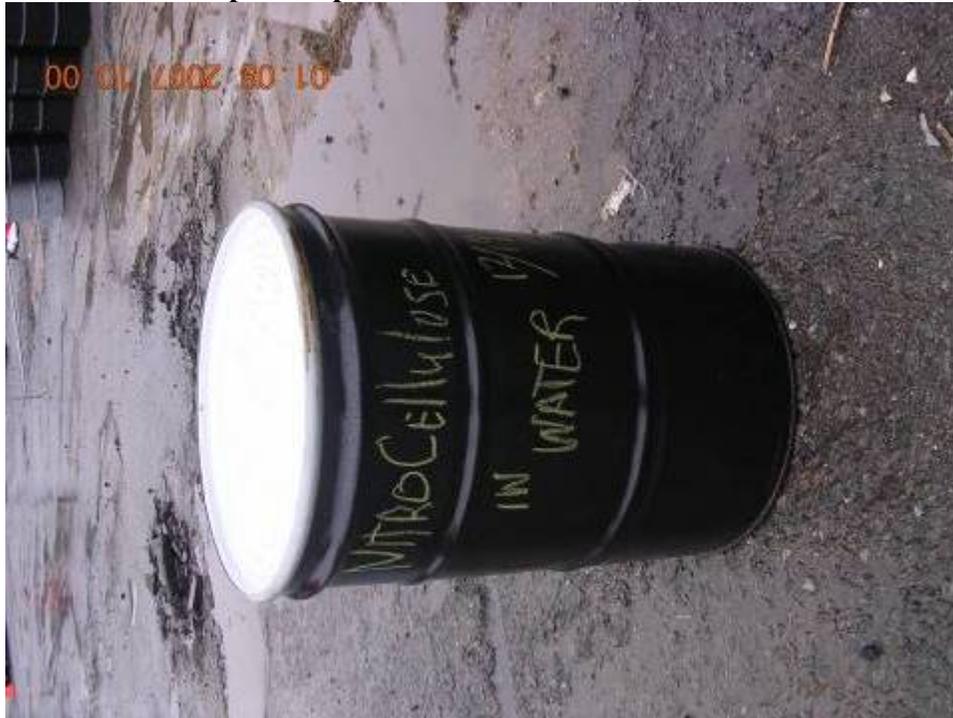
SCENE: View of the Beverly Dive Team performing underwater debris investigations. Photograph taken facing south.

DATE: 05 January 2007
PHOTOGRAPHER: B. Mace

TIME: 10:10 hours
CAMERA: Nikon Coolpix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts

TOP



SCENE: View of the nitrocellulose drum ready for disposal. Photograph taken facing northwest.

DATE: 08 January 2007
PHOTOGRAPHER: B. Mace

TIME: 10:00 hours
CAMERA: Nikon CoolPix 3100

TOP



SCENE: View of the loading of the flammable solid drums for disposal. Photograph taken facing southwest.

DATE: 09 January 2007
PHOTOGRAPHER: B. Mace

TIME: 10:51 hours
CAMERA: Nikon Coolpix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of emptied Vat No. 12. Photograph taken facing northeast.

DATE: 09 January 2007

TIME: 12:02 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the contents of Vat No. 4 being removed by hand. Photograph taken facing north.

DATE: 10 January 2007

TIME: 10:09 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the western portion of the site. Photograph taken facing southeast.

DATE: 13 January 2007

TIME: 09:37 hours

PHOTOGRAPHER: K. Brennan

CAMERA: Nikon Coolpix 3100



SCENE: View of the staged drums and roll-off container in the central portion of the site. Photograph taken facing southwest.

DATE: 13 January 2007

TIME: 09:37 hours

PHOTOGRAPHER: K. Brennan

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the evidence trailer in the northwest portion of the site. Photograph taken facing west.

DATE: 13 January 2007

TIME: 09:38 hours

PHOTOGRAPHER: K. Brennan

CAMERA: Nikon Coolpix 3100



SCENE: View of the central portion of the building footprint containing staged drums. Photograph taken facing southeast.

DATE: 13 January 2007

TIME: 09:38 hours

PHOTOGRAPHER: K. Brennan

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the western portion of the site where drums, scrap steel, and crushed drums were staged. Photograph taken facing south.

DATE: 13 January 2007

TIME: 09:44 hours

PHOTOGRAPHER: K. Brennan

CAMERA: Nikon Coolpix 3100



SCENE: View of the loading of drums containing inert solids for disposal. Photograph taken facing east.

DATE: 16 January 2007

TIME: 11:54 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the central portion of the site (photograph taken from the Danvers Electric Bucket Truck). Photograph taken facing east.

DATE: 18 January 2007

TIME: 12:11 hours

PHOTOGRAPHER: Danvers Electric Personnel

CAMERA: Nikon Coolpix 3100



SCENE: View of the southern portion of the site (photograph taken from the Danvers Electric Bucket Truck). Photograph taken facing southeast.

DATE: 18 January 2007

TIME: 12:11 hours

PHOTOGRAPHER: Danvers Electric Personnel

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the northern portion of the site (photograph taken from the Danvers Electric Bucket Truck). Photograph taken facing northeast.

DATE: 18 January 2007

TIME: 12:11 hours

PHOTOGRAPHER: Danvers Electric Personnel

CAMERA: Nikon Coolpix 3100



SCENE: View of the flammable solid drums being loaded for disposal. Photograph taken facing northeast.

DATE: 24 January 2007

TIME: 10:05 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the western portion of the site cleared of staged materials in preparation for excavation. Photograph taken facing southeast.

DATE: 24 January 2007

TIME: 10:07 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the remaining flammable liquid and solid drums staged for disposal. Photograph taken facing southeast.

DATE: 24 January 2007

TIME: 10:08 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the western portion of the site (120-122 Water Street Property) excavated to 6-12 inches. Photograph taken facing south.

DATE: 01 February 2007

PHOTOGRAPHER: B. Mace

TIME: 10:43 hours

CAMERA: Nikon Coolpix 3100



SCENE: View of the site from the Baker Tank. Photograph taken facing southeast.

DATE: 01 February 2007

PHOTOGRAPHER: B. Mace

TIME: 10:44 hours

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the northern portion of the site. Photograph taken facing northeast.

DATE: 01 February 2007

TIME: 10:45 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the central portion of the site and the decontaminated building footprint. Photograph taken facing east.

DATE: 01 February 2007

TIME: 10:46 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the southern portion of the site. Photograph taken facing southeast.

DATE: 01 February 2007

TIME: 10:46 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the staged and emptied totes that will remain on site. Photograph taken facing north.

DATE: 01 February 2007

TIME: 10:47 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the staged and emptied vats that will remain on site. Photograph taken facing northeast.

DATE: 01 February 2007

TIME: 10:47 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of CSB evidence items that will remain on site. Photograph taken facing northwest.

DATE: 01 February 2007

TIME: 10:43 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the damaged forklifts staged on the site. Photograph taken facing northeast.

DATE: 02 February 2007

TIME: 06:45 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the dust collection system components that were removed by CAI personnel. Photograph taken facing west.

DATE: 02 February 2007

TIME: 10:20 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the fence installed by CAI along the northern property boundary. Photograph taken facing southeast.

DATE: 09 February 2007

TIME: 12:27 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the temporary fence surrounding the excavated soil stockpile. Photograph taken facing north.

DATE: 09 February 2007

TIME: 13:19 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the fence gate installed by CAI along the southern property boundary. Photograph taken facing north.

DATE: 09 February 2007

TIME: 13:20 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the fence installed by CAI, along the southern property boundary (along the marina road). Photograph taken facing east.

DATE: 09 February 2007

TIME: 13:20 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Danversport Explosion Site • Danvers, Massachusetts



SCENE: View of the fence gate installed by CAI along the southeastern property boundary. Photograph taken facing north.

DATE: 09 February 2007

TIME: 13:21 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon Coolpix 3100



SCENE: View of the fence installed by CAI along the eastern property boundary. Photograph taken facing north.

DATE: 09 February 2007

TIME: 13:21 hours

PHOTOGRAPHER: B. Mace

CAMERA: Nikon CoolPix 3100